

Duke University Libraries



D02291360N

DUKE
UNIVERSITY



WOMAN'S COLLEGE
LIBRARY

VOLUME
CXXIX

JULY-DEC
1925

THE BUILDERS



N : ILLUSTRATED : WEEKLY
JOURNAL : FOR : THE :
ARCHITECT : AND :
CONSTRUCTOR.

"EVERY man's proper mansion-house, and home, being the theater of his hospitality, the seat of self-fruit, the comfortablest part of his own life, the noblest of his sonne's inheritance, a kind of private princedome, nay, to the possessors thereof, an epitome of the whole world, may well deserve, by these attributes, according to the degree of the master, to be decently and delightfully adorned." ■ ■ ■ ■ ■

"Architecture can want no commendation, where there are noble men, or noble mindes."

—SIR HENRY WOTTON.

"OUR English word TO BUILD is the Anglo-Saxon Bylsan, to confirm, to establish, to make firm and sure and fast, to consolidate, to strengthen; and is applicable to all other things as well as to dwelling-places."—DIVERSIONS OF PURLEY. ■ ■ ■ ■ ■

"ALWAYS be ready to speak your mind, and a base man will avoid you."—WILLIAM BLAKE. ■ ■

OFFICE: CATHERINE ST. STRAND LONDON W.C.

INDEX TO VOLUME CXXIX.

JULY TO DECEMBER, 1925.

CONTENTS.

Articles, Notes, and Reviews, Reports of Meetings, Papers Read, Law Cases, Correspondence, &c.	PAGE ii
Architects, &c., of Buildings Illustrated	vi
Illustrations	viii

ARTICLES, NOTES, AND REVIEWS, REPORTS OF MEETINGS, PAPERS READ, LAW CASES, CORRESPONDENCE, ETC.

NOTE.—* Signifies Reports of Meetings, Papers Read, Law Cases, &c.

† Signifies Correspondence.

- ABBEY, Cockersand, *635
Abercrombie, P., on Extension of Town-Planning Spirit, *743
Aberdeen War Memorial, 501
Abrahams v. MacFisheries, 188
Abrahart v. Webster, 260
Academy, Royal, Students' Competition, 886
Accommodation, Voluntary Hospital, 273
Acoustics, 487
Act: Public Health, 676, 712, 746; Roads Improvement, 605; Small Dwellings Acquisition, 294, 538
Adams, M. B.: Architectural Competitions, †242; Manchester Art Gallery, †174
Address, President's, 655
Administration of the Housing Act, 433
Adshad, S. D., on Housing after Slum Clearance, *708
Advertisements, Electric, Affixing, 636
Advertising in Public Places, 692, †696
Advocacy, Craftsmanship and, 1
Afforestation, 553
Age: Penalty of, †624, †714; We Live In, †624
Aggregate, †780, †816
Agreements, Industrial, 450
Air Flow, Practical Measurement of, 574
Air Force, Royal, Apprenticeship in, 196
Alterations, Structural, to Churches, 525
American: Commonwealth Fund Fellowship, 130; Office Practice, 915; Scholarship, Another, 518; Steel House, 226
Ancient Lights, *189
Anderton, R., Sand-Lime Bricks, †257
Appointments, 4, 94, 269, 520, 525, 553, 622, 730
Apportionment under Rent Acts, 260
Apprenticeship in the Air Force, 196
Archaeological: Association, British, *243, *288; Institute, Royal, *254, 281, *887
Architect: and Builder, 552; Choice of, 381; The, and his City, 728, *734; The, and Sub-contractor, 22
Architects: and Builders' Inquiry Bureau, 21, 79, 115, 155, 192, 223, 257, 292, 329, 363, 398, 432, 502, 534, 572, 604, 638, 711, 745, 780, 816, 854, 891, 927; and Surveyors, Association of, †590, †675, †772, *852, †874, †914, *917; and the Spirit of Co-operation, 91; Cape Institute of, 891; Fees, *637, *779, *804; in Scotland, Incorporation of, 803; Legal Assistance for, 344; Society of, Another, 486; Surveyors and Technical Assistants, Association of, *6
Architectural: Association, 2, 8, 44, 45, 170, *175, *290, 501, 520, 588, *625, 627, *770, 870, *927; Competitions, †212, †242, 727, 733, 764, 768, †802, †836; Education, 692; Society, New, †836
Architectural Societies: Berkshire, *663; Bristol, *663, *802; Devon and Exeter, *887; Glasgow (Craftsmen), *603; Ireland (Association), 707; Leeds and West Yorks, *840; Manchester, *926; Norfolk and Norwich, 42; Northern, *627, 658; Sheffield, *744; Staffordshire, North, 802; Wales, South, *626, *887; Wessex, *627; Yorkshire, South, 903
Architecture: 130, 239; and League of Nations, 206; and Sculpture at Glasgow Institute, *634; and the Press, 130; and the Public, 620; and the Surveyor, †522; Art School and, 591; Back to Methuselah, 245; Beauty in, *626; Club, 41, *697; Club Exhibition, *626; Construction and Design in, *599; Domestic, of St. Albans, 384, 838; Higher Education in, 170; Ironwork and, 535, 569; Masters of, 41; New, Laymen and, 797; Ramsay MacLonald on, *72; Street, 803; Theory of, 18, 76, 98, †874, †914; The Social Art, *603; The Touchstone of, 219
Art: and Industry, 587; Exports, 343; Industrial, 518; International, 2; Mediæval and Renaissance, 572; New, Spirit of, 587; Politics and, 3; Trade of, †772
Arts and Crafts, Church Congress and, 585
Asphalt, Cracking, †21, †115
Assigning Premises, Covenants against, 188
Assignments, Consents to, 636
Atholl Steel Houses, 715
Atkin-Berry, W. H., Architectural Perspectives, †418
Atkinson v. North Eastern Railway Company, 866
Attorney General v. Denby, 464
Attorney General v. Laird, 295
Auctioneer, Mock-, †455
Auctioneers and Estate Agents' Institute, *717
Audley End, A.A. Visit to, *45
Awards, Bartlett School of Architecture 151
BADMINTON Court, †21
Baines, Sir F., on Westminster Hall Roof, *742
Bankruptcy and Workmen's Compensation, 778
Barnes, Harry, Association of Architects and Surveyors, †590, †772
Barrett & Evans v. Hardy Bros., 327
Bartlett & Gluckstein, Wage-rate Default Circulars, †96
Bartlett School of Architecture, 151
Barton, T., Preserving Post Ends, †292
Basement, Condensation in, †534, †604; Water in, †432, †502, †534
Batchelor v. Murphy, 779
Baths: Enamel, Cleaning, †257, †292, †329, †363; Paddington, 246
Bath Stone, Preservation of, †32, †473, †502, †534
Beauty, Perception of, 206
Beetles, †780, †816
Bennett, T. P., Trade Training Experiment, †556
Benslyn, W. T., Manchester Art Gallery, †96
Berkeley-street, New, 553
Bermondsey Slum Problem, 768
Bill, Housing, Another? 194; Landed Property Practitioners, †174; Rating and Assessment, 24, 26, 157, 223, 259, 328, 349, *717, 817, 855, 928
Birmingham: Building Exhibition, 365, 380, *401, *443; Civic Society's Report, 456; Housing Experiments, 194; University, *663, *742, *852
Blackheath, 275
Blagrove, G. H., Eccentric Loads upon Pillars, †7, †72
Blocks: Concrete, Testing, 834, *850; Four-Flatted, †927
Board of Architectural Education, *177, 225, 242, 707
Bond between Concrete and Steel, 293
Boni, Senator, The Late, 175
Books, Magazines, Pamphlets, &c.:—Ackermann, A. S. E., Scientific Paradoxes and Problems, 665
Adams, F. J., American Office Practice, 915
Architecture, 130, 239
Architecture, Touchstone of, 219
Ballard, F., Concrete for House, Farm, and Estate, 747
Barman, C., Sir John Vanbrugh, 430
Barns, J. H., Estimating for Builders, 431
Blacks and Pitches, 714
Blake, E. G., Roof Coverings, 578A
Blomfield, Sir R., Touchstone of Architecture, 219
Blue Circle, 233
Books Received, 7, 117, 212, 279, 310, 431, 501, 574, 578A, 665, 714, 732
Brickwork, English, 699
Briggs, M. S., Building Crafts, 714
Brinton, S., Golden Age of the Medici, 916
Buchanan, A., & Hudson, W. H., Building Construction Plates, 117
Building Crafts, History of, 714
Building Practice, 117, 714
Building Trades Directory, Kelly's, 578A
Cellulose Ester Varnishes, 714
Chambers, Sir William, 430
Churches, Old, 279
Composition, Architectural, 385
Concrete for House, Farm, and Estate, 747
Concrete, Reinforced, Guide, 431
Conway, Sir Martin, Art Treasures in Soviet Russia, 325
Credits, Export, and Insurance, 366
Davidge, W. R., Rotherham Regional Planning, 431
Diary, Builder, 896
Dictionary, French-English, 578A
Edwards, A. T., Sir William Chambers, 430
Estimating for Builders, 431
Exhibitions and the Arts of Display, 280
Fishenden, M., House Heating, 467
Fishenden, M. W., Domestic Grate, 293
Gamble, J. S., Indian Timbers, 574
Gerrard, L. A., Building Practice, 117
Gibbs, R. W. M., Building Mathematics, 226
Goodhart-Rendel, H. S., Nicholas Hawksmoor, 430
Gotch, J. A., Old English Houses, 916
Grate, The Domestic, 293
Handbook, Photographic, 443
Harper, W., 445
Harvey, W., Building Practice, 714
Harvey, W., Preservation of St. Paul's Cathedral, 454
Hawksmoor, Nicholas, 430
House Heating, 467
Houses, Country, of To-day, 362
Houses, Old English, 916
Housing Act, 1925, Circular, 31
Inigo Jones, 430
Kelly's Directory of Building Trades, 578A
Ketteridge, T. O., French-English Dictionary, 578A
Lakeman, A., Guide to Reinforced Concrete, 431
Langton, H. M., Blacks and Pitches, 714
Laymen and the New Architecture, 797
Leston, G. L., Land and Engineering Surveying, 226
Lloyd, N., English Brickwork, 699
Lockwood's Manual, 510
Manual of Indian Timbers, 574
Mathematics, Building, 226
Medici, The, Golden Age of, 916
Monuments, List of, 332
Office Practice, American, 915

ARTICLES, NOTES, AND REVIEWS, REPORTS OF MEETINGS, PAPERS READ, LAW CASES, CORRESPONDENCE, Etc. (continued):—

- Oxford Renowned, 839
Paradoxes and Problems, Scientific, 665
Phillips, R. R., Country Houses of To-day, 362
Property, Law of, New, 332
Ramsey, S. C., Inigo Jones 430
Report, Ministry of Health, 199, 237, 488
Rice-Oxley, L., Oxford Renowned, 839
Robertson, M., Laymen and the New Architecture, 797
Roof Coverings, 578A
Rotherham Regional Planning, 431
St. Paul's, Preservation of, 454
Slates, Notes on, 434
Sproston, F., Cellulose Ester Varnishes, 714
Stencilling for Craftsmen, 747
Stowell, H. S., Old Churches, 279
Stratton, A., Architectural Composition, 385
Studio Year Book, 7
Surveying, Land and Engineering, 226
Sutherland, W. G., Stencilling for Craftsmen, 747
Swain, A. H., Export Credits, 366
Timber Calculator, 723
Timbers, Indian, Manual of, 574
Topham, A. F., Law of Property, 332
Treasures, Art, in Soviet Russia, 325
Vanbrugh, Sir John, 430
Weaver, Sir L., Exhibitions and the Arts of Display, 280
Booth v. Thomas, 925
Breach of Covenant, 636
Bressey, C. H., on Roadmaking, *853
Bricks: and Tiles, Imports of, †292; Building Stones and, 834; Concrete †604, †638, †675, †711; Sand-Lime, †257, †329, †363; Special, Making of, †854, †927
Brickwork: C92; English, History of, 699
Bridge: Digswell-road, Welwyn Garden City, 671; Waterloo, 39, 40, 76A, 94, 132, 171, 238, 275, 313, 554, 588, 620, 656, 664, 692, 698, †732, †772, 834, 870, 908, †915
Bridges: London, 908; Strengthening of, *819; Thames, 274, 276, 751
Briggs v. Dryden & Son, 259, 295, 328
Bristol: Art Gallery, 42; Cathedral, 313; Town Planning, 554
British Association, The, *350
British Medical Association Headquarters, 100
British Thermal Unit, †257, †329, †398
Bronze: Composition of, †223, †292; Foundry, 381
Builder, Architect and, 552
Builders: Benevolent Institution, 747; Business Organisation, *818; Foremen and Clerks of Works Association, *855; Hints to, 258, 330, 537, 573, 639, 781, 893; Institute of, 330, 819; Town Planning Advantages to, *780
Building: and Engineering Contracts, 714; and Public Works Congress, *263, *504; Contracts, 22, 155; Contracts, Disputable, *744; Education in, 225; Enterprise, Town Planning and, 92; Foreign Competition in, 486; Human Touch in, 728; in Streets Act: Building Line, 295; Line, †891, †927; Line: Building in Streets Act, 295; Materials, French, 723; Picturesque, 170; Price of, Increase in, †223, †257, †292; Stone for, Selection of, *751; Surveyors' Association, †168, 310, 507, *607
Building Industry: Condition of, *875, *929; Congress of, *929; Joint Council for, 345; Problems, 869
Buildings: Ancient, Protection of, 238; College, Style and, 451; Good, Spoiling, 586; in "Streets," 464; Metal, 657; New, in London, 25, 79, 116, 156, 195, 227, 262, 296, 331, 367, 404, 437, 478, 506, 539, 575, 607, 641, 678, 716, 752, 784, 821, 856, 895, 931; New, in Scotland, 87, 124, 164, 233, 269, 303, 339, 366, 411, 445, 481, 513, 547, 580, 614, 649, 686, 723, 759, 792, 829, 864, 903, 937; Old, Preservation of, 552; Proposed New, 32, 84, 121, 161, 199, 231, 266, 301, 336, 373, 409, 442, 479, 510, 543, 578B, 611, 646, 683, 720, 756, 788, 826, 861, 900, 935; Separation of, 207; Steel Frame, By-laws and, 169
Building Trade: Friction, 540, †590; Rates of Wages in (see each Issue)
Bull & Bull, Wage-rate Default Circulars, †96
Bull, John, Fixing Gutter, †927
Burglar Alarm, Automatic, 201
Burrows, H., The Church and Freemasonry, †7
Bush House Sculpture, 40
By-law Questions, †675, †711, †745
By-laws and Steel Frame Buildings, 169
CABINET, Hanging, Walpole, 381
Canterbury: Cathedral, 729; Town-planning Conference, *530
Capitalism, 368
Cardiff Technical College, 190, 291
Carshalton, 553
Carter, W. L., Penalty Clause in Contract, †432
Case, G. O., on Concrete Aggregates, *679
Cathedral: Bristol, 313; Canterbury, 729; Memorials, 552, 553; New York, †174, †242, †280, †312; St. Paul's, Preservation of, 454, 500, †557, 694, †696, †732, 766, †772
Caxtons and White Horse Hill, 888, 922
Ceilings, Cast, †21
Cement: Delivery of, *637; Portland, British Standard Specification for, 576
Cenotaph, Manchester, 417
Centenary, Railway, 210
Chalk Walling, 784
Chelsea Studios, 310
Chessum, R. B., on Builder's Business Organisation, *818
Chimneys, Height of, †711, †745
Church: Ancient, at Chickney, 729; Building Society Incorporated, *276, *852; Congress, Eastbourne, 558, 585; Frinton-on-Sea, 590; St. Clement's, restored, 730; St. Katherine Coleman, 131; St. Martin's, Ruislip, 420; The, and Freemasonry, †7
Churches, Structural Alterations to, 525
City Development, 908
Civilisation, Europe's, in Stone, 525
Clapperton, T. J., The Work of, 491
Clark, E. K., Leeds Parish Church, †675
Clay Lump for House Building, †312
Clayton and Others v. Sale U.D.C., 925
Club, Architecture, 41, *697
Coalfields, East Kent, 178
Cockersand Abbey, *635
Coker, E. G., on Problems in Construction, *912
College: Constantine Technical, †312; of Estate Management, 802, 817, *854, 913
Collins, A. E., Freemasons' Memorial, †455
Coltress Iron Co., v. Dagleish, 226
Committee, Propaganda, 449
Committees of Public Taste, 552
Companies, New, 31, 333, 369, 441, 483, 578A, 651, 688, 715, 929
Compensation, Painters', *779
Competition: Conditions, 206; Dundee School, 395; Foreign, in Building, 486; Hospital School, Holbrook 6; Manchester Art Gallery, 2, †7, 40, †46, 92, †96, †135, 136, †174, 176, 206, †211, 212, 278, †348; Moor Park Building, †802; News, 4, 42, 94, 132, 172, 208, 240, 276, 310, 346, 382, 418, 452, 488, 520, 554, 588, 622, 658, 694, 730, 766, 800, 836, 872, 910; Ramsgate Lay-out, 315; Shuttering, 640; Student's, Royal Academy, 886; Suggestion, †76; Wolverhampton Hospital, 592
Competitions: †46, 129; Architectural, †212, †242, 727, 733, 764, 768, †802, †836
Concrete: Aggregates, *679; and Steel, Bond between, 293; Blocks, Testing, 834, *850; Colours in, 729; Construction for Houses, New Method, 377; Pre-cast, †21, †115; Proportioning, †7; Reinforced, 856; Sleepers Experiment, 331
Condensation, †745, †780
Conference: Labour Party, *536; of Institution of Municipal and County Engineers, *20; R.I.B.A., *47, 93, *107; Town-planning, Canterbury, *530
Congress: and Exhibition, Public Works, Roads, and Transport, 686, *748, *783, 790, *819, *897; British Archaeological Association, *243, *288; Church, Eastbourne, 558, 585; of Building and Public Works, *263, *504; of the Building Industry, *929; Royal Sanitary Institute, Edinburgh, *186; Trades Union, *434, *505
Construction: and Design in Architecture, *599; House, Special Forms of, 792; Problems in, *912
Contract: Documents, †816, †854, †927; Penalty Clause in, †432, †473; Privy of, 155
Contracts: †854, †927; Building, 22, 155; Building and Engineering, 714; Building, Disputable, *744; with Foreign Employers, 24
Conversazione, A.A., 870
Cooling, Heating and, 450
Co-operation, Spirit of, 91
Costs, Building, 416
Cottage Building, 417, 621
Cottages: Coloured, 764; Old, Loss of, 552
Council, Joint, for Building Industry, 345
Countyside, The: 519; Peril to, 833; Spoiling, 92
Craftsmanship: and Advocacy, 1; English, 870
Cranes, Inspection of, 827
Credit Risks, Commercial, 366
Creswell, H. B., New York Cathedral, †280
Creswell, W. T., on Disputable Building Contracts, *744
Criticism, Architectural, 656
Crosby Hall, 380, 386
Cross, A. W. S. and K. M. B., Architectural Competitions, †802
DAM, Welsh, Disaster, 802
Danger of a Stereotyped Training, 763
Davidson, W.: Theory of Architecture, †914; Waterloo Bridge, †732
Davison, T. Raffles, The Work of, †96, †455
Decoration, County Hall, 835
Decorators, British, Incorporated Institute, *187, 694
Defries, Amelia, Rima Controversy, †802
Denmark and Sweden, A.A. Visit to, 2, *8, *44
Design, Evolution and Revolution in, 490
Developments, Architectural, in Oxford, 711
Dilapidations and Waste, 907
Dinners, 627, 642, 697, 747, 855, 857, 926
Diploma, R.I.B.A., †696
Dog Nuisance, 207
Door Frames, Circular-headed, †711, †745
Drainage Work, Responsibility for, †711, †745
Drain Repair Dispute, 930
Drains: 746; Combined, †534, †604; Flow of Sewage in, †223, †257, †292
Drake, W., Tennis Court, †816
Drawings, Early Water Colour, 19
Dry Rot: †329, †363, †398, †432 in Timber, 345
Dunbar v. Smith, 926
Dundee: Housing Scheme Dispute, *637; School Competition, 395
Durham, Newcastle and, R.I.B.A. Conference, *47
Dwellings: Model, Limehouse, 274; Small, Acquisition Act, 294
EARTHQUAKE, Santa Barbara, 600
Eastbourne: Church Congress, 558, 585; College War Memorial Tower, 46
Eccles Housing, 817
Economy, 765
Edinburgh, Royal Sanitary Institute Congress, *186
Education: Architectural, 692; Architectural, Board of, *177, 225, 242, 707; in Building, 225
Eisteddfod Competitions, 656
Elections: Municipal, Housing and, 677; R.I.B.A., 840
Electricity, Uses of, *783
Electric Lighting: †21, †79; Plant, Wind-driven, †257, †329, †363
Elvy, J. C., Fires due to Electrical Causes, †46
Employers and Employed, 486
Engineering Societies: Institution of Civil Engineers, 886; Institution of Heating and Ventilating Engineers, 717, 825; Institution of Municipal and County Engineers, *20; Institution of Public Lighting Engineers, *929; Institution of Structural Engineers, 438, 488, *710, *850; Society of Engineers, *679, *840
Engineering, Structural, Technical Instruction in, 503
Equipment, Heating, Notes, 472
Estates, Housing, L.C.C., *931
Estimates, Approximate, 330
Eve, C. G., on Rating in the Metropolitan, *854
Evetts, J., Veneers, †115
Evolution and Revolution in Design, 490
Examinations: and Experience, 586; Liverpool University, 151; R.I.B.A., 240, 310, 422
Excavations at Ur, 730
Excavator, 781
Exhibition: Architecture Club, 41, *626; Building, Birmingham, 365, 380, *401, *443; Commercial Motor, *642, *682; Congress and, Public Works, Roads and Transport, 686, *748, *783, 790, *819, *897; Decorators', Manchester, *750, *784; Forthcoming, 309; Housing and Health, Glasgow, 23; Notes, 176, 452, 500, 525, 572, 627; Paris, National Pavilions at, 134; Public Works, 686, *748, *783, 790; Roumanian, 238; Walcot, 871; War Memorials, 586
Exhibitions and the Arts of Display, 280
Expansion, Regulated, 92
Expenditure, Local, 765
Experiment, Trade Training, 487
Exports: Art, 343; Our, 487
FACTORY Act, Decision under, 866
Federation: National Building Trade Employers, 553; National Building Trades Operatives, 405; National, of House Builders, *606
Fee, Architects', for Abandoned Work, †398, †432, †502

ARTICLES, NOTES, AND REVIEWS, REPORTS OF MEETINGS, PAPERS READ, LAW CASES, CORRESPONDENCE, Etc. (continued):—

- Fees: Action for, 24; Architects', *637, *779, *804; District Surveyors', 309; Quantity Surveyors', *190
- Fellowship, American Commonwealth Fund, 130
- Felt, Roofing, †363, †432
- Fife, J. M.: Blistered Paint, †115; Cleaning Baths, †363; Preservation of Bath Stone, †473; Varnished Paper, †115
- Fine Arts Commission, 130, 851
- Finn, H. W., Condensation, †745
- Fire: Factory, 33; Open, 466
- Fires due to Electrical Causes, †46
- Fletcher, Sir Banister, on St. Peter and the Popes, *742
- Flint, Building with, †155, †257
- Floor: Hollow, and Roof Materials, Approval of, 607; Loads and L.C.C. Regulations, 640; Timber, Fungus on, †534, †604
- Floors, Dairy, †572, †604, †638, †745, †816
- Florence, Palaces of, *603
- Foundations, 781
- Foundling Hospital, 309, 310
- France, Museum-Palace of, 887
- Freeman, A. C., Architect's Practices, †363
- Freemasonry, The Church and, †7, †174
- Friction, Building Trade, 540, †590
- Friendship, Anglo-American, 40
- Frieze, Sculptured, East India House, 450
- Frinton-on-Sea, Church, 590
- Fungus on Timber Floor, †534, †604
- GALLERY, Art, Manchester, 2, †7, 40, †46, 92, †96, †135, 136, †174, 176, 206, †211, 212, 278, †348
- Garden Cities and Town-Planning Association, 162
- Gas Heating, Progress of, 468
- German Competition in Housing, 344
- Gibbon, I. G., on Town Planning, *890
- Girder Question, †292
- Glasgow: Housing and Health Exhibition, 23; Institute, *634; Iron and Steel Co. v. Dickson, 226; Kelvin Hall, 366
- Glass: Modern, 657; Stained, 886; Stained, in Old Churches, 656
- Glover, Kenneth, Manchester Art Gallery, †7, †46
- Glover, T., & Collins, A. E., on Tar for Roadways, *783
- Godfrey, N., Distribution of Wren's Work, †174
- Gold Medal Presentation at Institute of British Decorators, *187
- Golf Course, †604
- Granite, Crushed White, †675
- Grate, Domestic, 293
- Griffin v. Pillet, 677
- Guidance, Inspiration and, 586
- Gutter, Fixing, †854, †927
- HALL: County, Pictures and Decoration, 835; Crosby, 380, 386; Ironmongers', 151
- Hammer, Kango, 261
- Harbron, D., Tudor-street, Kingston-upon-Hull, †99
- Hard Core, Claim for, 366
- Hardie, R., on Uses of Electricity, *783
- Hare, J. H., Damp-proofing Walls, †927
- Harris, G. W.: Dry Rot, †363; Hot Water System, †223; Parquetty Warping, †292; Price of Building, †292; Shuttering, †329
- Harvey, Wm., Preservation of St. Paul's, †557, †732
- Haywood, W.: on Modern Town Growth, *742, *852; on Town-Planning, *663
- Heal's Building, †455
- Heating: and Cooling, 450; and Ventilation, 466; Central, Oil Fuel for, 471; Equipment Notes, 472; Gas, Progress of, 468; House, 467
- Highland, West, Slate Industry, 580
- Hints to Builders, 258, 330, 537, 573, 639, 781, 893
- History of English Brickwork, 699
- Holbrook, Hospital School Competition, 6
- Homecroft Settlements, *196
- Home, Gordon, Roman London, †135
- Hospital: Accommodation, Voluntary, 273; Vellore, South India, 841; Wolverhampton Competition, 592
- Hot Water: Supplies and Plumbers' Claims, 432; System, †192, †223, †398
- Houlder Bros. & Co. v. Gibbs, 636
- Hours, Building Trade, 755
- House: Ashley Park, Walton-on-Thames, 16; Builders, National Federation, *606; Building, Clay Lump for, †312; Construction, *917; Construction, Methods of, 693; Construction, Modern Methods, *820; Design, 416; Heating, 467; Non-Parlour, 621; Plinth of, Coating for, †711; Sale of, Contract for, †534; Small, Erecting, †242; Steel, American, 226; Steel, Pitlochry, 339
- Houses: Concrete, New Method of Construction, 377; of Parliament, Condition and Repair of, 769; Smokeless, 909; Specimen, 193, 924; Steel, 416, 679, 686, 715, 759, 782, 816, 827, 829, 851, 908; Subsidy, †21, †79, †153, †675, †711; Working-Class, Scheme for increasing, 261
- Housing: Act, 1923, Administration of, 433; Act, 1925, Circular, 31; after Slum Clearance, *708; and Municipal Elections, 677; and the Workers, 487; Bill, Another, 194; Conference, Wembley, *538; Eccles, 817; Estates, L.C.C., *931; German Competition in, 344; in Scotland, 172, 260, 339, 513, 547, 649, 759, 792, 894, 937; Labour and, 574; L.C.C., 21, 658; London's, 486; National, and Town-Planning Council, 799; Needs of London, 621; New Materials for, †710; Policy, Government's, 924; Private Enterprise in, 380; Problem, L.C.C. and, 194; Progress, 380; Questions, 799; Report of Minister of Health, 237; Subsidy Suggestion, 344, 417, 816, 829, 851; Transport and, *635
- Humphries, H. H., on Regional Planning, *819
- Hunter v. St. dtische, 24
- Hutchins, J. B., Verdigris, †432
- Huyton and Roby Gas Co. v. Liverpool Corp., 925
- IDEAL, The, 275
- Improvement Scheme, Leeds, 428
- India, South, Vellore, Hospital, 841
- Industries: Rural, 871; Village, 308
- Inquiry Bureau, Architects' and Builders', 21, 79, 115, 155, 192, 223, 257, 292, 329, 363, 398, 432, 502, 534, 572, 604, 638, 711, 745, 780, 816, 854, 891, 927
- Insect Nuisance, †155, †223, †363
- Institute, National, for the Blind, 693
- Institute, Royal, British Architects: *47, 93, 94, *107, 151, 176, 205, 222, 240, 242, 310, 346, 422, 501, 624, 655, 656, *660, 693, 696, 707, 728, *734, 742, 802, 840, *875, *929; Decorative Work at, 487
- Institutions, Societies and, 742, 802, 840, 887
- Instruction, Technical, in Structural Engineering, 503
- Insurance: Architects' Indemnity, 556; Scheme, Bad Weather, 405; Unemployment, 835
- Investigation of Timber Diseases, 379
- Ironmongers' Hall, 151
- Ironwork and Architecture, 535, 569
- Italian Renaissance, 766
- Italy, A Winter in, 360, 498
- JAKENS, R., Badminton Court, †21
- James, J. C. F., Dry Rot, †363
- Jenkins, G. H., Manchester Art Gallery, †135
- Jennings, A. S.: Reduced White Lead, †329; Varnished Paper, †115
- Jones, Ronald P., Waterloo Bridge, †915
- Jones v. Tarr, 160
- Jubilee of Nicholls & Clarke, Ltd., 201
- KANGO Hammer, 261
- Kaye, W. Martin, Theory of Architecture, †874
- Kensington, Church Street, 93
- Kent, East: 3, 517; Coalfields, 308; Survey, 485
- Kingston-upon-Hull, Proposed Tudor-street, †99
- Knowledge, Zeal for, 170
- LABOUR: and Housing, 574; Dignity of, 909; Party Conference, *536
- Ladder, Falling, Death from, *926
- Landlords' Liabilities, 677
- Landowners, Liabilities of, 925
- Lane, Terence, Heal's Building, †455
- Laurie, A. P., on Stone for Building, *751
- Law: of Property, 332; Relating to Right to Light, 23, 78, 114, 154, 191, 224
- Lawson, F., News-vendors' Benevolent Institution, †522
- Layman, The, Plea for, 397
- Laymen and the New Architecture, 797
- Lecture Scheme, Novel, 896
- Leeds: Improvement Scheme, 428; Parish Church, †675
- Leeming, E. L., on Road Corrugation, *897
- Legal: Abbott, G. H., v. Richman, 24; Andrews, T. A., v. Packham, *804; Assistance for Architects, 344; Atkinson & Long v. Wellbrook Sanitary Laundry, *779; Booth & Dickie v. Assoc. Cinema Theatres, *190; Courtrai du Nord Tile Co. v. Dennis, Ltd., 926; Eccles Corp. v. Wooller & Sons and Moore & Sons, *817; Griffiths, T., v. Layman, H., *189; Hartman v. Austin Reed, *189; Keith v. Dundee Town Council, *637; Leete, E. N., v. Trevor, *779; Lewis Morgan & Co. v. Jones Bros., *637; Mahoney v. Connelly, *779; Mills, E., v. Moseley, L., *864; Morgan and Cowles-Voysey v. Southern Publishing Co., *189; P. & S. Road Materials Transport v. Suburban Developments, *366; Rutter v. Hall, Beddall & Co., Ltd., 926; Sinfild & Harmer v. Berrick Bros., Ltd., 930; Sutcliffe v. Truscott, *637; Williams, E. A., v. Bacon, *116
- Legal Column and Section, 24, 35, 116, 188, 327, 366, 464, 636, 676, 778, 817, 864, 925, 928, 930
- Leicester College of Arts and Crafts, 802
- Leverhulme Sale, 451
- Liabilities, Landlords', 677
- Liability of Building Owner, 638
- Libel, Architect's Action, *189
- Light: Obstruction of, †398, †473; Rights of, †115, †192, †212, †257; Right to, and Law Relating Thereto, 23, 78, 114, 154, 191, 224
- Lighting of Peterborough Cathedral, 814
- Lily Maid, The, 799
- Limehouse Model Dwellings, 274
- Liverpool: School of Architecture, *113, 151, 291; University Examinations, 151
- Lloyd, H. G., on Testing Concrete Blocks, *850
- Loads: Eccentric, upon Pillars, †7; Floor, and L.C.C. Regulations, 640
- Loans, Housing, 156
- Local Authority, Plans and, †572
- Loire, On The, 841
- London: †348; and Environs, Regional Planning in, *892; Building Acts, 607; County Council, Public Safety and, 131; County Council v. Hutter, 636; Current Prices for Building Work (see each Issue); Master Builders' Association, *857; New Buildings in, 25, 79, 116, 156, 195, 227, 262, 296, 331, 367, 404, 437, 478, 506, 539, 575, 607, 641, 678, 716, 752, 784, 821, 856, 895, 931; North-West, New Railway for, 751; Replanning, 887; Roman, †135; Society, The, *892
- Lovegrove, H.: By-law Questions, †711; Subsidy Houses, †711; The Church and Freemasonry, †174
- Lowther v. Clifford, 928
- MACALISTER, Ian, Architectural Competitions, †836
- MacAlpine, T. W., Tourist Guide Maps, *874
- MacDonald, Ramsay, on Architecture, *72
- Macintosh, H., Right of Light, †212
- MacTaggart, M., Trade of Art, †772
- Mahogany, †257, †363
- Manchester: Art Gallery Competition Award, 2, †7, 40, †46, 92, †96, †135, 136, †174, 176, 206, †211, 212, 278, †348; Cenotaph, 417; Corporation Competition, †556; Decorators' Exhibition, *750, *784; Town-Planning Committee, 798; University School of Architecture, 94
- Mansard Gallery, The, 416
- Manual of Indian Timbers, 574
- Maps, Tourist Guide, *874
- Marsden, F., on Town Planning, *780
- Marshall, John, Dairy Floors, †816
- Mass Production Material, 574
- Material: Building and Trade Custom, *637; Mass Production, 574
- Materials: and Brilliance of Style, 624; Building, French, 723; Building, Prices of, 22, 115, 227, 368, 505, 677, 819; New, for Housing, *710; Old, Removal of, *864
- Matthews, E. C., Dairy Floors, †745
- Measurement: Practical, of Air Flow, 574; Statutory, of Distance, 35
- Medal, Street Frontage, 656
- *Mediaeval' Manner, 519
- Mellor, W., and Gibson, J. A., Unemployment, †679
- Members, New, Architectural Assoc., 770
- Memorial: Freemasons', †455; Hudson, 3, 729, 764; Royal Artillery, 586, 620; Scott, Devonport, 328; War, Aberdeen, 501; War, Inscriptions, 239; Willett, 417, 620
- Memorials: Cathedral, 552, 553; National, 620; Public, Choice in, 870; War, and Symbolism, 691; War, Miscellaneous, 329, 346, 436, 658, 694, 745, 766, 894, 914
- Merritt, F. P., Hard Tennis Court, †292
- Mesopotamian Studentship, 99
- Metals, Corrosion of, 657
- Methods, Modern, of Road-making, *853
- Methuselah, Back to, 245
- Metropolitan Water Board, 751
- Middleton, G. A. T., Registration, †675
- Minister of Education at the A.A., 170
- Minister of Health, Report of, 237
- Mitchell, C. G., on Strengthening of Bridges, *819

ARTICLES, NOTES, AND REVIEWS, REPORTS OF MEETINGS, PAPERS READ, LAW CASES, CORRESPONDENCE, Etc. (continued):—

Mitchell, J., Assoc. of Architects and Surveyors, †675
 Monomarks, 164
 Monuments: Ancient, and Historic Buildings, 238; Ancient, Royal Commission on, 798, 800; Architectural, Preservation of, 619; Old, 332
 Moorgate and Beyond, 803
 Moor Park Building Competition, †802
 Morris, P., on Methods of House Construction, †820
 Mortar, †604, †638
 Mortgage Question, †292
 Morunt, W. E., Wind-Driven Plant, †363
 Motor, Commercial, Exhibition, *642, *682
 Museum, Victoria and Albert, 671
 NATURE, "One Touch of, 487
 Neighbours, Our, and Ourselves, 728
 Nelson Pillar, 621
 Newcastle: and Durham, R.I.B.A. Conference, *47, 93, *107; Development Scheme, 100; What it might become, 68
 News, General, 4, 24, 42, 45, 87, 94, 120, 132, 160, 172, 187, 208, 240, 261, 276, 310, 326, 331, 342, 346, 382, 411, 418, 434, 445, 452, 488, 520, 538, 554, 574, 576, 578A, 580, 588, 618, 622, 626, 635, 640, 643, 658, 664, 694, 698, 699, 707, 711, 720, 730, 752, 766, 794, 800, 803, 836, 872, 874, 903, 910
 News-vendors' Benevolent Institution, †522
 New York Cathedral, †174, †242, †280, †312
 Northern Polytechnic, *599, *818
 Northern Theatres Co. v. Schillito, 778
 Northwich Town, Lifting, 314
 Norwich: Castle, 207; City Development, 207; Congress at, British Archaeological Association, *243, *288; Shirehouse Extension, 313, †348, †382
 Now, Then and, 523
 OBITUARY:—
 Barber, D., 4; Bartlett, Paul, 452; Bell, J., 513; Boni, Giacomo, 175; Brunner, A. W., 291; Bryce, J., 481; Burnett, J. T., 445; Caldwell, W. J., 643; Chettle, C. F., 732; Cowdell, W. M., 94; Craig, Vincent, 42; Crampton, G. J., 866; Creed, W., 643; Dick, D. B., 418; Dunk, W., 928; Forbes, James, 917; Fuller, J. F., 240; Geen, C., 928; Gilbert, C. W., 554; Grater, J. S., 643; Heal, S. J., 116; Holt, W., 928; Hudson, James, 790; Jago, E. T., 418; James, J., 580; Jerman, J., 554; Kirk, Chas., 153; Lister, E. W., 643; McCallum, J. B., 614; McAlpine, R., 513; Morrison, James, 829; Morrison, R., 513; Norris, E. C., 195; Paul, W. S., 800; Pearson, Sir E. E., 928; Pritchard, T. J., 684; Raine, W., 116; Reid, W., 513; Ruckley, W., 35; Sampson, C. H., 872; Smith, John, 35; Stewart, A., 829; Tarring, F. W., 132; Thornycroft, Sir Hamo, 917; Triggs, D. W., 445; Vaughan, J. W., 580; Voisey, F. J., 643; Ware, H. C., 866; White, Thos., 116; Wratten, E. L., 872; Young, R. M., 766
 Offices, Southampton Harbour Board's, 458.
 Office, The, and Minor Works, 672
 Oil Fuel for Central Heating, 471
 Operatives, Unity among, 486
 Opinion, Intellectual, 908
 Options to Purchase 779

Organisation, Builder's Business, *818
 Overcrowding of the Architectural Profession, 171, 177, 307
 Owner, Building, Liability of, 638
 Oxford: 551; Amenities of, 308; Architectural Developments in, 711; Colleges, 308; Development of, 798; Renowned, 839; Town-planning and, 487
 PADDINGTON Baths, 246
 Pailin v. Northern Employers' Indemnity Co., 778
 Paint: Bituminous, †432, †502; Blistered, †21, †115; Old, †21; off Woodwork, †745, †780, †816
 Painting: During the Winter, 657, 692; Mural, in Paris, 239
 Palace, Nonsuch, 175
 Palestine, Town Planning in, 455
 Panel System of Warming, 471
 Paper, Varnished, Removing, †21, †115
 Paris Exhibition, National Pavilions at, 134
 Parker, Barry, on Traffic, Zoning, &c., 152
 Parliament, The Week in, 21, 80, 156, 193, 223, 260, 744, 782, 816, 851, 894, 924
 Parquetry Warping, †223, †292
 Partition: Soundproof, †780, †816; Walls, 871
 Partnership, †398, †473
 Patents 33, 124, 269, 332, 377, 445, 827, 937
 Pavilions, National, at Paris Exhibition, 134
 Paving Materials, †534, †604
 Paying Our Way, 587
 Payment for Wet Time, 380, 692, 720, 755
 Penalty Question, †854, †891
 Pepler, G. L., on Regional Planning, *892
 Peril to the Countryside, 833
 Perspectives, Architectural, †418
 Peterborough Cathedral, Lighting of, 814
 Picture: a Decorative, 487; Exhibitions, 176, 452, 500, 525, 572, 627, 871
 Pictures: 587; County Hall, 835
 Pillars, Eccentric Loads upon, †7, †72
 Pitlochry's Steel House, 339
 Planning: Regional, and Road Development, *819; Regional, in London and Environs, *892
 Plans: and Local Authority, †572, †638, †675; of Church, near Leeds, †927
 Plasterers, Master, National Association, *256
 Play, Architectural Association, *927
 Playing Fields Assoc., National, 92
 Plea for the Layman, 397
 Plots, Building, Sizes of, 92
 Plumbers' Claims, Hot Water Supplies and, 432
 Pond, L. J., Proportioning Concrete, †7
 Post Ends, Preserving, †292, †329, †398
 Practices, Architect's, †363, †432
 Premises: Assigning, Covenants against, 188; for Courtaulds, St. Martins-le-Grand, 178
 Premiums under Rent Acts, 676
 Preservation of Architectural Monuments, 619
 Presidential Addresses, 152, 434, 625, 627, 655, 660, 709, 710, 840
 Press, The: Architecture and, 130; Selection by, 131
 Prices: Current, for Building Work in London (see each Issue); of Building Materials, 22, 115, 227, 368, 505, 677, 819
 Prime Cost and Provisional Sums, 192
 Prizes: Presentation of, at the A.A., *175; Royal Academy, 886
 Problems: Building Industry, 869; in Construction, *912

Probyn, Colonel, on House Construction, *917
 Professional Announcements, 42, 94, 132, 310, 488, 528, 554, 800, 872
 Profession: Architectural, Overcrowding of, 171, 177, 307; Architectural, Solidarity in, 834
 Prong-lock Bar, †675
 Propaganda: Architectural, 518; Committee, 449
 Property, Law of, 332, *852
 Prospectuses, School, 326, 429, 501, 571
 Public: Authorities Protection Act, 925; Health Act, 676, 712, 746; The, "Voice" of, 381; Works Exhibition, 686, *748, *783, 790, *819, *897
 Pugh, G., Association of Architects and Surveyors, †914
 Pump, Horse Power for, †257, †363
 Purley Waterworks, 92
 QUANTITIES, †432, †502, †534
 Question, A Legal, 131
 Quinton, G.: Concrete Bricks, †638; Mortar, †638
 RADIATORS, Size of, †675, †711, †745, †816
 Railway: Centenary, 210; for North-West London, 751
 Ramsgate Lay-Out Competition, 315
 Randolph, W., New York Cathedral, †174, †312
 Ransome, J., Clay Lump for House Building, †312
 Rating: and Assessment Bill, 24, 26, 157, 223, 259, 328, 349, *717, 817, 855, 928; in the Metropolis, *854
 Reavell, G., Lowest Tender, †522
 Recreation in Cities, 92
 Registration: Bill, Singapore, 664; of Architects, †624, †675; Straits Settlements, 500
 Regulations, L.C.C., Floor Loads and, 640
 Rendell, W. J., Waterproofing Brickwork, †192
 Rent Acts: Apportionment under, 260; Decontrol, 926; Premiums under, 676; Prosecution under, 368
 Rent: and Rates, 487; Economics of, 913; Restriction and Flats, Rateable Value, 327; Strikes, 451
 Rents, Regent-street, 190
 Reorganisation: 274; R.I.B.A., 205
 Repairs, Lath and Plaster, †572, †604, †638
 Report: Birmingham Civic Society's, 456; of Minister of Health, 237; Sir E. Lutyen's, on Waterloo Bridge, 698; Waterloo Bridge, 39, 40, 76A
 Review: Ministry of Health's, of Town Planning, 415; of Housing Situation, 621
 Richardson, A. E., on Construction and Design in Architecture, *599
 Richardson, H. M., Enamelled Taps, †502
 Richborough, 309, 310
 Rima Controversy, 764, †802
 Road: Corrugation, *897; -making, Modern Methods, *853
 Roads: †745, †780; Improvement Act, 605
 Robertson, M., on Excursion to Sweden and Denmark, *770
 Rolling Margin, †21, †115
 Rome Scholarship in Engraving, 132
 Roofing Felt, †363, †432, †502
 Roof: Lifting, 225; Materials, Hollow Floor and, Approval of, 607; of Shed, Corrosion of, †604, †675
 Roughcast, Colouring of, †432, †502
 Ruislip, Church, St. Martin's, 420
 Rush v. Mathews, 676
 Russia, Soviet, Art Treasures in, 325
 SAFETY, Public, and the L.C.C., 131
 St. Albans, Domestic Architecture of, 384, 838

St. Martin's-le-Grand, Premises for Courtaulds, 178
 St. Paul's Cathedral, Preservation of, 454, 500, †557, 694, †696, †732, 766, †772
 St. Peter and the Popes, *742
 Salary for Services, †927
 Salonica International Fair, 342
 Sanitary Institute, Royal, 120, *186, 909
 Santa Barbara Earthquake, 600
 Scheme for Increasing Working Class Houses, 261
 Scholarship, Honan, 559
 Scholarships, R.I.B.A., 802
 School: Art, and Architecture, 591; Building, 764; Children, Work by, 41; Dundee, Competition, 395; Hospital, Competition, Holbrook, 6 of Architecture and Atelier, London University, *77; of Architecture, Liverpool, *113, 151, 291; of Architecture, University College, 326; Prospectuses, 326, 429, 501, 571
 Schools: Architectural, 291; Trades Training, *606
 Scotland: Building Trade Wages in (see each Issue); Housing in, 172, 260, 339, 513, 547, 649, 759, 792, 894, 937; New Buildings in, 87, 124, 164, 233, 269, 303, 339, 366, 411, 445, 481, 513, 547, 580, 614, 649, 686, 723, 759, 792, 829, 864, 903, 937; Steel Houses for, 908
 Sculpture: Architecture and, Glasgow Institute, *634; Bush House, 40; in Concrete, 381; R.A. Gold Medal for, 909; Symbolism in, 519
 Sermon, The, and Art, 657
 Setting Out: a Staircase, 364, 399, 435, 474; the Works, 639
 Settlements, Homeroft, *196
 Sewage, Flow of, Velocity of, †223, †257, †292
 Shirehouse, Norwich, Extension, 313, †348, †382
 Shopkeepers' Liability, *116
 Shuttering: †292, †329, †363; Competition, 640; Concrete, 729
 Signs, Sky, and Architecture, 834
 Singapore Registration Bill, 664
 Singleton, T.: Manchester Art Gallery, †348; Manchester Corporation Competition, †556
 Slate: Industry, West Highland, 580; Notes on, 309
 Slater, R. J., Subsidy House, †21
 Slates, Foreign, †79
 Shum Clearance, Housing after, *708
 Small Dwellings Acquisition Act, 294, 538
 Smoke: Abatement League, 501; Nuisance, 300, 834
 Soane Medallion and Tite Prize Competitions, 222
 Societies and Institutions, 742, 802, 840, 887
 Society for Preservation of Ancient Buildings, 552
 Sockett, A. E., on Law of Property, *852
 Soil Deposited on the Highway, *189
 Soirée, R.I.B.A., 693, 728
 Somerset Church Towers, †556
 Sossitts, A. F., Shirehouse, Norwich, †348
 South, A., St. Paul's Cathedral, †772
 Southampton Harbour Board's Offices, 458
 Southern Railway, The, 171
 Southport School of Art, 536
 Specification, British Standard, for Portland Cement, 576
 Squares, London, 2
 Stained Glass: 886; Personal Views on, 349
 Staircase, Setting Out a, 364, 399, 435, 474
 Stairs, Rise and Go of, †257, †292, †363
 Stations, Underground 500
 Statuary, Cast-Concrete, 930
 Statues on Monuments, 620

ARTICLES, NOTES, AND REVIEWS, REPORTS OF MEETINGS, PAPERS READ, LAW CASES, CORRESPONDENCE, Etc. (continued):—

- Stedman, A. G., Concrete Bricks, †675
Steel Houses, 416, 679, 686, 715, 759, 782, 816, 827, 829, 851, 908
Stevenson, J.: Landed Property Practitioners Bill, †174; Mock-Auctioneers, †455
Stone: Europe's Civilisation in, 525; for Building, Selection of, *751
Stones, Building, and Bricks, 834
Stonework, Measuring, †854, †927
Stott, A. H.: Constantine Technical College, †312; Manchester Art Gallery, †348; St. Paul's Cathedral, †696
Stott & Sons, Manchester Art Gallery Competition, †96, †211
Straits Settlements Registration, 500
Streatham Common Town-Planning Scheme, 642
Street: Architecture, 803; Tudor Design for, 2
Streets: and Buildings, 712; Making-up: Tenants' Liability, 928
Students: Designs, Exempted, 422; Drawings, 451; Work at the A.A. School, 170
Subsidy: Houses, †21, †79, †155, †675, †711; Housing, 344, 417, 816, 829, 851
Sums, Provisional, Prime Cost and, 192
Survey, East Kent, 485
Surveyors' Institution, *153, 223, 260, 709, *853
Sweden: 40; and Denmark, A.A., Excursion, *770; Impressions of, *44
Swedish Classic, 40
Symbolism, War Memorials and, 691
- TABLETS in Cathedrals, †696
Talbot v. Vickers, Ltd., 259, 328
Taps, Porcelain Enamelled, †473, †502
Tar for Roadways, *783
Taylor, H. E. L., on the Gothic Church Window, *840
- Tendering: †556, †590; Restrictions on, 656
Tender, Lowest, not accepted, †455, †488, †522
Tennis Court, Hard, †292, †363, †816, †891, †927
Tennis Courts, Red Ash, †257, †329
Then and Now, 523
Tiles: Infringement of Description, 926; splashed with Cement, †363, †398, †432
Tiling Phenomena, †192, †292
Timber: Diseases, Investigation of, 379; Dry Rot in, 345
Timbers, Indian, Manual of, 574
Time, Wet, Payment for, 380, 692, 720, 755
Tolley, W., Water in Basement, †502
Town: Growth, Modern, *742; Lifting a, 314
Town Planning: 120, 381, 488, 517, 534, 622, *817, 818; Advantages to Builders, *780; and Building Enterprise, 92; Historical, *663; in Palestine, 455; Institute, *152, 309, 475, *530, *743, *890; Ministry of Health's Review of, 415; of Built Areas, *890; Schemes, 171, 924; Schemes, Statutory, 799, 894; Spirit, *743
Trade: Custom, *864; News, 24, 31, 122, 162, 164, 201, 225, 233, 261, 267, 276, 296, 330, 365, 366, 375, 377, 405, 411, 443, 452, 481, 488, 507, 520, 536, 539, 540, 582, 588, 616, 622, 649, 658, 684, 715, 759, 788, 794, 856, 864, 896, 903, 910; Training Experiment, †556
Trades: Training Schools, *606; Union Congress, *434, *505
Tradition and Vagary, 519
Traffic, Zoning, &c., in U.S.A., *152
Training, Stereotyped, Danger of, 763
Transport and Housing, *635
Treasures, Art, in Soviet Russia, 325
Trenches, Planking and Strutting to, 893
- UNDERPINNING, †155
Unemployment: Insurance, 835; Problem, †679
United Counties Omnibus Co. v. Mayor of Northampton, 35
- University College School of Architecture, 326, 912
University, London, School of Architecture and Atelier, *77
Unsworth, Wm., Subsidy House, †115
Unwin, Raymond, on The Architect and His City, *734
Urban Amenities, *852
- VALE, E., Somerset Church Towers, †556
Veneers, †115, †192
Venice in the Making, 770
Ventilation: and Warmth, 466; Heating and, 466
Verdigris on Copper Pipes, †432, †502
Views, Personal, on Stained Glass, 349
Visit, A.A., to Denmark and Sweden, 2, *8, *44
Visits, 44, 45, 290, 473, 770
- WAGE-RATE Default Circulars, †96
Wages, Rates of, in the Building Trade (see each Issue)
Wallboard, "Sundeala," 366
Wall, Boundary, †329, †398, †432, †572, †604, †638
Walling, Chalk, 784
Walls: Damp-proofing, †891, †927; Exposed, †638, †675, †711, †745, †816; Outer, Lining of, 871; Partition, 871
Walton-on-Thames, Ashley Park, 16
Warboys, E. M.: Age we live in, †624; Competitions, †46; London, †348
Ware, B., Architect's Fee for Abandoned Work, †398
War Memorials: and Symbolism, 691; Miscellaneous, 329, 346, 436, 658, 694, 745, 766, 894, 914
Warming, Panel System, 471
Warmth, Ventilation and, 466
Waste, Dilapidations and, 907
Watercourses and Streams, 746
Waterhouse, B. J., Raffles Davison Volume, †455
Waterloo Bridge: 39, 40, 76A, 94, 132, 171, 238, 275, 313, 554, 588, 620, 656, 664, 692, 698, †732, †772, 834, 870, 908, †915; Will it come to this? †664
Waterproofing Brickwork, †192, †275
- Water Supply, †363, †398, †432, 778
Waterworks, Purley, 92
Weather, Bad, Insurance Scheme, 405
Webb, Philip, and His Work, 18, 76, 98, 220, 360, 498, 672, 811, 888, 922
Welch, H. A., on Condition of Building Industry, *875, *929
Welford, A., Advertisements in Public Places, †696
Wells Cathedral, Glass from, 909
Well under House, †292, †329, †363
Welwyn Garden City, Digswell-road Bridge, 671
Wembley Housing Conference, *538
West Ham College Prospectus, 326
Westminster: Hall Roof, *742; Houses of Parliament, Condition and Repair of, 769
Wheelwrighting, 621
Wheelwright, Village, 518
White, A. G., Building Trade Friction, †590
White Lead, Reduced, †257, †329
Will it Come to This? †664
Will, Lord Curzon's, 171
Wilson, Arthur, Water in Basement, †534
Wiltshire, Architectural Association in, *290
Window: Gothic Church, Growth of, *840; Restoration, 207
Windows, Hospital, †745, †780
Winter, Painting during, 657, 692
Wolverhampton Hospital Competition, 592
Woodcock, E. H., New Architectural Soc., †836
Woodward, W., Work of T. Raffles Davison, 496
Words of Wisdom, 450
Workmen's Compensation Act: Cases under, 160, 226, 259, 295, 328, 778; Contracts with Foreign Employers, 24
Work: of Philip Webb, 18, 76, 98, 220, 360, 498, 672, 811, 888, 922; of T. J. Clapperton, 491
Wren's Work, Distribution of, †174
X-RAY Proof Material, †711

ARCHITECTS, Etc., OF BUILDINGS ILLUSTRATED.

- ADAMS, Holden & Pearson, Station, Underground Railway, 500
Adams, P. T., & Small, W., College Chapel, Ceylon, 527
Allan, Eva D., Jacob Wrestling with Angel, 909
Allison, R. J., Legation, Montevideo, 737, 738
Anderson, M., Bridge Chapel, 174
Ansell, W. H., Convalescent Home, Skegness, 527
Armstrong, C. T., Shop Premises, Regent-street, W., 526
Astbury, F. N.: Shop Front, 522; Summer School for Political Party, 914, 918
- PARDELL, F. S., School of Architecture, 319
Bayes, Gilbert, "Lily Maid," 799
Bell, Reginald, Coats of Arms, Ironmongers' Hall, 131, 132
Bennett, T. P., & Son, House, Cholesbury, Hot Water Supply Plans, 467
Bergsten Carl, Swedish Pavilion, Paris Exhibition, 137
Bertram, R.: Cathedral Church, Newcastle, 49; "Surtees House," Newcastle, 61
Bjerke, A., School, Gothenburg, 44
Blomfield, Sir R., War Memorial, Bury, Panels, 186
Bolton, A. J., Adam Room, Exhibition, Wembley, 206, 209, 213, 214
- Boni, G., Byzantine Capitals, 316
Booty & Edwards, Chinese Assembly Rooms, Kuala Lumpur, 527
Breakwell, J., Dawnay Scholarship Design, 701, 702
Brierley, W. H., & Rutherford, J. H., Easthorpe Hall, Malton, Yorks., 248
Brinton, W. R., Open-Air Theatre, 179
Budden, L. B., War Memorial, Birkenhead, 344, 3 5, 347, 353
Burford, J., & Pierce, S. R., Development Scheme, Malta, 215-217
Burnet, Sir John, & Partners, Vigo House, Regent-street, 552, 562-564
Butling, G. A., Rome Scholarship Design, 42, 74, 75
Butling, G. H., Posters, Exhibition, 172
- CACKETT, & Burns Dick: Armstrong College, Newcastle, 64, 65; Assembly Rooms, Newcastle, 92, 93, 95, 97, 103; Infirmary, Tyne-mouth, 67; Offices and Warehouse, Newcastle, 67; War Memorial, Churchyard, Newcastle, 62; War Memorial, Tynemouth, 63
Cawthra, H., Panels, Bury War Memorial, 186
Clapperton, T. J.: Sculpture, 490, 491; War Memorial, Galashiels, 519
Coates, H. J., Parish Hall, 918, 919
Cochrane, J. B.: Architectural Library, 323; Bathing Pool, 322
- Collins, M. E., & O. H., Offices, Insurance, Leadenhall-street, E.C., 702, 704, 705
Conrade, A. C., Wall Panels, Adam Room, Wembley, 206
Cooper, Sir Edwin, Premises, St. Mary Axe, E.C., 657, 659, 666-669
Cotton, A. C., Aquarium, 523
Crook, R. H., Bungalow, Rivington, 589, 594
Cross, A. W. S., & Cross, K. M. B., Art Gallery, Manchester, 136, 145-149
- DANN, Reginald and Angus, Laurence, Hospital, Vellore, South India, 842-849
Davison, T. Raffles: Benenden War Memorial, 274; Church, St. Katherine Coleman, 131; Old English Fireplace, 208
Dawbarn, G. R., Constantine Technical College, Middlesbrough, 285-287
Detmar, Blow & Billerey, Fonhill House, 248
Dick, R. Burns, Newcastle Development Plan, 106
Dick, W. Reid: Kitchener Memorial, St. Paul's Cathedral, 834, 835, 837; "The Spinners," Sculpture, 552
Doman, C. L. J., and Clapperton, T. J., Frieze, East India House, Regent-street, 450, 451, 453
Douglas, Minshull & Muspratt, Guild hall, Conway, 631
- Downing, H. P. B., Reredos, Gillingham Church, Dorset, 277
Dowson, Miss: Madonna, Hatfield Church, 559; Madonna, Whitwell Church, I.W., 553, 587
Doyle-Jones, F., Figure in Cast Concrete, 381
Droz and Marrast, Church, Vincennes, 870, 871
Dyer, H. T., Cinema Design, 324
- EASTON & Robertson, British Pavilion, Paris Exhibition, 134
Edwards, F. E. P.: Baths, Sheffield, 284; Library, Sheffield, 880
Elcock & Sutcliffe, Wolverhampton Hospital, 595
Ellicott, S., Flats, Bloomsbury, Scheme, 321
- FAREY, C. A., Church Hall, Hounslow, 424
Fildes, G., House, Wimbledon, 492, 494
Fisker, Kay, Danish Pavilion, Paris Exhibition, 135
Fletcher, Sir Banister, Church, Frinton-on-Sea, 565
Forrest, G. T.: Fire Station, Peckham, 281, 284; Tenement Dwellings, 739
Forsyth & Maule: Library, Berkhamstead School, 622, 630; Royal Veterinary College, Camden Town, 623, 630

ARCHITECTS, Etc. (continued):—

Frere, E. C., Cabinet Design, 239
Furse, H. E., County Hall, 918-920

GOLDSMITH, H. H., Renaissance Composition, 173
Goodhart-Rendel, H. S.: Church, Pimlico, 241; House, Kingston, Som., 460
Gotch, T. C., Portrait of Mr. J. A. Gotch, 661
Goulden, R. R.: Bronze Group, Garden, Wootton Wawen, Warwick, 275; War Memorial, Dover, 731
Griffith, A. T., Memorial Tablet, Church, Stourbridge, 190
Gunton & Gunton: Bank, Cheapside, E.C., 772, 774; Offices, Insurance, Threadneedle-street, E.C., 494, 495; Premises, St. Martin's-le-Grand, E.C., 771, 775; St. Martin's House, St. Martin's-le-Grand, E.C., 772, 774

HALL, E. T., & **Hall, E. S.**, East India House, Regent-street, 450, 451, 453
Hall, H. A., Offices and Showrooms, Islington, 773, 774
Halsey, Gertrude, Frieze, Kinema, Regent-street, S.W., 2, 3
Hardy-Syms, R., Ramsgate Lay-Out, 317
Hardy, T. Elson, "Doone House," Winchmore Hill, 359
Hare, C. G., Wyke Manor, Pershore, Worcs., 805-809
Harris, E. V., House, 47, Grosvenor-square, W., 809, 810
Hastings, Tho., & **Reilly, C. H.**, Devonshire House, Piccadilly, 142
Haynes, T. C., House, Liverpool, 567
Hays & Gray, Welfare Scheme, Brancepeth, 355
Hayward, A. B., Maynard, D. C., & **Farey, C. A.**, Main Road Inn, 665, 666
Heal, R. G., Floating Stand, 518
Henry, T. W., Library, Belfast, 17, 20
Heyworth, P. D.: Bungalow, Halstead, Essex, 458, 460; House, Bagthorne End, 843; Moor Park Building Competition Design, 775
Hill, Oliver: House, Aldeburgh, 703; Houses, Smith-square, Westminster, 738
Hoffmann, Malvina: Medal for the Colonial Dames, 72; Paderewski Bronze, 41; Peacock "Bird Fountain," 207; "Young Neptune" Fountain, 76A
Horth, F. J., and **Andrew, H.**, Institute, Spring Bank, Hull, 355
Horth, F. J., Façade to Business Premises, 880
Hunt, W. and E., House, Southway, Hampstead, 460

JAGGER, C. S., Memorial, War, Hyde Park Corner, 590
James, W. E., Road Bridge, Welwyn Garden City, 670, 671
Johnson, H., Bungalow, Double, 309
Johnson, R. J., Allan's School, Newcastle, 66
Jones, Ivor, & **Thomas, Percy**, Police and Fire Station, Newcastle-on-Tyne, 880, 881
Joseph, Messrs., Synagogue, St. John's Wood, 586, 587, 596, 597, 603

KAUFMANN, R., Lay-Out, Nahalal, Palestine, 455

Kiffer, Fleming & Keesey, Caterham School, Memorial Hall, 630

Kennedy, G. L., & **Nightingale, F. B.**, King's College, Cambridge, 10, 12, 16
Kewell, J. E., Club, Irlam, 391, 397
Keys, P. H., Hospital, Singapore, 879, 880
Kieffer & Fleming, Shirehouse, Norwich, 426, 427
Knott, R., & **Collins, E. S.**, Sports Pavilion, Grove Park, 631

LANGMAN, H., & **Richardson, F.**, Shirehouse, Norwich, Competition Design, 356, 357
Lessor, F., Plaster Relief, Kinema, Regent-street, 486, 487
Lewis & Smith, Mariners' Homes, Liverpool, 728, 740, 741
Lidbetter, H., House, Watford, 598
Lorimer, Sir R., War Memorial, Galashiels, 519
Lutyens, Sir Edwin: Headquarters, British Medical Assoc., Tavistock-square, W.C., 101-103; War Memorial, Leicester, 133
Lyon, T. H., College, Cambridge, Buildings, 494

McINTOSH, F. G., Railway Offices, Nairobi, Kenya Colony, 282, 283
Mackenzie, A. G. R., Organ Case, Church, Medmenham, 423
Mackenzie, A. M., & **Son**, Aberdeen Art Gallery, 494, 495; Aberdeen Hall of Remembrance, 492, 495
Maclaren, Soutar & Salmond, School, Dundee, Competition Designs, 496, 497
Marshall & Tweedy, Business Premises, Newcastle, 105
Marvin, P. J., Church, Eastney Barracks, 425
Mawson, E. P., Church, Salonica, 171
Meadows, S. D., Offices, Fort Canning, Singapore, 630
Michelozzi, M., Capital and Cornice, Chapel, Florence, 916
Milburn, W. & T. R., Hospital School, Holbrook, 593, 594
Milne, O. P., Church of Christ Scientist, London, 424
Minoprio, C. A., Jarvis Studentship Design, 103, 104
Moore, J. R., Bossom Studentship Design, 528, 529
Morrison, A., Bungalow, California, 790
Munby, A. E., London School of Hygiene, 808

NEWTON, J., Assembly Rooms, Newcastle, 92, 93, 95, 97, 103
Nicholas & Dixon-Spain, Kinema, Regent-street, S.W., 2, 3, 5, 11, 12

OSBORNE, John, & **Son**, Bronze Group, Garden, Wootton Wawen, Warwick, 275
Ostberg, R., Town Hall, and Quays, Stockholm, 40
Owen, W. S., Lodge, Hitchin, 568

PAUL, R. W., Bristol Cathedral Renovations, 308, 316, 318
Pearson, C. B.: Houses at Bare, Arkholme and Arnside, 253; Warehouse and Offices, Lancaster, 390
Pearson, L., War Memorial, Hyde Park Corner, 590
Petter & Warren, Municipal Buildings, Yeovil, 526
Pole, J. A., Cancer Hospital, S.W., 703, 706
Poole, E. C., Harbour Board Offices, Southampton, 461-465
Prentice, A. N., Dining Saloon, "Otranto" Liner, 354

Pugin & Pugin, College, Strawberry Hill, 738

RAMSDEN, Omar: Ornaments, Altar, for Coll'ge, Cambridge, 592; Processional Cross, Bath Abbey Church, 560; Silver Altar Cross, 559
Rees, F. W., and **Archer-Betham**, House and Garden, Hove, 921
Rees, F. W., Bungalow, Winchester, 430
Reeves, Son, & Rason, Model Dwellings, Short's-gardens, Drury-lane, W.C., 633
Reid, A. D., Caurch, Earlsfield, 425
Reid, John, War Memorial, Churchyard, Newcastle, 62
Reid, J. M. W., War Memorial, 656
Reilly, C. H., Bank Premises, London, 489, 493
Reynolds, E. F., Screen and Pulpit, Lapworth Church, Warwick, 842
Richardson, A. E.: Church, Newcastle, 110; Houses, Durham Cathedral Precincts, 130
Richardson & Gill: House, Sunninghill, 461; Memorial Hall, London University, 460
Rogers, Elsie, Church, Design for, 150
Roscoe, F., Church in Belgium, 729

SAUNDERS, Dyce, Entrance Gates, 170
Scott, Baillie & Beresford: House, Crockham Hill, 354; House, Curator's, Cambridge University Botanic Gardens, 355, 362; House, Guildford, 526
Scott, Sir G. G.: Dowaside Abbey, near Bath, 180, 181, 211, 214; War Memorial, Hawarden, 693; War Memorial Tablet, Church, Trefnant, N. Wales, 696; War Memorial Tablet, Oswestry, 697
Sedgwick, F. J., Weather Vanes, Oast House, Crockham Hill, 693
Seth-Smith & Monro, School, Dorking, 318
Seth-Ward, M., Golf Club House, Denham, Bucks., 629, 631
Shepherd, H., Baths, Public, and Wash-houses, Paddington, 249-253
Silcock, T. (Miss), Menai Bridge, 524
Simpson, Sir J. W. & Ayrton, M., Palace of Arts, British Empire Exhibition, 380, 419, 428

Sirotkin, Z. G., House, Migdal, Palestine, 842
Slater & Moberly, Shop Premises, Oxford-street, W., 424
Smith, A. D., Norwich Shirehouse Extension, 316, 319
Smith, G. H. T., War Memorial, Birkenhead, 344, 345, 347, 353
Soissons, L. de, & Kenyon, A. W., House, Welwyn Garden City, 566, 703
Soissons, Louis de, Road Bridge, Welwyn Garden City, 670, 671
Spencer, E.: Altar Cross and Vases of Silver, 556 Mace for Aberdeen Cathedral, 621
Stephens, P. E., Electric Lighting Plant, 4257
Sullivan, L. S., & **Faber, O.**, Courtauld's Premises, St. Martin's-le-Grand, E.C., 180-185
Summerson, J., College Chapel, 319, 320
Swan, J. A., House, King's Norton, 350, 354
Swan, J. M., Tapestries, Burne-Jones, British Empire Exhibition, 419

TANNER, D. G., & **Horsburgh, A. L.**, Housing Scheme, Arley, 383, 387-389

Tapper, W., Church, Little Coates, Lincoln, 702
Tapper, W. J., Offices and Showrooms, Islington, 773, 774
Tatchell, S., & **Wilson, G. C.**, College, Eastbourne, 43, 71, 73
Tatchell, Sydney, Ironmongers' Hall, Aldersgate, E.C., 131, 132, 138-144
Tengbo n, Ivar, Church, Hogalids, 44, 45
Thearle, H.: Bank and Office Building, 386, 389, 396; Menai Bridge, 521
Thoms & Wilkie, School, Dundee, 392-395
Toft, A., War Memorial, Benenden, 274
Trent, W. S., Wolverhampton Hospital Competition Design, 632
Troup, F. W., Bank of England Dining Club, Tokenhouse-yard, E.C. 738
Tabbs, P., Son & Duncan: Hortensia House, Chelsea, 312, 318; Studios, Chelsea, 311

VANBRUGH, Sir John, Seaton Delavel Hall, 68
Venton, C. W., Higher Market, Exeter, 358

WALKER, Leonard: Stained Glass Panel from Door, St. John's Wood, 348; Stained Glass Window, Braintree, 345; Stained Glass Windows, Bank, Singapore, 351

Warman, W., & **Sinning, W. G.**, Art Gallery, Manchester, 214, 218, 219
Warren, E., Sports Pavilion, Clifton College, 620, 630
Warren, Gerald, House, Moor Park, Herts., 459
Warwick, Septimus, Canada House, Trafalgar-square, W.C., 13-15
Wearing, S. J., Masonic Building, Norwich, 248
Webb, Philip: House, Exning, nr. Newmarket, 76, 100; House, Joldwynds, Surrey, 99
Webb, Sir Aston, & **Webb, M. E.**, Birmingham University Extension, 424
Weightman, F. N., War Memorial, 656
Wellesley, G., & **Wills, T.**: House, Hertford, 431; House, Loch Eck, Argyll, 911
Wheatley & Houldsworth, Proposed Tudor Street, Hull, 247
Whinnéy, Son, & Hall, A.: Bank, Henley, 775; Bank, Pall Mall, S.W., 354
Wilkes, J. E., Oxford Town-planning Scheme, 561
Wilkinson, S., Bronze Tablet, Stockton-on-Tees, 153
Wills, T. T.: Cathedral of Humanity, 798, 800, 801; Monument and Lighthouse, 555
Wilson, W. G.: Almshouses, Thorpe-ness, Suffolk, 666; Workmen's Club, 667
Wood, Wallace: Houses, Wolverhampton, 883-885; Lay-out Plan, Low Hill Estate, Wolverhampton, 882
Wood, W. H., Church, Addingham, Yorks., 881

YOUNG, A., & **Reid, A. D.**, Church, Golder's Green, 878, 881
Young & Hall & Binns, Hospital, St. John's Wood, 776, 777

ILLUSTRATIONS.

[The Illustrations will be found on, or immediately following or preceding, the pages indicated.]

- ABBEY: Downside, near Bath, 180, 181, 211, 214; Langthorne, War Memorial, 896
- Aberdeen: Art Gallery, 494, 495; Cathedral, Mace for, 621; Hall of Remembrance, 492, 495
- Academy, Royal, Gold Medal Design, 918-920
- Aldeburgh, House, 703
- Aldersgate, E.C., Ironmongers' Hall, 131, 132, 138-144
- Aldwych, W.C., Bush House, View of, 41
- Almshouses, Thorpeness, Suffolk, 666
- Altar and Reredos, Church, Golders Green, 878, 881
- American Steel-Frame House, 226
- Amiens, Cathedral, Grille, 535
- Aquarium, An, Student's Design, 523
- Architectural Assoc. School of Architecture, Students' Designs, 170, 173, 174, 179, 701, 702
- Argyll, Lock Eek, House, 911
- Arkholme, House, 253
- Arley Colliery Housing Scheme, 383, 387-389
- Arms, Coats of, Ironmongers' Hall, 131, 132
- Arnside, House, 253
- Art Gallery, Manchester, 136, 145-149, 214, 218, 219
- Ash Church, 532
- Assembly Rooms: Chinese, Kuala Lumpur, 527; Newcastle, 92, 93, 95, 97, 103; Newcastle, Group Photograph, 109
- Aston Hall, Birmingham, 456, 457
- Attleborough Church, 244
- BAGTHORNE End, House, 843
- Bank: and Office Building, Student's Design, 386, 389, 396; Midland, Henley, 775; of England Dining Club, Tokenhouse Yard, E.C., 738; Pall Mall, S.W., 354; Premises, London, Design for, 489, 493; Singapore, Stained Glass Windows, 351; Westminster, Cheapside, E.C., 772, 774
- Banquet, R.I.B.A. Conference, Dinner Card, 111
- Bare, House, 253
- Basilica, View in, Palace of Arts, British Empire Exhibition, 380
- Bath: Abbey Church, Processional Cross, 560; Downside Abbey, 180, 181, 211, 214
- Bathing Pool, Student's Design, 322
- Baths: Hillsborough, Sheffield, 284; Public, and Washhouses, Paddington, 249-253
- Belfast Library, Competition Design, 17, 20
- Belgium, Church in, 729
- Bench End, St. Mary's, Gateshead, 58
- Benenden War Memorial, 274
- Berkhamstead School Library, 622, 630
- "Bird Fountain," Peacock, 207
- Birkenhead War Memorial, 344, 345, 347, 353
- Birmingham: Aston Hall, 456, 457; University, 424
- Blo' Norton Hall, 243
- Book Plate, 888
- Bosom Gold Medal Designs, 528, 529
- Boston, Museum, Mural Decoration by Sargent, 764, 767, 873
- Braintree, Stained Glass Window, 345
- Brancepeth Welfare Scheme, 355
- Bridge: Chapel, 174; Menai, 521, 524; Road, Welwyn Garden City, 670, 671; Thetford, 877
- Bristol Cathedral, 308, 316, 318
- British Medical Assoc. Headquarters, Tavistock Square, W.C., 101-103
- Broughton Church, 238
- Building, Masonic, Norwich, 248
- Buildings, Municipal, Yeovil, 526
- Bungalow: California, 790; Double, 309; Halstead, Essex, 458, 460; Rivington, 589, 594; Winchester, 430
- Burlingham, South, Church, 242
- Bury War Memorial, Panels, 186
- Bush House, Aldwych, W.C., View of, 41
- CABINET Design, 239
- California, Bungalow, 790
- Cambridge: College, Altar Ornaments, 592; College, Buildings, 494; King's College, 10, 12, 16; University Botanic Gardens, Curator's House, 355, 362
- Camden Town, Royal Veterinary College, 623, 630
- Canada House, Trafalgar Square, W.C., 13-15
- Cancer Hospital, S.W., 703, 706
- Canterbury, Town-Planning Conference, Group Photo, 533
- Capital and Cornice, Chapel, Florence, 916
- Capitals, Byzantine, 361
- Cardiff City Hall, Morgan Statue, 490
- Carron Fireplace Suite, 472
- Cartoon, Tapestry, 674, 811, 812
- Castleacre Priory, 288
- Castle: and Cathedral, Durham, 47; Durham, 53; Egeskov, 9; Newcastle, 58, 63
- Caterham School Memorial Hall, 630
- Cathedral: Amiens, Grille, 535; Bristol, 308, 316, 318; Durham, 51, 52, 54-57, 59; Liverpool, Processional Staff, 554; of Humanity, Student's Design, 798, 800, 801; of Puy, Grille, 535; Peterborough, 815, 816
- Ceylon, College Chapel, 527
- Chapel: Bridge, 174; College, Ceylon, 527; College, Student's Design, 319, 320; Florence, Capital and Cornice, 916; in Castle, Newcastle, 58
- Cheapside, E.C., Bank, Westminster, 772, 774
- Chelsea: House, Hortensia, 312, 318; Studios, Two, 311
- Chickney, Church, 729
- Chimney-piece, Premises, St. Mary Axe, E.C., 659
- Chimney Stack: Adisham, Kent, 662; at Wye, 909
- Chinese Assembly Rooms, Kuala Lumpur, 527
- Cholesbury, House, Hot-water Supply, Plans, 467
- "Christ before Pilate," Alabaster Panel, 558
- Church: Addingham, Yorks, 881; Ash, 532; Attleborough, 244; Brampton, Cumberland, 77; Broughton, 238; Cathedral, Newcastle, 49, 60; Chickney, 729; Congress Exhibits, 553, 554, 556 558-560; Design for, 150; Earlsfield, 425; Eastney Barracks, 425; Frinton-on-Sea, 565; Gillingham, Dorset, Reredos, 277; Golders Green, 878, 881; Hall, Hounslow, 424; Hesselgarde, 9; Hogalids, 44, 45; in Belgium, 729; Lapworth, Warwick, Screen and Pulpit, 842; Little Coates, Lincs, 702; Medmenham, Bucks, Organ Case, 423; of Christ, Scientist, London, 424; Pimlico, Porch and Tower, 241; Ranworth, 289; Ruislip, 416, 417, 420, 421; St. Katherine Coleman, 131; St. Nicholas', Newcastle, 110; Salonica, 171; South Burlingham, 242; Stourbridge, Memorial Tablet, 190; Vincennes, 870, 871
- Cinema, Design for, 324
- Clifton College, Sports Pavilion, 620, 630
- Club: Dining, Bank of England, Tokenhouse Yard, E.C., 738; Irlam, 391, 397; Workmen's, Thorpeness, Suffolk, 667
- College: Armstrong, Newcastle, 64, 65; Cambridge, Buildings, 494; Constantine Technical, Middlesbrough, 285-287; Eastbourne, 43, 71, 73; King's, Cambridge, 10, 12, 16; Royal Veterinary, Camden Town, 623, 630; Strawberry Hill, 738
- Coln St. Denis, 288
- Composition, Renaissance, 173
- Concrete, Cast: Figure in, 381; Statue of Pan and Model for Door Knocker, 930
- Conference, R.I.B.A., Newcastle, Group Photograph, 102
- Conway, Guildhall, 631
- Copenhagen, Police Headquarters, 8
- Cottage, Nonnington, 530
- "County Hall," R.A. Gold Medal, 918-920
- Courtaulds' Premises, St. Martin's-le-Grand, E.C., 180-185
- Courtyard, Fonthill House, 248
- Crockham Hill: House, 354; Oast House, 693
- Cross: Altar, and Vases of Silver, 556; Altar, Lancing School Chapel, 560; Altar, Silver, Rochester Cathedral, 559; Processional, Bath Abbey Church, 560
- Cumberland, Brampton Church, 77
- DAWNAY Scholarship, School of Music, 701, 702
- Decoration, Mural, by Sargent, in Museum, Boston, 764, 767, 873
- Denham, Bucks, Golf Club House, 629, 631
- Denmark: "Vallo," 4; Views in, 8, 9
- Development Schemes, Malta Competition Designs, 215-217
- Devonshire House, Piccadilly, 142
- Dinner Card, R.I.B.A. Conference Banquet, 111
- Doorway, Friars', Newcastle, 58
- Dorking, School, 318
- Dorset, Gillingham Church, Reredos, 277
- Dover, War Memorial, 731
- Downham Estate, Steel House, 715
- Downside Abbey, near Bath, 180, 181, 211, 214
- Drawing, Pencil, 812, 813, 814
- Dumfries, Canonbie, War Memorial Figure, 490
- Dundee, School, Competition Design, 392-395, 496, 497
- Durham: Castle, 53; Castle and Cathedral, 47; Castle Courtyard, Group Photograph, 102; Cathedral, 51, 52, 54-57, 59; Cathedral Precincts, Old Houses, 130; "Prospect of," From a Print, 50; Sculpture, 58
- Dwellings: Model, Short's Gardens, Drury Lane, W.C., 633; Tenement, L.C.C., 739
- EARLSFIELD, Church, 425
- Eastbourne College, 43, 71, 73
- Eastney Barracks, Church, 425
- Exeter, Market, Higher, 358
- Exhibition: Architectural, Posters, 172; British Empire, Wembley, Adam Room, 206, 209, 213, 214; Palace of Arts, 380, 419, 428; Paris, British Pavilion, 134; Paris, Danish Pavilion and Exhibit, 134, 135; Paris, Swedish Pavilion, 137
- FACADE to Business Premises, 880
- Figure, War Memorial, Canonbie, Dumfries, 490
- Fireplace: and Gas Fire, Overseas League, 470; Brick, Oxburgh Hall, Norfolk, 699; Marble, Institute of Hygiene, 470; Old English, 208; Suite, Carron, 472
- Fires, Gas, Overseas League, 469, 470
- Fire: Station, Peckham, 281, 284; "Well," 473
- Flats: Bloomsbury, Scheme, 321; Shops and, Bosom Gold Medal, 528, 529
- Florence, Chapel, Capital and Cornice, 916
- Font: at Nacton, 245; Ruislip Church, 417
- Fonthill House, 248
- Fordwich, Town Hall, 798
- Forthampton, near Tewkesbury, 220
- Fountain, "Young Neptune," 76a
- Frame, Mirror, in Wrought Iron, 570
- Fresco, Ruislip Church, 417
- Frieze: Kinema, Regent Street, S.W., 2, 3; Sculptured, East India House, Regent Street, 450, 451, 453
- Frinton-on-Sea, Church, 565
- GALASHIELS War Memorial, 519; Model for, 490
- Gallery, Art, Aberdeen, 494, 495
- Garden, Memorial, Wootton Wawen, Warwick, Bronze Group, 275
- Gardens, Botanic, University of Cambridge, Curator's House, 355, 362
- Gas Fires, Overseas League, 469, 470
- Gate: at Tours, 569; Wrought Iron, 571
- Gatehouse, West Stow Hall, Suffolk, 695
- Gates, Entrance, to Botanical Gardens, 170
- Gateshead, St. Mary's, Bench End, 58
- Golders Green, Church, 878, 881
- Golf Club House, Denham, Bucks, 629, 631
- Gotch, J. A., Portrait, 661
- Gothenburg, School, 44
- Grille: Cathedral, Amiens, 535; Cathedral of Puy, 535; for Bank Entrance, Paris, 569; Interior Decorative, 570; Nancy, 569; of Hotel, Chartres, 569; with Glass Panels, 569; Wrought Iron, 570
- Grosvenor Square, W., No. 47, House, 809, 810
- Group on National Museum of Wales, "Shipping," 491
- Grove Park, Sports Pavilion, 631
- Guildford, House, 526
- Guildhall, Conway, 631
- HALL: Church, Hounslow, 424; County, R.A. Gold Medal Design, 918-920; Ironmongers', Aldersgate, E.C., 131, 132, 138-144; Memorial, Caterham School, 630; Memorial, London University, 460; of Remembrance, Aberdeen, 492; Oxburgh, Norfolk, Fireplace, 699; Parish, Students' Design, 918, 919; Seaton Delaval, Northumberland, 68; West Stow, Suffolk, Gatehouse, 695

ILLUSTRATIONS (continued):—

Halstead, Essex, Bungalow, 458, 460
 Hampstead, House, Southway, 460
 Hatfield Church, Madonna, 559
 Hawarden War Memorial, 693
 Headquarters, British Medical Association, Tavistock-square, W.C., 101-103
 Heating Plant, Oil Burning, 472
 Henley, Bank, Midland, 775
 Hertford, House, 431
 Hexham, Church, Mewburn Memorial, 491
 Hitchin, Lodge, 568
 Hogalids Church, 44, 45
 Holbrook, Hospital School, 593, 594
 Home: Convalescent, Skegness, 527; "Vallo," Denmark, 4
 Homes, Mariners', Liverpool, 728, 740, 741
 Hospital: Cancer, S.W., 703, 706; Manor House, Liverpool, 728, 740, 741; Newcastle, 60; St. John's Wood, 776, 777; Singapore, 879, 880; Vellore, South India, 842-849; Wolverhampton, Competition Design, 595, 632
 Hotel, Macclesfield, Staircase, 702
 Hot Water Supply, House, Cholesbury, Plans, 467
 Hounslow, Church Hall, 424
 House: Aldeburgh, 703; and Garden, Hove, 921; Bagthorne End, 843; Blo' Norton Hall, 243; Canada, Trafalgar-square, W.C., 13-15; Chartham, Kent, 908; Cholesbury, Hot Water Supply, Plans, 467; Crockham Hill, 354; Curator's, University of Cambridge Botanic Gardens, 355, 362; "Doone," Winchmore Hill, 359; Easthorpe Hall, Malton, Yorks, 248; East India, Regent-street, 450, 451, 453; Exning, nr. Newmarket, 76, 100; Fonthill, 248; Golf Club, Denham, Bucks, 629, 631; 47, Grosvenor-square, W., 809, 810; Guildford, 526; Hertford, 431; Hortensia, Chelsea, 312, 318; Inverchapel, Loch Eck, Argyll, 911; Joldwynds, Surrey, 99; King's Norton, 350, 354; Kingston, Somerset, 460; Liverpool, 567; Lodge, Hitchin, 568; Migdal, Palestine, 842; Moor Park, Herts, 459; Oast, Crockham Hill, Kent, 693; 1, Palace Green, Kensington, 18, 19; St. Martin's, St. Martin's-le-Grand, E.C., 772, 774; Southway, Hampstead, 460; Steel, Downham Estate, 715; Steel-Frame, American, 226; Sturry, 908; Sunninghill, 461; Surtees, Newcastle, 61; Vigo, Regent-street, 552, 562-564; Watford, 598; Welwyn Garden City, 566, 703; Wimbledon, 492, 494; Wyke Manor, Pershore, Worcs., 805-809
 Houses: at Bare, Arkholme and Arnside, 253; Concrete, New System of Construction, 377; Low Hill Estate, Wolverhampton, 883-885; Moor Park, Competition Design, 775; of Parliament, Westminster, showing Disintegration, 765, 768-770; Old, Durham Cathedral Precincts, 130; St. Alban's, 384, 385, 838, 839; Smith-square, Westminster, 738.
 Housing Scheme, Arley Colliery, 383-387-389
 Hove, House and Garden, 921
 Hull: Proposed Tudor-street, 247; Spring Bank, Institute, 355
 Hyde Park Corner, Royal Artillery War Memorial, 590
 INDIA, South, Vellore, Hospital, 842-849.
 Infirmary, Tynemouth, 67
 Inn: Main Road, 665, 666; Sissinghurst, Kent, 692

Institute: of Hygiene, Fireplace, 470; Research, Royal Veterinary College, Camden Town, 623, 630; Spring Bank, Hull, 355
 Irlam Club, 391, 397
 Ironmongers Hall, Aldersgate, E.C.: 131, 132, 138-144; Coats of Arms, 131, 132
 Ironwork, Specimen, 535, 569, 570, 571
 Islington, Offices and Showrooms, 773, 774
 "JACOB Wrestling with an Angel," 909
 Jarvis, Henry, Studentship, 103, 104
 KENSINGTON, 1, Palace Green, 18, 19
 Kent: Adisham, Chimney Stack, 662; Chartham, House, 908; Sissinghurst, Inn, 692
 Kinema, New Gallery, Regent-street, S.W., 2, 3, 5, 11, 12, 486, 487
 King's Norton, House, 350, 354
 Kitchener Memorial, St. Paul's Cathedral, 834, 835, 837
 Knightsbridge, Shop Premises, 471
 Knock, Door, Model for, 930
 Knowle, East, Church Tower, 221
 Kuala Lumpur, Chinese Assembly Rooms, 527
 LANCASTER, Warehouse and Offices, 390
 Lancing School Chapel, Altar Cross, 560
 Lay Out: Nahalal, Palestine, 455; Ramsgate, Competition Design, 317
 Leadenhall-street, E.C., Offices, Insurance, 702, 704, 705
 Legation, H.B.M., Montevideo, 737, 738
 Leicester War Memorial, 133
 Lenin's Tomb, 325
 Library: Architectural, 323; Belfast, Competition Design, 17, 20; Berkhamstead School, 622, 630; Sheffield, 880
 Lighting, Studies of, 278, 279
 Lily Maid, The, Sculpture, 799
 Lion at Dawn, Pen Drawing, 922
 Little Coates Church, Lincoln, 702
 Liverpool: Cathedral, Processional Staff, 554, 624; Homes for Mariners, 728, 740, 741; Hospital, Manor House, 728, 740, 741; House, 567; School of Architecture Exhibition Posters, 172; University School of Architecture, Students' Designs, 386, 389, 396, 518, 521-523, 524, 555, 567, 798, 800, 801, 914, 918
 Lodge, Hitchin, 568
 Loggia and Courtyard, 47, Grosvenor-square, W., 810
 London: Bank Premises, Design for, 489, 493; Church of Christ Scientist, 424; School of Hygiene, Competition Design, 808; University, Memorial Hall, 460; University School Students' Designs, 309, 319-324
 Lorries, Commercial, 642, 682
 MACCLESFIELD, Hotel, Staircase, 702
 Mace: for Aberdeen Cathedral, 621; University, 889
 Madonna: Hatfield Church, 559; Whitwell Church, I.W., 553, 587
 Malta, Development Schemes, 215-217
 Malton, Yorks, Easthorpe Hall, 248
 Manchester Art Gallery, 136, 145-149, 214, 218, 219
 Market, Higher, Exeter, 358
 Medal, Model, for the Colonial Dames, 72
 Medmenham, Bucks, Church, Organ Case, 423

Memorial: Kitchener, St. Paul's Cathedral, 834, 835, 837; Mewburn, Church, Hexham, 491
 Memorial, War: Abbey Langthorne, 896; Benenden, 274; Birkenhead, 344, 345, 347, 353; Bury, Panels, 186; Churchyard, Newcastle, 62; Dover, 731; Galashiels, 519; Galashiels, Model for, 490; Hawarden, 693; Leicester, 133; Northern Architectural Association, 656; R.A., Hyde Park Corner, 590; Tablet, Church, Oswestry, 697; Tynemouth, 63
 Menai Bridge, 521, 524
 Middlesbrough, Constantine Technical College, 285-287
 Montevideo, H.B.M. Legation, 737, 738
 Monument and Lighthouse at the Mersey Bar, 555
 Moor Park: Building Competition Designs, 775; House, 459
 Museum: Boston, Mural Decoration by Sargent, 764, 767, 873; National, of Wales, Sculptured Group, 491
 NAIROBI, Kenya Colony, Railway Offices, 282, 283
 Newcastle: Allan's School, 66; Armstrong College, 64, 65; Assembly Rooms, 92, 93, 95, 97, 103; Assembly Rooms, Group Photograph, 109; Business Premises, 105; Castle, 58, 63; Cathedral Church, 49, 60; Chapel in Castle, 58; Church, St. Nicholas', 110; Churchyard, War Memorial, 62; Development Plan, 106; Friars' Doorway, 58; Grey Street, 66; Hospital, 60; Offices and Warehouse, 67; Plans and Views, 47, 48, 69, 70; Police and Fire Station, 880, 881; Stowell Street Wall, 68; "Surtees House," 61
 Newmarket, Exning, House, 76, 100
 New York, Museum, Arts Gallery, 278
 Nonington, Cottage, 530
 Northern Architectural Assoc., War Memorial, 656
 Northumberland, Seaton Delaval Hall, 68
 Northwich, Views in, 314, 315
 Norwich: Masonic Building, 248; Shirehouse Extension, 316, 319, 356, 357, 426, 427
 OFFICE Building, Bank and Student's Design, 386, 389, 396
 Offices: and Showrooms, Islington, 773, 774; and Warehouse, Newcastle, 67; Harbour Board, Southampton, 461-465; Headquarters', Fort Canning, Singapore, 630; Insurance, Leadenhall Street, E.C., 702, 704, 705; Insurance, Threadneedle Street, E.C., 494, 495; Newcastle, 105; Railway, Nairobi, Kenya Colony, 282, 283; St. Martin's-le-Grand, E.C., 771, 772, 774, 775; St. Mary Axe, E.C., 657, 659, 666-669; Warehouse and, Lancaster, 390
 Oil-Burning Heating Plant, 472
 Organ Case, Church, Medmenham, Bucks, 423
 Ornament, Piano, Details of, 672, 673
 Ornaments, Altar, for College, Cambridge, 592
 Oswestry, War Memorial Tablet, 697
 "Otranto" Liner, Dining Saloon, 354
 Overseas League, Gas Fires, 469, 470
 Oxford Street, W., Shop Premises, 424
 Oxford Town Planning Scheme, 561

PADDINGTON, Public Baths and Washhouses, 249-253
 Paderewski Bronze, 41
 Palace of Arts, British Empire Exhibition, Wembley, 380, 419, 428
 Palestine: Migdal, House, 842; Nahalal, Lay-out, 455
 Pall Mall, S.W., Bank, 354
 Panel: Alabaster, "Christ before Pilate," 558; Ivory, "Crowning of the Virgin," 553; Stained Glass, Door, St. John's Wood, 348
 Panels: Bury War Memorial, 186; Wall, Adam Room, Wembley, 206
 Paris Exhibition: British Pavilion, 134; Danish Pavilion and Exhibit, 134, 135; Swedish Pavilion, 137
 Parish Hall, Student's Design, 918, 919
 Park, Aston, Birmingham, 456, 457
 Pavilion: British, of Arts, 42, 74, 75, 103, 104; British, Paris Exhibition, 134; Danish, and Exhibit, Paris Exhibition, 134, 135; Sports, Clifton College, 620, 630; Sports, College, Newcastle, 64, 65; Sports, Grove Park, 631; Swedish, Paris Exhibition, 137
 Peacock, "Bird Fountain," 207
 Peckham, Fire Station, 281, 284
 Pershore, Worcs., Wyke Manor, 805-809
 Peterborough Cathedral, 815, 816
 Photograph, Town Planning Conference, Canterbury, 533
 Piano, Ornament Details, 672, 673
 Piccadilly, Devonshire House, 142
 Pimlico, Church, Porch and Tower, 241
 Plan, Lay-out, Low Hill Estate, Wolverhampton, 882
 Polytechnic, Regent Street, Students' Designs, 528, 529
 Posters, Architectural Exhibition, 172
 Premises: Business, Façade to, 880; Business, Newcastle, 105; Court-auds' St. Martin's-le-Grand, E.C., 180-185; Insurance, Leadenhall Street, E.C., 702, 704, 705; Insurance, Threadneedle Street, E.C., 494, 495; St. Martin's-le-Grand, E.C., 771, 775; St. Mary Axe, E.C., 657, 659, 666, 667, 668, 669; Shop, Oxford Street, W., 424; Shop, 289, Regent Street, W., 526
 Priory, Tynemouth, 63
 Puy, Cathedral of, Grille, 535
 RAMSGATE Lay-out Competition, 317
 Ranworth Church, 289
 Raven on Shield, 813
 Regent Street: East Endia House, 450, 451, 453; New Gallery Kinema, 2, 3, 5, 11, 12, 486, 487; Shop Premises, 526; Vigo House, 552, 562-564
 Relief, Plaster, New Gallery Kinema, Regent Street, 486, 487
 Renaissance Composition, 173
 Reredos, Gillingham Church, Dorset, 277
 Ribe, Views in, 8, 9
 Rivington, Bungalow, 589, 594
 Road, Main, Inn, 665, 666
 Rochester Cathedral, Altar Cross, 559
 Rome Scholarship Designs, 42, 74, 75
 Room, Adam, British Empire Exhibition, Wembley, 206, 209, 213, 214
 Ruislip Church, 416, 417, 420, 421
 ST. ALBANS, Houses, 384, 385, 838, 839
 St. John's Wood: Hospital, 776, 777; Stained Glass Panel from Door, 348; Synagogue, 586, 587, 596, 597, 603

ILLUSTRATIONS (continued):—

- St. Katherine Coleman Church, 131
 St. Martin's-le-Grand, E.C.: Court-
 aulds' Premises, 180-185; Pre-
 mises, 771, 775; St. Martin's
 House, 772, 774
 St. Mary Axe, E.C., Premises, 657,
 659, 666-669
 St. Paul's Cathedral, Kitchener
 Memorial, 834, 835, 837
 Salonica, Church, 171
 Saloon, Dining, Liner "Otranto,"
 354
 San Francisco Hall, Lighting Study,
 279
 Santa Barbara, Views in, 600, 601,
 602, 603
 School: Allan's, Newcastle, 66;
 Dorking, 318; Dundee, Competi-
 tion Design, 392-395, 496, 497;
 Gothenburg, 44; Hospital, Hol-
 brook, 593, 594; of Architecture.
 Student's Design, 319; of Hygiene,
 London, Competition Design, 808;
 of Music, Dawnay Scholarship,
 701, 702; Summer, for Political
 Party, 914, 918
 Screen: and Pulpit, Church, Lap-
 worth, Warwick, 842; Nevill,
 Durham Cathedral, 59
 Sculpture: Bronze Group, Garden,
 Wooton Wawen, Warwick, 275;
 by T. J. Clapperton, 490, 491;
 Durham, 58; Figure in Cast Con-
 crete, 381; Frieze, East India
 House, Regent Street, 450, 451,
 453; Jacob Wrestling with Angel,
 909; Lily Maid, 799; Madonna,
 Hatfield Church, 559; Madonna,
 Whitwell Church, I.W., 553, 587;
 Paderewski Bronze, 41; Peacock,
 "Bird Fountain," 207; Siena,
 360; "The Spinners," 552;
 "Young Neptune" Fountain, 76A
 Sheffield: Baths, 284; Library, 880
 Shield on Sports Pavilion, Clifton
 College, 620
 Shirehouse Extension, Norwich, 316,
 319, 356, 357, 426, 427
 Shop: Front, Student's Design, 522;
 Premises, Knightsbridge, 471;
 Premises, Oxford Street, W., 424;
 Premises, 289, Regent Street, W.,
 526
 Shops and Flats, Bosson Gold
 Medal, 528, 529
 Short's Gardens, Drury Lane, W.C.,
 Model Dwellings, 633
 Showrooms, Offices and, Islington,
 773, 774
 Siena, Sculpture, 360
 Singapore: Bank, Stained Glass
 Windows, 351; Fort Canning,
 Headquarters Offices, 630; Hos-
 pital, 879, 880
 Skëgness, Convalescent Home, 527
 Somerset, Kingston House, 460
 Southampton, Harbour Board Offices,
 461-465
 Spinners, "The, Sculpture, 552
 Staff, Processional, Liverpool Cathe-
 dral, 554, 624
 Staircase: 16th Century, Hotel,
 Macclesfield, 702; Palais de
 Justice, Paris, 569; Plans, 364,
 365, 399, 400, 435, 436, 474
 Stand, Floating, 518
 Station: Police and Fire, Newcastle-
 on-Tyne, 880, 881; Underground
 Railway, 500
 Statue: Bishop Morgan, Cardiff City
 Hall, 490; Garden, of Pan, 930
 Stockholm: Silent Street, 45; Town
 Hall and Quays, 40
 Stockton-on-Tees, Bronze Tablet,
 153
 Stourbridge, Church, Memorial
 Tablet, 190
 Strawberry Hill, College, 738
 Street: Silent, Stockholm, 45; Tudor,
 proposed, Hull, 247
 Students' Designs: American Com-
 monwealth Fund Studentship, 150;
 Architectural Assoc. School, 170,
 173, 174, 179, 701, 702; Dawnay
 Scholarship, 701, 702; Henry
 Jarvis Studentship, 103, 104;
 Liverpool University School, 386,
 389, 396, 518, 521-523, 524, 555,
 567, 798, 800, 801, 914, 918;
 London University School of
 Architecture, 309, 319-324; Rome
 Scholarship in Architecture, 42, 74,
 75; Royal Academy Gold Medal,
 918-920
 Studios, Two, Chelsea, 311
 Sturry, House, 908
 Suffolk, West Stow Hall, Gatehouse,
 695
 Summer School for Political Party,
 914, 918
 Sunninghill, House, 461
 Surrey, House, Joldwynds, 99
 Synagogue, St. John's Wood, 586,
 587, 596, 597, 603
 TABLET: Bronze, Stockton-on-
 Tees, 153; Memorial, Church,
 Oswestry, 697; Memorial, Church,
 Stourbridge, 190; Memorial,
 Church, Trefnant, North Wales,
 696
 Tapestries, Palace of Arts, British
 Empire Exhibition, 419
 Tapestry Cartoon, 674, 811, 812
 Tavistock Square, W.C., British
 Medical Assoc., Headquarters,
 101-103
 Tenement Dwellings, L.C.C., 739
 Tewkesbury, Forthampton, 220
 Theatre: Open-air, 179; Roman, of
 Verona, 588, 591
 Thetford, Bridge, 877
 Thorpeness, Suffolk: Almshouses,
 666; Workmen's Club, 667
 Threadneedle Street, E.C., Offices,
 Insurance, 494, 495
 Tokenhouse Yard, E.C., Bank of
 England Dining Club, 738
 Tomb: Lenin's, 325; of Wm. Morris,
 814
 Tower, East Knoye Church, 221
 Town Hall: and Quays, Stockholm,
 40; Fordwich, 798
 Town Planning: Conference, Canter-
 bury, Group Photo, 533; Scheme,
 Oxford, 561
 Trafalgar Square, Canada House,
 13-15
 Trefnant Church, North Wales,
 Memorial Tablet, 696
 Tynemouth: Infirmary, 67; Priory,
 63; War Memorial, 63
 UNDERGROUND Railway Station,
 500
 University, Birmingham, 424
 VALETTA and Floriana, Malta,
 Development Schemes, 215-217
 Vanes, Weather, Oast House, Crock-
 ham Hill, Kent, 693
 Vases of Silver, Altar Cross and,
 556
 Vaulting of Tower, "St. Nicholas,
 Newcastle, 60
 Vellore, South India, Hospital, 842-
 849
 Verona, Roman Theatre of, 588, 591
 Vigo House, Regent Street, 552, 562,
 564
 Village, Wingham, 531
 Vincennes, Church, 870, 871
 Virgin, The, "Crowning of, Ivory
 Panel, 553
 WALL, Stowell Street, Newcastle,
 68
 Warehouse and Offices, Lancaster,
 390
 Warwick: Lapworth, Church, Screen
 and Pulpit, 842; Wooton Wawen,
 Bronze Group in Garden, 275
 Watford, House, 598
 Welfare Scheme, Brancepeth, 355
 "Well" Fire, The, 473
 Welwyn Garden City: Bridge, Road,
 670, 671; House, 566, 703
 Wembley, British Empire Exhi-
 bition: Adam Room, 206, 209, 213,
 214; Palace of Arts, 380, 419, 428
 Westminster: Houses of Parliament,
 showing Disintegration, 765, 768-
 770; Smith Square, Houses, 738
 Whitwell Church, Madonna, Sculp-
 ture, 553, 587
 Wimbledon, House, 492, 494
 Winchester, Bungalow, 430
 Winchmore Hill, "Doone House,"
 359
 Window, Stained Glass, Braintree,
 345
 Windows, Stained Glass, Bank,
 Singapore, 351
 "Winget" Machine, 749
 Wingham Village, 531
 Wolverhampton: Hospital, Competi-
 tion Design, 595, 632; Low Hill
 Estate, Houses, 883-885; Low
 Hill Estate, Lay-out Plan, 882
 Wye, Chimney Stack at, 909
 Wyke Manor, Pershore, Worcs.,
 805-809
 YEOVIL, Municipal Buildings, 526
 Yorks, Addingham, Church, 881



THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VOL. CXXIX.—No. 4,200

JULY 3, 1925

CRAFTSMANSHIP AND ADVOCACY—II

FORCE of circumstances has combined to create in architecture what Mr. Marriott terms "the illusion of detachment from materials." The architect, who is generally an enthusiast upon craftsmanship, often forgets that he must take a considerable share of the blame for the injury to the craftsman as a human being by depriving him of initiative, but a much more serious complication comes into architecture when the craftsman himself develops the illusion of detachment from materials. Where there are illusions about the fundamental duty involved in work, we must not be surprised at the further detachment.

The tendency of craftsmen to-day is to organise, and whatever their ideals may be the policy takes the form of collective action on official lines. Obviously a time must come when only the permanent officials can understand the academic problems, when considerable authority and power must pass into a few hands. This procedure seems to be the inevitable end of most democratic societies, and we see the ancient guilds which were a protection of quality merging into trade unions which seem to aim at an economic protection. As things are we do not expect the unions to become craft guilds; we believe that the influence of public education has converted the craft guilds into trade unions and substituted polemics for work.

It is worth quoting here an extract from the "Industrial History of England." The extract is taken from Mr. Cobden Saunderson's essay on Ideals in Industry:—

"The artisan or craft guilds, which afterwards became very important, arose first in the towns, and originally seemed to have consisted of a small body of the trading men of a particular craft, to whom was confided the regulation of a particular industry, probably as soon as that industry was thought of sufficient importance to be regulated. The guild, 'and this is important,' tried to secure good work on the part of its members, and attempted to suppress the production of wares by irresponsible persons who were not members of the craft. Their fundamental principle was, that a member should work not only for his private advantage, but for the reputation and good of his trade."

The position to-day, as we see it, seems to be that the workers' leaders probably have these fundamental principles in mind, but they have given a narrow political or economic twist to our conception of trade reputation, and as a consequence they forget the duty and responsibility of service for the common good of mankind.

It may be urged that while we are discussing work in terms of craftsmanship we are merely lamenting the absence of ideals in work, whereas by far the greater problem is the one which involves not only the necessity for work but the manner of finding it. We grant that our whole economic system is at present out of gear, and that the urgent need of the country is to find work for everyone. We admit that the problem is greater than a part of it, nevertheless we believe that the ideals underlying good craftsmanship are precisely those which have been undermined in the economic problem. Ideals have gone astray in the welter of argument upon economic doctrines. It may seem a trivial thing to worry about ideals in craftsmanship when a great proportion of craftsmen can find no work to do, but if we look closely enough we may trace the confusion between cause and effect. Craftsmanship, or the quality of the work (call it what you like) will look after itself, we are told, if we can only find work, but surely there is something of an inversion here when we know that if we had the

right idea of work there would be plenty of it. Craftsmanship is not only manual dexterity; it is a form of service, and carries with it an obligation either not to think about economics, or to be able to think beyond trade agreements and the number of pennies per hour.

We are not suffering from the want of theories, but the most that our education in political economy has done for us is to enable us to create an artificial economic position, and prevent the elementary laws of political economy from working out the position for us automatically. This may be deemed a negative policy, and so it is; consequently we refuse to test it against our facile theories. Where work is concerned we avoid it; we prefer to rely upon our wits. We do not suggest that all the knowledge is on one side and that the workers are always in the wrong; on the contrary, we believe that the economic theories (as opposed to economic principles) of one side are as good as those of the other, but when we are discussing craftsmanship, the joys or—as some would have us believe—the evils of craftsmanship are the exclusive privilege of the craftsman.

The recent dispute arising out of the proposed erection of steel houses provides a piquant touch to our argument. The nation in a desperate situation invited substitutes for the traditional methods of building to help to reduce the huge shortage of houses. One set of craftsmen receiving higher wages objected to another set of craftsmen working for lower wages in different materials. We were doubtful about the sincerity of this display of altruism between the different crafts, but we had no doubt that the significance of the country's needs was being flagrantly overlooked by the doctrinaires. The contention that the steel house "attempted to superimpose upon the building industry a lower rate of wages," was merely another way of saying that another competitor was in the field. It would have been easy to invert this contention by saying that the building trade were seeking to superimpose upon the engineering industry a higher wage to neutralise the economic advantages of the building substitute which had been evolved. The whole difficulty arose from the artificial economic situation which was built up, and in refusing to realise that it was artificial and therefore vulnerable when it was against the best interests of the country.

We raise the question of the steel house entirely from a disinterested point of view, although we regret the failure of the building industry to meet a situation which was clearly obvious, even if it was abnormal. It might be contended that the building industry, in its objection to the steel house, was thinking of its reputation for craftsmanship, and of the industry, but ample warning was given by those who could foresee the danger, and it was neglected. In the end, force of public opinion will always find a remedy when the responsibility of service is neglected, and thus we come back to our original point: If the welfare of any industry rests upon the ideals of craftsmanship and service, there will be no danger from faulty reasoning in the realms of political economy.

The whole problem of work must be based upon some ideal of service to society, whether in the quality and tradition of workmanship or in the brains which are responsible for the economic policy. Quality in workmanship, and many other qualities associated with it, have not been destroyed in the name of science and wealth; they have been destroyed mainly because the true conception of work and craftsmanship has given way before our new and facile teachings.

NOTES.

The Manchester Art Gallery Award.

THE protests which have been made against the award in the Manchester Art Gallery Competition ought to be seriously considered. If they have a sound basis for action it should be taken, but even if that is not the case, it should be fully disclosed wherein lies the discrepancy between the views of the assessors and the competitors, so that future troubles of this sort may be avoided.

Tudor Design for New Street.

WHATEVER may be said as to the desirability of reverting to our traditional Tudor architecture for the entire treatment of a fine new thoroughfare in the city of Hull, we may at least welcome whole-heartedly the enthusiasm and imagination which have inspired the Lord Mayor of Hull in his ideal for improvement and development of a modern city in this way. How far the fine municipal buildings which Hull has recently erected may have been the direct incentive to the desire for further city improvement we do not know, but the great improvements in the city should certainly act as an inspiration to further efforts. The public are probably a little tired of the heavy type of modern Renaissance which is adopted for so many buildings to-day, and such reversion to a really English style like that in Liberty's new premises close to Regent-street are undoubtedly welcome. The creation of an entire new thoroughfare with buildings of Tudor design may suggest to many that we should gain picturesqueness and lose dignity of effect, but that certainly does not follow in the

hands of a capable architect. We are told that the Lord Mayor of Hull has adopted Gothic in the artistic habiliments of his business, even down to Church Text for his typewriting, but this need not be set down to his discredit if he has the ability and force to persuade his city how essential it is that its fine new thoroughfare from Paragon-street Station to Berentz-road shall be fronted by buildings of good architecture.

The A.A. in Denmark and Sweden.

THE A.A. visit to Denmark and Sweden has been a great success, and must have helped to strengthen the ties that have always bound these countries of the North to ourselves. That we have a great deal to learn from them is evident, and it is no less clear that the lavish hospitality and kindness to be found in Scandinavia have not been exaggerated. Visits of this kind fulfil more than their immediate purpose, for they awaken an enthusiastic desire on the part of those who enjoyed the trip to send others to share in the inspiration to be gained in the work—old and new—of those countries. We would remind our readers that it is easy to reach Copenhagen and Stockholm over land, and that the sea voyage that looks so alarming on the map need not deter them from undertaking the journey.

International Art.

THE "A.A." is often serious but it is never solemn, and nowhere does it better show its genius for work and play than when on holiday. The party that spent those two wonderful and crowded weeks travelling in Denmark and Sweden was distinctly on the young side (its one

grandfather was the youngest of the party!); it was out to learn and enjoy, to make friends and, if possible, to keep them, and the influence of the trip is not to be measured in the sketches, photos, and written accounts which will be the visible record of the adventure. Adventure it was in a fine sense, and the contact with two different and stimulating countries will make an impression far beyond the immediate range of those who took part in it. It is curious that while art has been largely internationalised since the war, local and race character appear to be more strongly cherished. The Renaissance was denationalising; the present tendency reverting further back still to material and function has discovered the soil. The genius of England will be best expressed in its architecture when its young men and women learn how other countries not only build but live.

Amongst the charms of The London London are its squares, Squares.

usually adorned with trees—no wonder that we all hope they may be preserved for the general amenity. But the chairman of the L.C.C. Town-planning Committee points out that, unfortunately, in many cases we have not to deal with private ownership. The various borough councils and other authorities seem to own some two-thirds of those enclosures scheduled under the London Squares Preservation Bill of 1906. Meantime an inquiry is proceeding on behalf of the L.C.C. as to what squares may be regarded as safe, what squares are protected or unprotected by judgments, which are in immediate danger, &c. The cost of acquiring the squares which are in danger seems to be prohibitive, for the time being at least.



Detail of Painted Figure Frieze in the New Gallery Kinema, Regent Street, London. By GERTRUDE HALSEY.



Detail of Painted Figure Frieze in the New Gallery Kinema,
Regent Street, London. By GERTRUDE HALSEY.

THE letters we published last week from the Hon. Secretary of the East Kent Joint Town-planning Committee and Messrs. Culpin & Bowers throw some light upon the situation. They show that one colliery company is dealing seriously with its housing, and also, what we never doubted, that the town-planning advisers to the Ministry of Health are doing what they can to help. We note also that a Town-planning Report is shortly to be issued. This is excellent so far as it goes, but the arrangements for the area as a whole can hardly be called "effective" when it is admitted that "it is difficult for the Eastry Rural District Council to take any steps definitely to town-plan the areas, owing to the fact that the colliery owners are not prepared at the present time to give any definite information as to the sites which will be utilised for the housing necessary in connection with the collieries, and they are even uncertain as to the sites of the collieries themselves." The point is that at present there is no efficient co-operation and no legal restriction, nor any immediate prospect of restriction upon haphazard development. Judging from the correspondence, one

must conclude that the next step lies with those colliery owners who are not ready with the requisite information. We hope that they may see their way to enlighten the public as to their position.

"THE Man in the Builder's Yard" writes to us, but without giving his name or address: — "Those who have written from the high-brow, high-pedestal, professional point of view concerning the Hudson Memorial have overlooked the following in 'Green Mansions' page 65, chapter v: 'It was a human being—a girl form . . . one arm was doubled behind her neck . . . while the other arm was extended before her, the hand raised towards a small brown bird. . . .'; and page 77, chapter vi: 'In casting about for some term or figure of speech in which to describe the impression produced on one at that moment, I think of *waspish*, and better still, *avis-pada*—literally the same word in Spanish, not having precisely the same meaning nor ever applied contemptuously—only to reject both after a moment's reflection. Yet I go back to the image of an irritated

wasp as perhaps offering the best illustration; of some large tropical wasp advancing angrily towards me, as I have witnessed a hundred times, not exactly flying, but moving rapidly, half-running and half-flying, over the ground, with loud and angry buzz. . . . Surely, the sculptor did not go far beyond that portion of the book to make his image—his wasp-girl, with its waspish face, wasp-waist, small round body, elongated lower body, all waspish, half-flying, with W-shaped arms? Most people get into a panic over a wasp. This angry tropical one, so literally rendered in stone, has stung many, so badly, indeed, that it is they who do the buzzing! Really, it is amusing to hear professionals talk high-art over a grossly literal rendering of a figure of speech, and I wonder who enjoys the joke most?"

THE appointment of Mr. Miles Malleon, the actor and playwright, as dramatic adviser to the I.L.P., is more than a gesture. The Labour Party, as a party, cares definitely for art, and is anxious to show that art patronage is not the prerogative of the rich and great. Artists respect this encouragement, and they cannot better express their co-operation than in proving that art is beyond class as it should be beyond sex. Whether such detachment is helped by the incorporation of a particular person with a party machine is doubtful; propaganda is an insidious element in political life. We hope that the sincere impulse which placed Mr. Malleon where he is will not overlook the lesson from other essays in political patronage. Napoleon carried off artistic spoils to celebrate his glory in war, and the desire to exploit art can still be expressed in other ways. The Labour Party can do much to release art from the bonds in which materialism has left her, but in playing St. George let it not forget England.



Detail of Painted Figure Frieze in the New Gallery Kinema, Regent Street, London. By GERTRUDE HALSEY.

GENERAL NEWS

Building Students' Association.

The members of the Wolverhampton and District Building Students' Association recently visited the works of the Himley Fire and Red Brick Co., Ltd., near Dudley. The party were shown over the works and laboratory by Captain Yates, and were afterwards entertained to tea at the "Crooked House," at Himley.

Ancient Warwickshire Building Threatened.

The Warwickshire Archaeological Society is urging the Town Council to consider taking steps to prevent the threatened demolition of the Priory, one of the town's most ancient buildings.

Proposed Manchester Town Hall Extension.

A preliminary scheme for the lay-out of the new buildings which are proposed as an extension of the Manchester Town Hall, has been prepared by the City Architect, Mr. Henry Price.

Dangerous Structures Surveyorship.

Mr. Gilbert H. Lovegrove, F.R.I.B.A., F.S.I., of Messrs. Lovegrove & Papworth, 374, Old-street, E.C.2, has been appointed, by the City Corporation, Surveyor for Dangerous Structures in the City of London under Part IX of the London Building Act, 1894.

The Newcastle Conference.

We would remind readers that those who propose to attend the R.I.B.A. Conference to be held at Newcastle and Durham, from July 8 to 11, should notify the Secretary of the R.I.B.A. without loss of time. Full particulars of the conference were given in our issue for June 19.

New Baths and Washhouses, Paddington.

Erected on a site dividing Queen's-road and Porchester-road, Bayswater, and at a total cost of nearly £130,000, new central baths and wash-houses at Paddington have just been opened. Mr. Herbert Shepherd is the architect.

Old London Prints.

The London County Council has arranged for selections from the prints and drawings in its possession illustrative of eighteenth-century London to be exhibited at the County Hall. The public are admitted to view the County Hall from 10.30 a.m. to noon, and from 1.30 p.m. to 3.30 p.m. on Saturdays.

Appointments.

The King has sanctioned the appointment of Dr. F. J. Waldo, H.M. Coroner to the City of London, as Knight of Grace to the Grand Priory of the Order of the Hospital of St. John of Jerusalem in England. The oldest Order in Europe—founded A.D. 1014—"for the service of mankind."

Mr. E. Cavanagh, L.R.I.B.A., and Mr. C. E. L. Parkinson, A.R.I.B.A., have been appointed as additional architectural assistants for one year to the Battersea Borough Council.

Obituary.

We much regret to record the death, at the age of fifty-four, of Mr. Donn Barber, F.A.I.A., the distinguished American architect. He began practice on his own account in 1900, and up to the time of his death his professional career was marked by continued and brilliant success. He was a Beaux-Arts man, and gained his early experience in the offices of Carrère & Hastings, Cass Gilbert, and Lord & Hewlett.

COMPETITION NEWS

Pretoria Town Hall.

H.M. Senior Trade Commissioner at Johannesburg has forwarded a copy of minutes received from the clerk to the Municipal Council of Pretoria concerning the erection of a new Town Hall in that city. It is stated in the minutes that competitive designs will be invited at a cost (first estimate) of about £200,000. British firms interested in this announcement can consult the minutes referred to on application to the Department of Overseas Trade, 35, Old Queen-street, London, S.W.1.

St. Olave's School.

The Governors of the St. Olave's and St. Saviour's Grammar School propose to considerably extend their buildings in Tooley-street, S.E. 1. An area of land in Tooley-street, covering some 9,800 sq. ft., is being purchased, and the accommodation of the school will be increased to 500 scholars. It is understood that a competition among architects will take place for the purpose of obtaining plans.

Norwich Masonic Building Scheme.

Messrs. Edward Boardman & Son, the assessors, have made the following awards in this competition:—(1) Mr. Stanley J. Wearing, A.R.I.B.A., 3, Redwell-street, Norwich; (2) Mr. E. H. Buckingham, of Messrs. Morgan & Buckingham.

Worcester School Competition.

The Worcester City Council have decided to erect a new secondary school for girls on the Thames House site, at an estimated cost of £32,000. Local architects are to be asked to submit designs for the complete scheme, with alternate estimates for reinforced concrete blocks or reinforced brickwork. Two prizes will be offered for the best designs submitted, the first to be a prize of fifty guineas and the second one of twenty-five guineas. The prize to be merged in the architect's commission in the case of a successful competitor's design being accepted by the Council. The Council have also agreed to approach Mr. Widdows of Derby and Mr. Buckland of Birmingham with a view to one or the other of them acting as assessor of the designs, the Council reserving to themselves the right of ultimately deciding which set of designs shall be accepted.

Wolverhampton and Staffordshire Hospital.

Designs are invited by the Board of Management for a proposed new outpatient and casualty department. Mr. T. R. Milburn, F.R.I.B.A., has been appointed assessor, and premiums of £200, £150, and £110 are offered respectively. Sending-in day Sept. 5.

London School of Hygiene and Tropical Medicine.

In the limited competition for designs for the permanent quarters of the London School of Hygiene and Tropical Medicine, to be erected on the site adjoining Keppel-street, Gower-street, and Malet-street, near the British Museum, first place has been awarded to the design submitted by Mr. P. Morley Horder, F.R.I.B.A., who has been appointed architect for the work. Sir Frank Baines was the assessor.

Coventry Hospital.*

Sevenoaks U.D.C. Housing.*

Gower R.D.C. Housing.*

Other Competitions.

Other competitions still open include the following (the dates given are, first the sending-in date, and second the issue of *The Builder* in which full particulars were given):—Argentine Institute (Dec. 1; April 24). Copenhagen Bridge (Sept. 1; April 24). Warwickshire Hospital Extension (Aug. 10; May 29). Newcastle Fire and Police Station (Oct. 8; June 12). Drammen Bridge (Oct. 1; May 29).

* Competitions when "warned" or vetoed by the R.I.B.A. are Starred.



"Vallo," Denmark.

[Formerly a Royal Castle, now a home for ladies of the nobility.]



The New Gallery Kinema, Regent-street, London : The Auditorium from the Balcony.

MESSRS. NICHOLAS & DIXON-SPAIN, FF.R.I.B.A., Architects.

ROYAL HOSPITAL SCHOOL COMPETITION, AT HOLBROOK, NEAR IPSWICH

HALF-A-DOZEN designs for this extensive and interesting series of buildings were recently submitted in a limited contest, and the drawings have been on view during this week at the Royal Institute of British Architects. Sir Aston Webb, P.P.R.A., acted as the adjudicator, and we agree that he has undoubtedly selected the most appropriate design. All the schemes are quite meritorious and worthy of the occasion, though the assessor can have experienced little difficulty in arriving at his award. The successful architects are Messrs. Buckland & Haywood, of Birmingham, who are to be congratulated on their success, and if the school is carried out as the authors have designed their various main buildings with their accessories, this achievement will greatly increase the architects' reputation.

In the absence of a block plan it is not easy to describe the many difficulties which had to be solved to compare each scheme with the others. Some reproductions of the chief features of this undertaking, as illustrated by the accepted design, were published in *The Builder* on May 8 last. These plates show the lay-out of the central administration block, with its handsome, lofty tower and the complimentary turrets in the return fronts marking the entrances to the dining hall on the right and bathing pool house on the left. These wings are linked up with the assembly hall by a range of classrooms overlooking the parade ground in a spacious way distinctly marked by architectural individuality, refined and broad in handling, without any undue elaboration or fuss. The main approach is from the rear on the north, reached by diagonal roads disposed somewhat after the manner shown by scheme No. 1 submitted by Mr. Vincent Harris, who may be reckoned second in merit.

The hostels in the chosen plan are set out in double order east and west of the parade ground, which has an elevated saluting base in centre of its top frontage. The rather Baroque-looking chapel is located at the extreme end of the western vista surrounded by a formal garden, and at the termination of the view eastwards stands the superintendent's house. Towards the north is the fourteenth hostel, to be occupied by fresh arrivals. The isolation building and the hospital are well placed for their purposes. The classrooms are laid out round squares and along roadways to the northern or upper levels, while others occur in the vicinity of the chapel. The rifle range is below the pavilion south of the parade square.

No. I.—We carefully noted the large series of drawings sent in by Mr. Vincent Harris, whose scheme is compact, scholarly and ingenious. The octagonal chapel features finely the main front to the south, where a dripping-pan-like stadium is provided for games. The bathing house and the gymnasium are put at back of the parade square, which measures 350 ft. by 300 ft. The assembly hall, with workshops beyond it are on its left, with the dining hall to the right. The fourteen hostels range along the southern front and the classroom houses are set along the four radiating roads at the rear, which nicely meet in a handsome rendezvous where the entrance gates make a fine feature, close by being the headmaster's residence and chief officer's house, each well commanding the approach. Below the "Park Covert" the isolation block and also the infirmary are placed, nearly the same as shown by the selected plan. The simple Classic severity adopted by Mr. Harris is managed with good proportions, and the details of his planning show much thought, and here, as in most of the designs, the classrooms face the south with cloisters behind round inner quads. The perspective shows the campanile set between the gymnasium and bath at rear of the central parade adding much dignity.

No. II, by Messrs. Adshead, Topham and Adshead, is marked by the bold manner in which the assembly central hall projects towards the river in front of the main southern façade. It measures inside 127 ft. by 55 ft., and is flanked by classrooms, with southern windows, and large inner quads behind. The parade

ground is set behind, and has the block for administration on the north frontage, while behind that stands the big dining-room, with its capital elevation marked by two big bays. This front is somewhat obscured to view. The boiler-house extending at the back completes the bisection of the site cleverly. The bath building and gymnasium are on the east of the parade ground, particularly plain in treatment, with sufficient space between to approach the chapel, which is long and narrow on plan, having square mullioned windows and a regular chancel. The grouping of the various class houses is well contrived, all neatly designed, with wide eaves, if somewhat bold in style.

No. III, of which Messrs. W. & T. R. Milburn, of Sunderland, are the authors, is in some respects similar to No. I, especially in the disposition of the chapel flanked by the seven hostels on either hand. The brick tower adds importance to the parade ground, but the pinched appearance of the school block is due to the over-long pilasters under the pediment above on the campanile façade. The vertical lines of this over-large tower tend to reduce the apparent width of the assembly hall behind it. The dining hall is on the right of the parade ground, and the rifle range, gymnasium and bathing house rise correspondingly to the left. An oval-shaped sports area is planned in alignment with the chapel. The northern location of the staff cottages occurs above the level of the boiler house. The sanatorium and hospital face the south-east at the eastern end of the property with its many undulating levels. The masters' houses range round the boys' playing fields. The superintendent and chaplain are quietly put away in the south towards the future ceremonial landing stage leading through an avenue up to the chapel, which will seat 1,250 persons.

No. IV, submitted by Messrs. Nicholas & Dixon-Spain, is mainly based upon a parallel lay-out, with the chief frontages, like the other schemes, towards the south, and the entrance is set off on the "road to Ipswich" at the north, and the infirmary approach is skirted by this highway and also adjoins the "open road" to the west of the parade ground. The classrooms project beyond the "school courts," with the detached assembly-room on one flank and the chapel on the other. The bath and gymnasium occupy like situations in the parade ground (behind this "school court") balanced by the dining hall and kitchen premises. The H-shaped hostels, as in the winning scheme, are set out in double order three behind four, so that the rear ones get light and air between in the interspaces of the frontier series. The chapel has a monumental west façade, which is quite of the first rank in this competition.

No. V is contributed by Messrs. Marshall Mackenzie & Son, and their scheme has an individuality of its own, being based upon a vast quadrant arrangement with the big radiating lay-out of the hostels forming an extensive crescent. The dining-hall set in the centre is emphasised by a splendid campanile rising above a colonnaded pavilion serving as a frontispiece, with the library and museum on one hand and a smallish administration block on the other, their dwarf contour enhancing the scale of this tower. "The schools" occupy the left hand of a commodious quad or parade ground, and the bathing establishment and gymnasium come rather well towards the right, the chapel being reached between these buildings in a secondary fashion. The headmaster and his large body of assistants have dwellings south of the principal centre-piece and extending the whole dimension of that front, which is considerable. The artisans are housed in a long line north of the quadrant above it on the west. The infirmary comes on the east. This design is a performance of no inconsiderable merit and much dignity. The chapel has an almost flat roof and Tudor windows. It is set 'twixt the two rigidly simple elevations of bath and gymnasium in clever contrast.

ASSOCIATION OF ARCHITECTS, SURVEYORS AND TECHNICAL ASSISTANTS

THE Fourth National Convention of Delegates of the Association of Architects, Surveyors and Technical Assistants was held at Whitsuntide at the Head Office in London. The chair was occupied by the newly-elected President, Mr. E. Fiander Etchells. In addition to the President there were elected to office and to the Executive Council the following:—

Vice-Presidents: Mr. A. Cunes (Devon and Cornwall), Mr. H. R. Surridge (Leicester and Northants), Mr. J. G. Marr (Aberdeen). Trustees: Mr. J. W. Denington, Mr. Chas. Pickford, Mr. R. Gordon Strachan. Hon. General Treasurer: Mr. C. G. Wright.

Members Executive Council: Messrs. C. A. Adamson, John Battey, J. W. Denington, J. W. M. Dudding, R. G. Forbes, J. A. Gould, A. S. Hinkley, R. B. Holloway, F. R. Jelley, A. M. Laurie, E. G. Lynde, Chas. McLachlan, G. W. Mitchell, A. S. Reeves, F. E. Simpkins.

The Annual Report dealt with a variety of subjects, all of them of great interest to salaried architects, surveyors and builders' technical staffs. In furtherance of the Association's aim to abolish the box office method of filling vacant posts, 138 members had been placed in positions during the year. At the moment unemployment had fallen to its lowest point since 1920, and few members were out of employment. The recognition by the Royal Institute of British Architects of the principle of a minimum payment for professional assistance had been carried another step forward. A deputation had presented the case before a sub-committee of the Practice Committee of the Institute. The decision of the R.I.B.A. Council is awaited with interest. The Association's position is plain. There is in existence a minimum and flat rate scale of fees approved by the R.I.B.A., for the protection of the practising architect, therefore it is logical to have a minimum payment for architectural services rendered to the practising architect by the assistant. There are over 300 firms throughout the country who recognise and pay their assistants the amount of minimum salary claimed by the Association on behalf of its members [i.e., £5 10s. (approximately) per week for all over 26 years of age, and £3 8s. (approximately) per week for all over 19 years of age]. Large numbers of protests against underpayment have been sent to private firms, public companies, local authorities and Government departments. Districts where our membership is strong and active have maintained, in some cases, more than the salaries being paid. On the other hand, it is amazing to find that the average salary paid to assistant architects throughout the country is from £3 to £4 per week! This fact explains the urgent need there is for the general recognition of a minimum salary. The allegation that the architectural profession is seriously overcrowded and the consequent increase in the amount of casual employment amongst assistants is now the subject of a joint inquiry by a committee appointed by the R.I.B.A. Council and the A.A.S.T.A. Executive Council. Its report is now awaited.

For the first time an assistant architect is now a member of the Royal Institute of British Architects' Council, in consequence of the Association having secured an official representative thereon. The architectural group has appointed one of its founders and the first Hon. General Secretary, Mr. Chas. McLachlan, A.R.I.B.A., as its representative for the year 1925-26. The A.A.S.T.A. Benevolent Fund has received a good start-off during the first year. Thanks are due not only to the members who have subscribed, but also to the various firms and individuals connected with the building professions and industry who have so generously responded. New members are enrolling at the rate of over thirty a month, whilst many lapsed members have rejoined. In the words of the President, "Never in the Association's history has its prestige been higher." The Report was unanimously adopted.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

Manchester Art Gallery Competition.

SIR,—As a competitor I have read your article on this matter in your issue of June 26 with great interest. You say, "If ever there was a clear breach of conditions, it is to be found here." Is nothing going to be done about it again? If all those competitors who agree with your remarks about this competition, or who are victims of other recent injustices, will write to me, I will endeavour to organise some form of protest. Any letters I receive will be treated with the strictest privacy. I feel certain that to gain no premium will be as nothing in the hearts of unsuccessful competitors—that is but an incident; but injustice is another thing. And if, out of this ridiculous farce, some improvement should come, then their labours will indeed not have been in vain.

KENNETH GLOVER, F.R.I.B.A., M.I.Struct.E.
11, Saville Chambers,
North-street, Newcastle-on-Tyne.

The Church and Freemasonry.

SIR,—Apocryph the King's visit to Oxford on June 24 in honour of the celebration of the foundation of Wolsey's College, Christ Church, in 1525, it is of interest to all Freemasons to recall that its founder, in whose honour the college was first called Cardinal's College, was appointed Grand Master on the accession of Henry VIII, and held office from 1509 to 1534, and during his term he built Hampton Court, Whitehall, Christ Church College, Oxford, and several other noble edifices, all of which, upon the disgrace of that prelate, were forfeited to the Crown in 1530. Wolsey was not the only ecclesiastic in high office who had been Grand Master, Warden, &c., in Masonic history. In 1066 Gundulph, Bishop of Rochester, was appointed "Joint Patron of the Masons," and under his auspices the Tower of London was begun. In 1272 the superintendence of the Masons was entrusted to Walter Giffard. In 1367 Walter Stapleton, Bishop of Exeter, was appointed Grand Master, under whose auspices Exeter and Oriel Colleges, Oxford, and Clare Hall, in Cambridge, were built. William of Wykeham, Bishop of Winchester, continued as Grand Master on the accession of Richard II, who built New College, Oxford, and Winchester College at his sole expense. Again, on the accession of Henry V, the fraternity was directed by Chicheley, Archbishop of Canterbury, under whom the lodges and communications of the fraternity were frequent. In 1447 Henry VI presided over the lodges in person, and nominated William Wainfleet, Bishop of Winchester, Grand Master, who built Magdalen College, Oxford, and several religious houses during his term. In 1471 Robert Beauchamp, Bishop of Salisbury, was appointed Grand Master by Edward IV, and honoured with the title, Chancellor of the Garter, for repairing the Castle and Chapel of Windsor. On June 24, 1502, when King Henry VII was Grand Master, he appointed John Islip, Abbot of Westminster, his Warden on this occasion, when he (the King) proceeded in great state to the north-east end of the Abbey to lay the foundation stone of that excellent piece of Gothic architecture called Henry VII's Chapel. After the beheading of the Duke of Somerset, the Grand Master, in 1552, John Poynt, Bishop of Winchester, presided over the Lodges until the death of the King in 1553. The Elizabethan Reformation followed, and no more ecclesiastics were appointed to any office in the fraternity. By the way, it is interesting to note that in 1425 an Act of Parliament was passed against Freemasonry, but was never enforced; the Act "was made against the

meetings of the Chapters, and congregations of Masons, commonly called free-masons."

HUBERT BURROWS.

Eccentric Loads upon Pillars.

SIR,—Section 22 (21) (c) of the London County Council (General Powers) Act, 1909, provides that any pillar eccentrically loaded "shall have the stresses caused by such eccentricity computed," &c. No rules are prescribed for computing such stresses, and in some cases the computation has been of a haphazard nature.

According to the formula usually to be found in text-books,

$$W_1 = W + \frac{Wxy}{R^2}$$

where W is the actual load, W₁ is the increased centric load equivalent to W when placed eccentrically; x is the distance between the centre of the load and the axis of the pillar; y is the distance of the outer edge of the pillar from its axis, and R is the radius of gyration.

The accompanying diagram shows the application of the above rule in the common case of a steel joist used as a stanchion, the load being conveyed from a girder on to a bracket fixed to the web. Rivets and unessential details are omitted. The section represented is 9 in. by 7 in. at 58 lbs. per ft. I have worked out the effect of eccentric loading with x=2 in., and the formula gives W₁=W+2.6W, or the result of placing the load at 2 in. from the axis increases the stress upon the stanchion by 260 per cent. It appears to me that if this be true, many structures now standing ought to be on the verge of collapse. With deference, I suggest that there is a fallacy somewhere.

The theory assumes deflection in the girder. Now, unless the girder is overloaded, the deflection at the bearing is imperceptible and quite negligible; consequently, in regarding the girder as perfectly rigid, we may assume the load to be acting with a shearing stress at the end of the girder next to the web. The dimension x will then be measured to the end of the girder instead of to the centre of the load, and its value in this case will be $\frac{1}{2}$ in., which means an increase of 64 per cent. in the effective load, through eccentricity. In the case of a flange stress the increase would be 170 per cent. If we put x=1 in. we shall have 129 per cent. for a web stress, and 187 per cent. for a flange stress. In cases where structures have been designed without any allowance for eccentricity of loading it is probable that such additional stresses are covered by the factor of safety. I have known a contractor who, in estimating for steel-frame structures, allowed for additional stresses amounting to 50 per cent. for a web stress and 100 per cent. for a flange stress.

GEORGE H. BLAGROVE.

June 18, 1925.

Proportioning Concrete.

SIR,—One can understand the objection of your correspondent "Concretius," to Mr. Topham Forrest's proposal that sand and gravel should not be separated when gauging concrete mixtures, when one considers that the whole question of proportioning mixtures to reduce voids is much neglected in this country.

Most specifications call for so many parts gravel (or stone) of a certain maximum size and so much sand and so much cement, all by volume, and it is assumed without further tests that all "clean, sharp" material below 1/9 in. is equally suitable for sand, whatever the percentage of the differently-sized grains forming its whole.

Many investigators have demonstrated that the strength and impermeability of concrete depend to a very large extent on having certain well-defined proportions of aggregate ranging in size from the maximum largest practical size—say 1½ in.—down to the finest grains of sand—say those passing a 50 by 50 sieve, and that given proper cement and workmanship concretes up to 2,000 lbs. per sq. in. crushing can be obtained from a mix which would be more commonly specified as 9:2:1, and obtained in everyday work in large quantities, and, the writer is satisfied, at a price which is not excessive.

One often reads specifications calling for "fine material to fill the voids"; it is not generally realised that the said fine material is itself void to the extent of perhaps 30 per cent. of its volume; and very careful "mechanical analysis," and possibly the combination of several different grades of sand, is necessary before the voids in the whole aggregate can be reduced down to 30 per cent. It is probable that most concrete to-day is being made with aggregate having 40 per cent. and 45 per cent. voids that are later more or less filled with cement at 60s. per ton, when by using the method of mechanical analysis laid down by Professors Thompson and Taylor a stronger and more watertight job could be obtained at a lower cost.

After so much research work has been done it is somewhat a condemnation of all sections of the industry that there is to-day no recognised standard or measure or method of good concrete that would be accepted by any half a dozen architects and engineers selected at random; they would each draw a different specification with different measures and different methods for the same jobs, and then only use perhaps 25 per cent. of the safe strength of first-class concrete.

Why not cut out all reference to volumes of cement, sand, stone, &c., and specify by strength, as, for instance, 600 lbs., 1,000, 1,500, or 2,000 lbs. concrete, and pay for concrete according to its importance in the structure?

LEN. J. POND,

General Manager, Corolite Construction Ltd.

MEETINGS

FRIDAY, July 3.

Town Planning Institute.—Annual General Meeting. At 92, Victoria-street, S.W.1. 5.30 p.m.

SATURDAY, July 4.

Edinburgh Architectural Association.—Visit to Dirlton Castle and Tantallon or Bass Rock.

BOOK REVIEW

The Studio Year Book of Decorative Art, 1925. (The Studio.) Price 5s.

The Studio Year Book for 1925 maintains its high standard, and is well illustrated in its various sections, many of the illustrations being in colour. The work of English and Continental architects and craftsmen is well represented by the work of many of our leading designers, well known for the excellence of their domestic work. The garden, architectural and furniture sections are particularly strong; the gardens show some charming examples. Mr. Frank Brangwyn, R.A., contributes the foreword. The volume is an excellent record of current art work, and keeps one in touch with the development of art on the Continent.

Books Received.

COLOUR MIXING AND PAINT WORK. By D. F. Cary. (London: Crosby Lockwood & Son.) Price 2s. 6d.

WORKMEN'S COMPENSATION ACTS, 1906-1924. By W. Addington Willis. (London: Butterworth & Co.) Price 15s.

THE SOAP AND WATER MISSIONARY. By George Walter Shipway. (London: Arthur H. Stockwell.) Price 2s.

LAND AND ENGINEERING SURVEYING. By G. L. Leston. (London: Crosby Lockwood & Son.) Price 3s. 6d. net.

THE A.A. IN DENMARK AND SWEDEN

By MANNING ROBERTSON.

SOME IMPRESSIONS OF DENMARK.

FIVE days hardly constitute an adequate allowance of time for obtaining a comprehensive view of Danish architecture—we were robbed of a sixth day by a strike—but in so far as it is humanly possible to see Denmark in five days, our hosts—Hr. C. Brummer, Fru. Brummer, Hr. R. Wied, Hr. Marnus, Hr. L. Hygom, Hr. A. Cock-Clausen, Hr. Packness, Hr. Stegmann, Hr. E. Thomsen, Hr. S. Moller, Hr. S. Risum, Hr. E. Dyggve, Hr. G. Laage, Hr. T. Havning, Hr. E. Monberg, Hr. J. Tvede, Hr. M. Clemmensen, Hr. E. Petersen, Hr. A. Jensen, and Fru. Jensen—the Danish architects, saw to it that we did so. After a calm sea voyage of some twenty-four hours, the party arrived at Esbjerg, on Sunday evening, June 7, where we were met by about fifteen Danish architects, including Mr. and Mrs. Carl Brummer and Mr. Monberg, the President of the Danish Institute of Architects. It is not until one realises that the distance from Copenhagen to Esbjerg is the same as that from London to Liverpool, but includes two sea passages, that one can appreciate the goodness of our hosts in coming so far to welcome us and to conduct us personally through the most interesting regions of Denmark.

On Monday, we were taken to Ribe, an extremely old Danish town dominated by a tremendous seventeenth-century cathedral tower in brick. Here one can see streets of old half-timber houses and of mellowed stepped gables, often capped with the nests of storks that winter in Egypt and fly north across Germany in the spring. Lunch was provided and speeches were exchanged at the hotel "Klubber," where we made our first official acquaintance with the toasting art, to "skaall." In crossing Jutland by rail from Ribe to Kolding, we were able to form some opinion of the Danish countryside. The country abounds in beautiful old farm-houses, often of whitened bricks, and in little churches with gabled towers, such as that

at Hesselgarde. Advertisement hoardings are practically non-existent, and the ordinary modern houses and cottages—all electrically lighted and communicating by telephone—reach a level of design that we can only find in selected places in England; the general impression is that the country has been used in the right way and that man has embellished rather than degraded it.

The steamer from the mainland to the island of Funen landed us at Hindsø, by invitation of the Association of the North. The mansion, an admirable example of eighteenth-century brickwork, is set in a park overlooking an arm of the sea. From Hindsø some motor charabancs conveyed us to Odense, the capital of the island, and the birthplace of Hans Andersen. Odense is the third city of Denmark, and, like every other Danish town of importance, has access to the sea. The most interesting building is St. Canute's church, with a fine cloister in decorated brickwork. The interior of the church is of brick with pointed arches and groined vaults, but an unusually bright and interesting result is derived from plain limewhiting, a common and traditional treatment. Like all Scandinavian churches, it lacks stained glass, but the ironwork and other details contribute the personality that appears inseparable from the work we visited.

On Tuesday we left Odense by motor for Egeskov Castle, where we were entertained to a typical—and very lavish—Danish luncheon by Countess Ahlefeldt-Laurevig-Bille, who, with her nieces, kindly showed us over the castle and grounds. It is an extraordinarily perfect example of sixteenth-century brickwork; a fortress, yet strongly domestic in character, it stands surrounded by a moat, and can be approached from the back by a suspension bridge; the sense of association permeates the building, inside and out. The plan is peculiar in that it consists of two long and narrow houses lying side by side, and separated by a wall 8 ft. thick that is honeycombed with passages. The garden was laid out in the eighteenth

century, and forms a fine setting for a memorable example of architecture.

From Egeskov we were motored to the Castle at Hesselagergaard, where we were entertained by Baron Blixen-Finnecke. Here, again, we found a revelation in the solid treatment of brickwork, the brilliant sun bringing out the depth of shadow and the velvety texture of the walls. The plan consists of a very long and narrow house with two projecting towers at the corners, standing out into the moat; the interior reveals some quaint fresco figures and several beautiful little panels of conventional design.

Our next castle was Holckenhavn, near Nyborg, where once again we were lavishly entertained by the owner, Baron Holck, who was himself unfortunately absent. This building was begun in the sixteenth century, but the main effect is given by the great façade, dated 1624, and conveys a much later impression than the two previous examples. The castle encloses a courtyard and forms a splendid group; the brickwork is treated elaborately in panels, surrounded by white borders in the shape of swastika and other designs, and suggests the inspiration of the brick treatment of the Danish pavilion at the Paris Exhibition, where alternate brick courses are sunk and lime-whited, giving the effect of immensely thick mortar joints. Evening found us at Nyborg after a day of great interest and intense heat; some of our party found energy for a bathe, and many danced till late into the night.

On Wednesday we were ferried from Nyborg to Konsor on the main island of Zealand, and taken on by rail to Sorø where, after a walk through a shady forest, we crossed a lake to the great Academy, or public school. In showing us over the school the headmaster emphasised the connection between Sorø and England: Ludvig Holberg, who may be regarded as the founder of the modern school, had been educated at Magdalen College, Oxford. The main block of the school dates from 1822, but there still exist two charming wing blocks of an earlier date. The chapel, a monastery church, is one of the most ancient in Denmark, and contains a wooden crucifix that is certainly a masterpiece. As a souvenir of this visit we were all given a special edition of the Journal issued by



Cathedral Tower and Old Houses, Ribe.



Police Headquarters, Copenhagen: Internal Colonnade.



Bird's-eye View from Ribe Tower.



Hesselgarde Church.

the Society of Academical Architects describing and illustrating the academy, and with a special preface written in English by the distinguished scholar, Mr. V. Wanscher.

From Sorø we went straight to Copenhagen where we were entertained to a banquet given by the Danish Institute of Architects at the "Langelinie Pavilion," the Yacht Club whose restaurant provides that superb view over land and sea that appears to be a normal feature of the Danish landscape. Here we met new friends, and after much pleasant conversation and dancing returned home in the early hours.

Thursday saw us once again in motor cars, this time bound through extensive beech forests for Elsinore. On our way we inspected the royal hunting box known as the Hermitage, and arrived at the great castle of Frederiksborg at noon. Some English airs were played on the chimes in our honour, and we listened to a delightful recital on the old organ in the chapel. The castle, with its surrounding buildings, connected by an S-shaped bridge, makes a bold and romantic group. It is now used as a Museum of National History, contained in what must surely be the most be-decorated interior in the world.

Next we came to the Palace of Fredensborg, which is still used by the Royal Family and is backed by a formal garden. Beside the palace lies a dignified row of houses, occupied, we were told, by the "cavaliers" of the court. It is doing scant justice to all we have left to hurry on to Elsinore, where we arrived at about six o'clock. Here stands the historic castle of Kronborg, facing, though it no longer defies, the long extent of Swedish coast. Within it we walked the ramparts where Hamlet saw his father's ghost; we viewed the dungeons, climbed an immense tower, and then, after a bathe, dinner, dance, and final speeches at the hotel "Marienlyst," were motored back to Copenhagen in the twilight by the coast line.

Friday, the 12th, was scheduled as a "free day," but there was in reality little of freedom about it. Each of us was armed with a special

English edition of "Arkitekten," beautifully produced by Mr. S. E. Rasmussen, illustrating modern architecture in Denmark, and each of us realised how much he wanted to know and how little he could see. We separated and pooled our various experiences in the evening, but here I will only attempt to sketch an impression of the two buildings which we all saw, and which between them represent the two prevailing influences in Scandinavia—the Town Hall and the new Police Headquarters. The Town Hall, a severe and majestic block of brickwork, dominates the principal square; it conveys much the same impressive sense of civic character, plastic brick treatment, and a delight in craft detail that is to be found in its later counterpart at Stockholm. Its form is northern and asymmetrical, and depends upon mass effect, while its neighbour—the Police Headquarters—reflects the new symmetrical and classical spirit which is now animating the younger men in Denmark and Sweden. The exterior of the Police Headquarters is rough-cast a grim grey, and panders to no romantic fancy. Originally designed by Prof. H. Kampmann, it was completed on his death by his son, by H. Jacobsen, and by Aage Rafn. The interior courts are executed in warm-coloured stone and consist of a fine circular colonnaded court and a large square hall, containing two rows of Corinthian columns that support the roof, light being admitted through an enormous rectangular panel that is open to the sky. The greatest interest lies, however, in the colour treatment of the corridors. Some are red, some yellow, and some black and white. The latter were extremely impressive when seen for the first time as part of the general design, but they could hardly fail to be depressing to those whose daily routine confined them to that black-edged part of the building. The lamps and other fittings showed that austere good taste which appears to be inherent in the people.

In the afternoon some of the party were able to accept the kind invitation of Mr. and Mrs. Brummer to tea at their most attractive home,

while the others followed a grim determination to learn all they could to the last. A few penetrated to Mr. Monberg's fine office block for the Danish Steamship Association and admired the restraint and elegance of its interior; some visited Mr. Brummer's Gymnasium, while others combined what they could of the town generally, with a special attention to the immense blocks of new brick tenement dwellings that are springing up on all sides and that have much in common with the excellent work of our own L.C.C.

In the evening we collected in the train ferry for Malmö in Sweden, and said a sorrowful good-bye to our Danish friends in what must be one of the finest railway stations in the world.

This is a hurried account, and it must be believed that in this respect at least it conveys a true impression of those five frantic days. The architects who acted as our guides had organised every small detail to perfection. We were presented with maps of every district we were about to visit, and when we left a place in the morning our overcoats and luggage had only to be labelled with our own appropriate number and we knew that we should find them in our own room at some unknown hotel, perhaps a hundred miles away, that evening. The enduring impression that we shall always carry with us is that Denmark is a land of sound and inspiring architecture, and of overflowing kindness and hospitality, and we can only look forward to seeing our Danish friends on this side of the North Sea. We like to feel that when we left we did not only say good-bye (with musical honours) as party to party, but as friends to friends with a real personal affection.

The British party included Mr. and Mrs. Manning Robertson, Mr. and Mrs. Kenyon, Messrs. L. H. Bucknell, E. R. Jarrett, W. Lewis, H. J. Birnstingl, L. H. Glencross, W. Aumonier, M. Tha Tun, A. Allen, R. Willis, C. H. James, A. Bryer, Cecil Smith, N. Good, F. R. Yerbury, Misses D. Lewis, J. E. Townsend, M. F. Rigg, M. F. Ellis, I. M. Chambers, E. Meikle, C. W. Preston, and Mrs. Dawson. Mr. Oliver Hill joined the party at Copenhagen.



Egeskov Castle.



A Street in Ribe.

LEADING CONTENTS. PAGE

CRFTSMANSHIP AND ADVOCACY	1
NOTES	2
COMPETITION NEWS	4
ROYAL HOSPITAL SCHOOL COMPETITION, AT HOLBROOK, NEAR IPSWICH	6
CORRESPONDENCE	7
THE A.A. IN DENMARK AND SWEDEN.....	8
ASHLEY PARK, WALTON-ON-THAMES.....	16
PHILIP WEBB AND HIS WORK—VII.....	18
ANNUAL CONFERENCE OF THE INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS..	20
ARCHITECTS' AND BUILDERS' INQUIRY BUREAU	21
THE BUILDING TRADE.....	22
SOME OBSERVATIONS ON THE RIGHT TO LIGHT AND THE LAW RELATING THERETO	23
THE RATING AND ASSESSMENT BILL.....	24
COURT OF APPEAL: ACTION FOR FEES....	24
WORKMEN'S COMPENSATION: CONTRACTS WITH FOREIGN EMPLOYERS	24

ILLUSTRATIONS

King's College, Cambridge.

We illustrate the design for new buildings at King's College, Cambridge, a first instalment of which, comprising the completion of the unfinished corner of Bodley's building and extending east as far as the existing Provost's Lodge, has been approved by the College and will be put in hand. Additional accommodation has been considered for some years, and the College is to be congratulated on having obtained this dignified solution of the difficult problems presented to the architect by the familiar riverside setting and the monumental character of the surrounding buildings.

The completion of Bodley's building which was left unfinished in 1891, provides for the immediate needs of the College and becomes the starting-point for the later developments, which are to include a new library and Provost's Lodge. The third wing, as designed by Bodley, would have extended to the river, with the inevitable Gate Tower as its central feature, for which the site seems to provide very little pretext. The curtailment of the proposed wing, and the introduction of an important entrance in the main block facing west, is well calculated to emphasise the orientation which prevails among the principal buildings in this region of the Backs, and which brings the wooded depths

of the left bank of the river into effective account. A landing-place and an approach from the river are suggested in connection with the new entrance, which gives access to an important corridor penetrating the building as far as Webb's Court, a treatment which could undoubtedly be used to invest Bodley's work with a significance in the landscape which features of its own could hardly have supplied. The extension of the formal treatment on this axis across the river in the direction of the new iron gates, as indicated by the architects, who, we understand, would like to see the existing backwater developed on these lines, would be a further contribution. When Bodley's building is completed, to the slowly-moving eye-point which the course of the Cam suggests, the gradual emergence of the new block standing back as a recessed screen, and giving the spaces of the lawn their full value, should have a certain fascination of its own.

The new buildings as contemplated provide for forty-two new sets of rooms, a bath installation, College offices, a library of increased capacity and a new Provost's Lodge. The existing lodge, which was planned by Wilkins in the somewhat bewildering Gothic of his day, covers some 8,000 sq. ft. of ground and is unsuited to the needs of the head of a college of our own time.

Messrs. G. L. Kennedy and F. B. Nightingale are the architects.

The New Gallery Kinema.

This theatre has been rebuilt on the site of the old one, but with considerable extension at the rear and elsewhere, and with a spacious balcony, which reaches back to the Regent-street façade.

The design and decoration throughout have been worked out with scrupulous care and on very definite lines. All the work has been put into expert hands, and the materials and craftsmanship are of a quality rarely found in theatre building.

The entrance from Regent-street is crowned with a semi-dome of Sienna marble supported on bronze beams. The plaster reliefs were modelled by Mr. Frederick Lessore, and the painted figure frieze which runs round the auditorium below the balcony level is the work of Gertrude Halsey. The design of this band is of extreme delicacy. The proscenium curtains, carried out by Mr. Charles Treleaven, are equally worth noting on account of their design and good workmanship.

The colour scheme consists broadly of a rich blue panelled base reaching to the underside of the figure band, which, representing a Greek festal procession, is 4 ft. deep. Above this the walls are panelled and treated in varying yellows. The ceiling is beamed, with the soffits delicately designed and painted, the general colouring being blue and brown. The whole scheme reaches a climax in the massive gold proscenium, with its heavy gold fret on a black ground.

The general contractors for the main work were Messrs. Wm. Downs, Ltd., part being executed by Bovis, Ltd. The sub-contractors were as follows:—J. Jeffreys & Co., Ltd., ventilation; Anselm Odling & Co., Ltd., marble; The Birmingham Guild, Ltd., ornamental metal work; Crittall Manufacturing Co., Ltd., metal casements; Diespeker & Co., Ltd., terrazzo; Stuart's Granolithic Co., Ltd., flooring; Clark & Fenn, plaster; Comyn Ching & Co., Ltd., brasswork; R. A. Evans, Ltd., Leices'er, lifts; Permanent Bronzing and Restoring Syndicate, Ltd., bronzed iron rails; Kershaw Projector Co., Leeds, projectors; H. Lazarus & Son, Ltd., seating; Bulman Cinema Screen Co., screen; Walter Pearce, Wurlitzer organ; J. Evans, sanitary work; Chalwin & Co., ironwork; Lawford & Co., asphalt.

Messrs. Nicholas & Dixon-Spain, F.F.R.I.B.A., are the architects.

The New Canadian Headquarters, London.

The various departments of the Canadian Government in London, hitherto distributed over the Metropolis at points as far apart as Basinghall-street in the City, and Oxford-street and Regent-street in the West, have now been concentrated in the building occupying the greater part of the western side of Trafalgar square, formerly the Union Club, which, opened by the King on Monday last, has been reconstructed from the designs of Mr. Septimus Warwick, F.R.I.B.A.

The original building, designed in 1820 by Sir Robert Smirke, was added to by Mr. Macvicar Anderson some 30 years ago, and at the beginning of this century Sir Arthur Blomfield made many interior changes. In the reconstruction of the building to serve the purposes of the Canadian Government, Mr. Warwick found it necessary to construct at the back of the building an entirely new wing six stories high, and entirely to remodel the rest of the work.

The ground floor is now open throughout, with space allocated as visitors' reading and writing rooms, inquiry offices for the various departments, and for other purposes. The staircase existing when the building was taken over has been retained, but new panelling has been added to the walls in keeping with the rooms that now open upon it. A new passenger lift has been provided, giving access to both the old and the new portions.

The entrance has been removed to the Cockspur-street frontage, giving a vista of over 100 ft. in the interior. The Cockspur-street front, with its portico supported by four Ionic columns, is entirely new. A feature has been made of the bronze entrance doors, into which has been introduced as a motif in the design the Canadian emblem of the maple leaf. The Trafalgar-square front has been refaced with stone to match the Royal College of Physicians adjoining, so that the whole side of the Square becomes now one distinctive facade, harmonious both in design and in material.

Canadian maple and birch flooring has been used in the upper floors, with British Columbia fir doors; the flagstaff over the main entrance also came from British Columbia.

Following is a list of firms who participated in the reconstruction:—Trollope & Colls, Ltd., general contractors; Aston Construction Co., Ltd., steelwork contractors; Diespeker & Co., Ltd., hollow floors; Fenning & Co., Ltd., marble; Waygood Otis, Ltd., lifts; St. Aldhelm box ground stone, quarried and worked by The Bath and Portland Stone Firms, Ltd.; H. H. Martyn & Co., Ltd., stone carving; Bromsgrove Guild of Applied Arts, bronze doors, &c.; The Seaman Kent Co., Toronto, birch and maple flooring; The Office Speciality Co., Ottawa, furniture.



Site Plan of Proposed New Buildings for King's College, Cambridge.

MESSRS. G. L. KENNEDY AND F. B. NIGHTINGALE, Architects.



The New Gallery Kinema, Regent-street, London : The Vestibule.

MESSRS. NICHOLAS & DIXON-SPAIN, F.F.R.I.B.A., Architects.



The New Gallery Kinema, Regent-street, London : A View of the Auditorium.

MESSRS. NICHOLAS & DIXON-SPAIN, F.F.R.I.B.A. Architects.



The New Gallery Kinema, Regent-street, London : The Auditorium.

MESSRS. NICHOLAS & DIXON-SPAIN, F.F.R.I.B.A., Architects.

KINGS COLLEGE, CAMBRIDGE.

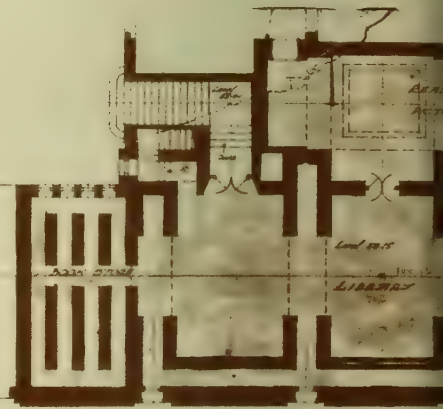
PROPOSED NEW BUILDING.

REVISED SOUTH ELEVATION.

Scale of Feet



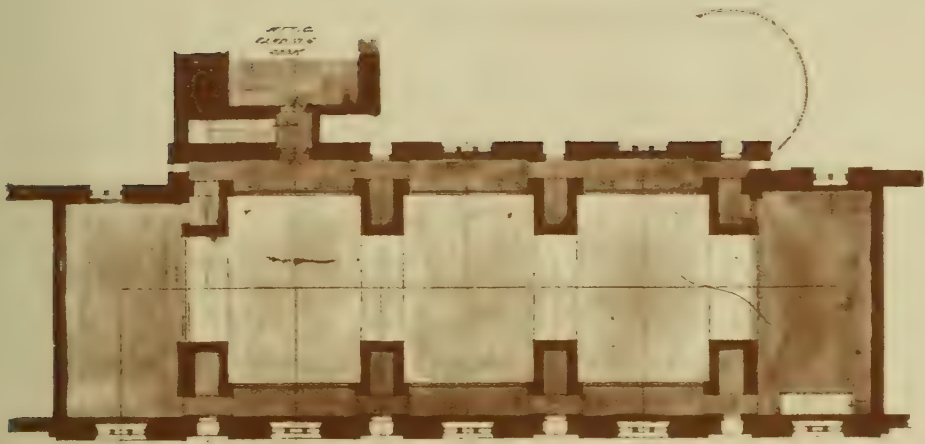
UNDERGRADUATE ROOMS



FIRST FLOOR



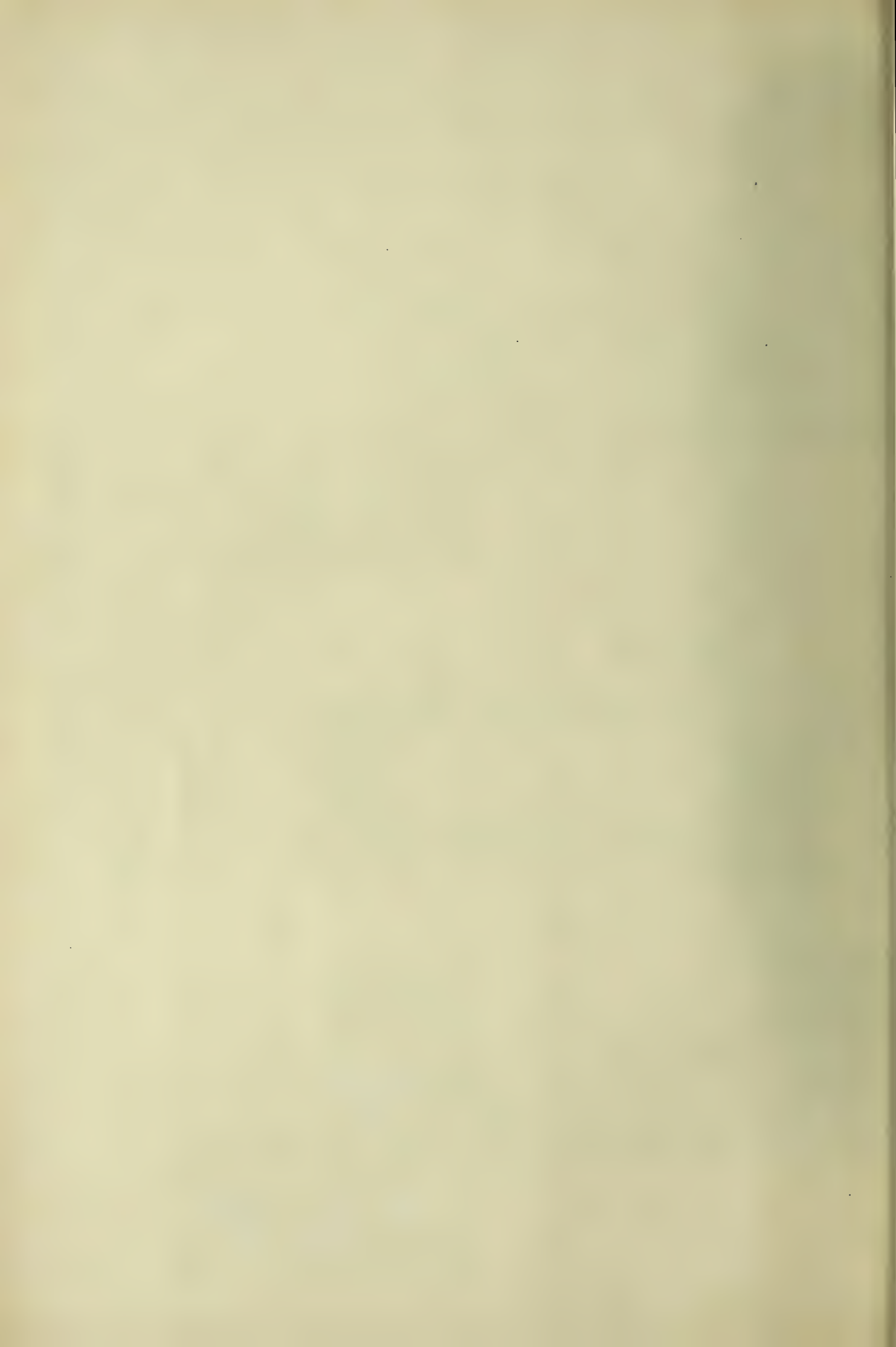
(S.W.)



UPPER PART OF LIBRARY.



2 PLAN



KINGS COLLEGE CAMBRIDGE
PROPOSED NEW BUILDINGS
REVISED NORTH ELEVATION. (APRIL 1925)

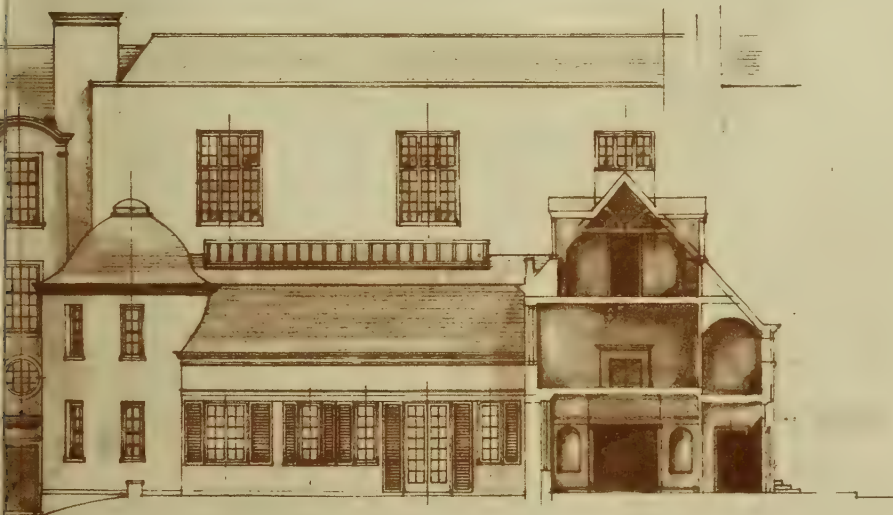


REVISED SOUTH
(APRIL 1925)





ELEVATION.

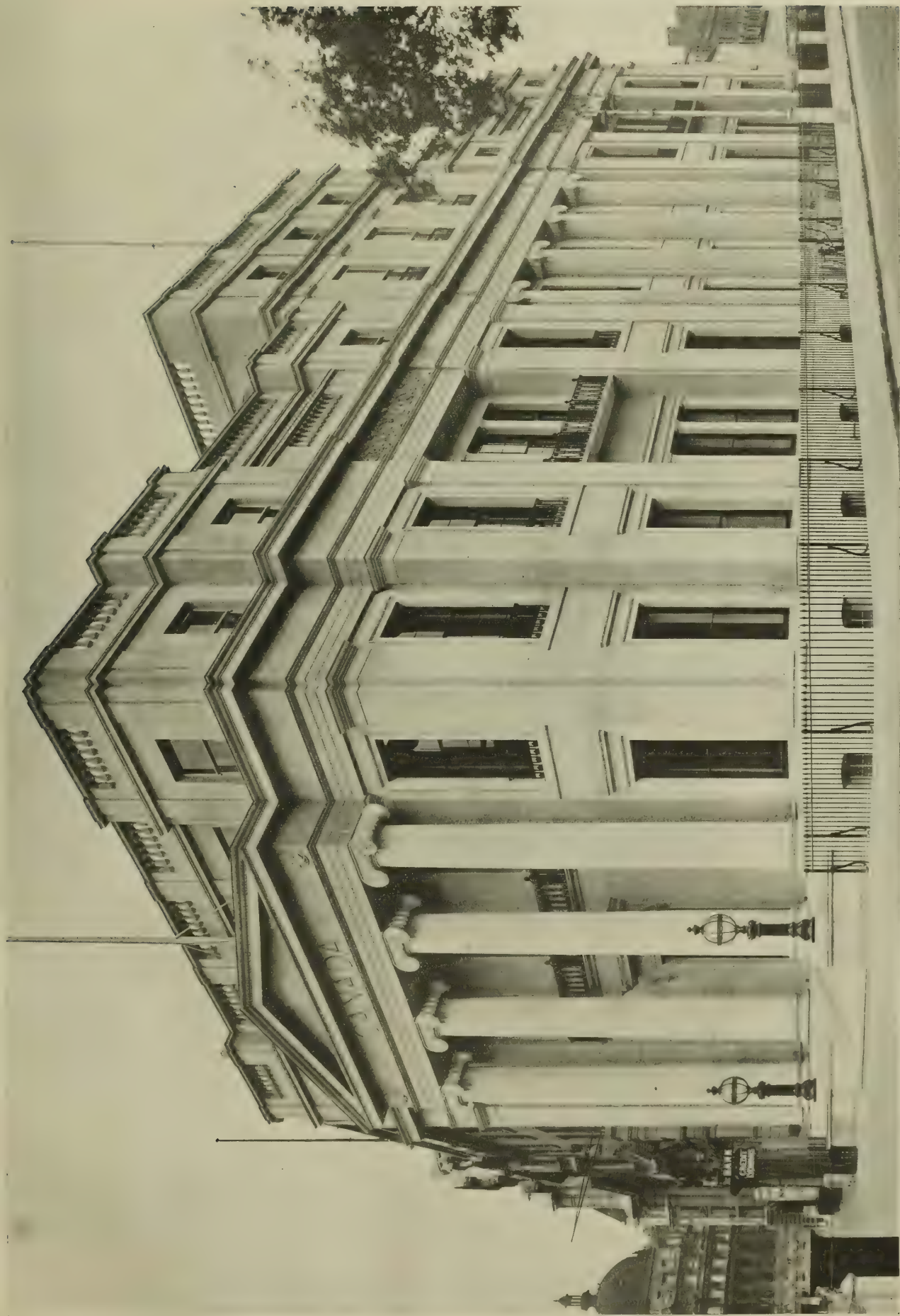






Canada House, Trafalgar-square, London : First-floor Landing.

MR. SEPTIMUS WARWICK, F.R.I.B.A., Architect.



Canada House, Trafalgar-square, London. MR. SEPTIMUS WARWICK, F.R.I.B.A., Architect.



Canada House, Trafalgar-square, London : Entrance Hall.

MR. SEPTIMUS WARWICK, F.R.I.B.A., Architect.



Canada House, Trafalgar-square, London : Detail of Principal Entrance, Cockspur-street.

MR. SEPTIMUS WARWICK, F.R.I.B.A., Architect.

ASHLEY PARK, WALTON- ON-THAMES

THE fete to be held within these precincts on July 8 in aid of the local Cottage Hospital offers a favourable opportunity to inspect a little-known but remarkably interesting house and park. Formerly Ashlees Park, it has been recorded as a Crown property, and, in the early part of the seventeenth century, passed to the Earl of Anglesea, brother of the ill-starred Duke of Buckingham. Field-Marshal Lord Shannon bought the property in 1718. He is memorised in an imposing monument by Roubiliac in the village church of St. Mary.

The original building is a Tudor H. plan. A mellowed brick fabric, its moulded stone-coped gables, stone-mullioned windows, great chimney breasts, and stacks on the south front, are relics of this period. There is also the Tudor expression in the pointed vault of the hall and treatment of the ceilings of a suite of rooms on the first floor. Scattered gems of Tudor craftsman-

ship—an improvised cupboard, panelling that peers from behind modern wall-paper, a fireplace of richly-carved oak in one of these southern rooms—cause the thoughtful to conjure up their former jewelled setting, perhaps to envisage a gallery of splendid extent on the long south front.

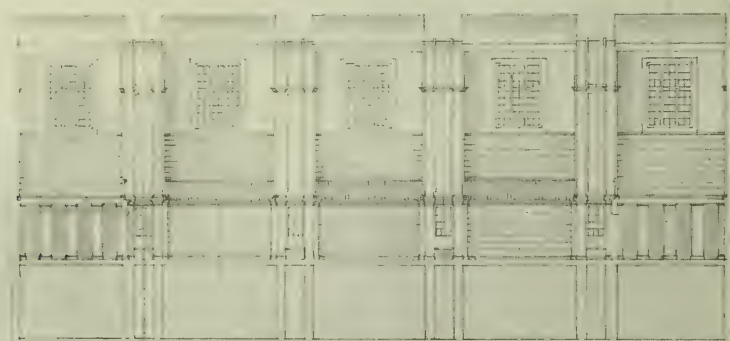
Lord Shannon seems to have accepted the architectural terms of his day and set about the modernisation of Ashley Park accordingly—in the Georgian expression. It is significant that the converse process is to-day attempted in the retention of the atmosphere of existing fabrics, and not in its eclipse. Be that as it may, the Georgian manner of these renovations is sustained by a balance of scholarly detail and excellent craftsmanship. Panelling covers the walls of the hall and the ceiling is the field of display for heraldic devices. The staircase is spacious and easy of ascent, has ample landings; the painted carvings of the ramp and strings are of oak. The decoration of the walls and ceilings is handled in arabesque and architectural conventions.

But the mullioned windows of the ground and first floors have been removed and sashes have been inserted. And the conversion of the southern rooms on the ground floor into a ball-room has produced a chamber of immense length, but of inadequate width and height. The ball-room is lined from floor to ceiling with panelling enhanced by Corinthian columns, presented in beautifully-considered detail. As an early Georgian example this room is worthy of much study. William Kent was probably the architect responsible for the marble chimney-pieces. His handiwork is noticeable in the north wing and suspected again in the bay windows of the east and west facades. By the intrusion of a modern stone wing—a dining-room with a superimposed billiard room—the original concept is damaged, and the light formerly enjoyed from one of its open quads is lost.

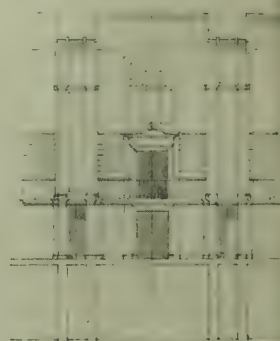
The open space of this old park, its matured trees that gently touch the imagination, induce a sense of serenity and peacefulness. Here is something expressing the high purpose of creation that conveys its fragrance to the mind.



SECTION A-A



LONGITUDINAL SECTION.

SECTION A-A SHOWING
ENTRANCE TO LIBRARY
FROM SQUARE

KING'S COLLEGE, CAMBRIDGE. PROPOSED NEW BUILDINGS. REVISED SCHEME. (APRIL 1925). EIGHTH SCALE DETAILS OF LIBRARY.

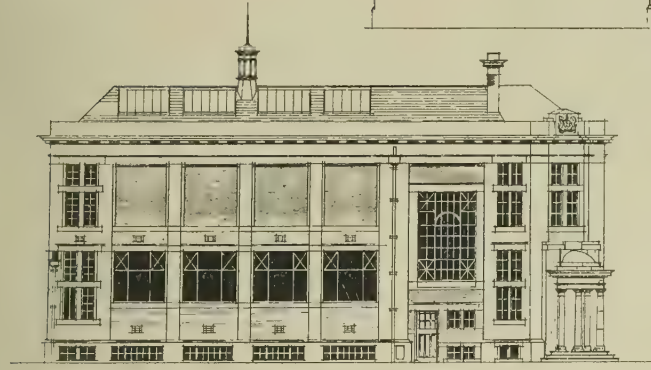
CROSS SECTION OF LIBRARY SHOWING WEST ELEVATION
OF PROVOST'S LODGE

King's College, Cambridge, proposed New Buildings : Details of Library.

MESSRS. G. L. KENNEDY & F. B. NIGHTINGALE, Architects.



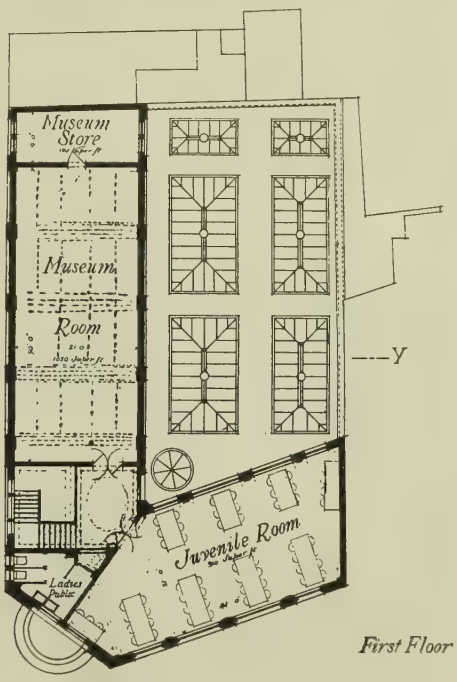
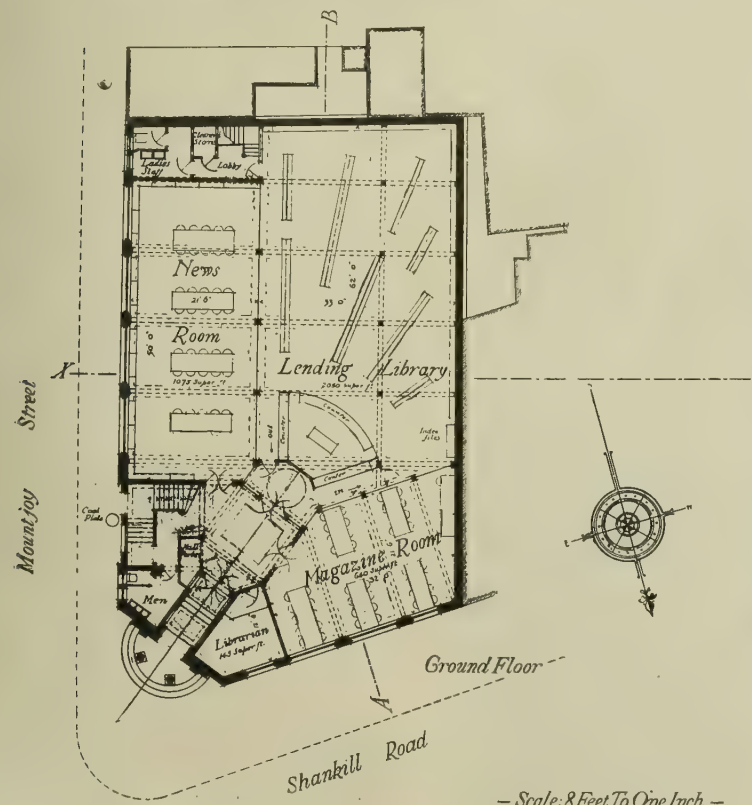
Main Entrance



Elevation to Mountjoy Street



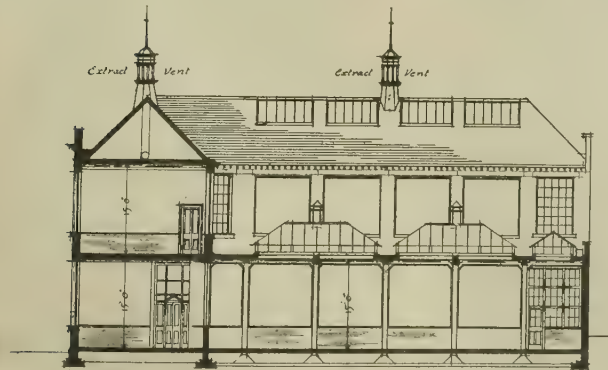
Elevation to Shankill Road



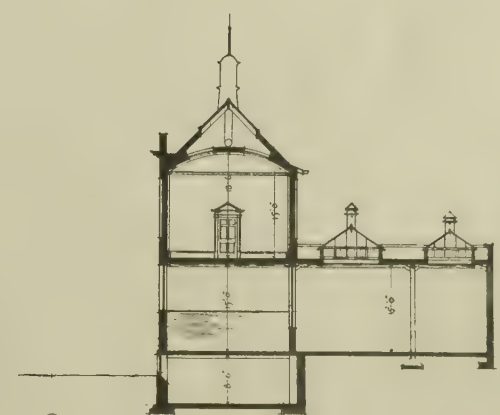
First Floor

— Scale: 8 Feet To One Inch —

J. W. HENRY, F.R.I.B.A., Architect.



Section AB.



Section X-Y.

PHILIP WEBB AND HIS WORK.—VII.

By W. R. LETHABY.

THEORY OF ARCHITECTURE.

'Beauty lives with kindness.'

—Two Gentlemen of Verona.

If you try to find out what a modern architect has 'the will to believe' it is likely to appear something like this—Architecture is the supreme Art: it is produced by genius. An architect must be a genius. Moreover, there have in the past been wonderful manifestations of art-genius called Styles, and the architect must know about these, that is, about one or two of them which he may select, and he must imitate the features of those. True architecture addresses itself to an æsthetic faculty, and æsthetical satisfaction is obtained by handling the style elements in a tactful and tasteful way in architectural designs.

For Webb this would not do; he was endowed with an inquiring mind, and he needed a General Theory for his belief, a ground on which to stand, a foundation to build on. We often discussed the question and I put down here what I understood of his teaching under a dozen headings.

Common Tradition.—Architecture to Webb was first of all a common tradition of honest building. The great architectures of the past had been noble customary ways of building, naturally developed by the craftsmen engaged in the actual works. Building is a folk art. And all art to Webb meant folk expression embodied and expanding in the several mediums of different materials. Architecture was naturally found

out in doing; it is the very opposite of the whim "designs" we are so excited about exhibiting. In a word, architecture is building traditionally.

There can be no arts of the old kind until by some means folk traditions are once more regained so that builders and employers accept the natural expression of the moment. "Till the employer knows clearly what the architect is going to do for him no reasonable building will come about."* All style-imitation is trivial and futile. "It is patent from the laborious efforts of well-meaning architects, from the time of the younger Pugin to that of the late Mr. —, that they have worked on a sand-hill. Many of the results indeed are childish efforts which only call forth contempt almost before the scaffolding is removed from such wasted labour." The spirit essence of such designs in the styles has nothing whatsoever in common with the natural work of old builders—"father to son witnessing of undoubting endeavour."

The works of Morris and of Burne-Jones have often been spoken of as "mediæval," but they were not intended to be, nor were Webb's. All tried to be modern. Ruskin finely spoke of Burne-Jones's 'true relation with the paternal and everlasting Art in the world.' Burne-Jones said of Morris: 'All his life he hated the copying of ancient work as unfair to the old and stupid for the present—only good for inspiration and hope.' Morris

* Quotations in this form " " are from Webb; others are given thus ' '.

said of himself: 'I cannot think that I ever consciously aimed at any particular style; I by nature turn to romance rather than classicalism and naturally without effort shrink from rhetoric.' By 'romance' he did not mean the mediæval; at a lecture I heard him say 'by romantic I mean looking as if something was going on.' It was making an effort in the present instead of pretending that something past had been perfect. Webb wrote to me on the death of a gifted mediævalist architect, "True, X— has been a disappointing man. W.M. recognised that he had 'taste.' He was always shy on the road, and harnessed himself with blinkers—has it not been from fear, the opposite of divine courage?" "Harnessed himself with blinkers!" the phrase bears repetition. Webb intended to see clear and straight; he had his eyes set on being rational and of his own time.

October 18, 1901: Having been asked to express an opinion on the stipulation for the Liverpool Cathedral competition "that the style of the new Cathedral shall be 'Gothic'" (1), he replied that "the restriction has something of the visage of humour in it. The nature of Classic, Gothic, and 'squaring the circle' can hardly, so to speak, be 'tasted in a sip.' Were any of the designs made for the earlier Liverpool competition as 'Gothic' as St. Sophia, or St. Vitale, or St. Paul's?" . . .

In a letter to Mr. Percy Wyndham, in answer to some kindly appreciation of his work at Clouds, and speaking of it as "the house of the age," Webb replied:

July 20, 1886: "There are two classes of houses which would rightly come under the title. The first is the majority one, the natural style of a 'shoddy period,' of which the houses in Tyburn, Belgravia, Victoria-street, etc., and their kind in the country, give the type which might be called Victorian. The second is the non-natural class, of which the mediæval style is represented by the Law Courts, the scholastic by the British Museum, the showy by the Club houses, and the dilettante-picturesque by the so-called Queen Anne style. All these styles are exceedingly artificial and have been run to death by fashion. As to my 'keeping people at arm's length,' if what you hint at thereby is true, it would merely be that I do not lay myself out to do work for people who do not in any degree want what I could honestly do for them."

Building Craft.—Of a gifted young man he wrote: "Poor young X— carried on the crest of a wave to a frowning coast whitened with professional bones. What can an infant almost in arms do under such malice of fate? Y— can hardly help him to mastership in the building craft." Modern architecture, if we ever have any, will be *Mastership in Building-craft* developed out of contact with needs and materials. It won't be design in the air; it will not be what he called "swell-domania." I asked Webb why Morris gave up architecture. "Because he found he could not get into close contact with it; it had to be done at second hand." The beginning of training for building and design must be on the works and in the shops. Architecting is a responsible business, like commanding a ship. Building is an art of doing. The architect cannot learn all the ways of workmanship, or may not master even one craft, but actual doing is necessary at the foundation to give a direction to the mind. The skilled foreman with an all-round instinct for the building crafts was only apprenticed to one of them; the architect should be an upper foreman. The best that Webb knew of building he would say had been gained in discussions with workmen. "Of course the craftsmanship part is a hard qualification for an architect in our own blind-guided days." He was deeply interested in limes and mortars, the proper ways of laying roof tiles and forming chimneys, of finishing plaster ceilings and mixing whitewash. He forced himself to become an expert in ventilation and drainage. On his making an inspection of a new drainage system he said: "Now this is so beautiful I don't like it to be covered



FIG. 1.—No. 1, PALACE GREEN, KENSINGTON.

up." In heating he was quite an authority, and he devised some excellent grates. He had a turn for experiment, his training in a country office was much more builder-like than anything now obtainable; the work of the Morris firm had increased his practical experience, and some actual modelling, wood engraving and decorative painting had helped, but all, he felt, was insufficient.

To A. H. Powell, March 17, 1894: "It would be good fortune for you if you could so arrange things as to have a year's continuous work at carpentering in its various kinds. Of course I know this may be impossible, but if so I should say that would be a misfortune. As you would be keeping your eyes wide open to all collateral things, you would pick up much general knowledge of the various other crafts connected with building and would gain much more help to your after work than in any other way. . . ."

To A. H. P., March 28, 1894: "If you can get the experience of a twelve months or so in a live workshop, and the outlying buildings, you will be saved a constant series of troubles in your future work. It has only been by constantly keeping my eyes open, talking freely whenever possible with all kinds of workmen, and reasoning out the knowledge gained that I have had any professional peace of mind for the last forty years. Three parts of the striving under conscious ignorance would have been avoided if I had 'served' as you are now doing. Mind you, you too must—if you would be wise in future—keep your eyes open. Keeping the eyes shut is just the trap into which regular workmen fall."

To A. H. P., December 3, 1898: ". . . I rather question if Aberthaw lime was quite the best for the outside plastering in question: my experience of that lime is that it is too sharp, and I should think liable to shrink. I never actually used it, but tried an experiment with it and concluded to use blue lias instead. I should not wonder if there are fine hair-cracks in it, not readily discernible with the nude eye. Perhaps and if this is so, two or even three coats of hot lime and Russian tallow might fill up these pores and keep the rain from being absorbed by the plaster. You see when the walling is dashed with rain by a high wind it becomes very wet, and the wind acts as hydraulic pressure. In the house I am building at Puttenham the bedroom walls, which are of brick-and-half thickness, have the full exposure of the S. and W. winds and rain, so that I feared penetration, and rough-rendered the outer face of wall on those two sides with Portland cement and sand, and then plastered and rough-casted. . . . The above may not help you at all, and if so I shall be sorry, as I like helping lame dogs over stiles, and being so helped myself."

Webb's thought on this matter of craft practice is well brought out in a letter to the Art Workers' Guild in 1892: "After much indecision I have concluded not to accept the honour. It would be too long a business to tell all the reasons, but the one that has helped me to a decision is that unfortunately I am not a craftsman and I am too old to set about making myself one. I find a large proportion of the members are architects, a number of whom are young enough to become craftsmen and to lift the 'profession' out of the slough in which it sticks. Painters have the advantage of being craftsmen already and they will as times improve be able to work in a broader way than the present demand will allow. The other crafts are numerous and all will, I hope, be able to drop the misleading title of 'designer.'"

All the glorious building works of the world were wrought by work-masters who had learnt their craft by practice and perfected it by further practice. Now that it is taught that architecture is a matter of recombining on paper features learnt from old styles mixed according to taste, it is not seen that a paper architect is almost as absurd as a paper athlete. There are two ways open to anyone who would follow architecture. Webb and his better contemporaries would have said—learn



FIG. 2.—No. 1, PALACE GREEN, KENSINGTON.

to build; learn other things, too, of course, the multiplication table, for instance, and mechanics, planning and sanitation; but, above all, learn to build. Be clear about this at the beginning; there are two gates; the building shop and the architectural atelier, and it is difficult to be in two places at one time. There are two ideals, sound, honest human building, or brilliant drawings of exhibition designs.

Mr. Jack says: 'Houses that he built, beautiful as they are, in no way form the measure of his power; for, quite distinct from his actual performance as an architect, there was in him a most potent quality of silent influence. This influence had always one tendency: it removed "architecture" from the architect's office to the builder's yard and the craftsman's workshop. One remarkable quality was his keen perception of the proper ways in which all kinds of building materials should be used—it was a kind of instinct with him.'

Labour and pains.—We have heard so much of genius and of the ease with which genius works that we are likely to be somewhat impatient of labour and pains; indeed, a phrase of reproach is 'laboured art.' Webb did not bother about genius, but he was convinced of the need of carefulness and strenuous labour. "There is great danger that students will look on art as a trick to be learnt or found out. Work in any way satisfying can only come of hard pounding." Again and again he returned to the necessity of taking pains "and anybody can do that." Even evidence of care and consideration was so far good. About taking pains he would say that it was all he had been able to do for his art. He had, indeed, trained his powers of observation to an acute point. I once sent him a tiny Kodak print of Watts's bronze "Physical Energy" in Kensington Gardens, and in writing back

he said that "under a glass it appears not to have been worked over the surface after casting, and I think it better so."

To W. R. L., September 17, 1903: "The Yorkshire proofs of your journey done by Kodak interested me much. I got out Ordnance maps and found Bainbridge-on-Bain, and it feeding Eure. The Roman road is ideal. . . . Being a little Englander the two Lincoln statues [the Church and Synagogue of the South Porch] consoled me. . . ."

EARLY WATER COLOUR DRAWINGS.

English water colour art is a subject of perennial and increasing interest as we get to know more of those who were amongst its pioneers. Mr. Walker has for years made it his object to discover and collect examples which illustrate the fine qualities of this beautiful native art of ours. The current exhibition at the Walker Galleries in Bond-street is of almost exceptional interest from the exhibition of examples by some almost unknown men. We suppose the general public hardly recognise the name of J. Skelton, yet the ten drawings by him in this exhibition include one of a wonderful quality—the view of Castle Gaudolfo and the Lake of Albano; the atmosphere and plane values in this drawing are something of a revelation for a water colour dated 1758. For perfect accomplishment one could see nothing better than the marine subject (112) by S. P. Jackson. A little drawing full of tender light and feeling is Mr. Havell's Moat House, Appleby (95). Of this kind the rough seas by H. B. Carter (see Nos. 22 and 26) could hardly be excelled. The masterly handling of architecture by T. Shotton Boys, in Envermure (9) and in Walton's two fine drawings, some delightful things by De Wint and Varley, are to be found in this exhibition of over two hundred drawings.

ANNUAL CONFERENCE OF THE INSTITUTION OF MUNICIPAL AND COUNTY ENGINEERS.

THE fifty-second annual conference of the Institution of Municipal and County Engineers was held last week at Harrogate, nearly 800 delegates attending. The annual general meeting was presided over by the President, Mr. G. F. Carter, and the annual report and balance sheet were adopted. Mr. Carter also presided over the statutory annual meeting, when the Mayor of Harrogate welcomed the Conference. The Chairman, in introducing the new President, said it gave him great pleasure to hand over to another Yorkshireman—Mr. Frank Massie, M.Inst.C.E.—the office and badge of president.

In his presidential address, Mr. Massie referred to the question of regional water boards and regional town-planning committees, saying he thought the formation of the former would be found to be imperative. It was not advisable or necessary that large sources of water should be set apart for a particular town until its population required them, while smaller bodies with more immediate necessities were seeking for supplies in vain. Apparently nearly every large gathering ground was now being rapidly absorbed by some large city, and he thought it would not be long before recourse would have to be made in greater measure to underground sources. The adoption of regional town planning would be of public advantage. For some surveyors it would mean a sacrifice of personality, but the advantages were so manifest that they must be content to efface themselves. In a reference to building by-laws, Mr. Massie said he was afraid the Health Ministry was making a mistake in enforcing the weakening of existing by-laws, the stringency of which was by no means the cause of the decline in the building of working-class houses.

The afternoon session was held in the Royal Spa Room, when Sir Henry P. Maybury (Director-General, Roads Department, Ministry of Transport) said they would doubtless expect him to deal with at least one important aspect of local government—that of road transport and the maintenance of its permanent-way and bridges—and to give them his impressions of the present position and for the immediate future. At no time in the nation's history had so much attention been paid to roads and road transport as since the days of the war. Those had been extremely strenuous years for the municipal and county engineers, the intensity of their endeavours being largely occasioned by the necessity of putting in hand large public works in order to mitigate the evils of unemployment. While he would be a bold man who could claim that for all the moneys thus expended for relieving unemployment full economic value had been secured for the community, they had, at any rate, had the satisfaction of feeling that they had done something in the way of finding useful and productive work for a large number of men.

The Ministry of Transport had, with the co-operation of the local authorities, put in hand useful works representing in the aggregate fifty-four and a half millions of money. Notwithstanding all that had been done, however, and all that was in hand, he was by no means satisfied that they were keeping pace with the demands which road transport would make upon them during the next decade. "This is an age of travel," said Sir Henry, "and it would seem as though there is a spirit of unrest abroad which appears to keep people continually on the move." The figures of the number of people travelling day after day were stupefying. All mechanically propelled vehicles, with the exception of road locomotives, motor ploughs, and tramcars, had increased, while the total number of licences issued for the first three months showed an increase of 15.1 per cent. on the corresponding period of last year. A gratifying feature of the licensing returns, he said, was in the reduction of the number of traction engines, which were slowly being superseded by lighter and more speedy forms of transport. In an industrial country, it was

probably essential in the interests of trade that these large road locomotives should continue to be used for heavy and indivisible articles which could not be accommodated on the railways. With the help of the Press, he would like to invite all those engaged in heavy traction work, and particularly his showmen friends, to have their engine wheels fitted with rubber tyres, which would not only save undue damage to the highways, but would reduce maintenance charges of costly engines. The matter had been engaging the attention of the Ministry of Transport, and he was going to invite representatives of the Traction Engine Owners' Association and of the Showmen's Guild to meet him to see whether they could not come to terms by which engines would be fitted with rubber tyres.

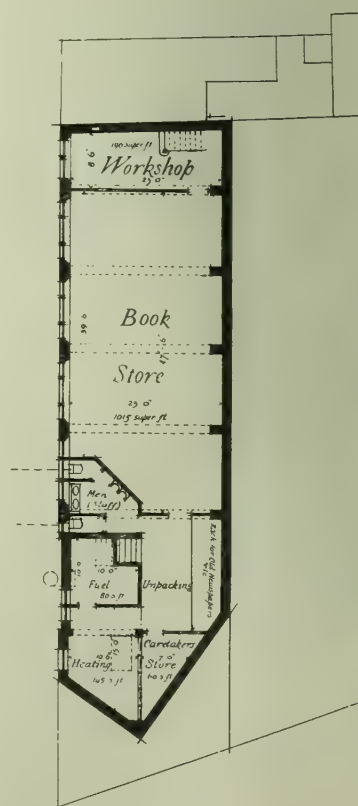
It was regrettable that so many cases of road accidents had to be recorded week after week. If "safety first" principles could be impressed upon every user of the road, he was confident that the number of accidents could easily be reduced by 75 per cent. Inquiries made by the Divisional Road Engineers all over the country went to show that carelessness and thoughtlessness account for by far the greater number of the accidents. Speed was not necessarily dangerous, but every vehicle on the highway should be driven in such a manner, and be under such control, that it could be pulled up when the necessity arose with perfect safety. Were they keeping pace with the requirements on the road? He feared that if the increase in mechanically-propelled vehicles continued, the roads would not be sufficiently commodious for them.

Local authorities should endeavour to improve all the important roads in rural districts, but those necessary improvements would be long delayed if they could only be undertaken year by year as financial provision could be made out of the Road Fund and the local rates. He visualised that at no distant date the movement which had been made under what was known as the Trunk Road Scheme, would have to be extended so as to comprehend a very much larger mileage of improvement work than had hitherto been undertaken. After dealing with the matter of road costs, he said he recognised and appreciated the ever-increasing and exacting duties that the revolution in modern transport had put upon municipal and county engineers and their staffs. He would suggest that in the interests of the ratepayers and of the Minister of Transport it would be well if the whole position could be reviewed, not only with a view of making the emoluments commensurate with the financial importance and magnitude of the work undertaken, but also with a view of seeing that the chief officer was provided with competent and adequate staffs, so that he might be relieved from detail, and thus have more time to devote to the things that really mattered.

Mr. C. E. Rivers, A.M.Inst.C.E., Borough Engineer of Harrogate, presented a paper in which he dealt with works and undertakings which have placed Harrogate in the forefront as one of the leading spas and health resorts in Europe. Having described these features in detail, Mr. Rivers mentioned that, owing to the inadequate covered accommodation in the Valley Gardens, the need for which has been especially felt during the inclement weather of the last two or three seasons, the Corporation is considering the erection of a covered pavilion in the grounds. "Plans have been prepared," he proceeded, "from designs of the Deputy Borough Engineer (Mr. L. H. Clarke, A.R.I.B.A.), which provide for a building on the west side of the present tea house, to accommodate about 1,000 people. The plan consists of a central space of 60 ft. square, with dome light over, with a platform for the orchestra placed on the north side. On each side of the central space is a wing 6 ft. wide and 70 ft. long, terminated by semi-octagonal bays 24 ft. wide. On the east end of the building is the caterer's department, with facilities for serving refreshments to persons inside the building, and advantage has been

taken of the fall in the ground to provide additional accommodation for the caterer approximately at ground level, and this will be used for serving the people sitting out in the gardens. The total length of the building is about 200 ft., and the maximum width in the centre about 75 ft. One of the chief objects kept in view during the designing of the building was the provision of ample windows, and to so arrange these that they may, during congenial weather, be drawn to one side, and so give an uninterrupted view of the gardens as far as possible, and so give one the impression that, whilst protected from the elements, they are still in the midst of the garden, and enabled to enjoy the fresh air and scenery. The building has been designed on simple lines, the introduction of the detached Roman Doric columns in the side wings and central features, together with piers at the angles of the building, giving the amount of 'solids' which in a building of this character is essential to balance the somewhat large area of 'voids.' The central dome is built up on a skeleton of steel framing, the base supporting of the dome being covered with copper sheeting, and the dome itself being of patent glazing with bold copper moulded ribs, giving light to an internal dome of less diameter. The roof over the side wings will be flat, with large counterlights at the extreme ends of the building, and the roof will terminate in copper-covered turrets. The construction of the building generally is built up upon a framework of steel, and clothed in patent stone of imitation Portland or Ketton stone. The floors throughout are of reinforced concrete, the principal floor being finished with wood-block flooring. The windows, as previously mentioned, are intended to fold up close to the columns, and are to be carried out in polished teak with leaded lights."

On Thursday the delegates visited Fountains Abbey, the Roundhills reservoir of the Harrogate Corporation, where luncheon was served, and also the Leighton reservoir of the Leeds Corporation. In the evening the annual dinner was held at the Grand Hotel, upwards of five hundred members and their ladies attending.



Belfast Branch Library Competition.

(See p. 17.)

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting!—ED.

Pre-cast Concrete.

SIR,—A building upon which I am at present engaged includes a large number of plain pre-cast concrete blocks as dressings between the windows of two floors. They are being cast in boxes, of which there are a few of standard size, and the blocks are turned out and stored as soon as they are set. This appears to be a long process unless the boxes are multiplied at some expense. Can any of your readers suggest an economical way of speeding up this work?

"ACCELERATE."

Cracking Asphalt.

SIR,—An asphalt flat laid by a well-known firm of specialists on boarding and felt, in two layers finishing 1 in. thick, has shown signs of cracking after two years' wear. I am satisfied that the timbering to the sub-structure is adequate, and am further covered by the specialists' guarantee which they do not question; but as I know of so many asphalt flats laid on timber work that have not failed after longer wear, I should be very much interested to hear of any rules that should be observed in such work, and which may not have been followed in this case.

"PUZZLED."

Blistered Paint.

SIR,—Some old blistered paint recently rubbed down and re-painted shows signs of again blistering after a very short interval, and apparently in the exact positions of the old blisters. Can you advise me what should have been done to obviate the appearance of this trouble and what might now be done to overcome it?

"AMATEUR."

Removing Old Varnished Paper.

SIR,—I should be glad to be told what is the best way of removing old varnished paper from walls intended to be redecorated. The walls in question seem quite impervious to the scraper, and the original varnishing must have been made an excellent job.

"REPAIRS."

Rolling Margin.

SIR,—Can you inform me what is the recognised percentage allowance for rolling margin in structural steelwork, and what is the maximum variation allowed in cuttings to dead length?

"STUDENT."

Electric Lighting.

SIR,—I should like to know of any rough-and-ready rule by which may be calculated the number of lamps of a given power required in a given area of an open, uninterrupted warehouse floor. I have no doubt that there are such rules though I am unable to find them in any of the better-known architects' handbooks.

"PLANNER."

Subsidy House.

SIR,—I have recently purchased a subsidy house for which the builder (not myself) received the subsidy. At the side of this house I have a piece of land 18 ft. frontage upon which I wish to build a brick garage. I have deposited plans with the local authority who have disapproved on account of the Ministry of Health stating "No house shall be granted the Government subsidy if a garage is included." (The subsidy

has been paid.) I may say the ground at side was included in the scheme for density purposes, but when purchasing no stipulation was made as to a garage.

My plan is absolutely in accordance with the by-laws. Would any reader be good enough to let me know what the position would be if I erected the garage, giving all notices to the local authority?

REGINALD J. SLATER.

Badminton Court.

SIR,—Please could any of your readers give me particulars of the best form of construction for a cheap enclosure for a Badminton Court?

R. JAKENS.

Old Paint.

[REPLY TO MESSRS. JARMAN & Co., JUNE 19.]

SIR,—Your correspondents will find that the readiest way of removing all but the last thin layer of old paint will be to burn it off with the blow lamp, and scrape down as far as possible. To avoid the possibility of damage to the fabric the last layer should be removed by means of a patent paint remover, the best of which consist of an alkali solution which softens the paint and renders it easily scraped away. After this has been used the surface should be washed over with a weak acid to neutralise the alkali. Any of the well-known paint manufacturers will give particulars and prices of such a paint remover.

"PAINTER."

Cast Ceilings.

[REPLY TO ECONOMY, JUNE 19.]

SIR,—I have myself recently attempted to produce on the soffit of a concrete floor, cast *in situ*, a surface such as is desired by your correspondent. I have found that it is not sufficient to use wrought boarding well cramped up together, as the wet concrete swells the boarding into such irregularities as to make the board marks too obvious. I intend to try the same construction but with the boarding covered with canvas, and am hoping that a matt surface will be produced in which the irregularities and board marks will not be apparent.

"EXPERIMENTER."

THE WEEK IN PARLIAMENT

WESTMINSTER, Wednesday.

L.C.C. Housing.

DURING a debate on the London County Council (Money) Bill, Sir G. Hume said that instructions had been given to the L.C.C. Housing Committee to get ahead as fast as ever they could, both with housing and slum clearances. The Housing Committee was being attacked on all sides, but they were spending money as fast as they could get the work done. He agreed that in years gone by they had been very slow, but to-day they were all eager to see the slum areas of London cleared. The difficulty was to re-house under existing conditions. That was why it was necessary to go very slowly, after the clearances were made, in getting people out of their houses. He felt sure that the House of Commons would pass the present Bill, for two-thirds of the capital expenditure authorised by it was for housing purposes.

The Bill was read a second time.

Houses Built in London.

Mr. N. Chamberlain informed Mr. Day that during the 12 months ending December 31, 1924, 5,546 houses were completed in connection with schemes under the Housing Acts in districts wholly or partly in the Metropolitan Police District, and a further 4,908 houses were in course of construction on December 31. Precise information as to the number of non-parlour houses included in these figures was not

available, but it was estimated that two-thirds of the houses were of this type.

Similar information in regard to houses erected by private enterprise without State subsidy was not available for the period in question, but during the twelve months ending September 30 last the houses so completed were:—

Not exceeding £35 rateable value	10,162
Exceeding £35 but not exceeding £70 rateable value	3,954
Exceeding £70 but not exceeding £105 rateable value	426

Total up to £105 rateable value 14,542

On October 1 the following numbers of houses were in course of construction:—

(a) 5 rooms or less	3,845
(b) 6, 7 or 8 rooms	5,049
(c) 9 rooms but not more than 12 rooms	286

Total 9,180

Information was not available as to the average cost of land and development per house.

Houses for Employees.

Major Glyn asked the Minister of Health whether he would give effect to the principle that firms or public companies inaugurating factories or other businesses in rural areas should take into account the necessity of providing housing accommodation for either the total number of workers who would be engaged in such work, or a proportion of such workers; and at what proportion of the total number of houses he would be prepared to fix the quota required to be provided by such companies.

Sir K. Wood, who replied, said that while the Minister was anxious to facilitate by all means at his disposal the provision of housing accommodation for the employees of new undertakings, he did not think that it would be practicable to introduce legislation making the provision of such accommodation compulsory, or to fix a quota as suggested in the last part of the question. A considerable number of houses were already being erected by firms for their workpeople.

Rural Housing.

Mr. N. Chamberlain informed Mr. Paling that 2,241 houses had been authorised under the Housing (Financial Provisions) Act, 1924, to be erected in 355 agricultural parishes in England and Wales. Up to June 1, contracts had been let or definite arrangements made for the erection of 1,028, and of these 242 had been completed.

Sir K. Wood informed Mr. Foot Mitchell that the Minister was aware that there was still a shortage of housing accommodation in agricultural districts in common with the rest of the country, and the problem was receiving his serious and continued attention. Since 1919 some 75,000 houses had been erected in rural districts under the Housing Acts, and during the past two and a-half years over 53,000 by private enterprise, without the aid of subsidy. The Minister anticipated that increasing advantage would be taken of the special Exchequer subsidy provided by the Housing Acts for the erection of houses in agricultural parishes, and he had hopes that alternative methods of house construction would contribute something towards the housing needs of these parishes.

Schemes Approved.

Sir K. Wood informed Mr. Riley that 459 local authorities in England and Wales had so far received approval to schemes under the Housing (Financial Provisions) Act, 1924, the number of houses authorised being 61,484—59,947 to be erected by the local authorities and 1,537 by private enterprise. Of these 4,428 had been completed by local authorities and 33 by private enterprise on June 1, and 15,855 and 184 respectively were under construction at that date. He was advised that in general the rents charged approximated to the rents of houses erected under the Housing, &c., Act, 1923.

THE BUILDING TRADE.

BUILDING CONTRACTS

By W. T. CRESWELL, Lic.R.I.B.A., Assoc. (late Fellow) of the Surveyors' Institution, F.R.San.Inst., Barrister-at-Law.

THE ARCHITECT AND THE SUB-CONTRACTOR. PROVISIONAL SUMS AND PRIME COST ITEMS.

The Architect's Duties.

WHERE there is no written contract between the employer and the architect, and consequently no defined obligations, then, under the implied contractual relationship existing between them, the duties of the architect comprise the preparation of drawings, plans and specifications for the works contemplated, and the superintendence of their construction to a conclusion. In general the architect is the employer's agent in respect of all these matters; but he has no authority to waive, vary or dispense with any conditions contained in the contract made between the employer and the contractor, without the knowledge and consent of the employer. (See *Sharpe v. San Paulo Railway Co.* (1873), 1 A.C. 120.)

The Architect's Authority.

An act to be within the scope of the architect's implied authority must be an apparently necessary one, and one that arises out of the ordinary and customary discharge of his duties. Acts of an excessive or improper character do not fall within such authority. (See *Lord Bolingbroke v. L. B. of Swindon New Town* (1874) L. R. 9 C. P. 575, and *Bank of New South Wales v. Owston* (1879) 4 A.C. 270.)

Even when an architect is authorised to obtain tenders he must adopt the customary means of obtaining them. There is no implied authority that he can go further and enter into a contract on behalf of the employer, even if the tender received is within the price the employer is prepared to pay. (See *Hamer v. Sharp* (1874) L.R. 19 Eq. 108.) The architect has no authority to make new contracts for work wholly outside the contract or to employ sub-contractors as specialists, for if the work is outside the contract its terms do not apply thereto. So much depends upon the terms of the contract between the employer and the general contractor; and they must be fully considered in determining the question as to whom the sub-contractors are to look to for payment.

At no time is the architect a party to the contract between the employer and the contractor; therefore, if he exceeds his authority and orders works which are outside the scope of his authority as agent of the employer he may incur liabilities towards the contractor for breach of warranty of authority. And where without express authority an architect orders works on a sub-contractor to the general contractor, the employer is not bound by his architect's act, whether the work is original work or in the nature of a deviation on the general contract, for there is no privity of contract between the employer and the sub-contractor. Also in this last instance it appears that the architect does not incur any liability towards his employer.

Payments for Work and Materials.

The architect's authority to order extras depends entirely on the terms contained in the general building contract, or upon written or oral instructions given to him by the employer. He must not promise in the case of an entire contract that indispensable works will be paid for, nor must he make reductions in the work originally contracted for, so as to make up to the contractor for work included in the contract that has turned out to be more expensive than originally contemplated. Nor again must he promise or guarantee that payment will be made by the employer or the

general contractor to a sub-contractor. Of course, for it to be a guarantee, it must be in writing to comply with the statute of frauds, and the existence of such a memorandum, in the form of a complete contract, before action is brought, is essential.

Should the architect issue a certificate directly on the employer in favour of the sub-contractor, that does not entitle the latter to recover payments from the employer; nor can the employer withhold sums due to the general contractor in order to pay the sub-contractor, when the general contractor has unduly delayed payment to the sub-contractor. (See *Randall v. Trimen* (1856) 18 C.B. 786 and *Meek v. Wendt* (1889) W.N. 19.)

A new contract must be established to enforce payment by the employer, either by showing that the employer expressly or impliedly ordered the work, or that his architect acting within the scope of his authority ordered the work, or that the employer ratified his architect's orders, or that the employer accepted the work. (See *R. v. Peto* (1826) 1 Y & J, 37.) Acceptance of the work cannot be

implied from the mere fact of the employer or building owner continuing in possession of his own land and the work which has become part of the freehold. Nor does the use of the work by the employer imply a contract to pay for it. Communications or dealings between an employer and a sub-contractor may, however, amount to a contract. (See *Smith v. Rudhall* (1862) 3 F & F, 143.)

Hence generally in most building contracts the employer contracts with one contractor. The sub-contractor is, therefore, employed by the general contractor, and the latter is usually made responsible wholly or in part for any defects or delinquencies of the sub-contractor in the work. The general contractor should, therefore, expressly make the sub-contractor liable to himself.

In all such cases the architect, it will be seen, has no power to vary or alter the work included in the sub-contract or to give orders to, or direct, or control, the work of the sub-contractor; or to enter into any agreement with, or to accept any guarantee from, the sub-contractor; or to make substitutions for the work to be executed under the sub-contract; unless (always, of course, acting within the scope of his authority from his employer), the terms of the sub-contract give him power to do any or all of these things.

The sub-contractor is in all respects responsible to the one with whom he contracted, viz., the general contractor for the entire work; and to the latter he must look for payment.

COMPARISON OF PRICES OF BUILDING MATERIALS IN JUNE, 1925, WITH CURRENT PRICES

Materials.	June, 1925. £ s. d.	July, 1925. £ s. d.	Rise. %	Fall. %
Bricks—				
Best Stocks	4 3 6	4 3 6	—	—
Flettons	2 13 3	2 13 3	—	—
Glazed	22 0 0	22 0 0	—	—
Thames ballast	0 10 6	0 10 6	—	—
Thames sand	0 14 6	0 14 6	—	—
Shingle (¾ in.)	0 12 9	0 12 9	—	—
Portland cement	2 18 0	2 18 0	—	—
Ground blue lias lime	2 4 6	2 4 6	—	—
Grey stone lime... ..	2 11 9	2 11 9	—	—
Bath stone	0 2 9½	0 2 9½	—	—
Portland stone	0 4 4	0 4 4	—	—
Good Sound Building Timber—				
4 in. × 11 in.	32 0 0	32 0 0	—	—
3 in. × 11 in.	28 0 0	28 0 0	—	—
2 in. × 11 in.	28 0 0	28 0 0	—	—
3 in. × 9 in.	25 0 0	25 0 0	—	—
3 in. × 7 in.	23 0 0	23 0 0	—	—
3 in. × 4 in.	23 0 0	23 0 0	—	—
Slates—				
24 in. × 12 in.... ..	37 12 6	37 12 6	—	—
22 in. × 12 in.... ..	34 0 0	34 0 0	—	—
20 in. × 10 in.... ..	25 12 6	25 12 6	—	—
16 in. × 10 in.... ..	17 12 6	17 12 6	—	—
16 in. × 8 in.... ..	13 15 0	13 15 0	—	—
R.S. joists	13 10 0	13 10 0	—	—
Iron—				
Common bars	13 10 0	13 10 0	—	—
Mild steel bars	12 0 0	11 0 0	—	8.33
Steel bars... ..	12 0 0	11 0 0	—	8.33
Cut nails	20 10 0	20 0 0	—	2.44
Sheet lead	44 0 0	44 10 0	1.14	—
Glass—				
15 oz. sheet	0 0 3½	0 0 3½	—	7.41
21 oz. sheet	0 0 5	0 0 4½	—	7.50
26 oz. sheet	0 0 6	0 0 5½	—	4.17
Raw linseed oil	0 4 4	0 4 4	—	—
Turpentine	0 6 7	0 6 0	—	8.86
Ground English white lead	55 15 0	55 15 0	—	—
White lead paint	76 15 0	76 15 0	—	—
Red lead	53 0 0	53 0 0	—	—

SOME OBSERVATIONS ON THE RIGHT TO LIGHT AND THE LAW RELATING THERETO.—IX

IN our last article we considered the cases where there has been an alteration of the dominant tenement, or the windows in the same, and we showed that since the decision in *Colls v. Home and Colonial Stores* (1904, A.C. 179) there had been a lack of authority on the effect that decision would have in such cases. The questions thus involved will be found discussed on academic lines in the leading text-books, both as regards the right to light acquired at common law, and under the Prescription Act, but it is clearly recognised that they can only be the subject of individual opinion and that no authoritative view can be expressed.

Now that the test is whether a nuisance has been created, and, as we have shown at the end of our sixth article, that the light derived from sources other than over the servient tenement can also be regarded (see *Colls' case* and *Davis v. Marrable*, 1913, 2 Ch. 421), one of the most difficult questions is to what extent the enlargement of a window, or the addition of new windows in the dominant tenement may affect the right, at any rate as regards the remedy. For instance, the test being—has the room or building been rendered less comfortable and suitable for occupation or business, but the room or building having obtained increased light through a new or enlarged window (there being no prescriptive right to the light having access through the enlarged windows where they do not correspond with the old apertures, or through the new window), how is the test to be applied?

Mr. Coombe, in his well-known treatise on the "Law of Light," expresses his opinion in some closely-reasoned passages and comes to the conclusion that where the title to the light has been completed or established by action, the enlargement of a window, by reducing the susceptibility of a room to light nuisance, far from increasing the burden on the servient tenement, may tend to alleviate it and enable the servient owner to build nearer the enlarged window than he could otherwise have done, but as regards alterations made during the prescriptive statutory period he considers it is erroneous to pay any attention to the effect of the alterations upon the easement, and that the only question is, has the same access and use of light been actually enjoyed for the twenty years preceding the action—that is to say, have the provisions of the Act been complied with?

We do not here attempt even to summarise Mr. Coombe's conclusions, but must refer our readers to his work; but he admits that at the time he was writing there was no satisfactory authority on these points, and therefore only an opinion could be expressed, and in the following observations we are in the same position, and can only very diffidently touch upon the subject. In the first place, we would observe that a good many years have elapsed since the latest editions of the leading text-books on the law of light appeared (we believe we are correct in saying that Mr. Coombe's work is the latest, and that appeared in 1911), and therefore we venture to suggest that the continuing absence of cases on these points (for ever since the decision in *Colls' case* there has been a considerable reduction in the number of all cases relating to light brought in the Law Courts) in itself appears to imply that in practice a working rule has been discovered and that the tendency to raise fine points has disappeared. Before the decision in *Colls' case* the owner of a dominant tenement had been encouraged to consider that he had a proprietary right to all the light which entered his house, either through ancient windows, or to the extent of the old aperture through windows that had been enlarged, and when he was threatened with the erection of a larger building in proximity to his own, with its attendant disadvantages, he had every incentive to take steps to protect what he deemed to be his right and to seek to restrain the erection of the higher building. When, however, it was re-established by the decision in *Colls' case* that the obstruction

of light must be such as to constitute an actual nuisance the position became very different and a more or less concrete fact had to be established to obtain any remedy. What was the position then? If the owner of the dominant tenement has altered his premises, but in such a manner that he is still dependent upon the light derived through the old aperture, then, of course, it is very material for him to claim the right acquired in respect of that aperture; but if by enlarging his ancient windows or adding new windows he has succeeded in obtaining the same degree of light as before, or even an increased degree of light notwithstanding the raising of a neighbouring building, then, however the original right has been acquired, whether by grant or at common law or by prescription, unless the existing conditions show an actual nuisance, he would feel great hesitation in bringing an action on academic grounds. It is true that the new windows or the increased space of the old apertures would not become prescriptive rights as regard the access of light unless he could do so, but, on the other hand, the extent of the actual or threatened obstruction having become known to him this would not necessarily trouble him, as he would feel secure for the future. The owner of the servient tenement would, however, in the future have to consider his position as regards new windows or enlarged, as the right to light to them would be acquired by prescription.

It appears that *Colls' case* has certainly tended to lessen litigation on fine points in relation to light, and we may remind our readers we held this view when, in 1918, a Bill to amend the law relating to light entitled "the Acquisition of Light Restriction Act" was read before the Royal Institute of British Architects, and we commented upon it in our issue December 6, 1918, pointing out that *Colls' case* would lead to only a reasonable restriction on building, and that the law as thus settled would prove less irksome and operate more uniformly than would building restrictions which might vary in every district.

If we are correct in the observations we have made above it will be seen that the law operates on broader lines than was the case before the decision in *Colls' case*, both as to the extent of the right acquired, and also as to the remedy to be applied in cases of obstruction. With the remedies we shall deal in a subsequent article, but before leaving the points we have been considering we desire to suggest what appear to be the broad points to be considered where the dominant tenement has been altered. The first point would appear to be, are the alterations such as to indicate abandonment of the right or a destruction of the easement. In *Ankerson v. Conelly* (1897, 1 Ch. 678; *The Builder*, May 4, 1897) the alteration in the dominant tenement was held to have this effect (see Article VII). The second point seems to be, does the alteration increase the burden of the servient tenement? This was discussed in Article VII, and *Ankerson v. Conelly* is one of the authorities on this question. The third point, then, is, does the obstruction occasion an actionable nuisance to the premises as altered? and this appears the point of the greatest difficulty, especially under the Prescription Act. The claim can, at the highest, only be made to light having access through the old aperture, and the enlargement of an old window certainly must not increase the burden on the servient tenement; but if, according to the decision in *Colls' case*, to obtain a remedy actual nuisance must be proved, it would appear that the effect of an alteration in the dominant tenement, which increases the light having access to any of the rooms, may, in fact, operate to relieve the servient tenement of some portion of the burden and even to decrease what we may term the privileged area over which the light is derived. It will be noticed that the converse proposition was accepted in *Davis v. Marrable* (1913, 2 Ch. 421; see Article VI); the defendants were allowed credit for the

increased light caused by their having lowered some part of their buildings as against the obstruction caused by having raised another part of it; the light was regarded as a whole and the plaintiff failed to prove an actionable interference amounting to a nuisance.

We are speaking without authority in making the above observations, but if we are correct, we submit that whatever may be the strict interpretation to be put upon the Prescription Act in relation to this question, the decision in *Colls' case*, by reintroducing the test of nuisance has, in fact and in practice, put an end to the fine questions which were continually being raised in the Courts before that decision was delivered, and that it has therefore had a beneficial effect, practically removing the unreasonable restrictions on the development of towns and the erection of higher buildings and placing the law of light on a sounder basis. The idea that the owner of the dominant tenement has an actual proprietary right to any particular cones or pencils of rays of light coming in any particular direction over any particular portion of the servient tenement (see the head note to *Davis v. Marrable*) led to endless litigation, but now that the owner of the dominant tenement has only, so to speak, to look at home and see whether his premises are sufficiently well lighted for the purposes of occupancy or business, a practical test is afforded him of what is an actionable obstruction to, or interference with, his light, and he has no desire to litigate about abstract propositions. In our next article we propose dealing with the remedies for interference with the right to light.

NOTE.—In our last article there were three trifling misprints in column 1. In the first paragraph the word "and" should be omitted before the words "ancient lights." In the second paragraph the word "perspective" should read "prescriptive," and in the 22nd line of the same paragraph the word "the" should precede the word "question." In column 2 in the 35th line from foot the word "such" should precede the words "an interruption."

GLASGOW HOUSING AND HEALTH EXHIBITION

PROSPECTUSES are now ready for the seventh annual Housing and Health Exhibition promoted by the Corporation of Glasgow, and to be held in the Kelvin Hall, Glasgow, during the three weeks commencing September 23. All the principal features of previous exhibitions of the kind will be retained, and several new attractions added. Included in the latter will be a Wireless Section organised by the National Association of Radio Manufacturers and Traders.

The exhibits will include model houses, building material, &c., sanitary appliances and material, house furnishings, &c., lighting, heating and labour-saving appliances, house decoration and photography. The model houses and building material exhibits will comprise imitation stone, brickwork of various kinds, building tiles and blocks, concrete building slabs and blocks, cements plain or coloured, cement colouring, building timber of all kinds, timber preservative, damp-proofing material for damp-proof courses, ground flooring and walls, composition slabs, &c., Roofing materials will include felt, terra-cotta and composition tiles. Flooring material of all kinds, wall linings, ornamental plaster, wall tiles, composition board of all kinds, artificial wood, ceiling coverings of all kinds, doors and framing, window casements of wood or iron, glazing material, reinforced mosaic; flexible and Vita glass will also be included. There will be at least one model cottage of the very latest type shown in the exhibition.

The exhibition, which will open on a Wednesday and close on the corresponding day three weeks later, will be open to the public daily from 1 p.m. to 10 p.m. All particulars regarding the Exhibition can be obtained on application to Mr. Cecil Sommerville, General Manager, Kelvin Hall, Glasgow, C.3.

THE RATING AND ASSESSMENT BILL

PROGRESS seems slow in Committee on the Rating and Assessment Bill, and the reports in the press are meagre, and therefore, until the proceedings are concluded and the Bill as amended is printed, it is impossible to give any connected idea of the effect of the amendments.

The proceedings seem to be lengthened by the attempt to introduce wholly irrelevant matters into the Bill, which mainly follows the "Draft Bill" circulated last year. Thus on clause 2, sub-clause (3), which practically stands as in the "draft Bill," an attempt was made to add after the words, "Every general rate shall be at a rate at a uniform amount per pound on the rateable value of each hereditament," the words "mining royalties and site value," an echo from the past famous Finance Act of 1909-10; whilst on clause 4, sub-clause (4), amendments were moved, but rejected, in reference to the rating of unoccupied houses. As regards this latter series of amendments, the Minister of Health pointed out that the revival of housing enterprise was certainly not in a condition to receive any "fresh shocks," and that this was not the time to make experiments.

Clause 4, sub-clause (1), which provides that every rate shall be deemed to be made on the date on which it is approved by the rating authority and that certification by the justices shall cease, was the subject of discussion, but an amendment to retain certification by the justices was withdrawn.

Clause 4 is substantially as was the same clause in the "draft Bill" save for the introduction of a new sub-clause (5), which is as follows: "Where the name of any person liable to be rated is not known to the rating authority it shall be sufficient to assess him to the rate by the description of the 'owner' or 'occupier' of the premises (naming them) in respect of which the assessment is made without further name or description."

Clause 6 is also new and did not appear in the draft Bill. It provides: "Notice of a rate may, if the rating authority think fit, in lieu of being given in manner prescribed by section 2 of the Parish Notices Act, 1837, be given by affixing the notice in some public or conspicuous place or situation in each parish affected, or by publishing the notice in one or more newspapers circulating in the area of the authority, and different methods of publication may be used as respects different parts of the area of the rating authority." An amendment moved with the object of making action compulsory and not in the discretion of the authority was defeated.

The most important amendment appears to have been that which the Committee agreed to insert in Clause 7 (which is substantially the same as in the "draft Bill"), which deals with "demand notes for rates" as the amendment provided that the gross and rateable value should be inserted in the demand note, and when it differs from the rateable value, also the net annual value. Lastly, clause 8, sub-clause (1) was considered. This is slightly different from what it was in the "draft Bill," and provides: "As from the appointed day any precept issued by the council of a county which under any enactment or order in force immediately before that day is required to be sent to a board of guardians, and any precept which under any such enactment or order is required to be sent to overseers shall instead of being so sent be sent to the rating authority." An amendment to leave out the words, "the appointed day," and to substitute "Date on which the first new valuation lists made under Part II of this Act come into operation" was strongly opposed by the Parliamentary Secretary to the Ministry of Health and rejected.

Shortage of British Tiles.

The Housing Committee of Stone (Staffs) U.D.C. having failed to secure a sufficient supply of British tiles for their housing scheme at Parson's Field, have given instructions for French tiles to be used.

COURT OF APPEAL: ACTION FOR FEES

IN this case, heard on June 10, before Lords Justice Bankes, Scrutton and Sargant, the defendant, Mr. Richman, appealed from the judgment of Mr. Justice Sankey, awarding the plaintiff, Mr. G. H. Abbott, an architect, of Warwick-court, Holborn, W.C., £275 fees for work done.

Mr. Samuel Duncan, for the appellant, said that Mrs. Richman was minded to get a building agreement and erect a factory at Mare-street, Hackney, London, N., but was anxious that the cost of the building should not exceed £6,000. Her husband interviewed the plaintiff, and pointed out to him that his wife was not anxious to run into any unnecessary expense. In February, 1923, the terms were arranged between Mr. Richman and the plaintiff on which the latter should do the work. At first there was no provision for payment of any sum to the plaintiff for the scheme and sketch plans; but on March 15, at another interview, it was agreed that the plaintiff should have a sum of £10 10s. for preparing the scheme and sketch plans, and that if a factory were erected on the site he should act as architect, and that he should be remunerated at the scale of the R.I.B.A.

Lord Justice Bankes: What is the point in the case?

Mr. Duncan said that the £275 represented the plaintiff's fees on the abandonment of the work calculated on the R.I.B.A. scale, viz., two-thirds of the scale rate. He (Counsel) submitted that there was a special agreement between the parties and that payment to the plaintiff was to be conditional on the defendant obtaining a building agreement and upon the building being erected—that was the only contract ever made. Defendant was only to be liable to pay the plaintiff in the event of her obtaining a building agreement from the London County Council. It was in the contemplation of the parties that the matter might go off, and if it did the defendant was only to be liable for £10 10s.

Lord Justice Bankes said it appeared from the evidence given at the trial that the plaintiff was instructed to prepare the working plans, and that was not included in the £10 10s.

Mr. Duncan said it was impossible to prepare working plans until one had the building agreement.

Lord Justice Bankes said he did not share that view. Besides, the plaintiff said he was told to go on and prepare plans.

Lord Justice Scrutton said the Judge had awarded the plaintiff £275 on a *quantum meruit* basis.

Lord Justice Sargant said it appeared that the defendant adopted the preliminary plans, and then told the plaintiff to proceed with the work, and act as her architect.

Without calling upon Counsel for the plaintiff, their lordships dismissed the appeal with costs.

Lord Justice Bankes, in giving judgment, said that in his opinion Mr. Justice Sankey took quite the right view, and indeed the only view on the evidence and correspondence before him. All the contract between the parties provided for was for the performance of the preliminary work for a preliminary fee, and this was the view taken by the plaintiff, who pointed out that he could only act in accordance with the provisions of the Schedule of the Institute, which provided for payment on the abandonment of the work. The plaintiff had made his position abundantly clear, viz., payment for preliminary work, and after that payment according to the Institute schedule. The plaintiff repudiated the suggestion that he was to have nothing if the scheme were abandoned. The learned judge had found that the plaintiff, having established his case, was entitled to be paid, and he (the Lord Justice) agreed with him.

Lords Justices Scrutton and Sargant concurred, and the appeal was accordingly dismissed with costs.

WORKMEN'S COMPENSATION: CONTRACTS WITH FOREIGN EMPLOYERS

A POINT of some importance appears to have been decided by the Court of Appeal in the case of *Hunter v. Stadtische Hechsee-Fischerei Gemeinnützige Gesellschaft* (the *Times*, June 18). The applicant had been employed as a crew trimmer on board the defendant's vessel at Tyn Dock, South Shields, on February 15, 1922, when he sustained injury by accident, liability for which had been admitted and compensation paid down to June, 1922. The applicant was now claiming further compensation, apparently on the ground that the incapacity was permanent. The German company was in liquidation but notice of the application had been served upon the liquidator by registered post in accordance with section 2, subsection (3) of the Workmen's Compensation Act, 1906, and the company appear to have filed an answer which amongst other defences, raised the point that they were not within the jurisdiction of the Court. The County Court had dismissed the application on this ground. The Court of Appeal set aside this judgment and remitted the case to the county court for hearing on its merits.

The Court pointed out that these proceedings before an arbitration tribunal were not judgments coming within Order XI of the Rules of the Supreme Court, though there was provision for giving effect to them. Here the service was registered post under the Workmen's Compensation Act had been duly effected, and the liability of the employer attached to the contract of employment, and the County Court would proceed to measure it in proceedings which were not initiated by a process requiring the attendance of a person before the Court.

The Master of the Rolls, in his judgment, reported as having said, "The terms of the Act brought within its ambit all contracts of employment in Great Britain and gave a remedy against a probable liability against a non-resident."

We prefer not to comment on the case until it is fully reported in the law reports, but we may here point out that it is one thing to obtain an award against a person not in the jurisdiction and another to be able to enforce it. In the case of ships, the Workmen's Compensation Act, 1906 and the new Act of 1923 (see section 11 of the former and section 20 of the latter), contain special provisions enabling awards to be enforced by detention of the ship on the analogy of an "action in rem" in the Admiralty Division, and thus these awards can be enforced whenever the ship comes within the jurisdiction; but where the contract has been made in this country, and there is no property of the defendant in the country when the proceedings are brought, there may be considerable difficulty, except in the case of ships, in enforcing the award. We shall revert to this subject when the case is more fully reported.

General Electric Company.

AT the annual general meeting of the General Electric Company, Ltd., held on Wednesday last, the directors reported a successful year's trading. The net trading profits amounted to £1,029,983, an increase of £194,422 over the previous year. The Company's works, throughout the state, have been fully employed, and the demand in the Home market for the Company's products—telephone and wireless apparatus, lamp switch-gear, cables and general electrical commodities—has shown a steady increase.

Lambeth Housing Scheme.

The Lambeth Borough Council have now completed their arrangements for the erection of 30 houses on their Bloomfield Estate, at a total cost of £229,524. At the present time some 10 houses are in the course of erection, which are cost £66,851, but the Housing Committee have now considered tenders for the erection of other types of houses, and have agreed to accept a tender of Messrs. F. & H. F. Higgs, Ltd., builders of Station Works, Hinton-road, S.E., for the erection of 220 more houses and flats at a further cost of £138,990.

NEW BUILDINGS IN LONDON

Baker-street.—Messrs. Elcock & Sutcliffe, 21, Northumberland-avenue, W.C.2, are the Bank's architects for the reconstruction of the branch premises of the Midland Bank, Ltd., in Baker-street, W.1, and not as stated in our last issue.

Bayswater.—It is proposed to build a new church building on a site in Pembroke Villas, in Bayswater, W.2. Plans have been prepared by Messrs. Lewis Solomon & Sons, 133, Moorgate, E.C.2.

Bermondsey.—Plans have been prepared by Messrs. Leighton & Higgs, architects, 225, Long-lane, S.E., for the building of shops on the corner of St. James's-road and Trothy-street, S.E. The builders are Messrs. J. A. Franey & Son, 134, Southwark Park-road, S.E.16.

Bishopsgate.—A large block of office and shop property, equipped with lifts, central heating, &c., is to be built in Bishopsgate, E.C.3, at the corner of Houndsditch. The architects are Messrs. Richardson & Gill, 41, Russell-square, W.C.1, acting on behalf of the London and Northern Estates Company.

Brentford.—It is proposed to build a new Cottage Hospital at Brentford. The plans have been prepared by Messrs. Dodge & Reid, 120, High-street, Brentford.

Chislehurst.—A scheme for the erection of 50 houses is shortly to be embarked upon at Chislehurst. The architects are Messrs. Crickmer & Foxley, 1, Lincoln's Inn Fields, W.C.1.

Church-street.—The contractors for the new building for the Gas Light & Coke Co., Ltd., in Church-street, Kensington, are Messrs. John Greenwood, Ltd., of 12-14, Arthur-street, E.C.4.

City-road.—New works and warehouse premises are to be built in City-road, E.C.1, for the International Harvester Company of Great Britain, Ltd., Finsbury-pavement, E.C. The plans have been prepared by Messrs. Davis & Emanuel and H. S. Smart, Queen Victoria-street, E.C.4. The contractors are Messrs. Allen Fairhead & Sons, Ltd., Sydney-road, Enfield.

Croydon.—Extensions to their works in Katherine-street, Croydon, including the building of cleaning and repairing shops for the store departments, are under contemplation by the Croydon Gas Company. Plans will be prepared by Messrs. Harry Berney & Son, 33, High-street, Croydon.—A housing scheme is to be carried out in the district of Limsfield-avenue, Croydon. A start on a number of good class villas has been made by Messrs. Tysoe & Harris, Briar-road, Pollards Hill, S.W.16.—New branch bazaar premises are to be constructed at High-street, Croydon. Mr. W. A. Lewis, architect, 11, Finsbury-square, E.C.2, acting on behalf of Messrs. Marks & Spencer, Ltd., 21, Chiswell-street, E.C.2.

Dagenham.—Work is in hand on the site in Bennett's Castle-lane and Green-lane, Becontree, where it is proposed to build a row of shops with flats above. The builders are Messrs. T. N. Hughes, Ltd., Clements-road, Ilford. Mr. E. Meredith, A.R.I.B.A., 7, Goodmayes-road, Goodmayes, Essex.

East Ham.—Plans for a new Spiritualist Temple or Church, in Fourth-avenue, East Ham, E., have been prepared by Mr. J. Stanley Beard, 52, Baker-street, W.1. Mr. A. E. Symes, Carpenter's-road, Stratford, E., is the contractor.—It is hoped to place a contract in the autumn for the building of the East Ham War Memorial Hospital in Hilda-road, E., for which plans were accepted in public competition from Messrs. Mennie & Smith, 11, New-court, Lincoln's Inn, W.C.2. The building will accommodate 66 beds and cost about £80,000.

Fenchurch-street.—New shop fronts and fittings are to be installed at No. 48, Fenchurch-street, E.C.3. The contractors are Messrs. Courtney Pope & Co., Ltd., 339, Seven Sisters-road, N.15.

Greenwich.—A new nurses' home is to be erected at "The Woodlands," Vanburgh-hill, East Greenwich, for the Greenwich Board of Guardians. The architects are William A. Pite,

Son & Fairweather, 12, Carteret-street, Queen Anne's-gate, S.W.1.

Hackney.—The site at Nos. 372-374, Mare-street, E., has been acquired by Messrs. Montague Burton, Ltd., of Hudson-road Mills, Leeds, for the erection of a branch clothing shop and showroom, with flats or offices above. The plans will be prepared by Mr. Harry Wilson, Victoria Park-avenue, Kirkstall, Leeds.

Hampstead.—It is proposed to build a new School of Domestic Science at the Garden Suburb at Hampstead, N.W.11. The architect is Mr. C. W. S. Soutar, "Wyldes," North End, N.W.3.

Harrow.—It is probable that an extensive scheme of repair may be carried out at the Parish Church of Harrow. Sir Aston Webb, 17, Queen Anne's-gate, S.W.1, has been called in to advise.—The owners of the *Harrow Observer* newspaper, of Station-road, Harrow, are to build new offices, warehouses, and printing works on a site adjoining in Station-road. Plans have been prepared by Mr. S. Poynton Taylor, The Cottage, Roxeth Hill, Harrow.—A new palais de danse is to be erected in Northolt-road, Harrow-on-the-Hill, for Mr. W. T. Farr, 237, King's-road, S.W.3. The architect is Mr. S. Poynton Taylor, 58, Roxeth Hill, Harrow-on-the-Hill.

Hayes.—Messrs. Wheeler's Wycombe Brewery, Ltd., High Wycombe, Bucks, have had plans prepared by their staff architect, Mr. C. J. Hedges, for the rebuilding of their licensed premises, the "Carpenter's Arms," in Uxbridge-road, Hayes. Negotiations as to building lines are being considered.

High Holborn.—Plans are being prepared for an important scheme of interior reconstruction at the large emporium of Messrs. Thomas Wallis & Co., Ltd., drapers and furnisiers, in Holborn-circus, E.C.1. The work will be spread over several years and will be supervised by Messrs. Yetts, Sturdy & Usher, 115, Moorgate, E.C.2.

King William-street.—The old buildings in Clement's-lane, E.C.3, have been pulled down preparatory to the erection of the second portion of the large headquarters in King William-street E.C.3, of Messrs. The Standard Bank of South Africa, Ltd. The builders are Messrs. Walter Lawrence & Son, Ltd., 19, Finsbury-square, E.C.2. The architects are Messrs. Meaking & Archer, 73, King William-street, E.C.

Lambeth.—New business premises are to be erected on the site of Nos. 32-34, New Cut, Lambeth, S.E.1, to the plans of Mr. H. A. Wright, 35, Pentonville-road, N.1. The contract will be carried out by Messrs. A. Class & Son, 80, Chapel-street, N.1.

Leyton.—Mr. John Stuart, F.R.I.B.A., architect to the Essex County Education Committee, Chelmsford, has prepared plans for a new secondary school at Leyton, to cost £62,000.

Merton.—The site in Burlington-road, Merton, S.W.19, formed by the junction of the new Kingston by-pass road, has been bought by Messrs. Charrington's Brewery, Mile End-road, E.1. A public-house, to be called the "Duke of Clarence," is to be erected from the designs of Mr. Frank J. Potter, F.R.I.B.A., 24, John-street, Adelphi, W.C.2.

Mildmay Park.—A sum of £4,000 is to be expended on the rebuilding of the day schools of St. Jude's Church, at Mildmay Park, N.1. Mr. W. Charles Waymouth, F.R.I.B.A., Gwydir Chambers, 104, High Holborn, W.C.1.

Muswell Hill.—A large hall, with adjoining small one, is being erected at St. James's Church, Muswell Hill, N.10, to the designs of Mr. G. Grey Wornum, F.R.I.B.A., Blue Ball Yard, St. James's-street, S.W.1, at a cost of £10,000. The contractors are Messrs. Stevens & Sons, 14, Muswell Hill-road, Highgate, N.

Park-lane.—Chester Club, Ltd., has been formed, with offices at 143, Fleet-street, E.C.4, to purchase premises in Park-lane and to convert them into a club, restaurant, &c. The plans have been prepared by Messrs. Nicholls & Hughes, 4, Raymond's-buildings, Gray's Inn, W.C.1.

Peckham.—The Park Estate in Peckham Rye, S.E., is to be developed. New roads are to be built and about 80 houses erected to the designs of Messrs. Martin & Co., surveyors, East Dulwich Station, S.E.12.

Petty France.—Work has now started upon the erection of a large garage and repair depot in Petty France, S.W.1, for Messrs. Wolsley Motors, Ltd., Piccadilly, W.1. The builders are Messrs. E. A. Roome & Co., Ltd., 7, Urswick-street, E.9.

Pollen-street.—A new restaurant, with three upper floors for offices, is being erected in Pollen-street, W.1, by Messrs. Hall, Beddall & Co., Ltd., Waterloo Bridge, S.E.1, to the designs of Messrs. Forsyth & Maule, 12, Stratford-place, W.1.

Redhill.—It is proposed considerably to improve and extend the accommodation of the Redhill Picture Theatre. A new front is also to be added, designed by Mr. Leonard P. Rees, 53, Station-road, Redhill.

Regent-street.—A commencement has been made on the superstructure of the new Regent Arcade, which is to be erected on the sites of Nos. 252, 260, Regent-street, 19-25, Argyl-street, and Little Argyl-street, W.1. Messrs. Kirk & Randall, Ltd., contractors, 146, Grosvenor-road, S.W.1. Mr. S. Gordon Jeeves, architect, 16, Hanover-square, W.1. The quantity surveyor is Mr. W. H. Webber, 33, Farnival-street, E.C.

Gidea Park.—The Wesleyan Methodist Church Commission has purchased a site at Gidea Park, Romford, where it is proposed to build a new school-chapel, to the designs of Mr. S. Phillips Dales, F.S.Arc., 63, High Holborn, W.C.1.

Silvertown.—The Co-operative Wholesale Society, Ltd., Leman-street, E.1, have under consideration the extension of their Silvertown Flour Mills, E. Mr. L. G. Ekins, F.R.I.B.A., architect to the Society.

Snow Hill.—The Snow Hill Police Station, E.C., is to be entirely rebuilt for the Police Committee of the City of London Corporation. Plans have been prepared by the City Architect's Department, Guildhall, E.C.2.

Tooting.—A block of 14 flats is to be erected on a site in Blackshaw-road, Tooting, S.W., of brick construction, partly roughcast. The plans have been prepared by Mr. F. L. Poole, 29, New Bridge-street, E.C.4.

Victoria.—A further block of tenement buildings is to be erected in Horseferry-road, S.W.1, with frontages on Great Peter-street and Chadwick-street, for the Peabody Foundation. The architect to the Trust is Mr. Victor Wilkins, 12, York-buildings, Adelphi, W.C.2.

Wallington.—A block of land at the junction of Woodcote-road and Stanley Park-road, at Wallington, has been acquired by the Croydon Gas Company, of 18, Katherine-street, Croydon, for the building of new shops and showrooms, with flats above. The company's architects are Messrs. H. Berney & Son, 33, High-street, Croydon.

Welwyn.—A further large housing scheme is being carried out at Welwyn Garden City, and a patented system of concrete construction has been adopted. The contractors are Messrs. Welwyn Builders & Joiners, Ltd., Welwyn Garden City, the plans having been prepared by Mr. Louis de Soissons, F.R.I.B.A., of the Welwyn Estate Office.—The London & North Eastern Railway Co. have decided to build a new station, with booking hall, waiting and refreshment rooms, &c., at a cost of £35,000. The plans will be prepared by Mr. C. Brown, chief engineer, Liverpool-street Station, E.C.2.

Westminster.—Messrs. The St. Clement's Press, Ltd., Portugal-street, Kingsway, W.C.2, propose to acquire the St. Clement Danes Vestry Hall, in Westminster, S.W.1, for conversion into printing works and offices. Plans will be prepared by Messrs. Emden Egan & Co., 7, Garrick-street, W.C.2.

Weybridge.—The Weybridge Cottage Hospital propose to proceed with the erection of their new buildings, at a cost of £30,000. The contractors will be Messrs. George Jarvis & Co., Church-street, Weybridge. The architects are Messrs. Kenyon & Livock, 22, Surrey-street, Strand, W.C.2.

Wimbledon.—Messrs. Chart, Son & Reading, High-street, Croydon, have prepared plans for the building of a new Spiritualistic Church in Hatfield-road, Wimbledon, S.W., about 80 ft. by 32 ft. Mr. H. Hann, 40, High-street, Collier's Wood, S.W.19, is the builder.



THE RATING AND VALUATION BILL

THE proceedings in Committee in relation to the Rating and Valuation Bill have commenced, but they are very briefly reported in the daily press. Perhaps this is evidence that public interest is much more centred on problems of greater national importance such as industrial matters to which they would desire Parliament to turn its attention, and it seems unfortunate that the Government should have placed in the forefront of their programme this Bill which, though highly contentious, is not so pressing as other matters. To the "rate spending" authorities this Bill may be highly acceptable; the assessments are not likely to be diminished with the association of representatives of the Inland Revenue on the assessment committees, but to the ratepayers there are provisions in this Bill of the greatest importance, upon which they should be given the fullest information. In the forefront of these questions is the adoption of one valuation for all purposes and the substitution of a fixed scale of deductions from gross values in place of maintenance allowances.

It is important that the public should be kept informed of the proceedings on this Bill. In the *Times* (June 17) a short report was issued when clause 1 was passed through Committee. The proceedings are not reported in detail, but it appears that assurance was given on one point which has been discussed in the press. Objection has been taken to clause 19 sub-clause (3) which leaves the date open when "the gross value of any hereditament, as appearing in the valuation list, shall be taken to be conclusive evidence of the annual value of that hereditament for the purpose of income tax," and the Minister of Health gave an assurance that as the Government intended to have one valuation for all purposes a date should definitely be fixed on the Report Stage. Clause 1 sub-clause (1) as passed reads: "The Council of every county borough and the Council of every urban and rural district shall be the rating authority for the borough, or for the county district, and from and after the appointed day (1 April, 1926) no authority or person other than the council shall have power to make, or levy, any rate within the borough or district." This sub-clause is as it stood in the draft Bill circulated last year. An amendment to retain the overseers as an independent body was rejected, but in these days of municipal extravagance there does appear some objection if the law is to be altered in making the spending authorities the sole rating authorities. Sub-clause (2) provides that: "As from the appointed day all powers and duties of the overseers of the poor in relation to the making, levying, and collection of rates and of any other person who by virtue of any local Act has powers in that behalf (these latter words were not in the "draft Bill") shall in every rating area be exercised and performed by the rating authority." The following sub-clause (3) did not appear in the "Draft Bill": "Every rating authority shall for the purposes of this Act have the same power with respect to the appointment and authorisation of Committees as they have for the purposes of the Acts relating to Public Health." There are 78 clauses in the Bill and nine Schedules, so the Bill is hardly likely to become law in a hurry.

Bath Buildings.

Bath Corporation has succeeded in getting a clause inserted in their new Bill giving them powers in respect of the elevation of buildings so as to preserve the amenities of the city. The argument which decided the Local Legislation Committee to pass the clause was that the welfare of Bath depended upon its baths and its beauty, and it was possible that someone not caring for questions of beauty might wish to erect a big brick warehouse, which would do irreparable damage to the inhabitants, whether owners of property or otherwise.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	C'p'ters. Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourer.
Aberdare	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Accrington	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Altrincham	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Ashton-under-Lyne	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Barnsley	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Barrow-in-Furness	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Barry	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Bellford	1/9	1/9	1/8	1/9	1/9	1/9	1/8	1/4
Birkenhead	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Birmingham	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Bishop Auckland	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Blackburn	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Blackpool	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Bolton	1/8	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Bournemouth	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Bradford	1/8	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Brighton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Bristol	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Burnley	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Bury	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Cambridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Cardiff	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Chester	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Chesterfield	1/8	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Colchester	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Coventry	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Crewe	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Darlington	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Derby	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Doncaster	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Durham	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
E. Glam. (Mon. Val.)	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Eastbourne	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Grays	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Grimby	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Hallifax	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Harrogate	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Hartlepool	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/0
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Huddersfield	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Hull	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Ipswich	1/5	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Leicester	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Leeds	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Leicester	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Lincoln	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Liverpool	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
Llanelli	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
London (12 m. radius)	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
London (12-15 m. radius)	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
Loughborough	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Maldstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Manchester	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Mansfield	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Merthyr Tydfil	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Middlesbrough	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Newcastle-on-Tyne	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Newport Mon.	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Norwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Nottingham	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Oakham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Oldham	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Plymouth	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Pontypidd.	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Preston	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Reading	1/8	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Rochdale	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
St. Helens	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Shetfield	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Southend-on-Sea	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Southport	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
South Shields	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Stockport	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Stockton-on-Tees	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Stoke-on-Trent	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Stroud	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Sunderland	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Swansea	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Taunton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Wakefield	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Warrington	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
West Bromwich	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Wigan	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Wolverhampton	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
York	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3

(For rates of wages in the Building Trade in Scotland, see page 27)

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the name of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

JULY 6.—Arbroath.—HOUSES.—Two houses at H.M. Coastguard Station, for H.M.O.W. Architect, H.M. Office of Works, 122, George-street, Edinburgh. Deposit £1 ls.

JULY 6.—Ardrossan.—HOUSES.—Twenty houses on the Young and Paisley streets housing site. J. C. Hunter, architect, Harbour buildings. Deposit 10s. 6d.

JULY 6.—Barnet.—PAINTING.—To be done at the Isolation Hospital, Mays-lane, Barnet, for the Committee. W. H. Trevellick, Clerk to the Committee, 1, Wellhouse-lane.

JULY 6.—Carnoustie.—MEMORIAL.—War Memorial, for the Committee. Bruce, Son & Morton, architects, 10, Whitehall-street, Dundee.

JULY 6.—Chelmsford.—New class rooms at the Hornchurch Council school, for the Essex County Council Education Committee. The County Architect, Old Court, Springfield, Chelmsford. Deposit £1 ls.

JULY 6.—Glasgow.—PAINTING.—Painter work required in connection with the "Shawlands Area" housing scheme, for the T.C. J. Lindsay, Town Clerk.

JULY 6.—Hemsworth.—LIGHTING.—Installation of electric lighting at the Secondary School, for the West Riding E.C. The Education Department, County Hall, Wakefield.

JULY 6.—Mfracombe.—ADDITIONS.—To the secondary school, for the Devon E.C. County Architect (Education), 1, Blackall-road, Exeter. Deposit £1 ls.

JULY 6.—Knaresborough.—PAINTING.—The Secondary School, for the West Riding E.C. Education Department, County Hall, Wakefield.

JULY 6.—Leeds.—REPAIRS.—To the hot-water system in Ward K 5, at Killingbeck Sanatorium, for the T.C. Thos. Thornton, Town Clerk.

JULY 6.—Mirfield.—RENOVATIONS.—Internal renovations to the Grammar School, premises, for the Governors. T. Goodall, Clerk to the Governors.

JULY 6.—Newcastle-under-Lyme.—RE-DECORATION.—Of certain portions of St. John's Institution, Keele-road, for the B.G. S. E. Lovatt, Clerk to the Guardians.

JULY 6.—Nottingham.—ADDITIONS.—Alterations and additions to the Town Clerk's Office, at the Guildhall, for the T.C. T. Wallis Gordon, City Engineer and Surveyor. Deposit £2.

JULY 6.—Penzance.—WARD.—Ward block, together with alterations to the West Cornwall Dispensary and Infirmary, for the Committee. W. A. Pite, Son & Fairweather, Carteret-street, Westminster, S.W.1.

JULY 6.—Rawcliffe.—ROOM.—Detention room and connecting corridor at Rawcliffe Hall Institution, Rawcliffe, near Gooler for the West Riding C.C. West Riding Architect, County Hall, Wakefield.

JULY 6.—Reigate.—DWELLING-HOUSES.—Six at Horley, 10 at Kingswood, for the R.D.C. District Surveyor, 48, High-street, Reigate. Deposit £3 3s.

JULY 6.—St. Andrews.—HOUSES.—Fifty houses at St. Mary's-street site, for the T.C. W. Watson, Burgh Surveyor.

JULY 6.—Salford.—HOUSES.—126 Houses and flats on the Littleton-road housing estate, Lower Kersal, for the C.B. C. Swain, architect, 12, Exchange-street, Manchester.

JULY 6.—Solihull.—PAINTING.—The exterior of certain buildings at the Institution, for the B.G. W. T. Orton, architect, 5, Waterloo-street, Birmingham.

JULY 6.—Stirling.—HOUSES.—Sixty-six houses at Bannockburn-road site, for the T.C. A. H. Goudie. Burgh Surveyor. Deposit £2.

JULY 6.—Truro.—HOUSE.—At Chapel-hill, Truro. J. Cornelius, architect, Truro.

JULY 6.—West Ham.—WIRING.—Electrical wiring of eight schools, for the C.B. John H. Jacques, Lic. R.I.B.A., Architect to the Committee, 61, West Ham-lane, Stratford, E.15.

JULY 6.—Westlake.—HOUSES.—Twenty-four houses on the Appinford housing site, for the U.D.C. Gladstone Beatty, Surveyor, Council Chambers, Dudley S.O., Northumberland.

JULY 6.—Weymouth and Melcombe Regis.—HOUSES.—Twelve blocks, semi-detached parlour type, and 10 blocks, semi-detached non-parlour type houses, 44 all told, for the T.C. F. T. V. Isherwood, Town Clerk, Municipal Office, Weymouth. Deposit £2 2s.

JULY 6.—Worsborough.—BUILDING.—Public urinal and wing walls at Furnace-yard, Worsborough Bridge, for the U.D.C. T. Shield, the Council's Engineer and Surveyor, Saville House, Worsborough Bridge. Deposit £1 ls.

JULY 7.—Adwick-le-Street.—HOUSES.—Seven pairs Class "A" and 16 pairs Class "B" houses in Princes-street, Woodlands, for the U.D.C. George Gledhill, surveyor. Deposit £2.

JULY 7.—Belfast.—PAINTING.—Painting of bar fencing, iron standards and gates of Wandsworth-road housing site, for the C.B. City Surveyor, City Hall.

JULY 7.—Bodmin.—HOUSES.—Thirty houses in five blocks on a site adjoining Looe-with main road, for the T.C. R. T. Buscombe, Borough Surveyor and Architect.

JULY 7.—Bonnykelly.—REBUILDING.—Mason, carpenter, and slater works of rebuilding the steading at Hillhead of Bonnykelly. C. W. Sleight, Strichen.

JULY 7.—Chatham, Kent.—Extension to Chatham Post Office. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners).

JULY 7.—Dumfries.—PAINTING.—At the Sheriff Court-house, for the C.C. J. Robson, County Clerk, County Buildings, Dumfries.

JULY 7.—Erlith.—Repairs and redecorations at "Hainault," Lesney Park-road, for the U.D.C. Mr. Harold Hind, engineer and surveyor, Council Offices, Erlith.

JULY 7.—Featherstone, near Pontefract.—HOUSES.—102 at Purston, for the U.D.C. Samuel Chesney, Council Offices, Featherstone. Deposit £2 2s.

JULY 7.—Hampton, Middlesex.—Alterations at Public Offices, Hampton (Rates Department), for the U.D.C. The Surveyor, Public Offices, Hampton, Middlesex. Deposit £2 2s.

JULY 7.—Hove.—PAINTING.—Internal painting and other work at the Connaught-road school, and the external painting at the East Hove school, Davidgord-road, and at the Committee's Offices and other premises Third-avenue Hove, for the E.C. H. H. Scott, Borough Surveyor.

JULY 7.—Kent.—PAINTING.—Outside paintings of the County Police Stations at Ashford, Cranbrook, Faversham, Gillingham, Hythe, Lydd, Sandwich, Seabrook, Sheerness, Southborough and Swanley, for the C.C. County Architect, 86, Week-street, Maidstone.

JULY 7.—London.—RENOVATIONS.—At the offices at the Lambeth Hospital at Kennington, for the Lambeth B.G. James L. Goldspink, Clerk to the Guardians, Guardians' Board Room and Offices, Brook-street, Kennington-road, S.E.11. Deposit £2.

JULY 7.—Manchester.—Alterations and additions to the Head Post Office, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners).

JULY 7.—Near Godalming.—SANATORIUM.—Construction of the proposed County Sanatorium at Milford, near Godalming, comprising official block, nurses' home, kitchen and dining halls, boiler house, lodge and male staff quarters, medical superintendent's residence, cottages for steward and engineer, sanatorium ward blocks and hospital ward blocks with covered ways, drains, and roads complete, for the Surrey C.C. S. Satchell, F.R.I.B.A., architect, Bank Chambers, 32, Strand, W.C.2. Deposit £10.

JULY 7.—Pembrokehire.—WORKS.—(1) Additions to headmaster's house at Nvern School, (2) additions to Wolfcastle schoolhouse, (3) improvements to offices at Loveston School, (4) repairs to Alestone school, (5) painting four secondary and 18 Council schools, for the County E.C. Owain T. Thomas, County Architect, Haverfordwest.

JULY 7.—"Redditch."—REPAIRS.—Certain repairs painting, &c., at the County Police Station buildings, for the Worcestershire C.C. A. V. Rowe, County Architect, 38, Foregate-street.

JULY 7.—Southampton.—BUILDING.—Constructing chimney and boiler foundations, boiler-house flooring and brickwork at the Electricity Works, Western Esplanade, for the C.B. W. G. Turner, Borough Electrical Engineer. Deposit £1 ls.

JULY 7.—Southampton.—Secondary School buildings at Itchen (tenders based on firm prices for materials and subject only to variations owing to fluctuations in wages), for the Corporation. Borough Engineer's Office, 33-35, French-street, upon production of the Borough Treasurer's receipt for a deposit of £2 2s.

JULY 7.—Stoke-on-Trent.—PAINTING.—For (a) interior and exterior painting of six steel chimney stacks, and (b) interior and exterior painting with creosote or "Sidel" of four wooden cooling towers, for the T.C. City Electrical Engineer, St. George's Chambers, Wolfe-street. Deposit £2.

JULY 7.—Whiteparish.—HALL.—Plans and specifications of a village hall, with tenders for erection, for the Committee. C. Stride, Hon. Secretary, Manor Farm, Whiteparish, Salisbury.

JULY 7.—Worcester.—REPAIRS.—Repairs, painting, &c., at the Shirehall and judges' lodgings, for the Worcestershire C.C. A. V. Rowe, County Architect, 38, Foregate-street.

JULY 7.—Worcestershire.—REPAIRS.—Certain repairs, painting, &c., at the County Police Station buildings at Bromsgrove and Halesowen, for the C.C. A. V. Rowe, County Architect, 38, Foregate-street, Worcester.

JULY 7.—Worcestershire.—REPAIRS.—Certain repairs, painting, &c., at the County Police Station buildings at Oldbury and Warley, for the C.C. A. V. Rowe, County Architect, 38, Foregate-street, Worcester.

JULY 8.—Acton.—Painting and repairs at the Beaumont Park school, Acton-lane, W.3. Borough Engineer and Surveyor, Municipal Offices, Acton, W.3.

JULY 8.—Ammanford.—LONGE.—Caretaker's lodge on the site of the proposed cemetery near Duffryn House, and constructing of carriageways, paths, fencing, &c., of a portion of the field for burial purposes, for the U.D.C. D. Thomas, architect and surveyor, Quay-street.

JULY 8.—Barnet.—CONVERSION.—Of a building at Boreham Wood into offices, for the R.D.C. A. J. Wilshire, Engineer and Surveyor to the Council, 1, Hillside-avenue, Boreham Wood.

JULY 8.—Batley.—HORSES.—Four parlour-type houses in the Victoria-avenue, for the T.C. H. L. Hall, Borough Engineer.

JULY 8.—Brighton.—HEATING.—Installation of low-pressure hot-water heating service and a sump pump, at Brighton Sorting Office and Telephone Exchange, for H.M. Office of Works. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 ls.

JULY 8.—Cashel.—ADDITIONS.—Alterations and additions to Ardmayle House, Cashel, Co. Tipperary, for Mr. V. R. Hunt, Brian E. F. Sheehy, L.R.I.B.A., &c., Chartered Architect, 57, O'Connell-street, Limerick. Deposit £3 3s.

JULY 8.—Cupar.—HOUSE.—Police sergeant's house, police cells, charge room, &c., for the C.C. Thoms & Wilkie, F.R.I.B.A., architects, 81, North-street, St. Andrews.

BUILDING TRADE WAGES IN SCOTLAND.*

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Brick-layers' Assistants.	Plas-terers' Assistants.
Aberdeen	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/10	1/8
Airdrie	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/8	1/8
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Arbroath	1/7	1/7	1/7	1/7	1/7	1/7	1/5	1/8	1/8
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Bathgate	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Blairstown	1/7	1/7	1/7	1/7	1/7	1/7	1/4	1/8	1/8
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Coatbridge	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Dumfries	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Falkirk	1/7	1/7	1/7	1/7	1/7	1/7	1/4	1/8	1/8
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/4	1/8	1/8
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Greenock	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Hamilton	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Hawick	1/7	1/7	1/7	1/7	1/7	1/7	1/4	1/8	1/8
Helensburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Inverness	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Kilmarnock	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Kirkwall	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/8	1/8
Lanark	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Motherwell	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Perth	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8
Stirlingshire (Eastern District)	1/3-1/10	1/3-1/10	1/8	1/8	1/7	1/8	1/5	1/8	1/8
Wishaw	1/8	1/8	1/8	1/8	1/8	1/8	1/5	1/8	1/8

* The information given in this table is copyright. The rates of wages in the various towns is changed and Wales are given on page 28.

JULY 8.—Dublin.—PAINTING.—Painting work, for the B.G. J. P. Condon, Clerk of the Union, Clerk's Office, Dublin Union, 1, James's-street.

JULY 8.—Edinburgh.—PAINTING.—James-place school, Leith Links, for the T.C. J. M. Johnston, architect, 47, Charlotte-street, Leith.

JULY 8.—Edinburgh.—REPAIRS.—Complete painter work at All Saint's School, Broughton Elementary, Corstorphine; removal of galleries and laying of level floors in class-rooms at Brunsfield School, for the E.C. J. Stewart, Executive Officer, Education Offices.

JULY 8.—Golcar.—BUILDING.—For (1) ferro-concrete raft foundations and floors; (2) steel-frame building, and (3) brick filling to steel-frame and sundry retaining walls, for the U.D.C. Dawson & Manfield, engineers, Lloyd's Bank Buildings, 53, King-street, Manchester.

JULY 8.—Kildare.—RESTORATION.—Restoration of Kill ex-R.I.C. barracks, co. Kildare, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

JULY 8.—Lepton.—PAINTING.—Sixty-two houses in Highgate-lane, for the U.D.C. E. A. Rundell, architect, Rowley-lane.

JULY 8.—Lepton.—ROUGHCASTING.—The front of one block of four of the old Council houses, situate in Highgate-lane, for the U.D.C. E. A. Rundell, architect, Rowley-lane.

JULY 8.—Norfolk.—Erection of teachers' dwelling house, Field Dalling School. Secretary, Norfolk E.C., Shirehall, Norwich. Deposit £1 ls.

JULY 8.—Nottingham.—PAINTING.—Cleaning and painting Colwick-street school, Scotland-road school, Dunksirk school, Haydon-road school, Huntingdon-street school, the Mundella school and Colligate-road school. New Basford school, Trent Bridge school, and Wollaton-road school, for the E.C. A. H. Whipple, Director of Education.

JULY 8.—Plymouth.—PAINTING.—External and internal painting of houses at 20, 21, Lambhay-hill, and 46, New-street, for the C.B. J. Wiberley, Borough Engineer and Surveyor. Deposit £1 ls.

JULY 8.—Pontardawe.—HOUSES.—Sixteen houses at the Trebanos site, and for the construction of roads and sewers, for the R.D.C. E. D. Jones, Architect to the Council. Deposit £2.

JULY 8.—Reading.—HOUSES.—Eighty-three parLOUR houses and 67 non-parlour houses on the Oxford-road housing site, for the Housing and Town Planning Committee. Housing Architect, Municipal Buildings, St. Laurence's Churchyard, Reading.

JULY 8.—Richmond (Surrey).—PAINTING.—Painting and decorating work at the Guardians' Offices and Receiving Home in Parkshot, for the B.G. C. L. Fenn, Clerk to the Guardians.

JULY 8.—Smethwick, Staffs.—For erection of employment exchange. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners).

JULY 8.—Wallingford.—HOUSES.—Two pairs of houses at Brightwell, for the R.D.C. J. G. T. West & Son, architects, The Knowl, Abingdon, Berks.

JULY 9.—Belfast.—ADDITIONS.—Additions and alterations to Skegoniel public elementary school, for the C.B. Education Architect, College-square. Deposit £2 2s.

JULY 9.—Doncaster.—ALTERATIONS.—Alterations and additions at the tram car shed in Grey Friar's-road, for the T.C. F. Oscar Kirby, Borough Engineer.

JULY 9.—Edinburgh.—ELECTRICITY.—Electric installation at South Bridge, London-street, Regent-road, and North Canongate (Old) Schools, for the E.C. W. F. Mitchell, Consulting Engineer, 34, St. Andrew-square.

JULY 9.—Lewes.—ALTERATIONS and additions at the Withyham Blackham Council School, for the East Sussex E.C. County Surveyor, County Hall, Lewes. Deposit £1 ls.

JULY 9.—Lewes, Sussex.—(1) New Men's Hospital (temporary construction), extension Women's Hospital (temporary construction), alterations to main building, Children's block, &c.; (2) other works (permanent construction) for the East Sussex County Council to the Sanatorium at Darvell Hall, Robertsbridge. County Surveyor, County Hall, Lewes. Deposit £1 ls.

JULY 9.—London, S.W.—Extension of Montagu House, Whitehall. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners).

JULY 9.—Rossmuck.—RESTORATION.—Of Rossmuck ex-R.I.C. barracks, co. Galway, for the Commissioner of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

JULY 9.—Sheffield.—BUILDING.—For (1) Phillimore-road Council school, hutments and alterations; (2) Carfield Council school, hutments and alterations; (3) Crofts Council school, folding partition, for the T.C. F. E. P. Edwards, F.R.I.B.A., City Architect. Deposit £2.

JULY 9.—Wisbech.—CONVENIENCE.—In the Market place, for the T.C. Borough Surveyor. Deposit £1 ls.

JULY 10.—Belfast.—WAREHOUSE.—At Victoria-street. Hobart & Heron, architects, Scottish Provident Buildings. Deposit £3 3s.

JULY 10.—Bristol.—FOUNDATIONS.—Foundations for the fifth instalment of the boiler-house at the Feder-road works, St. Philip's, Bristol, for the T.C. H. Faraday Proctor, Chief Engineer and General Manager, Electricity Offices, Colston-avenue. Deposit £2 2s.

JULY 10.—Bury St. Edmund's.—HOUSES.—Eight blocks of semi-detached houses on the Beet Sugar Factory-road site, for the T.C. R. H. Beaumont, C.C.E., Borough Surveyor. Deposit £2 2s.

JULY 10.—Carlou.—ADDITIONS.—Additions and reconstruction of Carlou Technical School. Foley & O'Sullivan, architects, 102, Grafton-street, Dublin. Deposit £2.

JULY 10.—Clown.—HOUSES.—Twenty-six houses and the construction of roads and sewers in the Parish of Elmtown-with-Creswell, for the R.D.C. J. Haslam, architect and surveyor, Ryton Chambers, Bridge-street, Workson.

JULY 10.—Croydon.—PAINTING.—Internal cleaning, painting and distemping of 25 cottages at Beddington Farm, Beddington-lane, near Croydon, for the C.B. Borough Engineer. Deposit £1 ls.

JULY 10.—Keighley.—PAINTING.—Colouring and whitewashing and painting outside at certain schools, for the T.C. H. Midgley, Secretary to the E.C.

JULY 10.—Kilmovoe.—RESTORATION.—Of Kilmovoe ex-R.I.C. barracks, co. Mayo, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Dublin. Deposit £1.

JULY 10.—Long Sutton.—HOUSES.—Three pairs of houses in the Delph-road, for the U.D.C. C. M. Bowser, Clerk to the Council.

JULY 10.—Mousehole.—BUILDING.—Of a concrete apron at the back of the South Pier, Mousehole. Harbour Office, Mousehole.

JULY 10.—Near Bingley.—PAINTING.—At Eldwick Sanatorium, near Bingley, for the West Riding C.C. F. A. Darwin, Clerk of the C.C., County Hall, Wakefield.

JULY 10.—Newport.—BUILDING.—For (1) new disconnecting chamber at St. Julian's-road; and (2) additions to Llanarth-street Generating Station, for the T.C. Borough Architect.

JULY 10.—Port Talbot.—ADDITIONS.—Alterations and additions to Health Department Offices, Talbach, for the T.C. Borough Engineer, Municipal Buildings, Aberavon.

JULY 10.—Queensbury and Clayton.—REPAIRS.—To roofs, pointing, &c., at Queensbury, Catherine Slack Council School, for the E.C. B. Leah, Education Office, Bingley.

JULY 10.—Rotherham.—APPARATUS.—Low-pressure hot-water apparatus at Alma-road Council Infants' school, for the E.C. J. A. Mair, Secretary for Education.

JULY 10.—Rotherham.—HEATING.—Heating chamber at Alma-road Council Infants' school, for the E.C. Borough Engineer.

JULY 10.—Swaffham.—HOUSES.—Twelve non-parlour type houses at Sporie-road, for the U.D.C. Owen Williams Parry, Surveyor to the Council. Deposit £1 ls.

JULY 10.—Walsall.—Post Office and Telephone Exchange. Contracts Branch, H.M. Office of Works King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners).

JULY 10.—West Riding.—REPAIRS.—External painting and repairs of Council Schools, at Dodworth, Cudworth, Royston, Darton, Great Houghton and Blacker Hill, for the C.C. G. Gibbs, Divisional Clerk, Education Office, Cudworth.

JULY 11.—Barton-upon-Irwell.—BUILDING.—New infirmary at Davyhulme, near Manchester, for the B.G. Elcock & Sutcliffe, architects, Avenue House, 21, Northumberland-avenue, W.C.2. Deposit £5 5s.

JULY 11.—Bexleyheath, Kent.—HOUSES.—In blocks of six, up to 100, non-parlour type, for the U.D.C. Surveyor to the Council, Council Offices, Bexleyheath. Deposit £3 3s.

JULY 11.—Burry Port.—WALL.—Masonry wall, about 300 yards in length, at the Garden City Road Improvement, for the Carmarthenshire C.C. R. W. Jones, County Surveyor. Deposit £2 2s.

JULY 11.—Caerwys.—SCHOOLROOM.—Attached to C.M. Chapel. Rees & Holt, architects, 64, Rodney-street, Liverpool.

JULY 11.—Devon.—REPAIRS.—For renovations and ventilations to various schools as follows: Ashwater Ashwater (Hunscott), Aylesbeare, Bratton Clovelly, Bondleigh, Broadwoodwidge (Ivy House), Broadwoodwidge (Thorncross), Buckland Brewer, Cheriton Fitz-paine, Christow, Colyton, Hartland (Elmscott), Hartland (Meddon), Kingsteignton, Milton Abbot and House, Shobbrock, Throwleigh, Uppottery, Washford Pyne, Welcombe, West and East Putford, Wodecombe-in-the-Moor, Winkleigh (Hollacombe), Zeal Monachorum, for the E.C. Architect's Office, 1, Blackall-road, Exeter.

JULY 11.—Leyton.—HOUSES.—Forty-four houses on the Nursery Park estate, Lea Bridge-road, Leyton, for the U.D.C. J. H. Jacques, Lic.R.I.B.A., 61, West Ham-lane, Stratford. Deposit £2.

JULY 11.—London.—REPAIRS.—External painting and repairs to the Central London District School, Greenford-avenue, Hanwell, W. 7, for the Managers. G. P. Morrell, Clerk to the Managers. Deposit 10s.

JULY 11.—Patricroft, Manchester.—New Infirmary for the Guardians of the Union, at Davyhulme, near Manchester. Clerk to the Guardians, Union Offices, Green-lane, Patricroft, Manchester. Deposit £5 5s.

JULY 11.—Sheffield.—PAINTING.—Inside painting and whitewashing at Block 2 at the Union Hospital, Fir Vale, for the B.G. Lawrence Richmond, Clerk to the Guardians, Union Offices, Westbar.

JULY 11.—Wallington, Surrey.—HOUSES.—Fifty-six brick built on the Bute-road estate, for the Beddington and Wallington U.D.C. The Surveyor, Council Offices, Wallington. Deposit £2 2s.

JULY 12.—Ripon.—HOUSES.—Twelve houses, for the T.C. J. H. Gough, Town Clerk. Deposit £5.

JULY 13.—Chelmsford.—ADDITIONS.—To the offices in Waterloo-lane, for the R.D.C. J. Dewhurst, Engineer and Surveyor, Council Offices, Waterloo-lane. Deposit £2 2s.

JULY 13.—Chesterfield.—HOUSES.—Sixteen A 3 type houses and 21 A 2 type houses, for the T.C. Bailey Deeping, Architect, 12, Gluman Gate. Deposit £1 ls.

JULY 13.—Crook.—ALTERATIONS.—Alterations and improvements to the Sunnisdale school building, for the Durham C.C. F. Willey, F.R.I.B.A., 34, Old Elvet, Durham.

JULY 13.—Edinburgh.—LIGHTING.—Installation of electric lighting circuits at the Public Washhouse, Abbeymount, for the T.C. A. Grierson, Town Clerk. Deposit £1 ls.

JULY 13.—Edinburgh.—LODGE.—Entrance lodge at the Institution, Gillespie-crescent, for the Royal Blind Asylum Committee. J. L. Hill, Dougal & Co., W.S., Secretaries, 18, Hill-street.

JULY 13.—Fowey.—HOUSE.—Residence at Fowey, Cornwall. A. J. Cornelius, F.R.I.B.A., architect, Truro.

JULY 13.—Glamorgan.—BUILDING.—For (1) new intermediate school for 340 boys, caretaker's house, boundary walls, cycle house, &c., at Neath, and (2) painting 55 schools in the Eastern Division and 20 schools in the Western Division, for the C.C. T. Mansel Franken, Secretary of Glamorgan E.C., County Hall, Cardiff.

JULY 13.—Hendon.—BUILDINGS.—Garages, workshop, messroom, &c., together with the construction of a roadway and other incidental works in connection with a refuse disposal works at Warner-road, Hendon, N.W. 4, for the U.D.C. A. O. Knight, Engineer and Surveyor, Town Hall, Hendon, N.W. 4. Deposit £3 3s.

JULY 13.—Highgate, N.5.—ALTERATIONS and additions to the administrative block, nurses' lodge (45 beds), ward block (20 cubicles), entrance lodge, main entrance, roads, paths, &c., for the Hornsey, Finchley and Wood Green Joint Hospital Committee. E. J. Lovegrove, Town Hall, Southwood-lane, Highgate, N.6, between 10 and 12 o'clock.

JULY 13.—Leeds.—ROOF.—Waterproof reinforced concrete roof for the service reservoir at Moortown, for the T.C. H. Shortreed, Assistant Waterworks Manager. Deposit £1.

JULY 13.—London, W.—REPAIRS and PAINTING.—Interior of Public Library, High-street, Acton, for the Corporation. Borough Surveyor, Municipal Offices, Acton, W.3.

JULY 13.—London, N.W.6.—Repairs and internal and external painting and redecoration of No. 1 Clinic, 9, Willesden-lane, and 24, St. Julian's-road, for the D.C. Engineer to the Council, Town Hall, Dyne-road, Kilburn, N.W.6.

JULY 13.—Monmouthshire.—PAINTING.—Thirty-eight elementary schools, for the E.C. J. Bain, F.R.I.B.A., County Hall, Newport.

JULY 13.—Nottingham.—PAINTING.—Internal cleaning and painting at the Central Home, Hartley-road, for the T.C. J. Allan Battersby, Clerk to the Board, Poor Law Offices, Shakespeare-street.

JULY 13.—Wallasey.—PAINTING.—External painting of 56 Council houses situate in Mill-lane, Ruskin-avenue, and Rostherne-avenue, for the C.B. Borough Engineer. Deposit £1 ls.

JULY 14.—Belfast.—OFFICES.—Depot and offices in Gardiner-street, for the C.B. R. B. Roe, Quantity Surveyor, Kings-court, Wellington-place. Deposit £1 ls.

JULY 14.—Birtley.—CHAPEL.—Building a chapel, tool-house, and other work, and supplying about 550 yds. of 5 ft. 6 in. creosoted military fencing, for the P.C. Mr. Milburn, Warwick House. Deposit £1.

JULY 14.—Cardiff.—ADDITIONS.—At Canton Secondary School, for the E.C. T. Peirson Frank, Architect to the E.C. Deposit £2 2s.

JULY 14.—Cardiff.—HOUSE.—Caretaker's house at Llandaff Council School, Bridge-road, Llandaff, for the E.C. T. Peirson Frank, Architect to the E.C. Deposit £1 ls.

JULY 14.—Dartford, Kent.—Extension of the Grammar School for Boys, Dartford, Kent, for the E.C. County Education Architect, Room 69, Sessions House, Maidstone. Deposit £2 2s. in the form of a cheque, payable to the Kent Education Committee, and crossed "National Provincial Bank, Ltd."

JULY 14.—Deptford, S.E.—Demolition of an existing overground urinal and the construction of an underground convenience at Clifton Hill, for the Metropolitan Borough Council, Borough Surveyor, Deptford Town Hall, New Cross, S.E.14.

JULY 14.—Exmouth.—HOUSES.—Two blocks of four houses, and main drainage of houses and construction of sewage lifting works, at Littleham, for the U.D.C. S. Hutton, engineer, surveyor, and architect.

JULY 14.—St. Albans.—For the erection of a wireless station. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 ls, payable to the Commissioners.

JULY 14.—Sefton.—COTTAGES.—Six in Victoria-road, Ince Blundell; 13 described in quantities as Lydiat-lane, Runcell's-lane, Sefton, for the R.D.C. E. B. Bailey, architect, 9, Cook-street, Liverpool. Deposit £1 ls.

JULY 14.—Thirsk and Sowerby.—WORKS.—In connection with the Institute, viz.: Bricklayer and draining, joiner, plumber, central heating, electrician, painting, for the Committee. A. Mather, Westbourne-terrace, Thirsk.

JULY 14.—Walthamstow, E.17.—Sundry works of improvements and interior and exterior renovation in painting, distemping, &c., to various schools, &c., for the E.C. Architect to the Committee, 263, High-street, Walthamstow, E.17, between 10 and 4 p.m., Saturdays 10 to 1 p.m.

JULY 14.—Walton-upon-Thames.—HOUSES.—Sixteen non-parlour in eight semi-detached pairs on a site north of Rodney-road, for the U.D.C. Council Offices, Hershams-road, Walton-upon-Thames. Deposit £2 2s.

JULY 14.—West Derby.—ADDITIONS.—To the lavatory accommodation at Walton Institution, for the B.G. Ernest B. Bailey, L.R.I.B.A., architect, 9, Cook-street, Liverpool.

JULY 14.—West Riding.—BUILDING.—For brick wall and iron fencing to the additional land at Royston Council school, and additional conveniences at South Kirby Council school, for the E.C. Education Department, County Hall, Wakefield.

JULY 15.—Admiralty, Whitehall.—For the external and internal painting, &c., of the Admiralty. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 ls., payable to the Commissioners.

JULY 15.—Carshalton, Surrey.—COTTAGES AND FLATS.—Ten cottages and four flats at St. Andrews-road, and Stanley-road, for the U.D.C. Council's Architect, District Council's Offices, The Grove, Carshalton. Deposit £2.

JULY 15.—Carshalton, Surrey.—Public convenience, with necessary drainage works, at The Grove, for the U.D.C. Surveyor to the Council, District Council Offices, The Grove, Carshalton. Deposit £2.

JULY 15.—Denbigh.—REDECORATING.—Repainting and redecorating of dining and recreation hall, for the Mental Hospital Committee. Wm. Barker, Clerk to the Committee.

JULY 15.—East Ashford (Kent).—REPAIRS.—To the Workhouse Chapel, for the B.G. E. A. Jackson, architect, North-street, Ashford.

JULY 15.—Gosport.—SCHOOL.—School for 200 children at Gordon Park, for the E.C. G. R. Walker, Secretary, "Rostellan," Stoke-road. Deposit £1 ls.

JULY 15.—Hambleton.—BUILDING.—Engine-house and laying 1,800 yards of 10 in. cast-iron pumping main, the construction of sewage disposal works, comprising sedimentation tanks, percolating filters, humus tanks and various other works in connection with sewage disposal for the parishes of Bramley and Womersley, for the R.D.C. Gerald Swayne, engineer, 1, Victoria-street, Westminster, S.W.1. Deposit £3 3s.

JULY 15.—Jarrow.—PAINTING.—Painting and distemper the Central Council and the St. Bede's Senior Boys', Senior Girls' and Infants' schools, for the E.C. T. H. Spencer, Secretary.

JULY 15.—Jarrow.—OFFICES.—New offices at the Central Council School, for the E.C. T. H. Spencer, Secretary.

JULY 15.—Leamybrien.—RESTORATION.—Of Leamybrien ex-R.I.C. Barracks, Co. Waterford, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

JULY 15.—Leyburn.—PAINTING.—The outside of the Workhouse, also for renewing and repairing part of the woodwork, for the B.G. C. E. Dixon, Clerk to the Guardians.

JULY 15.—London.—REPAIRS.—Extension of mess room at the Northern Hospital, Winchester Hill, N., and for cleaning and painting works and repairs at: (a) Caterham Mental Hospital, Caterham, Surrey; (b) High Wood Hospital for Children, Brentwood; (c) Colindale Hospital, Hendon; (d) Sheffield-street Hospital, Kingsway, W.C.; (e) South Wharf, Rotherhithe, S.E.; (f) North Wharf, Blackwall, E.; (g) T.S. Exmouth Infirmary and Shore Buildings, Grays, Essex; (h) Pinewood, Wokingham, Berks.; (i) Belmont Laboratories and stables, Sutton, Surrey; (j) South-wark Casual Ward, Great Guildford-street, S.E.1, for the M.A.B. T. Cooper, M.Inst.C.E., M.I.Mech.E., Engineer-in-Chief, Office of the Board, Victoria Embankment, E.C.4. Deposit £1 each.

JULY 15.—London.—REPAIRS.—Painting and repairs at the Observation Wards of the City of Westminster Institution, 367, Fulham-road, S.W.10, for the B.G. W. J. Lickley, Clerk to the Guardians, Guardians' Offices, Princes-row, Buckingham Palace-road, S.W.1.

JULY 15.—London, S.W.1.—PAINTING.—Painting and repairs at the Administrative offices and ambulance station, Princes-row, and Receiving House, Wallis'-yard, for the Guardians of the City of Westminster. The Clerk, Guardians' Offices, Princes-row, Buckingham Palace-road, S.W.1.

JULY 15.—Near Bristol.—COURT.—Petty Sessional Court at Staple Hill, near Bristol, for the Gloucestershire C.C. E. S. Sinnott, County Surveyor, Shire Hall, Gloucester. Deposit £2 2s.

JULY 15.—Norfolk.—New school at Walpole St. Andrew Cross Keys, or for the alterations and additions to Walpole St. Andrew school, or for the alterations and additions to Buxton Mixed School. The Secretary, E.C., Shirehall, Norwich. Deposit £2 2s. for each school.

JULY 15.—Nottingham.—PAINTING.—External cleaning and painting at the Northern Baths, Basford, for the T.C. T. Wallis Gordon, City Engineer. Deposit £1.

JULY 15.—Portadown.—ADDITIONS.—Alterations and additions to the R.U.C. Barracks, Edward-street for the Government of Northern Ireland. Ministry of Finance, 15, Donegall-square West, Belfast.

JULY 15.—Pontardawe.—HOUSES.—Ten parlour type houses at Hodgson-road site, Godrergrais, for the R.D.C. E. D. Jones, Architect to the Council. Deposit £2.

JULY 15.—Various Places.—Cleaning and painting works and repairs at (a) River Hospitals, Dartford; (b) Queen Mary's Hospital, Carshalton; (c) The Hostel, Gray's Inn-lane, W.C.; (d) Brook Hospital, S.E.18, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

JULY 15.—Woolwich.—Repair and decoration work at the Goldie Leigh Homes, Lodge-lane, Abbey Wood, S.E.2, for the Guardians. Whinop & Channer, architects, 47, Thomas-street, Woolwich.

JULY 16.—Bournemouth.—Tea rooms, shelters, steps, &c., at Overstrand, Boscombe Pier Approach, for the County Borough Council. Borough Engineer, Town Hall, Bournemouth. Deposit £1 ls.

JULY 16.—Ealing, W.5.—HOUSES.—Ninety-six parlour houses, 132 non-parlour houses, 54 pairs of flats, for the T.C. Borough Engineer, Town Hall, Ealing, W.5. Deposit £1 ls.

JULY 16.—Fordingbridge, Salisbury.—For alterations and additions to the Post Office. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 ls., payable to the Commissioners.

JULY 16.—Greenwich, S.E.10.—Extensions and alterations to the administrative offices of the Greenwich Union, including men's receiving ward, offices, board room, &c. The buildings will be generally of brickwork, with fireproof floors and roofs, for the Guardians. The Surveyor, Guardians' Offices, Board Room, East Greenwich, S.E.10. Deposit £3 3s.

JULY 16.—Salisbury.—Secondary School at Salisbury, for the Wilts C.C. County Architect, County Offices, Trowbridge. Deposit £2 2s. (cheques only).

JULY 16.—Sheering.—Erection of eight houses, for Epping R.D.C. Clerk to the Council, High-street, Epping, Essex.

JULY 16.—Smethwick.—LODGE.—Park keeper's lodge at the West Smethwick Park, for the C.B. R. Fletcher, Borough Engineer and Surveyor.

JULY 16.—Tonbridge.—HOUSES.—Forty (and alternatively, an additional 40) living-room type houses, in pairs, on the Hectors Estate, Tonbridge, for the U.D.C. Engineer and Surveyor, The Castle, Tonbridge. Deposit £2 2s.

JULY 17.—Brighouse.—HOUSES.—Fifty-two houses on the Smith House estate, for the T.C. E. C. Brooke, architect.

JULY 17.—Camberley.—For the erection of a Telephone Exchange. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 ls., payable to the Commissioners.

JULY 17.—Chatham.—Fourteen houses at Holcombe-road, for the T.C. Mr. R. L. Honey, Borough Engineer and Surveyor, Town Hall, Chatham.

JULY 17.—Cilfynydd.—MONUMENT.—War memorial monument at Cilfynydd, for the Committee. H. M. R. Burgess, A.R.I.B.A., Chartered Architect and Surveyor, 77, Taff-street, Pontypridd.

JULY 17.—Leyton.—SCHOOLS.—Sybourn-street infants' schools, to accommodate 350 children, for the U.D.C. J. H. Jacques, L.R.I.B.A., 61, West Ham-lane, Stratford, E.15. Deposit £2.

JULY 17.—Manchester.—ADDITIONS.—Alterations to schools and the erection of new homes, &c., at the Styal Cottage Homes, Handforth, near Manchester, for the B.G. F. H. Overmann, 183, Oxford-road, Manchester. Deposit £2 2s.

JULY 17.—Middlesbrough.—SCHOOL.—At Marton-grove to accommodate 1,432 scholars, together with Special Subjects Centre, for the E.C. Jas. Forbes, architect, 19, Grange-road West. Deposit £2 2s.

JULY 17.—Near Bristol.—COURT.—Petty Sessional Court at Staple-hill, near Bristol, for the Gloucestershire C.C. E. S. Sinnott, County Surveyor, Shire Hall, Gloucester.

JULY 17.—Tipton.—SCHOOL.—Central school in Alexandra-road, for 640 scholars, for the Urban District E.C. Scott & Clark, architects, Regent Chambers, Wednesbury. Deposit £3 3s.

JULY 17.—Tipton.—REPAIRS.—Repairs and painting at certain schools, for the E.C. Scott & Clark, architects, Wednesbury.

JULY 20.—Bournemouth.—Jarrah decking, timber shelters, stage, tea rooms, etc., in connection with the reconstruction of Boscombe Pier Head, Contract No. 2, for the Borough Council, Borough Engineer and Surveyor, Town Hall, Bournemouth. Deposit £1 ls.

JULY 20.—Chester.—SCHOOL.—Elementary school at Moreton for 400 scholars, with Special Subjects Centre, for the C.C. H. Beswick, F.R.I.B.A., County Architect, Newgate-street, Chester. Deposit £1 ls.

JULY 20.—Maidstone, Kent.—Erection of Court House at Dartford, for the Kent C.C. County Architect, 86, Week-street, Maidstone. Deposit £2 2s.

JULY 20.—Moreton.—Erection and completion of a new elementary school. H. Beswick, F.R.I.B.A., County Architect, Newgate-street, Chester. Deposit £1 ls.

JULY 20.—Wallasey.—HOUSES.—Thirty-two houses on the Belydere-road site, for the C.B. Borough Engineer and Surveyor. Deposit £1 ls.

JULY 20.—Winchester.—Erection of certain additions to the Electricity Works, Gordon-road, Winchester. Town Clerk, The Guildhall, Winchester. Deposit £2 2s.

JULY 20.—Windsor.—HOUSES.—Twenty parlour-type, fences, paths, &c., on the building site at Bedford-lane, Sunningdale, Berks., for the R.D.C. W. Menzies, architect, Englefield Green, Surrey. Deposit £1 ls.

JULY 21.—Brighton.—Erection of Telephone Exchange at Rottingdean, for the Commissioners H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 ls. (Cheques payable to the Commissioners.)

JULY 21.—Great Ouseburn.—ADDITIONS.—Alterations and additions to the low pressure hot water installation at the Council school, for the West Riding E.C. Education Department, County Hall, Wakefield.

JULY 21.—Greetsdale.—PRESSURE.—Low pressure hot water boiler at the Council school, for the West Riding E.C. Education Department, County Hall, Wakefield.

JULY 21.—London, S.W.1.—Beverley Brook Relief culvert, construction of concrete culvert from Beverley Brook, near Priests Bridge, Upper Richmond-road, and various works in connection therewith for the L.C.C. Chief Engineer of the Council, Old County Hall, Spring Gardens, S.W.1. Deposit £10.

JULY 21.—Preston, Lancs.—Alterations to the Post Office and Telephone Exchange. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 ls., payable to the Commissioners.

JULY 21.—West Riding.—BUILDING.—For (1) brick wall and iron fencing to the additional land at Royston Council School, and (2) additional conveniences at South Kirby Council School, for the E.C. Education Department, County Hall, Wakefield.

JULY 22.—Acton, W.3.—HOUSES.—Fifty, on the extension of Noel-road, Acton, for the Great Western (London) Garden Village Society, Ltd. T. Alwyn Lloyd, F.R.I.B.A., 6, Cathedral-road, Cardiff. Deposit £3 3s.

JULY 22.—Bentley-with-Arksey.—BUILDING.—Two shelters, pavilion, dancing floor and one sandpit in the Welfare Park, for the U.D.C. P. C. Woodhall, Architect and Surveyor, Council Offices, Bentley. Deposit £1 ls.

JULY 22.—Primrose Hill.—Erection of temporary Telephone Exchange, for the Commissioners H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 ls. (Cheques payable to the Commissioners.)

JULY 23.—Lowestoft.—Erection of Employment Exchange for the Commissioners of H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 ls. (Cheques payable to the Commissioners.)

JULY 23.—Newcastle-upon-Tyne (West).—Erection of Telephone Exchange, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, S.W.1. Deposit £1 ls (payable to the Commissioners).

JULY 24.—Dover.—Fifty houses on the Astor-avenue estate, for the Corporation. Mr. A. H. Steele, architect, 22, Park-street, Dover.

JULY 24.—Letchworth, Herts.—Extension of Post Office, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, S.W.1. Deposit £1 ls. (Cheques payable to the Commissioners.)

JULY 24.—Preston.—Adaptations and extensions to No. 38, Westcliffe, Preston, for the Commissioners H.M.O.W. Contracts Branch, H.M.O.W., King Charles street, S.W.1. Deposit £1 ls. (Cheques payable to the Commissioners.)

JULY 25.—Carlisle.—BUILDING.—Electricity generating station, at Willow Holme, for the T.C. Henry C. Marks, City Engineer and Surveyor, 18, Fisher-street, Deposit £2 2s.

JULY 29.—Ashford (Kent).—LAVATORY.—At Victoria Park, for the U.D.C. William Terrill, surveyor, 5, North-street, Ashford, Kent.

JULY 29.—Manchester.—SCHOOL.—Municipal school in Ravensbury-street, Clayton, for the E.C. P. M. Heath, Town Clerk. Deposit £1 ls.

No DATE.—Auchinairn.—HOUSES.—Twenty-eight houses, for the D.C. of Lanark C.C. Jas. A. McCallum, District Clerk, 15, West George-street, Glasgow.

No DATE.—Barnsley.—HOUSE.—Residence, garage, &c., in Mount Vernon-road. R. Goodworth, architect, 25, Springfield-street.

No DATE.—Chichester.—COTTAGES.—Two cottages at Ingham Farm, for the West Sussex C.C. H. P. Roberts, F.R.I.B.A., County Architect, Westgate.

No DATE.—Rochdale.—PAINTING.—School painting for the E.C. J. E. Holden, secretary, Education Office, Baillie-street.

No DATE.—Rochdale.—LIGHTING.—Electric lighting and power installations to 66 houses on the Kilworth-street housing estate, for the C.B. Borough Surveyor.

No DATE.—Skelmanthorpe.—HOUSE.—In New-street, Skelmanthorpe. H. Lodge, Huddersfield-road.

No DATE.—Stoke-on-Trent.—HOUSES.—Two pairs of semi-detached subsidy houses for the Electricity Supply Committee. Ford & Slater, architects, Overhouse Chambers, Burslem. Deposit £2.

No DATE.—Withnell.—ANNEXE.—Alterations to Withnell Pulmonary Hospital and the erection of an annex for 46 patients, &c., for the Lancashire Tuberculosis Committee. Mr. H. Littler, County Architect, 16, Ribblesdale-place, Preston. Deposit £2.

MATERIALS, etc.

JULY 3.—Aldershot.—Supply of necessary materials required for the construction of 100 houses by direct labour, for the Corporation. Borough Surveyor, Municipal Buildings, Aldershot.

JULY 6.—Brighton.—PIPES.—360 tons of 16 in. diameter class "C," 240 tons of 18 in. diameter class "B," and about 320 tons of 18 in. diameter class "C" cast iron pipes to the British standard specification, together with specials of both diameters, for the C.B. A. B. Cathcart, M.Inst.C.E., 12, Bond-street. Deposit £2 2s.

JULY 6.—Bromley.—MACADAM.—1,900 tons of tarred slag macadam, for the R.D.C. L. J. Small, Highways Surveyor's Office, Park House.

JULY 6.—Calstock.—MAINS.—Thirty tons of 3 in. cast-iron water main, for the R.D.C. G. Randle, District Surveyor, Albaston, Gunnislake, Cornwall.

JULY 6.—Ealing.—MATERIALS.—Stoneware pipes, &c., and the tarring of two steel chimneys, for the Electricity Supply Undertaking, for the T.C. J. D. Knight, Borough Electrical Engineer and Manager.

JULY 8.—Stockton-on-Tees.—MATERIALS.—Cement, lead, and compo pipe, castings, cast-iron pipes, paints, for the T.C. T. Downey, Town Clerk.

JULY 10.—London.—GRANITE.—7,500 ft. run 6 in. by 12 in. Norway edge granite kerbing, and 7,500 ft. run 12 in. by 6 in. Norway block channelling, for the Camberwell B.C. W. Bell, Borough Engineer and Surveyor, Town Hall, Camberwell, S.E.5.

JULY 11.—Middleton.—MATERIALS.—Granite setts, broken granite, granite chippings, limestone chippings, crushed slag, stone kerbs, flags, ballast and setts, concrete flags, Portland cement, stoneware pipes, and castings, for the T.C. Borough Engineer and Surveyor.

JULY 13.—Romford.—GRANITE.—2,500 tons of broken granite, for the R.D.C. Highway Surveyor, 16A, South-street.

JULY 15.—Atherton.—MATERIALS.—Earthenware pipes, concrete flags, grit setts, grit kerbs, granite setts, cement, tar macadam, iron castings and granite chippings, for the U.D.C. A. E. Hope, Clerk.

JULY 15.—Capetown.—FITTINGS.—Valves and fittings, for the Steenbras Pipe Line, for the T.C. Davis & Soper, Ltd., 54, St. Mary-axe, London, E.C.3. Deposit £5 5s.

JULY 16.—Southwell.—PIPES.—155 tons of 8 in., 4 in., and 3 in. cast-iron pipes and specials, for the R.D.C. Sands & Walker, engineers, Milton Chambers, Milton-street, Nottingham. Deposit £3 3s.

JULY 29.—Santiago.—PIPING.—Cast-iron piping, for the Empresa de Agua Potable. Department of Overseas Trade, 35, Old Queen-street, London, S.W.1.

ENGINEERING, IRON AND STEEL.

JULY 6.—Calstock.—RESERVOIR.—Construction of a small covered reservoir, an open tank, the installation of a small pumping set, and other works, including the laying of about 1½ miles of 3 in. cast-iron water main for the R.D.C. G. Randle, District Surveyor, Albaston, Gunnislake, Cornwall. Deposit £2.

JULY 6.—Lancashire.—BRIDGES.—For (1) a masonry bridge over the River Wyre at Kirkland; (2) a reinforced concrete bridge over the Lancaster and Kendal Canal near Cathouses; and (3) a bridge over the L.M. & S. Rly., Knott End Branch, of stone abutments and steel superstructure, for the C.C. W. H. Schofield, County Surveyor and Bridgemaster, County Offices, Preston.

JULY 7.—Ashby de la Zouch.—WELL.—Sinking of a brick-lined well, about 50 ft. deep, together with adit and borehole, and all appurtenant works, at the Old Toll Bar, Acresford, near Donisthorpe, for the R.D.C. W. H. Radford & Son, engineers, Albion Chambers, King-street, Nottingham. Deposit £2 2s.

JULY 11.—Leicester.—TANKS.—Tanks, percolating filters, channels, humus tanks, drains and pipe lines, roads, and the erection of new pumping stations, recorder house, &c., and all other works in connection, for the T.C. E. George Mawbey, City Engineer and Surveyor. Deposit £5.

JULY 15.—Black Notley.—RECONSTRUCTION.—Of Hoplit bridge over the River Brain, on the Braintree-Witham-road, for the Essex C.C. W. H. Morgan, chartered civil engineer, County Surveyor, Old Court, Chelmsford.

JULY 16.—Southwell.—WELL.—Sinking of pumpwell, erection of pumping station, and the carting, excavation and laying of about 1½ miles of 8 in., 4 in., and 3 in. cast-iron pipes and specials, together with all works, for the R.D.C. Sands & Walker, engineers, Milton Chambers, Milton-street, Nottingham. Deposit £3 3s.

JULY 21.—Sedgley.—TANKS.—Laying and jointing of stoneware and cast-iron pipe drains, also the construction of Detritus tanks, sedimentation tanks, storm-water tanks, straining tanks, bacteria beds, humus tanks, sludge beds, inspection chambers, the erection of office, stores and engine house, together with all other incidental and auxiliary works, for the U.D.C. Wilcox & Raikes, engineers, 63, Temple-row, Birmingham. Deposit £10 10s.

JULY 11.—Tynemouth.—WAVE-BARRIER.—At the Protection Jetty, for the C.B. J. F. Smilie, Borough Surveyor, Borough Surveyor's Office, North Shields. Deposit £2 2s.

JULY 13.—Denton.—EXTENSIONS.—Construction of eight 100 ft. diameter percolating filters and other works at the Sewage Disposal Works, for the U.D.C. J. B. Cooke, Engineer and Surveyor, Town Hall, Denton, near Manchester. Deposit £5.

JULY 13.—Dewsbury.—TANKS.—Percolating filters, humus tanks, and other appurtenant works in connection with the construction of sewage disposal works at Mitchell Laithes, for the C.B. Messrs. James Diggle & Son, engineers, 14, Brown-street, Manchester. Deposit £2 2s.

JULY 13.—Leeds.—GIRDERS.—Seven steel plate girders and the reinforced concrete work required in the construction of a small span bridge at Butt-lane, Farley, for the T.C. W. T. Lancashire, City Engineer.

JULY 13.—Norwich.—FENCING.—Fixing at Thorpe Power Station 70 lineal yards of wrought-iron fencing, gates, &c., for the T.C. J. S. Bullough, City Engineer.

JULY 14.—Kingston-upon-Hull.—ENLARGING.—Construction of the underground works required in the enlargement of the existing Pumping Station at Cottingham, for the T.C. Charles B. Newton, engineer. Deposit £5.

JULY 20.—Bristol.—RECONSTRUCTION.—Of Sheds "E" and "F," situated on the Grove, Bristol, for the Port Authority. Thomas A. Peace, Chief Engineer, Port of Bristol, Chief Engineer's Office, Avonmouth Dock. Deposit £5.

JULY 30.—Stirling.—BRIDGE.—Bridge over the River Forth between Stirling and Cambuskenneth, for the T.C. A. H. Goudie, Burgh Engineer.

ROAD, SEWERAGE, AND WATER WORKS.

JULY 6.—Aberdeen.—PIPES.—Laying of about three-quarters of a mile of 8 in. pipes, for the T.C. George Mitchell, Water Engineer, Water Engineer's Office, 41½ Union-street. Deposit £2.

JULY 6.—Bassford.—SEWERS.—Providing and laying about 1,650 yds. of 12 in., 9 in. and 6 in. stoneware and iron pipe sewers, manholes, &c., and for the construction of sewage disposal works, consisting of storm water and settling tanks, bacterial filters, mud drying beds, and other appurtenant works at Newstead, for the R.D.C. S. Maylan, Engineer and Surveyor to the Council, Public Offices, Rock House, Bassford. Deposit £2 2s.

JULY 6.—Brighton.—MAINS.—2,520 yds. of 18 in. and about 1,780 yds. of 16 in. cast iron mains in Ditchling-road, Hollingbury-road, Hollingdean-road, Old-lane, and Surrenden-road, for the C.B. A. R. Cathcart, Waterworks Engineer, 12, Bond-street. Deposit £3 3s.

JULY 6.—Dublin.—RE-SURFACING.—With bituminous macadam two-coat work (1) Dublin-Howth road, Killester to Kibarrack, approximate area 48,000 sq. yds.; (2) Dublin-Ashbourne road, Glasnevin to Finglas Village, approximate area 30,000 sq. yds.; (3) Dublin-Swords road, Whitehall to the Thatch, approximate area 10,000 sq. yds.; and bitumen grouted roadway (4) Dublin-Lucan road, R.C. church to town of Lucan, approximate area 8,000 sq. yds., for the C.C. County Surveyor, 11, Parnell-square. Deposit £2 2s.

JULY 6.—East Barnet.—SEWER.—Surface water sewer in Long-street, New Barnet, for the U.D.C. H. York, engineer and surveyor. Deposit £2 2s.

JULY 6.—Edinburgh.—ROAD.—Construction of Section F.G. (Dechmont to Broxburn), Contract No. 5 East, of a new road from Glasgow to Edinburgh, for the T.C. D. A. Donald, engineer, 271, Alexandra-parade, Glasgow. Deposit £3 3s.

JULY 6.—Greenford.—EXTENSIONS.—To the main drainage system, for the U.D.C. H. Humphreys & Sons, consulting engineers, 28, Victoria-street, S.W.1. Deposit £2 2s.

JULY 6.—Manchester.—PAVING.—For sewerage, draining, paving Bristow-street, Clayton; sewerage, draining, paving (concrete), &c., Princess-road, Chorlton-eum-Hardy; and sewerage and draining Haddon-road, West Didsbury, for the T.C. P. M. Heath, Town Clerk. Deposit £1 1s.

JULY 6.—Ministry of Transport.—REPAIRS.—Bituminous clinker or asphaltic concrete material on the Purfleet-Tilbury road, and bituminous clinker or asphaltic concrete material and tarred macadam on the Sidcup-by-pass road, for the M.T. Chief Engineer, Roads Department, Ministry of Transport, 7, Whitehall gardens, S.W.1. Deposit £25 each.

JULY 6.—Ongar.—ALTERATIONS.—Of existing sewage disposal works, the construction of contact beds and sludge filters, the laying of approximately 220 yds. of 6 in. cast-iron pumping main and 124 yds. of 6 in. stoneware effluent drain, with other incidental work, for the R.D.C. Plans, specification and quantities, H. C. H. Shenton, engineer, 28, Victoria-street, Westminster. Deposit, £1 1s.

JULY 6.—Romford.—ROAD.—Road, with necessary sewers, &c., from Balgores-lane (opposite Gidea Park Station, L. & N.E.R.), with construction of sewer through the Allotment Ground to Heath Park-road, for the Estate. Wm. C. Thornton, F.A.I. (Wm. Houghton & Co.), surveyors, 112, Old Broad-street, E.C.2.

JULY 6.—Romford.—MAKING-UP.—Portion of Mawneys-road, for the U.D.C. Engineer and Surveyor, 73, South-street. Deposit £2 2s.

JULY 6.—Southampton.—FOUNDATIONS.—Preparing foundations, asphalt, and the execution of other works, in St. Mary-street, Albert-road, and part of Millbrook-road, for the C.B. Borough Engineer, 33, French-street. Deposit £1 1s.

JULY 6.—Southampton.—WORKS.—Street works at (1) Colebrook-avenue, and (2) Bridlington-avenue, for the C.B. Borough Engineer, 33, French-street. Deposit £1 1s.

JULY 6.—Tiverton.—ROAD.—Construction, 1½ miles of district road, in the Parish of Cadeleigh, for the R.D.C. J. R. H. Warren, Highway Surveyor, Central Chambers, St. Peter-street.

JULY 6.—Wetherby.—SEWERS.—Construction of sewers, tanks, and sewage distributors on land for the drainage of part of the Parish of Thorparch, for the R.D.C. E. J. Silcock, engineer, 10, Park-row, Leeds. Deposit £5.

JULY 7.—Denton.—PAVING.—2,700 super yards of granited rock asphalt paving on concrete foundation, together with kerbing, flagging, and other works incidental thereto, for the U.D.C. J. B. Cooke, surveyor. Deposit £5.

JULY 7.—London.—MAINS.—Laying and jointing of 42 in., 27 in., and 15 in. diameter cast-iron mains from Homestall-road, Camberwell to Queen's-road, Peckham, for the M.W.B. H. E. Stilgoe, Chief Engineer, 173, Rosebery-avenue, Clerkenwell, E.C.1. Deposit £10.

JULY 7.—Monmouth.—WIDENING.—Widening and improvement of the Newport-Caiffrd main road, section No. 1, from Newport to Duffryn Corner, a length of about 2½ miles, for the C.C. S. A. Bennett, County Surveyor, County Hall, Newport. Deposit £25.

JULY 7.—Welwyn.—FOOTPATHS.—Tar-paving of about 27,000 super yds. of carriageways and about 5,000 super yds. of footpaths of various roads at Welwyn Garden City, for the R.D.C. Surveyor. Deposit £2 2s.

JULY 8.—London, E.C.1.—SANITARY CONVENIENCE.—Certain work in connection with the installing of new sanitary conveniences, &c., at the Institution, Shepherdess-walk, City-road, N., for the Guardians of the Poor of the Holborn Union. Clerk to the Guardians, Administrative Offices, 53, Clerkenwell-road, E.C.1. Deposit £1 1s.

JULY 8.—Oldham.—STREETS.—Certain street works in part of Heron-street, part of Repton-avenue, Lyndhurst-road, part of Plato-street, Watts-street, passages rear of 19-37, Portland-street, 48-64, Devon-street, 72, Devon-street, passages leading from Forest-street to Gramsere-road, and lying between Hillside-avenue and Ronald-street, for the C.B. Borough Engineer and Surveyor.

JULY 9.—Otley.—SEWERS.—Construction of a new intercepting sewer, for the U.D.C. C. J. F. Atkinson, Clerk.

JULY 9.—Skegness.—SEWERS.—Soil and surface water sewerage work at the Roman Bank, for the U.D.C. R. H. Jenkins, engineer and surveyor. Deposit £1 1s.

JULY 10.—Bilston.—SEWERING.—Making-up and sewerage of Mountford-lane, for the U.D.C. W. G. Lofthouse, A.R.I.B.A. Deposit £2 2s.

JULY 11.—Billingham.—SEWER.—400 yds. of 9 in. diameter pipe sewer, with manholes, &c., in Billingham, and for the construction of a settling tank and filter for the sewage disposal works, for the U.D.C. F. W. H. Stileman, engineer, Erismus Chambers, Queen's-square, Middlesbrough. Deposit £2 2s.

JULY 11.—Carmarthen.—IMPROVEMENTS.—Road widening and improvements between Bancyons and Llanwrda Village on the Abermarlais to Llanwrda road, for the C.C. G. Henry, County Surveyor, Llandilo. Deposit, £2 2s.

JULY 11.—Doncaster.—ROAD.—Road construction, &c., on the Warnsworth-road site, for the T.C. R. E. Ford, Housing Surveyor. Deposit £2 2s.

JULY 11.—Harrow-in-the-Hill.—MAKING-UP.—Vaughan-road and Bouverie-road, for the U.D.C. J. P. Bennetts, engineer and surveyor.

JULY 11.—Near Morpeth.—MAINS.—Laying and jointing about 7½ miles of 18 in. trunk water main near Morpeth, with the necessary bridge crossings, valve chambers, &c., for the Tynemouth T.C. J. W. McKerron, Water Engineer and Manager, Norfolk-street, North Shields. Deposit £3 3s.

JULY 11.—Ruislip-Northwood.—WIDENING.—Widening and reconstruction of Eastcote-road, between Ruislip and Fore-street, Eastcote, for the U.D.C. H. R. Metcalfe, Engineer and Surveyor, Council Offices, Northwood. Deposit £2.

JULY 13.—Beckenham.—MAKING-UP.—Of St. James's-avenue and Stanley-avenue, and the construction of a surface water sewer in Valley-road, for the U.D.C. J. A. Angell, surveyor. Deposit £2.

JULY 13.—London.—REPAVING.—Taking-up and removal of the existing paving of the carriageway, the making good and rendering of the existing concrete foundation, also the repaving with creosoted wood blocks and other incidental works of (a) part of Northumberland-avenue adjoining the Victoria Embankment and (b) Vauxhall Bridge and approaches, for the L.C.C. Chief Engineer of the Council, at the Old County Hall, Spring-gardens, S.W.1. Deposit £3 each.

JULY 13.—Romford.—RECONSTRUCTION.—Widening and reconstruction of about 187 yds. of Billel-lane, Hornchurch, including kerbing, tarmac surfacing, &c., for the R.D.C. W. J. Grant, surveyor, 16A, South-street.

JULY 13.—St. Albans.—DRAINAGE.—Circular sewage distributors, for the R.D.C. H. Humphreys & Sons, consulting engineers, 28, Victoria-street, Westminster. Deposit £1 1s.

JULY 13.—Watford.—ROAD.—Construction of a new road about 300 yds. long, involving approximately 20,000 cub. yds. of excavation, together with certain soil and surface water sewers, and the widening, raising and reconstruction of an existing road about 300 yds. long, for the T.C. D. Waterhouse, Borough Engineer. Deposit £2 2s.

JULY 14.—Ham.—SEWER.—220 lin. yds. of 15 in. stoneware pipe sewer and outfall, together with manholes and contingent works, for the U.D.C. E. F. Ogburn, surveyor. Deposit £1 1s.

JULY 14.—Leeds.—KERBING.—Part of Back Headingley-avenue; part of Estcourt-avenue, Hawksworth-grove, Hawkswood-street, Old Park-road improvement, and the Vesper-road diversion, for the T.C. Highways and Permanent Way Engineer, 1, Swinegate. Deposit £1 1s.

JULY 14.—Newbury.—SEWER.—Laying about 1,100 lin. yds. of 18 in. diameter outfall sewer complete with manholes and other works, for the T.C. Borough Engineer and Surveyor.

JULY 15.—Carshalton.—MAKING-UP.—Of Ashcombe-road, Woodstock-road and Kings-lane, for the U.D.C. W. Willis Gale, surveyor. Deposit £2.

JULY 15.—Limerick.—SURFACING.—With 7 in. of reinforced concrete about 45,727 square yards of roadways in three sections, for the Corporation. City Surveyor. Deposit £5.

JULY 15.—Tooting and Herts.—(a) Repairs to roads at Tooting Bec Hospital; (b) tarpaving works at Tooting Bec Hospital extension; (c) top dressing to airing courts at Leavesden Mental Hospital, Herts. G. A. Powell, Office of the Board, Metropolitan Asylums Board, Victoria Embankment, E.C.4. Deposit £1 in respect of each work.

JULY 16.—Salford.—SEWERING.—Sewering, excavating and levelling the foundations of six streets on the Littleton-road housing site No. 3, for the C.B. Borough Engineer.

JULY 18.—Cardiff.—PIPES.—Construction, laying, and completion of the No. 2 Pipe Line, second section. The line of pipes will commence on the disused Glamorganshire Canal, about one mile north of Abercynon, and terminate in Llanishen Reservoir, a length of approximately 14 miles of 31, 25 and 24 in. diameter lapwelded steel tubes concrete lined, one break pressure tank, together with several bridges and subways, and two houses, for the T.C. C. H. Priestley, Engineer, City Hall, Cardiff. Deposit £20.

JULY 18.—Carmarthenshire.—WIDENING.—Widening and improvements to road at (1) Wenall on the Llandovery to Lampeter main road; and (2) Brown Hill Smithy on the Abermarlais to Llanwrda main road, for the C.C. G. Henry, County Surveyor, Llandilo. Deposit £2 2s.

JULY 18.—Hatfield.—SEWER.—600 yards of 6 in. stoneware sewer and about 440 yards of 6 in. C.I. sewer with manholes, &c., at Little Heath, North Mymms, for the R.D.C. H. T. Sidwell, surveyor. Deposit £2 2s.

JULY 20.—Carlisle.—SEWERING.—Sewering and street works required in the formation of a new street connecting Fisher-street and Castle-street, for the C.B. H. C. Marks, City Engineer and Surveyor. Deposit 10s.

NO DATE.—Garnarvncshire.—ROAD.—Construction of 1.84 miles of new road, 30 ft. between fences, with 20 ft. carriageway, including cuttings, embankments, culverts, drains, walls and fencing, and other works relative thereto, in the slate quarrying district between Nantlle Railway Station (Talsarn) and the village of Nantlle, for the C.C. T. Owen, County Surveyor, County Offices, Camarvon. Deposit £4 4s.

NO DATE.—Middle Ward.—DRAINS.—Laying of drains, gas and water services, forming footpaths, and levelling ground, &c., in connection with the "Weir" and houses at West Benhar-road, Edinburgh-road, and Westgrais-road, Harthill, for the D.C. of the Lanark C.C. P. C. Smith, Housing and Town Planning Department, District Offices, Hamilton.

NO DATE.—Porthcawl.—ROADS.—Laying sewers and forming roads for Messrs. J. Elias & others. Cook & Edwards, surveyors, Dunraven-place, Bridgend. Deposit £2 2s.

Competitions.

(See Competition News, page 4.)

Auction Sales, Tenders, etc.

JULY 6.—Addiscombe, East Croydon.—G. E. Clark will sell, without reserve, at Shirley-road, Addiscombe East Croydon (corner of Bingham-road, site lately occupied by Frames Building Co.), second-hand timbers and effects, arising from demolition of various buildings and removed for convenience of sale. Auctioneer, Beddington House, Beddington, near Croydon.

JULY 10.—Edgware and Mill Hill.—Knight, Frank & Rutley, in conjunction with Joshua Baker, Cooke & Standen, in the Hanover Estate Room, freehold building land on the Stonefields Estate, comprising 65 acres. Auctioneers, 20, Hanover-square, W.1.

JULY 10.—London, W.—Knight, Frank & Rutley at the Hanover Estate Rooms, freehold residential and building estate, Kennet House, Harrow. Vacar possession. Auctioneers, 20, Hanover-square, W.1.

JULY 14.—Berks.—Hampton & Sons, freehold residential and building property, "Grove Hall" gardens and parkland, in all about 4 or 12 acres, at St. James's Estate, Rooms, 20, St. James's-square, S.W.1. Auctioneers' offices.

NEW COMPANIES

THE particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116, & 119, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

WILLIAM WOODSEND, LTD. (205,767). Registered May 6. Newcastle Wharf, Castle Boulevard, Nottingham. Builders and contractors. Nominal capital, £15,000.

EASTWOOD'S CEMENT, LTD. (205,752). Registered May 6. 47, Belvedere-road, Lambeth. Manufacturers of and dealers in cement, lime, &c. Nominal capital, £150,000.

E. B. JONES & RAWLINSON, LTD. (206,251). Registered May 27. Builders, &c. Nominal capital, £10,000.

M. T. GREY & Co., LTD. (206,301). Registered May 28. Builders' merchants. Nominal capital, £5,000.

BALL, SONS & SQUIRES, LTD. (206,296). Registered May 28. General builders and contractors, &c. Nominal capital, £2,000.

C. I. WARD & Co., LTD. (206,266). Registered May 28. 2, Mortimer-place, N.W.6. Builders and contractors, &c. Nominal capital, £100.

GILBERT HODGSON & SONS, LTD. (206,319). Registered May 29. Contractors, engineers, &c. Nominal capital, £4,000.

FREDERICK SINGLETON & SONS, LTD. (206,318). Registered May 29. Builders and contractors. Nominal capital, £1,000.

F. G. MINTER, LTD. (206,370). Registered June 2. Ferry Works, Putney, S.W. Builders, contractors, engineers, &c. Nominal capital, £100,000.

PATCHING & SON, LTD. (206,202). Registered May 25. 44, Portland-street, Brighton. Builders and contractors. Nominal capital, £5,000.

ALBERT ARCHER & Co., LTD. (206,160). Registered May 23. Painters and decorators, &c. Nominal capital, £4,000.

A. GELDARD & Co., LTD. (206,106). Registered May 21. Builders, contractors and builders' merchant. Nominal capital, £1,500.

BUILDING RESTORATIONS (LEEDS), LTD. (206,079). Registered May 20. Builders and general contractors. Nominal capital, £1,500.

EPHRAIM BALMFORTH & SONS, LTD. (206,084). Registered May 20. Joiners, builders and contractors, &c. Nominal capital, £5,000.

TULKETH BUILDING Co., LTD. (206,099). Registered May 20. 22, Water-lane, Preston. Builders, contractors, &c. Nominal capital, £1,000.

J. SHARPLES & SONS (BLACKBURN), LTD. (206,547). Registered June 10. Shaw-street, Blackburn. Joiners, builders, contractors, &c. Nominal capital, £3,000.

EVANS BROS. (CONCRETE), LTD. (206,541). Registered June 10. Greenhill-lane, Riddings, Alfreton, Derbyshire. Makers and erectors of concrete buildings, &c. Nominal capital, £7,000.

JOHN J. CUNBY, LTD. (206,517). Registered June 8. Builders' merchants and cement and general contractors. Nominal capital, £3,000.

HASKARD, MCGREGOR & Co., LTD. (206,657). Registered June 16. 45, Braunstone Gate, Leicester. Builders and contractors. Nominal capital, £10,000.

E. HAMPTON & SONS (HANLEY), LTD. (206,656). Registered June 16. Eastwood and Mousecroft Fire Brick and Marl Works, Hanley, Stoke-on-Trent. Brick manufacturers. Nominal capital, £10,000.

WILLIAM BAILEY & SONS (BUILDERS), LTD. (206,630). Registered June 13. 40, Pelton-road, S.E.10. Builders, decorators, &c. Nominal capital, £2,000.

FORMAN & BURLS, LTD. (206,576). Registered June 11. 36, Mill-lane, West Hampstead, N.W.6. Builders, contractors, &c. Nominal capital, £500.

F. HAYES, LTD. (206,599). Registered June 12. Contractors, builders, engineers, &c. Nominal capital, £100.

OXFORD CONSTRUCTION Co., LTD. (206,603). Registered June 12. 82, Victoria-street, Westminster, S.W.1. Builders, and contractors, &c. Nominal capital, £2,600.

HOUSING ACT, 1925

The Ministry of Health has issued a circular drawing attention to the Housing Act, 1925, which came into operation on July 1, 1925, and which reproduces in a consolidated form the permanent law relating to the housing of the working classes in England and Wales. The temporary measures which have been passed for the purpose of encouraging building in the immediate future to meet the present shortage of housing accommodation are not incorporated in the Act. The Minister proposes at a very early date to issue under the new Act consolidated regulations and an order prescribing forms, both of which will come into operation on September 1.

MODEL FORMS OF CONTRACT.

In this circular, under the above heading, it is pointed out that, in general, bills of quantities are not required in connection with contracts which provide for the repetition of simple types of building, such as working-class cottages. In view of the experience which has been gained in work of this character, variations from the plan should, in general, only occur in connection with foundations, and the adjustment of the contract price required in consequence of such variations can be readily effected by means of a short schedule of prices. A form of contract containing such a schedule (Hsg. 63) has accordingly been drawn up and placed on sale.

An alternative form of contract (Hsg. 64) has been drawn up for use in special cases where bills of quantities have been prepared. This form provides, however, that such bills of quantities shall not form part of the contract. The effect of this is that neither party can claim re-measurement of the work shown on the drawings or specified, but the priced bills of quantities become a schedule for determining the value of any variations. Copies of this form have also been placed on sale.

Provisions have been inserted regarding the employment by the contractor of apprentices in order to satisfy the requirements of the Minister as set out in Circular 520A issued to Local Authorities on February 3, 1925.

Changes have been made in the clauses relating to wages (Clause 13 of Form D. 88A) and to sub-contractors (Clauses 31 and 37 of Form D. 88A).

TRADE NEWS

Messrs. F. W. Young & Son, builders, 67A, Osnaburgh-street, N.W.1, have opened new offices at 67, Osnaburgh-street, and have also extended their existing works at 67A, Osnaburgh-street.

We have received from the National Radiator Co., Ltd., Hull, a copy of an abridged catalogue which they have brought out, in which they give particulars of their current types of ideal radiators and ideal boilers, with brief descriptive material; also information in regard to ideal towel rails and valves, unions, &c. They also send us a pamphlet descriptive of their new plate-rack for use with the Ideal Cookanheat.

Building Federation President.

Mr. John Hanson, a Burnley builder and contractor, was unanimously appointed President of the North-Western Federation of Building Trades at the annual meeting at Burnley. The Federation's area includes Lancashire, Westmorland, Cumberland, Cheshire, North Wales, and Shropshire. Mr. Hanson has for a number of years been President of the Burnley and District Building Employers' Association, which body he has represented on the North-Western Federation and also on the National Federation.

JULY 14.—Bracknell, Berks.—J. T. Skelding & Co., by order of Mr. E. W. Blow, who is giving up the business, on the premises, Station-road, Bracknell, Berks, freehold residence, builders' yard and premises in rear, with vacant possession; also in separate lots, without reserve, the builders' stock and plant. Auctioneers, 48, Gresham-street, Guildhall, E.C.2.

***JULY 14.—Merton.**—Opposite "Six Bells" Hotel. Vervard & Yates will sell useful timber and building material. Auctioneers, 365, Norwood-road, S.E.27.

***JULY 16.—Evesham, Worcestershire.**—Dicks & Badham, on the premises at Evesham, by order of Mr. John Knox, woodworking machinery, builders' sundries and numerous other effects. Auctioneers, 1, Market-place, Evesham.

***JULY 16.—London, N.W.1.**—Henry Butcher & Co., will sell by order of Messrs. Fred. Hodge, Ltd., who have acquired the premises, 102, Hampstead-road, N.W.1, builders' and general hardware, workshop plant, tools, &c., paints, enamels, varnishes, &c. Auctioneers, 63 and 64, Chancery-lane, W.C.2.

JULY 21.—London, S.W.1.—Hampton & Sons, at the St. James's Estate Rooms, 20, St. James's-square, freehold house, Burnham Beeches, Bucks, known as the "Greenlanes." Auctioneers, 20, St. James's-square, S.W.1.

JULY 21.—London, W.1.—Knight, Frank & Rutley, freehold building estate overlooking Kingsbury Green. Auctioneers, 20, Hanover-square, W.1.

***JULY 21.—Surrey.**—Hampton & Sons, at the St. James's Estate Rooms, 20, St. James's-square, S.W.1 (unless previously sold), in one or four lots, freehold residence, "Woodhurst," Upper Warrington, with excellent building sites; vacant possession. Auctioneers, as above.

JULY 22.—Hilfax.—James Styles & Whitlock have received instructions from the executors of the late Major A. H. Edwards to sell, in convenient lots, at the Old Cock Hotel, the valuable freehold property known as the Pye Nest Estate, comprising the well-known mansion house, &c., comprising about 82 acres. Auctioneers, The Estate Offices, Rugby; also at 44, St. James's-place, London, S.W.1.

JULY 22.—London, E.C.—Densham & Lambert, at the London Auction Mart, 155, Queen Victoria-street, E.C., freehold building estate, as a whole or in lots, known as the Effingham Estate, Surrey, of about 350 acres; also freehold building estate known as "The Firs," Cranford, Hounslow, of about 24 acres. Auctioneers, 23A, Savile-row, London, W.1.

***JULY 23 AND 24.—Whitechurch (Salop).**—Perry & Phillips, at Cloverley Hall, Whitechurch, interior and exterior fixtures and fittings previous to demolition of part of the mansion. The fabric of the mansion will also be sold for demolition after the above sale. The Agent, Estate Office, Cloverley, Whitechurch. Auctioneers, 59, High-street, Bridgnorth.

JULY 29.—Ickenham.—Knight, Frank & Rutley in conjunction with Joshua Baker, Cooke & Standen, portion of Swakeleys Estate, comprising freehold building land (about 160 acres). Auctioneers, Knight, Frank & Rutley, 20, Hanover-square, W.1, Joshua Baker, Cooke & Standen, 62, High-street, Uxbridge.

***JULY 30.—London.**—Knight, Frank & Rutley will sell, in the Hanover Estate Rooms, freehold building estate overlooking Kingsbury Green. Auctioneers, 20, Hanover-square, W.1.

Public Appointments.

JULY 6.—London.—Structural steelwork designers. Establishment Officer, H.M.O.W., Storey's Gate, Westminster, S.W.1.

JULY 6.—London.—Reinforced concrete designers. Establishment Officer, H.M.O.W., Storey's Gate, Westminster, S.W.1.

***JULY 8.—Bradford.**—Lecturer in the Department of Civil Engineering, Architecture and Building in the Technical College. Principal of the College, Bradford.

JULY 8.—Neath.—Architectural Assistant in the architect's department (Western Division) required by the Glamorgan County Council. County Architect, Midland Bank Chambers, Neath.

***JULY 9.—Barking, Essex.**—Builders' manager, to supervise (under the control of the Engineer) the erection of 59 dwelling houses required by the Barking Town U.D.C. Engineer and Surveyor to the Council, Public Offices, Barking.

***JULY 9.—London, E.C.4.**—Third-class Draughtsman required on the temporary staff of the Engineer-in-Chief's Department, by the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, London, E.C.4.

***JULY 9.—Manchester.**—Assistant Lecturer in Building Construction required at the Manchester Municipal College of Technology. Apply to the Registrar.

***JULY 10.—London.**—Lecturers required by Wimbledon Technical Institute for (a) Architectural Design; (b) Building Construction and Theory of Structures; (c) Plasterers' work, Theoretical and Practical. J. Sibree, B.Sc., Principal, Gladstone-road, S.W.19.

***JULY 11.—Wimbledon.**—Draughtsman required in the Borough Engineer and Surveyor's Department, for the Corporation. Borough Surveyor's Office, Town Hall, Wimbledon.

***JULY 13.—Gloucester.**—Architectural Assistants required by Gloucestershire C.C. R. S. Phillips, County Education Architect, Shire Hall, Gloucester.

***JULY 17.—Acton, W.3.**—Temporary Clerk of Works required by the Borough Education Committee to superintend the erection of a new school at East Acton, for 200 children. The Secretary, Municipal Offices, Acton, W.3.

***JULY 21.—Tofttenham, N.15.**—(a) Architect; (b) Quantity Surveyor, required by the District Council in connection with the development of the remainder of their housing estate at White Hart-lane. The Engineer, Town Hall, Tottenham, N.15.

***No DATE.—Gold Coast.**—Foreman of Works (buildings), M/13722; Foreman of Works (roads), M/13734; Assistant Workshop Foreman, M/1343. Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting the reference number against the appointment for which application is made.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

AYLESBURY.—The governors of the Aylesbury Grammar School propose to erect a new laboratory, remodel the existing laboratory, and erect new cloak-rooms. Plans by Mr. F. Taylor, 50, Bourbon-street.

BARNESLEY.—Plans have been approved for the erection of a school chapel on Huddersfield-road for the Wesleyan Trustees. Architect, Mr. W. F. Turner, of Barnsley. The General Chapels' Committee of the Wesleyan authorities are to make a grant of £1,000 towards the erection of a new chapel at Cortonwood and the South Yorkshire Coalfields. Commission will grant a further £1,000. The site near the housing estate has been given by the Cortonwood Colliery Co., and it is hoped to erect the building at an early date. The plans are to be prepared by Messrs. A. Brocklehurst & Co., architects and surveyors, 10, Norfolk-street, Manchester. The proposed technical college and institute is shortly to be commenced, the estimated total cost of which is £15,000.

BATLEY.—The E.C. accepted tenders for a new elementary school at Healey. The cost will be about £14,000. A sub-committee was also appointed to consider and report upon a suitable site for another new school and for playing fields.

BEXHILL.—The M.H. held an inquiry into two applications for loans involving £6,300, and affecting the roofing of the Colonnade and the acquiring of 36, Station-road, for extension of the municipal buildings.

BISPHAM.—A start is being made with the erection of the new convalescent home for miners of the Lancashire and Cheshire Miners' Federation. The estimated cost of the building and land is £115,000, the site being 7½ acres in extent.

BOGNOR.—The U.D.C. recommend that application be made to the M.H. for sanction to borrow £21,000 for housing.

BOLTON.—The Borough Engineer has prepared plans for offices and sheds at the Warwick-street store yard, and been authorised to invite tenders for the work.—The Corporation are to subsidise a further 250 houses.

BOURNEMOUTH.—The M.H. has sanctioned a loan of £3,000 for the development of Overstrand.—Preliminary sketch plans are to be prepared for baths to be erected on the Northwood estate.—Plans for the lay-out of the Charnier-street site are to be revised, in order to provide for a larger number of flats than originally suggested.—Russell Cotes-road is now suggested as the most suitable site for the war memorial.—The E.C. are considering as to the site for the new elementary school.

BURNLEY.—The sub-committee of the E.C. have been recommended to consider the acquisition of a plot of land at Lockye-avenue of 4½ acres as a site for a new central school.

BURSLEM.—A scheme is being proposed for the erection of a new hospital at Burslem, to replace the Haywood Hospital.

CARDIFF.—The "Angel" Hotel is to be remodelled at a cost of £50,000. The architect is Mr. Lennox Robertson, 27, Windsor-place.

CHADDERTON.—The Council instructed the Surveyor to proceed with the preparation of a scheme for the erection of 50 houses on a portion of Burnley-lane housing site.

CHESTER.—The T.C. resolved that applications be made to the M.H. for sanction to a further loan of £3,750 for the erection under the scheme by private enterprise of an additional 50 houses.—The Council resolved that they are in favour of the provision of an institution for mental defectives in combination with the Cheshire C.C. and the County Boroughs of Birkenhead and Wallasey.—The Council are to purchase, subject to the approval of the B.E., a piece of land at the corner of Cherry-grove-road and Chapel-lane for extensions to Cherry Grove-road school.

CHORLEY.—The Corporation have asked Mr. P. Howard, architect, to prepare a revised scheme for the proposed public baths, to meet requirements of the M.H.—A further 50 houses are to be subsidised.—Approval has been given to the lay-out plan prepared by the surveyor, showing development of the site at Pilling-lane, for the erection of 76 houses.—A site in Frederick-street is proposed as a housing estate.—The Rev. Canon R. Crank is in negotiation with the B.E. regarding the provision of a central school for Roman Catholic children, the improvement of St. Mary's schools, and the extension of St. Joseph's school.—Plans passed: Sixteen houses, Pilling-lane, for J. Fairclough & Sons.—The R.C. have appointed a sub-committee to inquire into the housing needs of Heskin, Eccleston, and Coppull, and to report suitable sites.

CHOPWELL.—Plans for a new Primitive Methodist Church, to accommodate 400 persons, have been designed by Mr. J. J. Eltringham, architect, of Black-hill. The estimated cost is about £5,600.

CLITHEROE.—The T.C. have purchased "Lowfield," for £2,350. It is intended to build on the site premises for the new motor fire engine and motor ambulance, and also provide garaging accommodation for the Corporation departments generally.—Plans have been approved by the R.D.C. for the erection by Lancashire Industrial Motors, Ltd. (Pendle Bus Co.), of a combined garage, waiting room, and assembly hall in King-street, Whalley.

CHRISTCHURCH.—The T.C. has decided on another housing scheme. Application is to be made to the

Public Works Loan Commissioners for a further loan of £1,500 for housing. Plans approved: New schools for the C.C. in Clarendon-road.

COALVILLE.—The U.D.C. are to make a new street leading from Belvoir-road to Forest-road, and any additional houses will be built in this street. It is probable that the Municipal Buildings will be erected on the site, and the public baths also.

COULSDON.—The U.D.C. has under consideration the provision of a swimming bath, and the surveyor is to report as to likely sites.—A lay-out plan submitted by Messrs. R. Costain & Sons, for 208 houses and 12 shops on the Selsdon Garden Village estate, is to be considered.

—The Coulsdon Heights estate is about to be developed by the Estate Company.—The surveyor is to prepare schemes for improvements at Smitham Bottom-lane and Chipstead Valley-road for submission to the M.T.—A scheme is to be prepared for widening the Higher Drive railway bridge.

DONCASTER.—Plans have been prepared by Messrs. Pite, Son & Fairweather, architects, of London, in association with Dr. Mackintosh, of Glasgow, of the new infirmary. The estimated total cost of the first scheme is about £200,000; and the site is on the Thorne-road.

EASINGTON.—Plans passed by the R.D.C.: 252 houses at Easington Colliery, for the Easington Coal Co., Ltd.; 86 houses at Horden, for H. Ball; 12 aged mine workers' homes at Deaf Hill, for the Aged Mine Workers' Homes Organisation; hotel on Coast-road, Horden, for J. Nimmo & Sons, Ltd., Castle Eden; church hall at Thornley, for Parochial Church Council.

EAST HAM.—The B.C. has instructed the Borough Engineer to renovate part of the corridor of the Town Hall, at an estimated cost of £153.—The Council recommend that £7,000 for the alterations and additions to the Refuse destructor works be applied for to the M.H.—Plans passed: Spiritualist Temple, adjoining 109-119, Third-avenue, Ilford, for the Ilford Spiritualist Society, and 20 houses, Hertford-road, for H. C. Seymour.

ENFIELD.—Middlesex C.C. has prepared a scheme for widening the junction of London-road and Southbury-road, at a cost of £38,285.

EXETER.—The T.C. approved the lay-out plan of the proposed new houses on the Buddle-lane Estate, providing for the erection of 54 houses.

GLASGOW.—Amended plans have been prepared for the provision of new wards at Knightswood Hospital.—The Housing Committee has agreed to investigate the proposal of the purchase of the Hundred Acre Hill, with a view to erecting tenements for slum clearance schemes.

GOLCAR.—The U.D.C. are making application to the M.H. for sanction to borrow £18,000 for the purpose of erecting 34 houses on the Bull Close site.

GREAT HARWOOD.—The surveyor to the R.D.C. has been instructed to prepare plans and specification for the proposed erection of a number of houses near Waverledge Mill.

HARROW.—Local authorities, the Middlesex C.C. and the M.T. have agreed on a scheme for the construction of an arterial road from Harrow to Watford. The length will be seven miles, and the cost is estimated at £265,000.

HASTINGS.—The business premises in Castle Hill-road, owned by Mr. W. Crowhurst, are to be rebuilt. Plans have been prepared by Mr. W. H. Coussens, 35, Havelock-road.

HAYES.—It is proposed to create a new parish of St. Anselm's, and build a permanent church.

HERDEN BRIDGE.—The M.H. has sanctioned the borrowing of £7,084 for the purpose of erecting 12 houses at Eaves Bottom.

HEMEL HEMPSTEAD.—The R.D.C. propose to erect 100 houses in the next two years.

HIGH WOOD.—The M.H. has forwarded observations on the proposals for providing a mortuary and post-mortem examination room at High Wood Hospital for Children.

HILLINGDON.—Middlesex E.C. has arranged terms for the purchase of a site for the erection of a secondary school.

JARROW.—The T.C. recommend that application be made to borrow £1,360, the estimated expenditure for converting the Council's premises at the corner of Grange-road and Water-street into a school medical and dental clinic and maternity and child welfare centre.—Application is to be made for sanction to borrow £20,585 for the erection of 46 houses by direct labour.

KILKEEL.—The Down C.C. are to spend £1,355 to aid the stability and usefulness of Kilkeel Harbour.

LEICESTER.—The T.C. has approved the erection of 291 houses in various places.

LINCOLN.—A new public-house is to be built on a site in St. Giles, for Messrs. James Hole & Co., Ltd., brewers, Castle Brewery, Newark-on-Trent. Plans have been prepared by Messrs. Sheppard & Lockton, 24, Castlegate, Newark-on-Trent.

LONDON.—The M.H. has approved the expenditure, by the M.A.B., of £33,790, for the erection of a boiler house, engine room, coal store and chimney, and for the execution of engineering works in connection with the re-arrangement of the heating and hot water supplies at Levensden Mental Hospital.

LONDON.—The M.A.B. recommend that the installation of electric light at the Southern (Lower) Hospital at an estimated cost of £3,500 be approved, and also

the provision at an estimated cost of £407 of further additional patients' accommodation at St. Luke's Hospital in accordance with the plan submitted, subject to the sanction of the M.H.

LONDON (BATTERSEA).—The B.C. recommend that, subject to the Unemployment Grants Committee approving the proposed scheme of work, sewers be re-constructed at an estimated cost of £36,196 3s. 7d., and that application be made to the L.C.C. for their approval.

LONDON (CAMBERWELL).—The B.C. recommend that a supplemental estimate for the sum of £780 for the structural repair of Brown's-terrace, Avenue-road, be approved.

LONDON (COLINDALE).—The M.A.B. recommend that the provision, at a total estimated cost of £176, of equipment for the laboratories at King George V Sanatorium, Colindale Hospital, Pinewood, and Princess Mary's Hospital be approved.

LONDON (DEPTFORD).—The B.C. has received approval from the M.H. for loans for the expenditure for the whole site and for the erection of the first portion of the North Ward Baths' scheme.

LONDON (FOREST HILL).—The Lewisham B.C. recommend that plans and estimates be approved, and that the necessary steps be taken for the erection of the convenience at an estimated cost of £1,600.

LONDON (FULHAM).—The B.C. recommend that application be made to the L.C.C. for sanction to the borrowing of £23,114, for the proposed housing scheme in Wyfold-road.

LONDON (HACKNEY).—The B.C. are proposing to purchase a site at Stamford-hill, for the erection of a substation.—The Council recommend that land be purchased at Southwold-road and Mount Pleasant-hill, for which the Surveyor has submitted a scheme for the erection of flats.—Plans passed: D. Morris & Sons, Ltd., eighteen shops and flats, 160-173, Clapton-Common, and 222-236, Stamford-hill; W. Shurmer & Sons, factory premises at Amherst Works, in the rear of the dwelling houses, Northwold-road.

LONDON (LEWISHAM).—The B.C. passed plans: J. G. Stephenson (for L.C.C.), 191 houses on the Downham estate; George Watt, 10 houses, Casslee-road; H. R. Watt, 21 houses, Bellingham-road; Chas. Ingram & Co., nine houses, Como-road; W. T. Champion & Son, 26 houses, Tatnell-street; A. J. Glock, 36 houses, Brightling-road; Thos. H. Sawyer & Son, 11 houses, Embleton-road; Chas. Ingram & Co., 10 houses, Kilgour-street; A. J. Glock, 26 houses, Bexhill-road; R. J. Aitchison, 13 houses, Tatnell-street.

LONDON (POPULAR).—The B.C. are to construct a convenience at Island Gardens, at a cost of £1,500.—Messrs. J. Calder & Co., Ltd., have a scheme for embanking the recess and filling in the draw dock at Johnson-street, Cubitt Town, by the North Greenwich railway station. An estimate of £48,000 for buildings and plant in connection with the development of the electricity undertaking has been prepared for submission to the Electricity Commissioners.

LONDON (ST. PANCRAS).—The B.C. has instructed the architect to prepare plans for the Somers Town housing scheme.—Plans passed: Buildings, 53-79, Highgate-road.

LONDON (STEPNEY).—The B.C. has decided to carry out a small housing scheme at Brook-street, Ratcliffe, at an estimated cost of £3,152. Application is to be made to the L.C.C. for sanction to a loan of £3,467 for the purpose. The Council recommend that instructions be given to the Housing Committee to prepare an improvement scheme for the re-arrangement and reconstruction of the streets and houses within the area at Limehouse Fields. This scheme is estimated to cost £377,500.

LONDON (WOOLWICH).—The Borough Engineer is to submit a plan showing a suggested lay-out of land at the junction of Footscray and Southwood-road, Eltham, for the erection of baths, hall and branch library.—The Council recommend that the Borough Engineer carry out repairs at the Plumstead Baths, at an estimated cost of £338.—The B.C. recommend that the Borough Engineer also carry out repairs, &c., at Woolwich Cemetery, at an estimated cost of £451, and at Plumstead Cemetery, at an estimated cost of £145.—Plans passed: W. Childs, 10 bungalows, Avery Hill-road, Eltham; J. T. Wyatt, 14 houses, Dobell-road, Eltham.

LONDON (STAFFS).—Mr. A. E. Jones has prepared a scheme for the erection of 150 houses at Lightwood, London.

MANCHESTER.—The Public Health Committee has received provisional sanction from the M.H. to its scheme for extending the Abergree Sanatorium for consumptives. It is proposed to increase the accommodation to 540 beds, and the total cost of the scheme will be about £300,000.

MARTLEY.—The U.D.C. has approved plans for 162 houses.

MARLBOROUGH.—Tentative proposals have been made for the utilisation of the site now used for the disinfecting station, for the erection of a block of flats to accommodate people displaced by slum clearances.—In connection with the decision to add an extra story to the new blocks of tenements on the Fisherton site, Messrs. Ashley & Newman, the architects, report that this will involve an additional expenditure of £7,800, and provide additional accommodation for eighteen families.—The Borough Council have appointed a committee to report on the possibility of constructing an open-air swimming bath in Regent's Park.—The Central London Railway Co. propose to erect residential flats in Maida Vale.

MIRFIELD.—The E.C. has decided to carry out improvements at Hopton Council School at an estimated cost of £249.

NEAR BELLINGHAM.—The Hatcliffe Almshouses at Catford are to be rebuilt near Bellingham.

NELSON.—The T.C. recommended that application be made to the M.H. for sanction to borrow £30,000 for the erection of public abattoirs.—The General Purposes Committee recommended that application be made to the M.H. for sanction to erect 200 additional houses on the Marsden Hall Estate.

* See also our List of Contracts, Competitions, etc.

NORTHFLEET.—The U.D.C. has decided to proceed with a scheme for the erection of 76 houses on the Northfleet House estate.

NORWICH.—The T.C. proposed that 150 houses should be built of brick and 100 of concrete, and that 200 should be of the non-parlour type and 50 parlour houses. The Ministry has approved of the plans for these houses. Application for sanction to a loan of £14,290 for sewerage and sewage disposal works is to be made to the M.H.

NUNEATON.—The T.C. decided to apply to the M.H. for sanction to erect a further 200 houses on the Stockingford and Tomkinson-road housing sites.

OLDHAM.—The Midland Bank, Ltd., of Thredneedle-street, E.C.2, are to build a new branch bank on a site fronting Middleton-road and Rochdale-road, Royton. The architects are Messrs. Taylor & Simister, 29, Queen-street, Oldham.

PLYMOUTH.—The C.B. has instructed the surveyor to prepare plans and estimates for an unhealthy area improvement scheme, which includes High-street and Peel-street, Stonehouse, Castle-street and New-street, and Batter-street. The Borough Surveyor submitted plan and estimate of £2,800 for the provision of a bowling green pavilion and refreshment room accommodation on the Hoe on a site near the bowling green and adjacent to the drinking fountain, and the Council resolved that the plan be approved, and application be made to the M.H. for sanction to borrow the sum of £2,800 for the work. The Borough Surveyor is to obtain tenders for the erection of the building.

PONTEFRAC.—The R.D.C. have approved of plans for the erection of 10 houses each in Pontefract-road, Ferrybridge; Carleton-road, Carleton; Joffre-avenue, Glasshoughton; Pontefract-road, Glasshoughton, and Coronation-street, Glasshoughton. The R.D.C. has approved plans for the lay-out of 38 houses on the 2 site at Airedale.

PORTSMOUTH.—The public house in Castle-road, known as the "Barley Mow," and owned by Messrs. Brickwood & Co., Ltd., The Portsmouth Brewery, Admiralty-road, is to be rebuilt. Mr. A. E. Cogswell, architect, Prudential Buildings.

PRESTON.—The T.C. passed plans: J. Miller (Ashton Building Co.), 12 houses, The Crescent; J. W. Grange, six houses, Lytham-road, and eight houses, Grange-road. The Housing Committee of the Corporation has decided to erect a new electricity transformer station at the corner of Hawthorn-road and Elm-grove. A plan for the erection of a proposed handstand in Moor Park has been approved.

PURLEY.—Inquiries are being made by the Surrey E.C. for sites in Purley for the erection of a secondary school, a technical school, and a central school.

RYDE.—A scheme for the provision of additional shelters on the Esplanade is under consideration by the T.C.

SARRETT.—The P.C. selected plans for 16 non-parlour type houses.

SHREWSBURY.—The Corporation propose to retain possession of the surplus land on the Coton Hill estate, in view of the possibility of providing sites for subsidy houses, of widening Berwick-road and lowering the wall south of Berwick-road, and thereby opening out the beautiful view of the town over the Terrace gardens.

SIEMOUTH.—The M.H. has sanctioned a loan of £16,000 for sea defence works to be undertaken by the U.D.C. Plans have now been prepared for the lay-out of the Arcot estate, and tenders for houses are to be obtained. A hospital is to be erected by the Victoria Cottage Hospital Committee.

SLEAFORD.—The Kesteven C.C. are to purchase certain premises known as Lafford-terrace, to provide County Offices.

SOLIHULL.—The R.D.C. decided to erect another 24 non-parlour type of houses.

STAINES.—The R.D.C. approved the housing and town-planning scheme submitted by the surveyor.

STANLEY (YORKS).—Plans passed: Fourteen houses at Newton Hill, for Messrs. F. & M. Silverwood. Application for sanction to borrow £22,000 is being made to the M.H. for the erection of 38 houses.

STOKE-ON-TRENT.—The Sutton Trustees are purchasing land at Stoke Lodge for a housing scheme. In connection with the Scotia-road Bridge improvement, the City Engineer has arranged with the railway company's engineers to first advertise for tenders for the steel joints. The Corporation has agreed to the lay-out plan of land in Weston-road, Mear, submitted by Mr. Sherwin, architect, for Mr. W. B. Sutton. Messrs. Myett & Co. propose the erection of a bridge across the passage at Arthur-street, Cobridge. The M.H. held an inquiry into the proposed compulsory acquisition by the Corporation of land at Abbey Hulton for the purpose of a housing scheme. The T.C. has decided to erect 700 additional houses, 400 at Abbey Hulton and 300 at Meir, Longton.

SWANSEA.—The C.B. resolved that application be made to the M.H. for sanction to the borrowing of £10,000 for housing purposes. The Borough Architect submitted a lay-out plan, which the Council approved, of the surface land to be purchased, which included the following types of houses to be erected thereon: 12 parlour type and 68 non-parlour type houses. The C.B. are to carry out an electric main scheme at an estimated cost of £33,137, for which application is to be made to borrow that amount. Unemployed relief schemes are to be carried out at a cost of £200,000. The Council has authorised the Estate Agent to negotiate for the purchase of land in the vicinity of Cadle School for the enlarging of the school. The Borough Estate Agent submitted a plan showing the lay-out of land at Town Hill, west of May Hill, which the Housing Committee wish to appropriate sufficient for the erection of 250 houses, which the C.B. agreed to. The Borough Engineer and Surveyor reported that the Highways Committee were carrying out an improvement at the junction of Carmarthen-road and Gorse-road, involving the removal of the existing public urinal, which would be replaced by a new urinal on the site now indicated; this the Council approved. The Council approved the scheme of the

Medical Officer of Health to seek approval to an orthopaedic scheme involving a clinic at Dynevor-place. Application is to be made to the M.H. for approval to this scheme. Mr. Evans Rees proposes to build a factory and stores. A reinforced concrete building has been designed by A. P. Lloyd, A.R.I.B.A. 71, Lincoln's Inn Fields, W.C.2.

TADCASTER.—Plans passed by R.D.C.: Ten houses at Allerton Common, for Miss G. Ward.

TOTTENHAM.—The D.C. has approved plans for 85 houses to be erected by various firms, including 30 in St. Ann's, Cissbury and Lydford-roads, for Mr. Thos. Rowley. Plans were also approved for a factory for Messrs. Moore, West Green-road; and warehouse extension at Down-lane for Messrs. G. J. Lines.

TROWBRIDGE.—Formal sanction has been received from the M.H. to the borrowing of £8,000 in connection with the Charlotte-street housing scheme.

UPPINGHAM.—The R.D.C. has instructed the surveyor to prepare plans for the conversion of the hospital on the Leicester-road into 14 cottages. Mr. G. E. Dolph is the surveyor.

WAKEFIELD.—The West Riding E.C. are to give notice of authority to erect a new Middle School at Featherstone with accommodation for upwards of 300 children. The Higher Education Committee propose to acquire two farms at Askham Bryan for experimental farm work, and to carry out improvements there, at a total estimated cost of £36,000. Plans are to be prepared for the erection of a modern out-patients' building at the Clayton Hospital.

WALSALL.—The T.C. has decided to erect a new medical clinic and handicraft centre in Littleton-street, at a cost of £2,250.

WALTON-ON-TRE-NAZE.—A new hotel, to be known as the Naze Links Hotel, is to be built at a cost of about £40,000. Plans have been prepared by Mr. F. Durant, "Maisonnette," Walton-on-the-Naze.

WEMBLEY.—A site in East-lane is being acquired by the Middlesex E.C. for the erection of an elementary school.

WESTHAMPTON.—The R.D.C. are to erect 12 houses at Singleton and six at East Dean, for which tenders are being invited.

WHITLEY AND MONKESEATON.—The U.D.C. are proposing to erect a bathing pool.

WILLESDEN.—The U.D.C. recommend the Borough Engineer to carry out the necessary internal decorations to the lodges in Roundwood Park and Willesden Cemetery. The Borough Engineer is to obtain tenders for the exterior painting of 259 houses. Application is to be made to the M.H. for sanction to the raising of a loan of £20,000 for housing purposes. Tenders are to be obtained for the erection of houses on the Brentfield estate. Plans passed: Electricity transformer house, Neasden-lane, Neasden, by S. A. S. Yeo, for the Royal Sovereign Pencil Co.; Boy Scouts' hall, St. Gabriel's Church Hall, Chichele-road, Cricklewood, by J. Hudson, for the Trustees of the Church Hall; factory, Milton-avenue, Harlesden, by J. Lawrence, for Blunt & Sons.

WORCESTER.—The Worcester C.C. are to erect 24 police cottages in various parts of the county.

FIRES.

LEYTONSTONE.—A serious fire occurred in the build ings of the West Ham B.G. Central Home.

Technical College, Wolverhampton.

The Technical College Joint Sub-Committee of the Wolverhampton Education Committee have recommended that the provision of the complete Technical College, costing altogether about £150,000, be proceeded with as soon as possible.

Factory Fire.

What might have been a disastrous fire broke out recently at Messrs. Rippers, Ltd., Castle Hedingham Works. The factory is operated by five gas engines, developing a total of over 1,000 h.p. on the suction gas principle, the waste, sawdust and shavings from all departments being used for fuel. A Sturtevant exhausting plant collects this waste in a central storage chamber situated over the power house, above which a wooden staging supports two cyclone settling chambers. Fortunately, the whole power plant is housed in one brick and ferro-concrete building, isolated from any other department, and it was thus possible to confine the outbreak to the one building, as otherwise owing to the exceptionally dry weather which has prevailed, the whole factory would have been gutted in a very short time. Amongst other preventive measures against fire, recently installed, are two tanks—one of 100,000 gallons capacity, situated near the joiners' shop, and the other of 40,000 gallons, underground under the timber mill—so that an ample supply of water was at hand. Within five hours of the first alarm the fire was well in hand; and immediate plans were put into operation for resuming work. The damage sustained has been considerable, but arrangements have been made to ensure that all orders in hand are being pushed forward with a minimum of delay. The firm's Standard Joinery Service is unaffected.

PATENTS.

APPLICATIONS PUBLISHED.*

232,814.—J. M. Moreland: Devices for closing doors and for holding them in an adjusted position.

232,818.—S. S. G. Dicker (M. Hutchinson): Wood-working machines.

232,584.—A. Kirkaldy: Anodes for preventing corrosion of metallic surfaces.

232,898.—L. G. Patrouilleau and Alumine et Derives: Process for the manufacture of aluminous cements.

233,001.—E. B. Hack and E. J. Burt: Manufacture of concrete.

233,033.—W. Simkin and E. Evans: Brick, pipe, and like kilns.

233,087.—K. D. Mackenzie and J. P. MacKinnon: Floors.

233,105.—B. C. Barton: Reinforced concrete walls.

232,155.—Soc. Anon. des Ciments Francais, and Bureau d'Organisation Economique: Manufacture of cement.

233,158.—G. Ollert: Balancing of stresses set up in lattice-work structures.

233,174.—A. O. Sarson and V. F. Lardner: Glazing-bars.

233,230.—H. Freeman and F. P. Bloomfield: Floors, roofs, and ceilings, and hollow reinforced concrete girders therefor.

232,232.—T. Franks: Casement stays.

255,521.—Naamlooze Vennootschap Machinerieen-en Apparaten Fabrieken: Pressure frames for vertically-guided sliding windows.

266,528.—International Copperclad Co.: Method of and apparatus for producing roofing elements.

233,764.—E. C. R. Marks (Polysius, G.): Process for burning raw cement sludge.

233,778.—H. D. P. Huizer: Preservation and treatment of wood.

233,795.—F. F. Mote: Mould-board apparatus for the erection of concrete structures.

233,796.—F. F. Mote: Mould-board apparatus for the erection of concrete structures.

233,807.—H. J. V. Berthelsen, A. L. Hansen, and J. Jensen: Machines for joinery work.

233,819.—A. Brune: Manufacture of plates, tiles, and the like articles, from lime and cement.

233,870.—J. W. E. Laker: Machines for grinding and mixing paints and other substances.

233,912.—A. E. Farwell: Scaffolding.

233,913.—H. Dyke: Doors.

233,920.—L. A. Dexter: Lath construction.

233,928.—A. Heidet: Scaffolding and staging platforms.

233,772.—A. G. Rotinoff: Piles and pile-driving.

233,386.—G. K. Green: System or means for building-up concrete and like monolithic structures in situ.

233,393.—W. McCaughan: Walls for buildings.

233,450.—V. E. Heathcote-Hacker: Attachments for fireplaces.

233,453.—W. J. Brise: Method and apparatus for facilitating the laying of bricks.

233,455.—P. Davies: Plain and reinforced-concrete structures.

233,475.—F. T. Walker: Chimneys.

233,488.—English Electric Co., Ltd., and P. W. Seewer: Pipe connections.

233,531.—Dr. K. Ritter and E. Hartel: Flooring-tiles.

233,548.—A. A. Thornton (National Brass Co.): Sliding latches.

233,560.—L. A. Pitcher: building-blocks.

233,623.—J. Boswell: Construction of concrete structures.

233,626.—A. R. Wells: Interlocking, self-jointing, non-slipping paving-blocks.

226,837.—J. M. Blasco: Drums applicable to concrete or mortar mixers.

* All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.		£	s.	d.
Best Stocks	4	3	6	
Second Hard Stocks	3	10	6	
Per 1,000, Delivered at London Goods Stations.		£	s.	d.
Flettons, at	2 13 3			
King's Cross	2 13 3			
Do. grooved for plaster	2 15 3			
Do. Bullnose	3 8 3			
Best Stourbridge Fire brick—				
2 1/2 in.	8 11 0			
3 in.	10 3 0			
GLAZED BRICKS—				
Best White				
Ivory, and				
Salt Glazed				
Stretchers	2 0 0			
Headers	2 10 0			
Quoins, Bull-				
nose and 4 in				
Flats	23 10 0			
Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.				

BREEZE CONCRETE SLABS.

Delivered London		£	s.	d.
2 in. per yd. super	1 11			
2 1/2 in. "	2 4			
3 in. per yd. super	2 9			
4 in. "	3 6			
Thames Ballast	10 6 per yd.			
Pit Sand	13 9			
Thames Sand	14 6			
Best Washed Sand	14 6			
3 in. Shingle for Ferro-				
Concrete	12 9			
1 in.	14 0			
1 in. Broken Brick	11 6			
Pan Breeze	7 6			

Per ton delivered in London area in full van loads.				
Standard Specification. Test £2 18 0 to £3 3 6				
51s. alongside at Vauxhall in 80-ton lots.				
Ferrocrete per ton extra on above	0 10 0			
Super Cement (Waterproof)	4 8 0			
Roman Cement	8 15 0			
Parian Cement	5 15 0			
Keene's Cement, White	5 10 0			
" Pink	3 0 0			
Plaster, Coarse, Pink	3 12 6			
" White	5 12 0			
" Fine	3 9 0			
Sliprite, Coarse	3 17 0			
" Finish	2 11 9			
Grey Stone Lime	2 11 9			
Chalk Lime	2 4 6			
Best Ground Blue Lias lime	17 0 0			
Hall	1 12 0			
Granite Chippings	1 12 0			
NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.				
Stourbridge Fireclay in sacks 35s. 0d. per ton at rly. dpt.				

STONE.

BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube.	2 9 1/2
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube.	2 11 1/2
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube.	4 4
Do. do. delivered on road wagons at above stations, per ft. cube.	4 5
White washed, 3d. per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every foot over 20 ft. average, and 1d. beyond 30 ft.	

HORTON-WOOD STONE—				
Delivered at any Goods Station, London.				
Small random blocks, up to 10 ft. cube. P. ft. cb.	7 0			
Random blocks from 10 ft. and over	17 0			
Sawn two sides	27 0			
Sawn three or four sides	32 0			
YORK STONE, BLUE—Robin Hood Quality.				
Delivered at any Goods Station, London.				
6 in. sawn two sides landings to sizes (under 30 ft. super.)	5 6			
6 in. rubbed two sides, ditto	6 0			
3 in. sawn two sides slabs (random sizes)	2 3 1/2			
2 in. to 2 1/2 in. sawn one side slabs (random sizes)	1 6 1/2			
1 1/2 in. to 2 in. ditto, ditto	1 4			
HARD YORK—				
Delivered at any Goods Station, London.				
Scalloped random blocks	6 3			
6 in. sawn two sides landing to sizes (under 40 ft. super.)	5 1 1/2			
6 in. rubbed two sides ditto	6 1 1/2			
4 in. sawn two sides slabs (random sizes)	2 10			
3 in. ditto ditto	2 1 1/2			
2 in. self-faced random flags	9 0			

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.	
--	--

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 x 11	232 0	3 x 6	223 0
4 x 9	228 0	3 x 11	223 0
4 x 8	226 0	2 x 11	223 0
4 x 7	225 0	3 x 9	225 0
3 x 5	224 0	2 x 9	225 0
3 x 7	223 0	3 x 4 1/2	223 0
2 1/2 x 7	222 0	3 x 4	223 0
1 x 11	232 0	1 x 9	230 0
PLANKED BOARDS.			
1 x 11	232 0	1 x 9	230 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
1 1/2	21/-	1 1/2	32/6
1 1/4	23/-	1 1/4	37/6
1	25/-		

TONGUED AND GROOVED FLOORING.		Inches.	per sq.
1 1/2	25/-	1 1/2	16/6
1 1/4	32/6	1 1/4	20/-
1	37/6	1	25/-

BATTENS.		s.	d.
3/4 x 2	2	6	per 100 ft.

SAWN LATHS.

Per bundle	1" AND UP THICK.	0 2 4
------------	------------------	-------

Dry Austrian Wainscoat, per ft. cube	0 16 0 to 0 18 0
Dry American and/or Japanese Figured Oak, ft. cube	0 15 0
Dry American and/or Japanese Plain Oak, ft. cube	0 11 0 to 0 13 0
Dry sq. edged Honduras Mahogany, ft. cube	0 16 0 to 0 18 0
Dry Log cut Honduras Mahogany, ft. cube	0 18 0 to 1 1 0
Dry Cuba Mahogany, ft. cube	1 4 0 to 1 10 0
Dry Teak, ft. cube	0 13 0 to 0 15 0
Dry American Whitewood, ft. cube	0 11 0 to 0 14 0
Best Scotch glue, per cwt.	4 10 0 to
Liquid Glue, per cwt.	4 7 0 to 5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£	s.	d.		£	s.	d.
24 by 12	....	37	12	6	18 by 10	....	21 2 6
22 by 12	....	34	0	0	18 by 9	....	18 12 6
22 by 11	....	31	5	0	16 by 10	....	17 12 6
20 by 12	....	29	15	0	16 by 8	....	13 15 0
20 by 10	....	25	12	6			

TILES.

Per 1,000 f.o.r. London.		£	s.	d.
Best machine-made tiles from Broseley or				
Staffordshire district	5	12	6	
Ditto hand-made ditto	5	17	6	
Ornamental ditto	6	2	6	
Hip and valley tiles	0	9	6	
(per dozen)	0	9	0	

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—		£	s.	d.
R.S. Joists, cut and fitted	13	10	0	
Plain Compound Girders	15	10	0	
Stanchions	17	10	0	
In Roof Work	20	10	0	

MILD STEEL ROUNDS.

To London Station, per ton.		£	s.	d.
Diameter.	1/2 in. to 1 1/2 in.	13	10	0
1 1/2 in. to 2 1/2 in.	13	10	0	

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2 1/2 per cent. less above gross discounts, carriage forward if sent from London Stocks.)

Tubes.		Fittings.		Flanges.	
Sizes	Under	Over	Under	Over	Under
1 1/2 to 2 1/2	55	47 1/2	50	57 1/2	60 1/2
Black Gas	50	42 1/2	45	52 1/2	55 1/2
Blue Water	45	37 1/2	40	47 1/2	50 1/2
Red Steam	40	37 1/2	40	47 1/2	50 1/2
Galv'd Gas	33 1/2	32 1/2	35	42 1/2	45 1/2
" Water	27 1/2	27 1/2	30	37 1/2	40 1/2
" Steam					
C.I. HALF-ROUND GUTTERS—London Prices, ex Works.					
Per yd. in 6 ft.					
lengths.					
3 in.	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
3 1/2 in.	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4
4 in.	1 1/5	1 1/5	1 1/5	1 1/5	1 1/5
4 1/2 in.	1 1/6	1 1/6	1 1/6	1 1/6	1 1/6
5 in.	1 1/7	1 1/7	1 1/7	1 1/7	1 1/7
O.G. GUTTERS.					
3 in.	1 1/7	1 1/7	1 1/7	1 1/7	1 1/7
3 1/2 in.	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8
4 in.	1 1/9	1 1/9	1 1/9	1 1/9	1 1/9
4 1/2 in.	1 1/10	1 1/10	1 1/10	1 1/10	1 1/10
5 in.	1 1/11	1 1/11	1 1/11	1 1/11	1 1/11

RAIN-WATER PIPES, &c.

Per yd. in 6 ft.		Pipe.	Bends, stock angles.
2 1/2 in. plain	1 1/11	1 1/11	1 1/11
3 in.	2 1/4	2 1/4	2 1/4
3 1/2 in.	2 1/10	2 1/10	2 1/10
4 in.	3 1/8	3 1/8	3 1/8

L.C.C. COATED SOIL PIPES—London Prices, ex Works.

Bends, stock Branches.		Pipe angles, stock angles.	s.	d.	s.	d.
2 in. per yd. in 6 ft. plain	2 11	2 3	2 9			
2 1/2 in.	3 5	2 6	3 5			
3 in.	4 1	2 9	4 0 1/2			
3 1/2 in.	4 5 1/2	3 5	4 8 1/2			
4 in.	4 11 1/2	3 9 1/2	5 5 1/2			

L.C.C. COATED DRAIN PIPES—London Prices ex Works.

Bends, stock Branches.		Pipe angles, stock angles.	s.	d.	s.	d.
3 in. per yd. in 9 ft. lengths	4 3	5 9	7 8			
4 in.	6 3	6 11	9 6			
5 in.	7 10	12 0	13 3			
6 in.	9 6	15 0	20 9			
Gasket for jointing	38/6	per cwt.				

IRON—

Common Bars		£	s.	d.	£	s.	d.
Staffordshire Crown Bars—		13	10	0	14	10	0
good merchant quality		14	5	0	15	5	0

Staffordshire "Marked		£	s.	d.	£	s.	d.
Bars	16 10 0				13 10 0		
Mild Steel Bars	11 0 0				12 0 0		
Steel Bars, Ferro-Concrete quality, basis price	16 0 0				17 0 0		
Hoop iron, Galvanised	31 0 0				32 0 0		
Soft Steel Sheets, Black—							
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	14 10 0				15 10 0		
" " " 24 g.	13 10 0				16 10 0		
" " " 26 g.	17 10 0				18 10 0		
Sheets Flat Best Soft Steel, (A.R. & C.A. quality—							
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	19 10 0				21 10 0		
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g.	21 10 0				22 10 0		
and 24 g.	23 10 0				25 10 0		
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	19 0 0				20 0 0		
Flat and Galvanised Corrugated Sheets—							
Ordinary sizes, 6 ft. by 9 ft. to 20 g.	19 10 0				20 10 0		
Ordinary sizes, 6 ft. by 9 ft. to 22 g. and 24 g.	22 10 0				23 10 0		
Ordinary sizes, 6 ft. by 9 ft. to 26 g.	23 10 0				24 10 0		
Sheets Galvanised Flat, Best quality—							
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	22 10 0				23 10 0		
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0				26 10 0		
Best Soft Steel Sheets, 26 g.	27 0 0				27 0 0		
Cut Nails, 3 in. to 6 in. (under 3 in. usual trade extras.)	21 0 0				21 10 0		

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)		£	s.	d.
LEAD—Sheet, English, 4 lb. and up	45	0	0	
Pipe in coils	46	10	0	
Soil Pipe	48	10	0	
Compo pipe	49	10	0	
NOTE.—Country delivery, 30s. per ton extra; lots under 3 cwt., 3s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes 2s. 3cwt. extra.				
Old lead, ex London area, at Mills	31	0	0	
Do., ex country, carriage forward	32	0	0	

COPPER.

		per lb.	1	1
Seamless Copper tubes (basis).....			2	3
Strong sheet.....	"		2	4
Thin.....	"		2	3
Copper nails.....	"		2	4
Copper wire.....	"			

PRICES CURRENT OF MATERIALS (contd.)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
15 oz. fourths .. 3 1/2	1.	32 oz. fourths .. 10 1/2	1.
15 " thirds .. 4 1/2	1.	32 " thirds .. 10 1/2	1.
21 " fourths .. 4 1/2	1.	Obscured Sheet, 15 oz. 1/2	1.
21 " thirds .. 5 1/2	1.	21 " 5 1/2	1.
26 " fourths .. 5 1/2	1.	Fluted 15oz. 6 1/2 d. 21oz. 9 1/2 d.	1.
26 " thirds .. 7 1/2	1.	En'led 15oz. 5 1/2 d. 21 oz 7 1/2 d.	1.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
1/2 Rolled plate .. 4 1/2	1.
1/2 Rough rolled .. 5 1/2	1.
1/2 Rough rolled .. 5 1/2	1.
1/2 Figured Rolled, Baltic, Oceanic, Arctic, Stip-polyte, and small and large Flemish white .. 6 1/2	1.
1/2 Ditto, tinted .. 9d.	1.
1/2 Rolled Sheet .. 6d.	1.
1/2 White Rolled Cathedral .. 5 1/2	1.
1/2 Tinted do. .. 7 1/2	1.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

	Per gallon.		Per gallon.
	£ s. d.		£ s. d.
Oak Varnish .. Outside	0 14 0		
Fine ditto .. ditto	0 18 0		
Fine Copal .. ditto	0 18 0		
Pale Copal .. ditto	1 0 0		
Pale Copal Carriage .. ditto	1 4 0		
Best Ditto .. ditto	1 12 0		
Floor Varnish .. Inside	0 18 0		
Fine Pale Paper .. ditto	0 18 0		
Fine Copal Cabinet .. ditto	1 2 0		
Fine Copal Flattening .. ditto	1 0 6		
Hard Drying Oak .. ditto	0 18 0		
Fine Hard Drying Oak .. ditto	0 19 0		
Fine Copal Varnish .. ditto	1 0 0		
Pale ditto .. ditto	1 2 0		
Best ditto .. ditto	1 12 0		
Best Japan Gold Size ..	0 12 6		
Best Black Japan ..	0 10 6		
Oak and Mahogany Stain (water) ..	0 12 0		
Brunswick Black ..	0 7 6		
Berlin Black ..	0 14 6		
Knotting (patent) ..	1 5 0		
French and Brush Polish ..	0 17 0		
Liquid Dryers in Terebinth ..	0 9 0		
Cupress Black Enamel ..	0 7 0		

STATUTORY MEASUREMENTS OF DISTANCE

A CURIOUS point was raised and decided in the case United Counties Omnibus and Road Transport Company v. Mayor, etc., of Northampton (*The Times*, June 30).

By the Northampton Corporation Act, 1922, the Corporation had powers to provide, maintain, and run omnibuses within the borough, but in the interests of a private company which was maintaining an omnibus service both within and outside the borough at the time the Bill was before Parliament, a clause had been inserted (section 33 in the Act), that the Corporation should not provide, maintain or run any omnibus service "beyond a distance of two and a quarter miles from the town hall upon any route on which the limited company are running omnibus services at the passing of this Act."

The question before the Court was how this measurement of distance was to be applied, the company contending that the distance was to be measured along the route traversed, where as the Corporation contended that the distance must be measured according to the "Measurements of Distances" prescribed by the Interpretation Act, 1889: "In the measurement of any distance for the purposes of any Act passed after the commencement of this Act that distance shall, unless the contrary intention appears, be measured in a straight line on a horizontal plane." The Court held that as no contrary intention appeared in the private Act the Interpretation Act applied, and therefore the distance was to be measured as above, or, as the Court put it, "as the crow flies."

If the streets in question follow a circuitous route it appears an interesting mathematical problem will have to be worked out.

Obituary.

The death has occurred of Mr. William Ruckley, 1, Llanover-street, Cadoxton, Barry, of the firm of Messrs. W. Ruckley & Sons, builders.

The death has taken place of Mr. John Smith, builder, Llanelly, who for some years was a member of the Llanelly District Council.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes accepted. † Denotes provisionally accepted.
§ Denotes accepted subject to modifications.
‡ Denotes recommended for acceptance.

ABERDEEN.—Tramway car sheds at Mannofield, for the T.C. Mr. J. Gordon, Burgh Surveyor:—

*Mason work—Edgar Gauld & Co.	£2,751	15	0
*Carpenter work—W. D. Forbes & Co.	1,469	10	0
*Cement concrete—Clark & Chapman	3,941	0	0
*Steel work—F. Braby & Co.	1,625	0	0
*Plumber work—Alexander W. Wood	669	12	6
*Heating work—J. A. Ross	487	0	0
*Slater work—J. Leslie & Son	600	4	7
*Painter work—Marshall, Watt & Co.	357	0	0

(All of Aberdeen.)

ALFRETON.—210 houses for the Blackwell R.D.C., as follows: 40 at Blackwell, 40 Pinxton, 90 Shirebrook, and 40 at South Normanton. Mr. A. H. Elliott, architect, 8, Union-street, Mansfield:—

*F. G. Chester, Nottingham—	
(a) For parlour .. per house	£485
(b) For Parlour ..	475
For non-parlour ..	440

BIRKENHEAD.—Secondary school for girls, in Park-road South, for the C.B.:—

*J. A. Milestone & Son, Wallasey	£54,869
----------------------------------	---------

BLACKBURN.—160 houses on the Brownhill housing site, for the C.B. Mr. A. T. Gooseman, Borough Engineer:—

†T. Higson & Son, Ltd.	
†Caton & Duckworth.	
†J. Cronshaw & Sons, Ltd.	
†J. Fecitt & Son, Ltd.	

(All of Blackburn.)

BOGNOR.—Sixteen cottages, for the U.D.C.:—

*E. L. Noye	£7,206
-------------	--------

BOGNOR.—For (a) two flats and (b) six pairs of parlour-type houses, for the U.D.C.:—

*H. W. Seymour	(a) £920 17 6
	(b) 6,319 4 0

BOGNOR.—Fourteen cottages, for the U.D.C.:—

*A. E. Chenly, Ltd.	£6,510
---------------------	--------

BOURNEMOUTH.—Walls at Overstrand, for T.C.:—

*M. Loader	£647 16 3
------------	-----------

BOURNEMOUTH.—Alteration at Lowther-road Hospital, for T.C.:—

*T. Conway	£760
------------	------

BRIGHTON.—Fifteen houses in Hereford-street for the C.B.:—

F. G. Cressy, Ltd.	£10,331
Kirk & Randall, Ltd.	9,735
*Structural Contractors, Ltd.	9,505

(All of London.)

BRISTOL.—Painting certain schools, for the T.C.:—

*A. P. Derrick—(Ashton Gate)	£440 4 0
*A. P. Derrick—(Hotwells Council)	464 5 0

*A. Weston & Son—(Mina-road Girls' and Infants')	450 0 0
*G. Sanders—(Park-place R.C.)	128 16 0
*H. C. Wakefield—(St. John's)	165 18 9
*G. Sanders—(St. Mary Redcliffe)	174 12 0
*W. Ash & Son—(Windmill Hill)	120 0 0
*W. Ash & Son—(Westbury Park)	110 0 0

(All of Bristol.)

CARDIFF.—Central heating of (a) Clwys-road, and (b) Wood-street Council schools, by a low-pressure heating installation, for the E.C.:—

* (a) E. Fitton, Manchester	£735
* (b) E. Porman, Newport (Mon)	630

CHESTER.—For adaptation, &c., of Queen-street slaughter house, for the T.C.:—

*E. Pritchard, Chester	£1,030
------------------------	--------

CHESTERFIELD.—Sewage disposal works at Williamsthorpe, for the R.D.C. Mr. H. Taylor, surveyor:—

*T. Beighton, Brimington.	
---------------------------	--

CHIPPENHAM.—Internal decoration work to houses in Ladyfield, for the T.C.:—

*Leighfield Bros.	£300
*C. E. Stevens	310

CIRENCESTER.—Alterations to the waterworks pumping station at Lewis-lane, for the U.D.C. Mr. E. J. Silcock, engineer, 25, Victoria-street, S.W.1:—

*Orchard & Peer, Stroud	£1,650
-------------------------	--------

CONGLETON.—Extensions to Brown-street Mill, for Messrs. W. A. Lowe & Co., Ltd. Mr. J. H. Walters, L.R.I.B.A., architect, Moody-street:—

S. Barnett, Congleton	£1,569	0	0
C. W. Machin & Son, Biddulph	1,495	0	0
J. Standeven, Congleton	1,383	0	0
*T. & E. Cooke, Congleton	1,265	0	0
S. Machin, Biddulph	1,235	16	6

DEVIZES.—Fourteen houses, for the T.C. Mr. A. Jakeway, Borough Surveyor:—

Arthur Guest, Langport	£6,528	8	8
F. Rendell & Sons, Ltd., Devizes	6,380	0	0
*L. Maslen & Sons, Devizes	6,158	0	0

DORCHESTER.—Engine room building at electricity works, for the T.C.:—

†Lee (Dorchester Building Guild)	£734	2	1
----------------------------------	------	---	---

DUMFRIES.—Bridge over the River Nith, for the Dumfries and Maxwelltown Traffic Bridge Committee:—

*M. Bride	£29,950
-----------	---------

EAST HAM.—Pavilion in Gooseby's Playing Fields, for the B.C.:—

*W. J. Cearn & Son.	
---------------------	--

EPSOM.—Ferro-concrete roof and alterations and additions to the existing buildings at East-street, and the Pump House at the Downs-road Reservoir. Mr. W. Vaux Graham, engineer, 5, Queen Anne's Gate, S.W.1:—

H. & F. Roll	£5,860	6	6
Henry Taylor & Son	5,818	6	6
*Copley Bros., Ltd.	5,719	6	6

(All of Epsom.)

ERITH.—100 Houses, for the U.D.C. Mr. H. Hind, engineer. Quantities by the Engineer and Surveyor to the Council:—

*G. H. Gunning & Sons, Ltd., Erith	£55,035
------------------------------------	---------

ERITH.—Extensions at the electricity works, Walnut Tree-road, for the U.D.C.:—

*H. Friday & Sons, Erith	£558
--------------------------	------

FENTON.—Repairing town hall roof, for Stoke T.C.:—

*B. James (Penkhull)	£463 5
----------------------	--------

GATESHEAD.—New King Edward-street schools for the E.C.:—

*Lumsden, Newcastle	£24,000
---------------------	---------

GELLYGAER.—Underground convenience at Bargoed, for the U.D.C. Mr. F. Read, Engineer and Surveyor, Council Offices, Hengoed, near Cardiff:—

F. & R. Lewis, Bargoed	£2,004
H. J. Davies & Son, Bargoed	1,996
W. Webb, Hengoed	1,845
W. Blackburn, Treharis	1,830
*G. W. Davies & Sons, Ystrad Mynach	1,676

GLASGOW.—Reinforced concrete bridge over the Duntocher Burn, for the Corporation:—

*Sir R. M'Alpine & Sons	£24,630
-------------------------	---------

GLASGOW.—Refreshment room at the cattle wharf for the T.C.:—

*J. Thaw	£1,780 3 2
----------	------------

GLASGOW.—Convenience at Garnock-street, for the T.C.:—

†Constructional work—	
†R. Murdoch & Son	£1,067 1

GLASGOW.—Buildings at Mearns Kirk sanatorium for the T.C.:—

†R. Rogerson & Co.: Excavator and brick work	£85,526 14 7
Carpenter and joiner work	22,111 8 0

GLASGOW.—Lavatory accommodation at Kinning Park Public Halls, for the T.C.:—

†J. Paterson & Co., Ltd.	£198
--------------------------	------

GLASGOW.—Construction of the Glasgow-Edinburgh-road, Section B.C., Baillieston to Newhouse, for the T.C.:—

†Shanks & M'Ewan, Ltd.	£253,587 18 4
------------------------	---------------

(Subject to M.T. approval.)

GLASGOW.—Painter work at the new buildings in Stockwell-street, for the T.C.:—

†A. Anderson	£1,675 3 3
--------------	------------

GLASGOW.—Erection of an alternating current sub-station in Maxwell Park, for the T.C.:—

†R. Murdoch & Son	£458
-------------------	------

GLASGOW.—Heating and ventilating installation at the district library, Whiteinch, for the T.C.:—

†James Combe & Son, Ltd.	£692
--------------------------	------

HOLYWELL.—Eight houses on the Cross-road site, for the U.D.C.:—

*J. L. Williams, Holywell	each £590
---------------------------	-----------

ILFORD.—Widening Cranbrook-road, for U.D.C.:—

*D. T. Jackson	£31,200 5 3
----------------	-------------

ILFORD.—Twelve houses in Thorald-road, for U.D.C.:—

†S. E. Moss, Southend	£8,325
-----------------------	--------

LEAVESDEN.—Boiler house and coal store, at the Mental Hospital, for the M.A.B.:—

*R. Tonge, Watford	£8,661
--------------------	--------

(Subject to M.H. approval.)

LEEDS.—Extensions to Lyons' Works, Templear-street, for Mr. S. H. Lyons. Messrs. G. F. Bowman & Son, architects and surveyors, 3, Greek-street:—

*Brick—Samuel Flockton	
*Joiners—John Trickett, Son, & Co.	
*Plumber—F. L. Armistage	
*Iron and steel—Leonard Cooper, Ltd.	
*Slaters—Watson & Worsclop	
*Painters—Roylance & Horsman	

(All of Leeds.)

LEEDS.—Blacksmiths' shop at Manor-road, Holbeck, for the Corporation:—

†J. Ferguson & Sons, Ltd.	
---------------------------	--

(Continued on p. 37.)

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	s. d.
		11 0
Add if in clay	" "	1 0
Add for every additional depth of 6 ft.	" "	0 6
Planking and strutting to trenches	per foot super	0 5
Do. to sides of excavation, including shoring	" "	1 0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	s. d.
		32 0
Add if in underpinning in short lengths	" "	7 0
Add if in floors 6 in. thick	" "	3 3
Add if in beams	" "	3 9
Add if aggregate 1, 2, 4	" "	10 0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2 6

BRICKLAYER.

Reduced brickwork in lime mortar and Fletton bricks	per rod	£ s. d.
		30 0 0
Add if in stocks	" "	7 10 0
Add if in Staffordshire blues	" "	22 0 0
Add if in Portland cement and sand	" "	1 10 0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0 0 1½
--	---------------	--------

POINTING.

Neat flat struck or weathered joint	" "	0 0 3
-------------------------------------	-----	-------

ARCHES.

Extra only to the price of ordinary brickwork:—		
Fair external in half brick rings	" "	0 0 10
Axed in stocks	" "	0 1 9
Rubbed and gauged jointed in putty camber or segmental	" "	0 6 0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0 1 0
Setting ordinary register grates and stoves	each	1 0 0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	" "	4 15 0

ASPHALTER.

Half-inch horizontal damp course	per yard sup.	s. d.
		4 3
Three-quarter-inch vertical damp course	" "	8 6
¾ inch on flats in two thicknesses	" "	6 3
Angle fillet	per foot run	0 3
Skirting and fillet 6 in. high	" "	1 2

MASON.

York stone templates fixed	per foot cube	13 0
York stone sills fixed	" "	22 0
Bath stone and all labour fixed	" "	10 6
Portland stone fixed	" "	20 0

SLATER.

Welsh 16 in. x 8 in. 3 in. lap, including nails	per square	72 9
Do. 20 in. x 10 in. Do. Do.	" "	80 9
Do. 24 in. x 12 in. Do. Do.	" "	90 0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5 0
Do. joists	" "	5 6
Do. roofs, floors and partitions	" "	6 0
Do. trusses	" "	8 6

Deal rough close boarding	per sq.	¾" 35/6 1" 40/- 1½" 45/- 2" 72/-
Flat centering for concrete floor, including struts or hangers	" "	s. d. 50 0
Do. to beams	per ft. sup.	1 0
Centres for arches	" "	1 6
Gutter boards and bearers	" "	1 0

FLOORING.

Deal-edges shot	per sq.	¾" 44/6 1" 53/- 1½" 60/6 2" 65/-
Do. tongued and grooved	" "	49/- 57/6 65/-
Do. matchings	" "	45/- 51/-
Moulded skirting, including backings and grounds	per ft. sup.	1/6 1/9 2/0 2/6

SASHES AND FRAMES.

One-and-a-half moulded sashes or casements	per foot super	s. d. 1 10
Two Do. Do. Do.	" "	2 1
Add for fitting and fixing	" "	0 3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights: average size	" "	3 9

DOORS.

Two-panel square frame	per ft. sup.	1½" 2/1 1½" 2/4 2" 2/6
Four-panel Do.	" "	2/5 2/8 2/11
Two-panel moulded both sides	" "	2/8 2/11 3/2
Four-panel Do.	" "	2/11 3/2 3/5

CARPENTER AND JOINER—continued.

FRAMES.

Deal wrot moulded and rebated	per foot cube	s. d. 14 0
		1" 1½" 1½" 1½"
Plain deal jamb linings framed	per ft. sup.	1/7 1/8 1/11
Deal shelves and bearers	" "	1/4 1/6 1/9
Add if cross tongued	" "	2d. 2d. 2d.

STAIRCASES.

Deal treads and risers in and including rough brackets	1" 1½" 1½" 2"	2/1 2/4 2/9 — 2½"
Deal strings wrot on both sides and framed	1/8 2/ 2/2 2/8	—

Housings for steps and risers	each	s. d. 0 11
Deal balusters, 1 in. x 1½ in.	per ft. run.	0 9
Mahogany handrail; average 3 in. x 3 in.	" "	6 0
Add if ramped	" "	11 10
Add if wreathed	" "	23 9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS)

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

Roller steel joists	per cwt.	s. d. 16 3
Plain compound girders	" "	19 0
Do. stanchions	" "	21 9
In roof work	" "	27 6

RAIN-WATER GOODS.

Half-round plain rebated joints	ft. run	3" 1/6 4" 1/9 5" 2/- 6" 2/6
Ogee Do. Do.	" "	1/9 2/- 2/6 3/3
Rain-water pipes with ears	" "	1/9 2/7
Extra for shoes and bends	each	4/4 5/11
Do. stopped ends	" "	1/11 2/4½ 3/7 4/-
Do. nozzles for inlets	" "	2/2 2/7 3/10 4/3

PLUMBER.

Milled lead and laying in flashings and gutters	per cwt.	s. d. 60 0
Do. Do. in flats	" "	59 0
Extra labour and solder in coated cesspools	each	6 9
Welt joint	per ft. run.	0 6
Soldered seam	" "	1 6
Copper nailing	" "	0 6

Drawn lead waste per ft. run	1½" 1½" 1" 1½" 2"	1/2 1/9 2/0 3/4 4/0
Do. service	1/8 2/2 2/7 3/10	
Do. soil	" "	6/9
Bends in lead pipe	each	3/3 8/2
Soldered stop ends	" "	3/8
Red lead joints	1/2 1/8 2/1 2/10 3/8	4/10
Wiped soldered joints	11d. 1/- 1/3 1/11 2/4	9/9
Lead traps and cleaning screws	2/10 3/6 4/- 4/11 6/6	
Bib cocks and joints	6/4 9/7 15/4 11/-	19/6
Stop cocks and joints	15/4 17/2 25/8 64/-	

PLASTERER.

Render, float and set in lime and hair	per yard sup.	s. d. 2 4
Do. Do. Sirapite	" "	2 7
Do. Do. Keen's	" "	3 7
Add sawn lathing	" "	1 7
Add metal lathing	" "	2 6
Portland cement screed	" "	2 2
Do. plain face	" "	0 11
Mouldings in plaster	per l girth	3 3
One-and-a-half granolithic pavings	per yard sup.	6 9

GLAZIER.

21 oz. sheet plain	per foot sup.	3 8½
26 oz. Do.	" "	1 0
Obscured sheet	" "	1 1
¾ in. rolled plate	" "	0 9
¾ in. rough rolled or cast plate	" "	10½
¾ in. wired cast plate	" "	1 4

PAINTER.

Preparing and distempering, 2 coats	per yard sup.	0 9
Knotting and priming	" "	0 7
Plain painting 1 coat	" "	0 9
Do. 2 coats	" "	1 2
Do. 3 coats	" "	1 9
Do. 4 coats	" "	2 4
Graining	" "	2 3
Varnishing twice	" "	1 9
Sizing	" "	0 3
Flatting	" "	0 7
Enamel	" "	1 1
Wax polishing	per foot sup.	0 6
French polishing	" "	1 2
Preparing for and hanging paper	per piece 2/-	4/-

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for fire insurance. The whole of the information given on this page is copyright.

TENDERS—Continued from page 35.

LEEDS.—Elementary school on the Middleton estate, for the E.C. Mr. W. Broadbent, architect:—
Excavator, brickwork and concrete—

*J. Ledger & Son	£13,699	0
<i>Joiner and carpenter</i> —		
*J. Ledger & Son	5,399	0
<i>Slater</i> —		
*J. Atkinson & Son, Ltd.	1,695	0
<i>Plasterers</i> —		
*Executors J. Dobson	1,445	0
<i>Plumber and glazier</i> —		
*H. Lindley & Co.	2,425	0
<i>Iron railings and fencing</i> —		
*G. Westmoreland	1,155	0
<i>Painter</i> —		
*Roylance & Horsman	596	10

LEEDS.—Painting Kirkstall-road school, for the E.C.:—

*A. Woodhouse & Son	£510	
---------------------	------	--

LEEDS.—Nurses' Home at Domestic-street, Holbeck, for the B.G. Mr. G. W. Atkinson, architect:—
*S. Flockton.

LONDON.—Internal cleaning and painting in the wards and administrative blocks and throughout the nurses' home at the Infirmary, St. Dunstan's-road, Fulham Palace-road, for the Fulham B.G. Messrs. A. Saxon Snell & Phillips, architects, 9, Bentinck-street, W.1:—

W. Oley	£3,732	3	6
W. H. Cooper & Son	3,593	0	0
Carter & Wise	3,393	8	4
W. Palmer & Sons	3,231	7	5
F. C. Flack	2,872	12	8
J. Scott Fenn	2,869	0	0
Prestige & Co.	2,866	0	0
Wm. Stamper	2,828	17	1
*W. Chappell	2,519	8	9

(All of London.)

LONDON.—Fireproofing and provision for fire exit, also painting, at 35, 37 & 39, Carter-lane, E.C., for Messrs. Allhausen & Co. Mr. R. Land Pearce, architect, 119, Victoria-street, S.W. 1:—

A. Logan	£654	
Parsons & Son	545	
*Cox & Sons	485	

(All of London.)

LONDON.—Painting works required to the Sydenham-park footbridge, for the Lewisham B.C.:—

S. T. Stevens & Sons	£420	
Edward Proctor & Sons	288	
Charles Cutler	286	
*G. J. Howick	277	

LONDON.—Third block of dwellings, to be known as Fremantle House, on the Collingwood estate, Bethnal-green, for the L.C.C.:—

Leslie & Co., Ltd., Kensington	£29,593	0	0
Thomas & Edge, Woolwich	26,930	0	0
Wm. Moss & Sons, Ltd., Cricklewood	26,806	0	0
C. Miskin & Sons, Ltd., Holborn	25,385	0	0
Allen Fairhead & Sons, Ltd., Enfield	24,960	0	0
A. E. Symes & Co., Stratford	24,888	0	0
Wilson Lovatt & Sons, Ltd., Wolverhampton	24,514	5	2
*Rowley Bros., Ltd., Tottenham	24,140	0	0

The architect's estimate comparable with the tenders, £24,350.
(Subject to M.H. approval.)

LONDON.—Cleaning and painting the Downs Hospital for Children, for the M.A.B.:—

C. H. Boyd & Son, Ltd.	£1,961	
Burnand & Pickett, Ltd.	1,957	
*J. Hocking & Co.	1,877	

(All of London.)

LONDON.—Dwellings in Staple-street, Southwark, as part of the re-housing accommodation to be provided under the Hickman's Folly, Bermondsey, scheme, for the L.C.C.:—

Griggs & Son, Westminster	£26,523	
Wm. Moss & Sons, Ltd., Cricklewood	24,201	
C. Miskin & Sons, Ltd., Holborn	22,758	
J. E. Billings & Co., Ltd., Westminster	21,997	
*Rowley Bros., Ltd., Tottenham	21,252	

The architect's estimate comparable with the tenders, £22,436.
(Subject to M.H. approval.)

LONDON.—Cleaning, painting and repairs to Park Hospital, for the M.A.B.:—

E. Proctor & Sons	£1,412	0
Edwards Construction Co.	1,295	0
J. Hocking & Co.	1,223	0
J. Scott Fenn	1,189	18
J. Dennis	1,120	0
*C. H. Boyd & Son, Ltd.	1,095	0

LONDON.—Cleaning and painting at Millfield, for the M.A.B.:—

T. J. Gabb, Blackfriars	£738	10	6
J. Linfield & Sons, Ltd., Littlehampton	735	0	0
C. J. Drake & Co., Rustington	701	6	8
C. H. Boyd & Son, Ltd., Paddington	493	0	0
W. J. White & Sons, Littlehampton	476	0	0
*J. Hocking & Co., Charlton	387	0	0

LONDON.—Cleaning, painting and repairs at South Western Hospital, for the M.A.B.:—

A. Vigor, Ltd.	£2,425	0
J. Hocking & Co.	1,600	0
J. L. Catterall & Sons, Ltd.	1,529	0
W. Simms	1,382	0
A. H. Inns, Ltd.	1,297	0
W. Palmer & Sons	1,210	6
*H. A. Thomas & Son	985	0

(All of London.)

LONDON.—Heating apparatus in the Council's, schools and other buildings in Chelsea, Hammersmith, Fulham, Kensington, Paddington, and St. Marylebone, for the L.C.C.:—

*Beaven & Sons, Ltd.

LONDON.—Thirty flats and five cottages, for the Kensington B.C. Mr. A. S. Soutar, architect, 8, King William-street, Strand. Quantities by Mr. E. J. Fairchild, 10, John-street, Adelphi:—

S. E. Moss, Southend-on-Sea	£24,430	0	0
T. Hooper & Son, Ealing	22,000	0	0
F. J. Coxhead, Leytonstone	21,973	0	0
Wm. Moss & Sons, Ltd., Cricklewood	21,916	0	0
F. D. Hidden & Co., Ltd., Brentford	20,706	0	0
*Hill & Gun, Bromley, Kent	20,337	12	9

LONDON.—101 houses on section "C" housing site, for the Woolwich B.C.:—

F. & F. H. Higgs, Ltd.	£86,800	
Patman & Fotheringham, Ltd.	85,771	
Edwards Construction Co., Ltd.	69,960	
Thomas & Edge	69,589	
Structural Contractors, Ltd.	65,012	

The Borough Engineer's estimate, £67,165.
(All of London.)

LONDON.—Painting the exterior steel work of the coaling plant and the eight steel chimneys of the boiler house at the electricity works, for the Hackney B.C.:—

J. Jarvis & Sons, Ltd.	£312	
W. G. Beaumont & Son	295	
*Vigor & Co. (Poplar Ltd.)	279	

LONDON.—Adaptation of Grove Park institution for tuberculosis purposes, for the M.A.B.:—

*L. G. Tate & Co.	£4,147	10
*W. G. Middleton & Co., Ltd.	1,615	0
*The Victor Engineering & Supply Co.	577	0
*T. Clarke & Co.	243	10

LONDON.—Maternity and Child Welfare Clinic at Simpson's-road, High-street, Poplar, for the Poplar B.C.:—

*W. Simms	£2,820	
-----------	--------	--

LONDON.—External painting and other works required at the City of Westminster Dwellings, Regency-street, for the City Council:—

A. Vigor, Ltd.	£2,909	0	0
Burton Bros.	2,820	0	0
W. Whiteley, Ltd.	2,754	19	1
Sims & Russell	2,680	0	0
Army and Navy Co-operative Society, Ltd.	2,216	0	0
*R. M. Pearson	1,877	0	0

LONDON.—Alterations at the City Hall, for the Westminster City Council:—

A. Vigor, Ltd.	£2,590	
F. G. Minter	2,375	
Wm. Whiteley, Ltd.	2,298	
Burton Bros.	2,271	
Sims & Russell	2,065	
*Army and Navy Co-operative Society, Ltd.	1,910	

LONDON.—Factory, 233-5, Liverpool-road, Islington, N., for Messrs. Bina & Barrey. Mr. Frank Nash, L.R.I.B.A., architect, 6, New-square, Lincoln's Inn, W.C.2.:—

Patman & Fotheringham	£2,421	
Sabey & Son	2,270	
F. Webster & Son	1,984	

(All of London.)

LONDON.—Conversion of old public house in Upper North-street into two flats, for Poplar B.C.:—
*Messrs. Truscott.

MAINSFORTH.—Institute and hall, for the Colliery Welfare Committee. Mr. G. J. Bell, architect, West Hartlepool:—

*G. W. Lazenby & Co., Ferryhill	£7,978	5	4
---------------------------------	--------	---	---

MALDON.—Eight dwellings at Goldhanger, for the R.D.C. Mr. W. Almond, surveyor, 6, Market Hill:—

T. J. Evers, Tiptree	£4,226	6	6
H. Gurton & Son, Wickham			
Bishops	3,406	14	0
W. J. Green, Tollesbury	3,823	3	10
J. Juniper, Tollesbury	3,231	13	2

MARTLEY.—External repairs to brickwork at the Poor Law Institution, for the B.G. Mr. A. G. Milner, Clerk, Worcester Chambers, Pierpoint-street, Worcester:—

*H. J. Probert, Worcester	£224	10
---------------------------	------	----

PEBWORTH.—Eight houses at Ashton-under-Hill, for the R.D.C. Mr. R. J. Atkinson, surveyor:—

A. Martin, Offenham	£3,784	
Espley & Co., Evesham	3,592	
Taylor & Sons, Evesham	3,500	
*E. Hopkins, Dumbleton	3,440	

PLYMOUTH.—Repairs to the Domestic's Hut at Swilly Hospital, for the C.B.:—

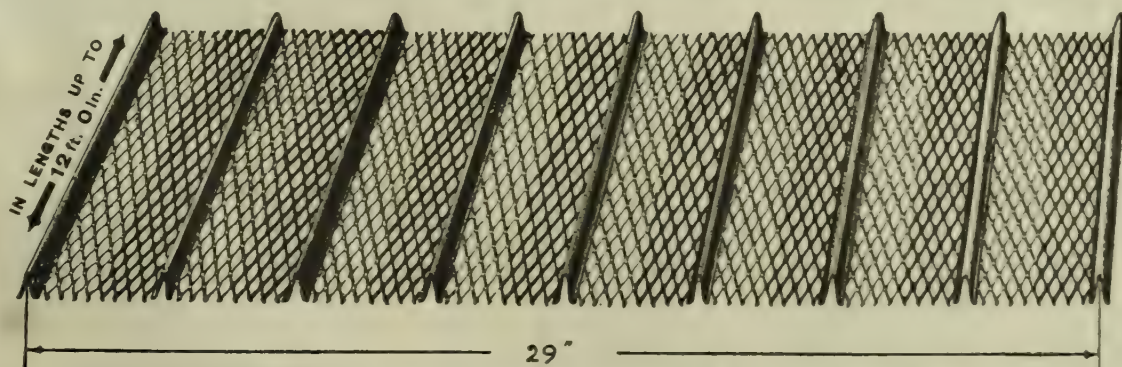
*G. T. Gorvin	£115	
---------------	------	--

PLYMOUTH.—Repairs at the undermentioned premises, for the C.B.:—

*C. Lobb & Co. (23, Rendle-street)	£138	0
*C. Lobb & Co. (6, Phoenix-place, Stonehouse)	116	0
*F. G. Nicholls (9, East-street, Stonehouse)	104	10
*F. G. Nicholls (2, Strand-street, Stonehouse)	127	0
*G. T. Gorvin (2, Mount-street, Devonport)	140	0
*E. Porter (8 & 9, Rendle-street)	424	18

PORTSMOUTH.—Alterations and renovations at factory, Mill-lane, for Messrs. Smith's Potato Crisps, Ltd.:—

*John Lay & Co., Portsmouth.



"SELF-SENTERING" EXPANDED METAL

SEND YOUR ENQUIRIES TO
**SELF-SENTERING
EXPANDED METAL CO. LTD.**
112, CANNON STREET, E.C.4

PORTSMOUTH.—Re-building and shop fronts at 21 & 23, Middle-street, for Messrs. F. E. French & Sons. Mr. E. H. Harvey, architect.

John Lay & Co., Portsmouth	£1,865
Samuel Salter, Southsea	1,792
C. Cole, Portsmouth	1,627
E. & A. Sprigings, Portsmouth	1,547
L. Road, Portsmouth	1,539
E. Tanner, Southsea	1,510

PORTSMOUTH. For alterations at 52-56, Fratton-road. Mr. H. J. Dyer, architect:—

Light Bros. & Flowers, Portsmouth	£1,720
John Lay & Co., Portsmouth	1,695
Samuel Salter, Southsea	1,497
F. J. Privett, Southsea	1,444
Tanner Bros., Southsea	1,315

RUISLIP.—New primary school, for the Middlesex C.C. Mr. H. G. Crothall, F.R.I.B.A., County Architect:—

W. S. Try, Cowley	£16,998
H. Knight & Son, Tottenham, N.	15,345
Ferris Bros., Acton	14,593
W. Lawrence & Sons, Ltd., E.C.	14,490
G. Hollow & Sons, Ltd., Acton	14,375
G. Godson & Sons, Ltd., W.10	14,310
W. J. Maddison, Ltd., Minories, E.	14,298
W. Lacey, Hounslow	14,260
A. Monk, Lower Edmonton, N.	14,145
Y. J. Lovell & Sons, Gerrards Cross	13,979



PORTABLE PARQUET
In Oak or Oak and Walnut, also
Spring Foundation Dance Floors
Post or Phone (Park 1885)
enquiries to

**TURPIN'S PARQUET
FLOORING CO.,**
25, NOTTING HILL GATE,
LONDON. W. 11.

J. GLIKSTEN & SON

LIMITED

Specialities in

**SEASONED
HARDWOODS**

**MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.**

REGISTERED OFFICE AND WHARF

**CARPENTERS RD.
STRATFORD
LONDON E.15**

Telephone: EAST 3771
(5 lines) Telegrams:
GLIKSTEN 'PHONE
LONDON

SALFORD.—Electricity sub-station building in Irlams-o'-the-Height, for the C.B. Borough Electrical Engineer, Electricity Works, Frederick-road, Pendleton:—

*J. F. Moore, Eccles. £775

SOUTH EMSALL.—Nursing home off Westholme-lane, for the Carlton Main Colliery Co., Ltd., near Barnsley. Messrs. Walker & Thompson, architects, Doncaster:—

*T. Jenkinson & Sons, Doncaster.

STANLEY (W. YORKS).—Thirty-eight houses at Lime Pit-lane, for the U.D.C.:—

*W. J. Kendall & Co. £20,000

SURBITON.—Detached house, for Mr. A. Robertson. Mr. R. Land Pearce, architect, 119, Victoria-street, S.W.1:—

R. Pierson, Clapham Junction	£2,545
Hossack & Co., Ltd., Surbiton	2,497
Everitt & Sons, Ltd., Croydon	2,460
Cropley Bros., Epsom	2,412
Taylor & Hall, Mitcham	2,300
A. Logan, Westminster	2,299
Milham & Sons, Esher	2,230
Hidden & Co., Ltd., Brentford	2,189

SWANSEA.—Heating installation at Waun Wen School, for the C.B. Mr. E. E. Morgan, A.R.I.B.A., Borough Architect:—

*J. Legg & Sons £543

TRURO.—Alterations to the City Hall, for the T.C. Messrs. Thornley & Rooke, architects, 3, Sussex-place, Plymouth:—

G. Shellabear & Son, Plymouth	£11,924
F. J. Stanbury, Plymouth	11,675
Wakeham Bros., Ltd., Plymouth	11,520
W. E. Bennett, Bodmin	11,148
Carkeek & Son, Ltd., Redruth	10,947
A. N. Coles & Son, Plymouth	10,440
*Colenso, Ltd., Camborne	9,237

WAKEFIELD.—Hotel at Havercroft, for Messrs. Beverley Bros., Ltd. Messrs. F. Massie & L. Holdsworth, architects, Wood-street:—

*Builders—Furness & Rinder.
*Joiners—R. Broadhead & Son.
*Slater—J. W. Illingworth.
*Plumber—J. Woodhead.
*Plasterer—Newton & Barnes.
*Painters—C. Turner & Son.
(All of Wakefield.)

WAKEFIELD.—Telephone exchange and extensions to the Head Post Office, for H.M.O.W.:—

*S. Johnson & Sons (Mirfield), Ltd.

WATH.—Scarlet fever ward of 26 beds and additions to the administrative block, for the Joint Hospital Board. Mr. J. Totty, architect, Rotherham:—

*H. M. Beeton. £9,328 15 2

WESTHAMPTON.—Ten houses in Lake-lane Walberton, for the R.D.C.:—

*Overington & Rapson £4,910

J. J. ETRIDGE, JR.

**SLATING AND TILING
SLATE MERCHANTS
CONTRACTORS.**

Inspections and Reports made on
OLD or FAULTY ROOFS

in any part of the country.

Telephone: Bishopsgate 1944/5, or write,

Bethnal Green Slate Works,

BETHNAL GREEN, LONDON, E.

FLOORINGS

HIGH-CLASS

of every description in

**WOOD BLOCKS. PARQUETRY
SEASONED T. & G. WAINSCOT OAK
TEAK AND MAPLE.**

FACTORY AND ROADWAY PAVING

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASANT

WANDSWORTH, S.W.18.
(Phones: Putney 1700 & 2457)

Established 1899. Estimates Free.

**LINO-LIKE JOINTLESS COM-
POSITION FLOORING MANU-
FACTURER, Wall and Floor Tiling
Contractor. Terrazzo, Roman and
Ceramic Mosaic Pavior.**

**O. TRAMONTINI, 551, LONDON ROAD
SOUTHEAST-ON-SEA**

FITZPATRICK & SON

Masons and Paviers,

455, OLD FORD ROAD, BOW, E.3

Phone: EAST 4808.

Granite Setts and Kerb (redressed and second-hand), York Paving Spur Stones, Granite Chippings, and Granolithic and Sett Paving.

School & Hospital Stoves

MAKERS OF

**WRIGHT'S IMPROVED and also SHORLAND PATENT
WARM AIR VENTILATING PATTERNS.**

GEO. WRIGHT (LONDON) LIMITED

19, Newman St., Oxford St., London, W.1
Burton Weir Works, Rotherham.

Telephone GLISSARD 1886.

Many years connected
with the late Firm of
W. H. LASCHLES & Co.
of Bunhill Row.

OGILVIE & CO.,

Mildmay Works, Mildmay Avenue, Islington, N.
EXPERTS IN HIGH-CLASS JOINERY.

ALTERATIONS AND DECORATIONS. ESTIMATES FREE

Telegrams: 'Frolio, Liverpool.' Phone 228 Bank

E. B. BURGESS & CO.

6, CASTLE ST., LIVERPOOL

**WOOD BLOCK FLOORING
AND PARQUETRY.**

Wheatly & Co.,

SPRINGFIELD TILERIES, NEWCASTLE, STAFFS.

Phone: Newcastle, Staffs, 101.
Grams: "Wheatly, Trent Vale."

Estd. Over 50 Years.
Brand: TRITON.

SPECIALITIES.

Rustic, Sand Faced and Hand Pressed Tiles in Blue, Blue Brindled, Red, Light Brindled and Dark Brindled Colours. Extensive stocks held of many varieties of Flooring Quarries, Ridge Tiles, Garden Edging Tiles, Air Bricks, Blue Bricks, Copings, etc., etc.

Price List and Catalogue, or Illustrated Brochure of Roofing Tiles free on demand.

N.B.—ALL our products are Hand-made by the Plastic Process.

HOWELL J. WILLIAMS

Builders Ltd.

High-Class Building

**and
Joinery Work**

11/17, BERMONDSEY STREET,

Telephone: LONDON BRIDGE, S.E.1
HOP 202

Builders of very many well-known Banks, Office and Business premises. Our works especially convenient for City Building and fittings.

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VOL. CXXIX.—No. 4,301

JULY 10, 1925

WATERLOO BRIDGE

WHATEVER the outcome of the efforts which have been and are being made for the preservation of Waterloo Bridge, the citizens of London and all who take an enlightened view of their duty to help preserve the amenities of our cities, our towns and our countryside, will, we believe, feel grateful to those institutions and societies which have joined forces in order to preserve a national as well as a beautiful monument. If these public-spirited bodies have not so far succeeded in their effort—though they may have gone far in the attainment of their objective—to induce the London County Council to reconsider their decision to rebuild Waterloo Bridge, they have surely satisfied the general public that a good and unanswerable case has been made out for further consideration by an independent and qualified body. We cannot think that the Council, elected as it is to represent the public, will be indifferent to public opinion, which contends that in view of the wide difference of opinion between the L.C.C. engineers and other engineers equally eminent, the contemplated action of the Council should be delayed until an entirely impartial body has considered the facts and all the expert evidence. It must not be forgotten, as it appears to be in some quarters, that Waterloo Bridge is a great national monument, which was to be "a lasting record of a brilliant and decisive victory," and no irrevocable step ought to be taken unless and until it is established beyond all reasonable doubt that "the old bridge is worn out and has to be taken down to prevent it falling down."

That the bridge is worn out has been the contention of the L.C.C., but it is emphatically contradicted by the societies who are urging the preservation of the structure, and a conference of these societies* has now submitted to the Council a report urging the preservation of the bridge by underpinning, with the hope that the Council will now refer the whole matter to an independent body. A *precis* of this report will be found in this issue, but we may explain that it is the outcome of a deputation from the conference which waited last February on the Special Committee on Thames Bridges, and pleaded for a further inquiry before the demolition of the existing bridge was finally decided on. The committee replied that a start could not be made with the new bridge for some months, certainly not before July, and if in the meantime any evidence against the destruction of the bridge were produced it could be considered. The societies interested received every courtesy and consideration from the Council and their officials in their quest for information and, as a result of thorough examination by independent engineers, they now report that they are able to present an unanswerable case, showing that on technical, artistic, and traffic grounds the destruction of the bridge cannot be justified. With the exception of one, all the engineers who have gone into the matter since last February take the view that the bridge can be preserved by a system of underpinning.

In a general statement addressed to the clerk of the L.C.C., Mr. Arthur Keen, Chairman of the Conference, points out that a large number of engineers and architects after protracted inquiry endorse the opinion that the bridge can be preserved, but that there are very natural divergencies of opinion as to the best methods of dealing with one detail or another, but the unanimity on the broad question is noteworthy. The report in part conveys the considered views of the societies working for the preservation of the bridge, but the document includes the individual opinion of engineers of considerable experience in underpinning and similar problems. The views of Mr. H. H. Dalrymple-Hay, who has had a wide experience of

underpinning and of similar problems in connection with the London Tube Railways, are well known, and in our issue for April 3 we gave his illustrated report to the Society for the Protection of Ancient Buildings. We then asked whether any impartial person, in view of this report, could consider the L.C.C. justified in rebuilding the bridge without further consideration, and that question may be asked again with added insistence now that the Conference of Societies has reported, as in addition to the opinions of Mr. Dalrymple-Hay, we have the statement of Mr. C. F. Bengough, whose experience in underpinning the high-level bridge at Newcastle under similar conditions to those prevailing at Waterloo Bridge, give exceptional importance to his opinions, and who believes that "the foundations of Waterloo Bridge, with the possible exception of pier No. 4, can be maintained by underpinning," and that "the question of underpinning pier No. 4 is well worth considering." The opinion of Mr. G. E. W. Cruttwell (Sir John Wolfe Barry & Partners) in support of Mr. Dalrymple-Hay's proposals are also given in the report of the Conference of Societies as well as those of Dr. Oscar Faber, who is a well-known authority on problems of foundations subject to settlement and decay, who considers that underpinning is not only practical, but "presents no greater difficulties than many other large underpinning works which engineers deal with in the ordinary course of their professional work, and further, that the life of the bridge could by this means be increased for another hundred years or more, and that the cost of this work should amount to only about one quarter of the cost of demolition and rebuilding!"

The report is confined to the technical problems of preservation, and deals with the foundations, the causes of settlement, the quality of materials employed, while a scheme of repair is proposed, accompanied by estimates of cost and time. The estimates for underpinning and for consolidation appended show variations. "Each, however, points to an outlay far below the figure of £988,000 estimated by the London County Council for partial rebuilding of the bridge in its present form, while the saving, both in time and money, resulting from the preservation of the existing structure compared with the cost of widening the bridge, or erecting a wholly new structure, is, of course, far greater. The difference between the cost of underpinning and the cost of a new Waterloo Bridge would go far to meet the outlay on the new Lambeth Bridge."

Particular emphasis is laid by the conference on a letter from Sir Francis Fox, in which he states:—"I am of opinion that it is quite unnecessary to destroy Waterloo Bridge—and that by means of underpinning it can be saved with enormous economy—and that, were it possible to examine the timber platform and piles below water, no decay would be found. If the widening of the bridge be necessary, then, with care, no crack between the old and the new portion need be caused; the granite facade can be used again, thus preserving the present character of the structure with the century-old appearance of the existing stone."

These and other views show that there is a very respectable body of opinion that the bridge can be maintained, and as a new and wider Waterloo Bridge would not solve the traffic problem without great street improvements north and south of the river, there can be no doubt that the case submitted justifies the request that the Council, which has an honourable record of disinterested public service, should examine the whole problem again. In the circumstances, we cannot help thinking that the L.C.C. will now see that they may face the possibility of retaining the bridge and so earn the gratitude of their fellow citizens. When all is said and done, we know that the efforts made for and against the preservation of the bridge have been dictated by a desire to serve the best interests of the city of London, and that being so, we may surely face the final outcome of the discussion on one side and the other with hope and even confidence.

* The Royal Academy, the Royal Institute of British Architects, the Society for the Protection of Ancient Buildings, the London Society, the Town Planning Institute, the Architecture Club, a Conference of Engineers. Published by the Conference, 9, Conduit-street, W.1. Price 3s. 6d.

NOTES.

Anglo-American Friendship.

THE ceremony on Saturday morning last of unveiling the group of statuary which adorns the archway above the entrance to the Bush Building from Kingsway was the public recognition of a very acceptable token of friendship between the English-speaking people on both sides of the Atlantic. Earl Balfour spoke of this with a gracefulness and feeling which added much to the significance of the gift from Mr. Bush to the English people. The hands across the sea are graphically symbolised in this admirable piece of sculpture.

Bush House Sculpture.

THE special value of the sculpture at Bush House, however, lies in the great success which the sculptor, Miss Malvina Hoffmann, has achieved in the difficult problem which confronted her. Any figures which had risen axially above the columns would have been almost impossible to treat successfully in size or form, but by narrowing the group within the columns whilst preserving the duality of the figures Miss Hoffmann has agreeably filled the space of the arch with figures, which, whilst large and expressive, evade the difficulty of being too small for the great columns below. The columns and the entablature which they support have now become by this design of the sculptor's art an expressive and pleasing feature in the elevation.

We can recall few modern instances in which the sculptor has done so much to give significance and value to the architectural forms of a composition. The detailed value of the sculpture will be fully appreciated by those who have studied it with care. The tense English figure with its air of self-assurance and its emblems of tradition is contrasted with the looser-limbed and athletic American in an attitude of receptive friendship; as they clasp hands on the torch above the altar of friendship these figures clearly and expressively symbolise the friendship of the English-speaking peoples. An opportunity such as this is seldom given to a sculptor who by a refined and expressive work may convey so much of vital significance to the world. Other examples of Miss Hoffmann's sculpture, which we give in this issue, show what outstanding quality characterises her work, and we can only wish she may find a long employment for her great capacity.

Waterloo Bridge.

WE make some comments in our leading article on the report on Waterloo Bridge which the Conference of Societies has just issued, but we may quote here an observation made by Dr. Faber in his letter which is included in the report. "In view," he says, "of the London County Council's proposal to demolish the bridge, it is difficult to see what objection there could be to authorising the underpinning

of one pier so that the cost and the difficulties could be definitely ascertained. If the work should, for any reason, be a failure, little would appear to be lost, as the present intention appears to be to demolish it anyhow, and if the work were a success the saving of the bridge and of a large sum of money would have been effected." Surely a very sensible observation!

Sweden. THE appeal of Sweden to the modern architect is so insistent that sceptics were

bound to arise and ask first whether the new Mecca justified the pilgrimage on its own merits, and even so to question whether the influence was such that we should attempt to translate it at home. For this reason, the recent visit of the "A.A.," described this week, has aroused much interest, and the travellers' impressions will be eagerly received. Probably the first point that they would all emphasize is the "folk spirit" in the building art—such as Professor Lethaby has described as underlying the genius of Philip Webb. This amazing co-operation between designer, mason and craftsman is no sudden development; it marks a re-birth, rather than a reaction, and the old castles of Denmark and Sweden are ancestors to that organic beauty to which the Town Hall of Stockholm owes so much of its unique beauty—for which evidently no photo or model can adequately prepare us.

Swedish Classic.

THAT this vitality has not stopped at the Town Hall is clear from the enthusiasm shown by the new "classic" school, which is as vigorous in Sweden as in Denmark. Here unconscious art—a contentious term—is replaced by a strong directional aim, and while classical details in no way follow the renaissance formula, they reappear. This movement has acquired considerable flexibility and must be of great interest to all students of architectural thought. In this country it is unlikely that "unconscious" or directional expression will claim the whole stage; perhaps such academic differences recall too vividly that other Battle of the Styles, now mercifully defunct, and perhaps because a vigorous catholicism in our schools at home has made the word "style" a subject of suspicion in any form, and owing to its reactions, dangerous as a label. Scandinavia, in short, has made those who visited it keener and more active-minded, and, given the opportunity, it should be reflected, not necessarily in novel, but in better work here.

Manchester Art Gallery.

THE duties of assessorship in architectural competitions are not so light and irresponsible as they once were, and this is probably due to a higher standard of accomplishment amongst competitive designs and the



Town Hall and Quays, Stockholm. MR. RAGNAR OSTBERG, Architect.



View of Bush House, showing Miss Malvina Hoffmann's Sculpture Group in position.

more vigilant oversight of awards. We know something of the difficulties of making fair awards and have much confidence in the *bona fide* of assessors. But the architectural profession has a right to criticise carefully and continuously the results of competitions, and as it is the competitors who are as a rule the best judges of the difficulties of the problems set, their complaints deserve some consideration. In the Manchester Art Gallery competition we certainly think that the complaints made about the award should be definitely met, and this not mainly in the interests of that scheme itself, but as a guidance to the conduct of future competitions. It is unfortunate if a competitor who has the ability to grasp the essential difficulties and advantages in the design of a certain work better than those who have promoted and conducted a competition, is to have the value of his scheme discounted because of some conditions or instructions which would have been better omitted. In the particular competition much may depend on the strict definition of the word *basement*, but this is not the only objection raised.

It was a happy coincidence that the degree of "Master of Architecture" was bestowed on Friday

Messrs. Hastings and Corbett, our two distinguished American confreres, and Prof. Adshead on Saturday last, just when the success of the Liverpool School of Architecture has been once more signalled in the awards of the Grand Prix de Rome. The speech of Mr. Ramsay MacDonald on Saturday, which we give elsewhere, was a well-informed tribute to the value and importance of architectural art.

THE exhibition of the Architecture Club is to be held this year at the Galleries of the Royal Institute of British Architects, from October 26 to November 14. The exhibition

is divided into three sections. "A" is to represent recent architecture by large photographic prints or models. Class "B" is to show interior architectural decoration in colour. Class "C" is for architects' preliminary sketches for

buildings. The exhibition should be a good one, but ideality and imagination are to be held strictly in check. As regards executed buildings, the popularisation of architecture for the general public being limited to what they can appreciate from photographs, the cult of the photograph is a heavy one.

Work by
Elementary
School
Children.

So much has recently been said in criticism of present-day teaching methods in the elementary schools that the high standard of work received by the British Commercial Gas Association in the Essay Section of their tenth annual Fairy Gas Competition is worthy of note. Of the 180,000 forms distributed in connection with the competition not a few were returned from secondary schools, but it was a pleasant surprise to the judges, we understand, more especially to those of them who were accustomed to University and Public School teaching only, to find that the work of the elementary schools was as excellent as that of the secondary schools.



Paderewski Bronze.

By MISS MALVINA HOFFMANN.

GENERAL NEWS

Professional Announcements.

Messrs. Longden & Venables have acquired the practice of the late Mr. C. G. Cowlishaw, architect, of Hanley, and have taken over the offices at Stafford-street. This practice will be amalgamated with their own in Stoke-on-Trent and Leek. Messrs. Longden & Venables would be glad to receive copies of up-to-date catalogues for use in the office.

Michelangelo Statues Discovered.

Seven models of statues of the prophets made by Michelangelo for the Dome of St. Peter's, Rome, have been discovered beneath a heap of rags in a storehouse in the Vatican, where they had lain for centuries. The prophet Isaiah is Leonardo da Vinci, and other portraits are those of Vasari, Titian, and Michelangelo himself.

Mersey Tunnel Scheme.

The Select Committee of the House of Lords which, with Lord Wemyss as chairman, has had under consideration the proposal to construct a tunnel under the Mersey for general vehicular traffic, has now passed the scheme, which includes the building of a tunnel from Liverpool to Birkenhead, with a branch on the Liverpool side leading to the docks. The cost is estimated at about five millions sterling, of which the Government is contributing one-half through the Ministry of Transport.

Repair of Parliament Buildings.

It will be necessary for the Government, possibly next year, to submit to Parliament a large estimate for the repair of the fabric of the Palace of Westminster, and in order that members shall know the exact condition of the building, a non-party Committee has been set up to investigate the position.

Leeds Improvement Scheme.

Leeds Corporation has approached Sir Reginald Blomfield with a view to the preparation of designs for buildings on the streets between Victoria-square and Vicar-lane.

Old Bideford Bridge.

Old Bideford Bridge, a fourteenth-century structure of twenty-four arches, has been restored and partly rebuilt, at a cost of £40,000.

Mr. F. E. P. Edwards's Resignation.

Mr. F. E. P. Edwards, Sheffield City Architect, has resigned his position after seventeen years' service.

Obituary.

We regret to record the death of Mr. Vincent Craig, F.R.I.B.A., of "High Close," Wokingham, Berkshire, and formerly of Eldon Green, Helen's Bay, co. Down. He practised as an architect in Belfast for twenty years, and designed many buildings in Ulster.

St. Paul's Cathedral Preservation Fund.

The secretary of the R.I.B.A. has received a cheque for £30 9s. which has been subscribed by members of the Institute of Architects of New South Wales as a donation from that body towards the St. Paul's Cathedral Preservation Fund.

The Norfolk and Norwich Association of Architects.

The above Association recently paid a visit to King's Lynn. The party included Messrs. E. T. Boardman (President), E. H. Buckingham, G. Cotman, F. W. and E. H. Skipper, C. Upcher and E. P. Rennie from Norwich, John Page from Fakenham, E. G. Holtom from Holt, and J. L. Carnell, W. D. White, E. E. Colman and L. F. Eagleton from King's Lynn, with the Honorary Secretary, Mr. W. W. B. Scott, and a number of Associate members and students. Visits were paid to most of the points of architectural interest in King's Lynn. After lunching at the Grosvenor Restaurant, visits were paid to the Town Hall and St. Margaret's Parish Church. The day ended with a visit to the interesting Greenland Fisheries Folk Museum, collected by Mr. E. M. Beloe, where tea was served.

Bristol Art Gallery.

Sir George A. Wills has offered to bear the cost of the extension and enlargement of the Bristol Art Gallery, which was given to the citizens by his cousin, the late Lord Winterstoke. It is proposed to utilise the site of the old Drill Hall, and plans have been prepared by Messrs. Frank W. Wills & Sons, who were the architects of the original building. The cost of the extension is estimated at £75,000. The Art Gallery adjoins the new University buildings, for which Sir George and his brother, the

late Mr. H. H. Wills, were responsible, and the whole block of the fine buildings which crown the summit of Park-street will stand as a lasting memorial to the civic spirit of the Wills family.

COMPETITION NEWS

Warwickshire Hospital Extension.

Designs are invited from architects practising in Coventry for a new ward of the pavilion type. The designs will be adjudged by an architect approved by the Secretary of the Coventry Society of Architects. Full particulars and conditions can be obtained from Miss Hooper, Secretary, Coventry and Warwickshire Hospital. Sending-in day, August 10.

Lincoln Art Gallery and Library.

Lincoln City Council has decided to recommend not to carry out the scheme already prepared for the building of an art gallery and museum. An open competition is to be promoted.

Public Library and Town Hall, Leith.

Edinburgh Town Council have decided to invite competitive plans for a public library and town hall for Leith.

Manchester Town Hall Extension.

A special committee of the Manchester Corporation has recommended the adoption of the scheme prepared by the City Architect in connection with the town hall extension site, and has given instructions for obtaining competitive designs.

Coventry Hospital.*

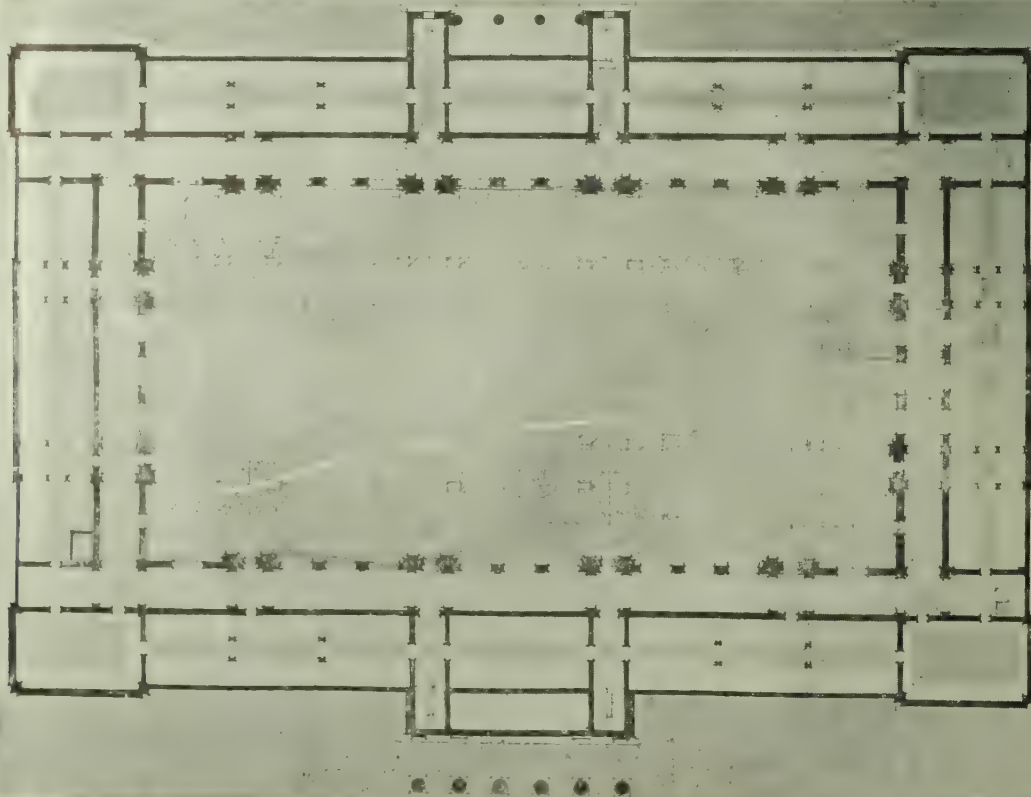
Sevenoaks U.D.C. Housing.*

Gower R.D.C. Housing.*

Other Competitions.

Other competitions still open include the following (the dates given are, first the sending-in date, and second the issue of *The Builder* in which full particulars were given):—Argentine Institute (Dec. 31; April 24). Copenhagen Bridge (Sept. 1; April 24). Newcastle Fire and Police Station (Oct. 8; June 12). Drammen Bridge (Oct. 1; May 29).

* Competitions when "warned" or vetoed by the R.I.B.A. are starred.



The Rome Scholarship in Architecture: Plan of Winning Design.
By MR. G. A. BUTLING (Liverpool School of Architecture). (See also pp. 74 and 75.)



Eastbourne College War Memorial Building.

MESSRS. SYDNEY TATCHELL & GEOFFREY C. WILSON, F.F.R.I.B.A., Architects.

THE A.A. IN DENMARK AND SWEDEN

SOME IMPRESSIONS OF SWEDEN

By MANNING ROBERTSON

Of the seven days that we spent in Sweden six were devoted to seeing Stockholm and its neighbourhood, and one to Gothenburg, the journeys Malmö-Stockholm and Stockholm-Gothenburg being accomplished in sleeping-cars.

On the morning of Saturday, June 13, we were met at the station by a party of Swedish architects, who took us to our hotel and later drove us in private cars to obtain a general idea of Stockholm and of its innumerable islands set in the inland seas. Even seen superficially, Stockholm shows its cosmopolitan character; French, German and Italian vogues have all left their imprint, and the 19th century has bitten deeply into its form. For this reason its own robust renaissance is the more remarkable and encouraging. Evening saw us travelling by steamer to Saltsjöbaden, where, surrounded by the most perfect scenery, we were entertained at a banquet—and a dance—by the Swedish Society of Architects, with Professor Ragnar Ostberg, the president, in the chair.

On Sunday we were taken in private cars for a hurricane drive through vast pine forests to Mariefred, where we were the guests at a delightful open-air luncheon given in our honour by the Swedish-British Society. At Mariefred, on the shore of Lake Mälaren there stands the great sixteenth-century castle of Gripsholm; there we were introduced to Swedish traditional craftwork, and learned something of the origins from which is derived the Swedish proficiency in frescoes and colour on wall and beam. From Gripsholm we went by steamer—passing the delightful little Mariefred church with its Wren-like spire—to the Palace of Drottningholm and through the grounds to a queen's birthday present, the "China Pavilion"—a marvel of Chinese art and colour in its choicest and most aristocratic mood, devised in 1770 by Chinese craftsmen.

Monday was mainly devoted to visiting the Town Hall, the great City Hall of Stockholm that was completed in 1922, and of this I will speak at greater leisure when closing this brief diary. Late afternoon found us at the Skandia Picture Theatre, the design of which has been completed by E. G. Asplund. The architect's aim has been to place one building inside another, the inner building being designed as though it stood in the open air of a dark summer night. The auditorium and the gal-

leries are carried out in bright red, and are approached from without by bright red doorways under a canopy, while a hint of vivid green is introduced in the folded-back lining of the proscenium curtain; the roof is of velvety blackness, and this assists the open-air illusion. Light is provided by yellow globe lanterns hanging, as it were, in a garden. The whole scheme is a daring *jeu d'esprit*; it has "come off," and the effect is quiet and restful. The evening of Monday was the most enjoyable of our visit, and many of us had the privilege of being entertained to dinner in Swedish homes, and so saw something of the home life of the country. Our hosts were Mr. and Mrs. Ragnar Ostberg, Mr. and Mrs. Johansson, Mr. H. Ahlberg, and Mr. F. Wetterquest. Our evening satisfied us—we had we needed satisfying—of the charm, friendliness, and culture of Swedish family life. After dinner we went to a dance given by the well-known publisher, Mr. Bonnier, and his wife, and we saw yet another beautiful private house and garden in those circumstances of midnight day which we always found it difficult to accept as a matter of course.

Tuesday was busy, even in that crowded fortnight: first we were taken to visit an unforgettable cemetery, about four miles out of Stockholm, where the graves are placed informally among the pine trees. In the centre there rises a homely little mortuary chapel designed by E. G. Asplund, and well illustrating the flexibility of the new interpretation of classicism in Sweden; near by can be found a small "free" annex containing the graves of children. This little nursery provides that sense of intimacy and company that would be so warming to a child's spirit, if almost unbearably touching to a visitor. The grave-stones are small, of local stone, cut with delicate conventional patterns and beautifully lettered; other graves are marked only with the simplest of wooden crosses, the whole effect being of harmony with each other and with nature. One of our party suggested that the repose of the great pines constitutes a place to be lived in rather than to be dead in, and the remark indicates the distinction between this resting-place and our own modern cemeteries.

From the cemetery we visited Högålds Church, designed by Ivar Tengbom, with its elegant twin towers that match but are not



Högålds Church, : Side Aisle.

MR. IVAR TENGBOM, Architect.

alike, and that symbolise the Old and the New Testaments. The interior is fresh and original, with its windows hidden in huge arched recesses that are in fact internal buttresses. As in most other churches in Sweden, the altar-rail is semicircular, thus not only giving a more sympathetic line to the arrangement of the sanctuary, but also providing a sense of intimacy and communion between priest and people. The great organ at the west end was played for our benefit; we left reluctantly, feeling that we had seen a new and living impulse in what has so often been the most tame and standardised expression. We were then led to the Academy of Architecture and Engineering, where the architect, Professor Erik Lallerstedt, took us over this monumental group of brick buildings, through its deeply shadowed entrance arch. The effect of the free curve of the side wings and of the walled parapet containing chimneys and ventilators gave an unexpected charm and character for which none of the many illustrations, which we had all admired in this country, had prepared us. From thence we hurried on to the Engelbrekts Church, where we were privileged to hear Professor Wahlman describe his design and intentions. The interior consists of a central square approached from the four sides by great stone arches, that diminish from front to back and are apparently parabolas, but in reality prove to be freehand curves approximating to that shape. The wind pressure on the walls of the nave is taken on heavy reinforced concrete internal cornices, and the whole design is expressive of aspiring impulse and strength. We concluded with the Magistrate's Court, where we were met by Mrs. Westman and her son. This fine building, crowned with a square tower and cupola, represents a pioneer work, the first of the great modern buildings of Stockholm. It conveys, with a peculiar quality, the big nature and humour of its designer—Mr. C. Westman. It is broad-shouldered and robust and it is never self-important; as an imposing and efficient public building it is worthy of its city and of its author.

Dinner-time found us at the Foresta Restaurant, and we then took advantage of Professor Milles' kind invitation to visit his house and statuary garden, where we saw much that is representative of his genius, and—which is perhaps rare in first-rate sculptural work today—of its unusually decorative feeling. Wednesday and Thursday were free days in which the party broke up into little groups; one of them visited some of the flats and offices which have recently been erected by Mr. Stark ending with the attractive Silent-street—



A School at Gothenburg. MR. ARVID BJERKE, Architect.



Högalids Church : Interior.

MR. IVAR TENGBOM, Architect.

street of demure rough-cast houses containing some newly completed blocks of flats; some of us returned again to the Town Hall to verify previous impressions; some roamed about the Skansen Gardens, where log huts, a log church, reindeer, and polar bears make up an open-air museum of life in the far north. Visits were paid to the Lilliewalk's Konst Hall, designed by Mr. Carl Bergsten, to the Stadium, to the great Wine Warehouse, and to many other counter-attractions. Through it all we remember the untiring kindness of our hosts, who escorted, motored, and—in the case of Mrs. Tengbom and others—privately entertained us. The way in which our lady members upheld the honour of our Association by seeing even more than the men by day while outrying our hosts by dancing in the evening, must be put on record. Finally we come to the farewell at the station, when Professor Ostberg headed a large party of our friends to bid us farewell, and to close with Swedish and British *Hurras* a visit which will remain an event in our lives.

Friday was spent at Gothenburg, where the President of the local society, Mr. Ernst Torulf, took us in charge and motored us round the city and its surroundings. The small timber house gives its special note to the Swedish suburb and countryside, and cannot by its nature convey the same impression of architectural permanence as its counterpart in brick or stone. Here we saw in passing the Carl Johan School, erected by E. G. Asplund, with its daring yellow brick façade, its three tiers of square windows, flush with the surface, and its powerful cornice. We saw also a great brick school, designed by Arvid Bjerke, the huge new post office just completed by E. Torulf, and what remains of the Gothenburg Exhibition. Mr. H. Ahlberg's Arts and Crafts Pavilion has unfortunately disappeared, but the chaste beauty of the museum by Sigfrid Erikson and Arvid Bjerke is a permanency. Throughout the day we were entertained as guests of the local architectural association, and in the afternoon we went by steamer to the island village and the castle of Marstrand, which in natural loveliness of situation cannot be surpassed in the world.

Economy of space precludes an adequate description of anything that we saw; indeed it would take a book to describe one-half of all we observed and appreciated, and no words can express our gratitude to the architects of

Sweden and their families for the energy they showed and the hospitality they extended towards us. One can only say that admiration at a distance has been widened into personal affection.

I have left the account of our visit to the Stockholm Town Hall on June 15 to the last. We had all heard so much of the wonderful opportunity that was presented and of the beauties of the building that we were, perhaps, prepared to be critical. It is one thing to be given an opportunity, another to use it to the full. Granted a fine enough site and sufficient funds, any well-trained man of talent ought to be able to raise up something to arrest attention and even to command admiration. Ragnar Ostberg had at his disposal an incredibly magnificent site; he had on his side the enthusiasm of an art-loving public, and sufficient funds to ensure the execution of a stupendous project. Twelve years of his life had been entirely devoted to the erection of this one building; during this period he was able to call in every craftsman of exceptional ability in Sweden, and, with the force of his personality, to draw the best from each. What had he made of these opportunities?

Nothing of dramatic significance was lost in our introduction to this amazing building. The architect took us first up the tower and told us something of the methods whereby he had achieved the vitality of its outline, then through the various minor apartments into the tremendous Blue Hall, where the walls that were to have been plastered and coloured blue now show common pressed brick, cut everywhere into panels with chisel and hammer as though they were of solid stone. This daring experiment results in a wall texture that glows like a Persian carpet. After an informal reception by the President of the Town Council, and a luncheon given by our architect hosts in the Three Crowns Chamber, we proceeded in pairs, to the sound of music, into the great Golden Hall—flooded with light from gilded arched window recesses—where, from the far end, the mystic Queen of the Mälaren looks down in mosaic through the length of the Hall towards the lake on which she, the City of Stockholm, stands.

If we attempt an analysis of this building the source of its beauty evades us. Free and romantic, it yet combines every appeal, and at the same time stands fearlessly exposed to criticism. It is not like a town hall: it is too personal; its details are borrowed; it is not Swedish; it is unsuited to its purpose; these and similar points one has long since heard urged against it. But it stands beyond the reach of praise or blame, linked with ships and the sea, a supreme monument to human genius. It conveys a heavenly message, and like a Beethoven symphony invites attack while boldly taking its place for all time with those art creations that seem sufficient in themselves to justify man's existence, its sublime beauty summarised in the text beaten into the copper cupola: "Glory to God in the Highest, and on Earth Peace, Good Will toward Men."



The Silent Street, Stockholm.

A.A. VISIT TO AUDLEY END

On Saturday last the Architectural Association visited the great Jacobean mansion of Audley End, Saffron Walden, and, by kind permission of Lord Braybrooke, spent an interesting afternoon exploring its many apartments. Said to have been begun in 1603 and completed in 1616, the house was originally somewhere about twice its present size, but on the advice of Sir John Vanbrugh three sides of its outer and more important quadrangle were demolished, leaving it a half-H on plan. Externally it was rather drastically restored in the eighteenth and nineteenth centuries, but the interior contains much of its original work, which is of no little interest to the evolutionist.

Its main feature is the Great Hall, 65½ ft. by 26 ft. At one end is an early seventeenth century oak screen lavishly decorated with carved torsos, strapwork and arabesques, while at the opposite end is a stone one, designed by Vanbrugh. These two screens provide a striking contrast in architectural style—the one decoratively complex, the other plain and stolid.

The most interesting apartment on the first floor is the Saloon, or Fish Room, so-called from the aquatic subjects introduced into the thirty panels of its plaster ceiling (66 ft. by 30 ft.) which is further distinguished by pendants at the intersections of the ribs.

As a relief to the rather florid work of the early seventeenth century, which includes staircases and chimneypieces, there are some good Adam rooms, with characteristic decorations on wall and ceiling, delicately modelled and coloured. Also, there is a fine collection of pictures, including works by Holbein, Lely, Kneller, and Canaletto. The A.A. party included Mr. Arthur T. Bolton, Mr. H. M. Fletcher, Mr. Howard Robertson, Mr. V. O. Rees, Mr. F. R. Yerbury, Mr. J. H. Kerner-Greenwood and others.

MEETINGS

FRIDAY AND SATURDAY, July 10-11.
Royal Institute of British Architects.—Annual Conference. At Newcastle and Durham.

SATURDAY, July 11.
Building Surveyors' and Inspectors' Association.—Annual Meeting, at the Town Hall, Stoke-on-Trent. 10 a.m.

Hadrian's Wall Discovery.

When cutting a pipe track for a section of the Wigton R.D.C.'s North Cumberland water scheme, workmen came across obstructive masonry, which is believed to be part of the western section of the Great Roman Wall of Hadrian. The structure is about 5 ft. deep and 8 ft. or 9 ft. wide, and is built after the Roman manner.

LEADING CONTENTS. PAGE

WATERLOO BRIDGE	39
NOTES	40
COMPETITION NEWS	42
THE A.A. IN DENMARK AND SWEDEN	44
CORRESPONDENCE	46
R.I.B.A. CONFERENCE—NEWCASTLE AND DURHAM	47-70
MR. RAMSAY MACDONALD ON ARCHITECTURE	72
PHILIP WEBB AND HIS WORK—VII	76
THE BUILDING TRADE	78
NEW BUILDINGS IN LONDON	79
ARCHITECTS AND BUILDERS' INQUIRY BUREAU	79
THE WEEK IN PARLIAMENT	80
CONTRACTS, COMPETITIONS, &C.	81
PROPOSED NEW BUILDINGS AND OTHER WORKS	84
TENDERS	87

ILLUSTRATIONS

The Eastbourne College War Memorial Tower.

The dedication of the War Memorial Building and the unveiling of the Roll of Honour at Eastbourne College recently took place.

The War Memorial Tower, which was designed by Messrs. Sydney Tatchell and Geoffrey C. Wilson, F.F.R.I.B.A. (Mr. Wilson being himself an Old Eastbournian), forms the central feature of some new and extensive additions to the school buildings, consisting of north and south blocks on either side of the tower, which will eventually link up the existing buildings with the new additions by means of cloisters.

This central tower, from the nature of its height and size, will always focus attention, and for this reason becomes the war memorial proper, having been designed so as to be the chief external architectural feature of the school buildings. It contains on the ground floor the war memorial hall, entered through wrought-iron gates from either the cloister on the playing fields or the headmaster's garden, on an axial line from College-road.

The hall itself is a vaulted compartment 26 ft. square, marble-panelled on the north and south sides, the east and west walls being occupied by the wrought-iron gates on which is inscribed, "In Memoriam, 1914-1918." The marble panelling is inscribed with the names of the fallen in eight panels, two on each side of the north and south dedicatory inscriptions, which are surmounted by the school arms with a bronze laurel wreath below.

The cloister, which runs along the whole of the new additions, is on the west side of the tower, and there is an entrance forecourt on the east side.

The first floor contains the new school library, and there are four music rooms and two other rooms on the second floor, third and fourth stages from the tower, from the flat roof of which the school flag is flown.

The remainder of the work, of which the War Memorial Tower forms the central feature, is practically completed so far as the south block is concerned. The north block has yet to be commenced, the problem having been to design a war memorial which should form a part of a scheme of further additional school accommodation.

The completed south block contains the armoury and drill hall, five new classrooms and a manual instruction workshop about 60 ft. in length. When the north block is put in hand, the school will replace its present science accommodation with three new physics laboratories, a large chemistry laboratory, balance room, two rooms for science masters and four more additional classrooms.

The elevations are simple, and balanced with the tower as a central feature. Tradition and the scale of the existing buildings have been carefully studied, and a free Tudor inspiration in brick and stone with a tile floor adopted.

The general contractors are Messrs. Walter Lawrence & Son, Ltd., and the principal sub-contractors are as under, the stone carving having been executed by Mr. George Alexander:—Durbin & Katesmark, central heating; Thomas Elsley, Ltd., rain-water goods; F. G. & S. H. Frost, wrought-iron gates, &c.;

Jacob White & Co., Ltd., electric light and power; The Kleine Patent Fire-Resisting Flooring Syndicate, Ltd.; Smith, Walker, Ltd., constructional steelwork; C. E. Welstead, Ltd., lead light casements.

Our Special Supplement.

In connection with the R.I.B.A. Annual Conference, which is being held this week, we present with this issue a Special Supplement dealing with the architectural features of Newcastle and Durham.

CORRESPONDENCE

Manchester Art Gallery Competition.

SIR,—Allow me to thank you for publishing my letter about this matter. I have already received a number of letters in support, but I must appeal very strongly to all those who agree with your statement that "if ever there was a breach of conditions it is here," to come forward and give their support. The matter has been well ventilated in the Manchester press, but we want it to be well ventilated in our own councils.

Nothing can be done by one or two persons, but much could be done by a united body of competitors. Those who agree that here is a case for investigation and that the time has come to make sacrifices, owe a duty to themselves and to their profession to come forward.

I shall be glad to act as secretary *pro tem.*; but I propose no course of action whatever until such has been settled by a sufficient body of competitors. I do not want anyone to think that he is pledged to any particular course. Any letters will be treated with the strictest confidence.

—KENNETH GLOVER.

11, Saville Chambers,
North Street, Newcastle-on-Tyne.

Competitions.

SIR,—Having noticed that every public competition produces varying opinions regarding the awards, I venture to write to you on both sides of the question. My views are entirely disinterested; moreover, they are expressed in the hope that certain reforms will be effected.

A competition, like marriage, is largely a matter of chance—a species of lottery raising false hopes, or, for the majority, ending in disillusion. There is no denying the fact that some remarkable buildings have been achieved by publicly advertising for designs; nor can it be said that assessors lack in ability. What, then, is the cause of the widespread dissatisfaction—that undercurrent of suspicion and jealousy which often follows in the wake of competitions? In the first place, few practising architects can afford to enter a competition which entails great expense and labour. They may, if work is quiet, decide to venture, especially if assessors are men of knowledge. The fact, however, remains that the field is generally left to the younger men and students who, fired with the idea of attaining instant renown, stake their all on the gamble.

I am not one of those who write on minor questions of the width of corridors or the line of the drainage, neither is it my purpose to question the taste of assessors who may or may not have definite ideas of architectural style. My remarks are directed almost entirely to the way in which the conditions are framed. Having the advantage of moving among assessors and competitors, both sides of the question are clear to me. The procedure usually followed is for a public body to determine the nature of a project and to draw up a list of requirements. The Royal Institute of British Architects is then approached to nominate an assessor or assessors. A new programme is drawn up, the site is examined, and the competition advertised. So far, so good. It would be more to the point, however, if the assessors and the competitors adhered to the conditions. As it frequently happens, both parties find it convenient to put the blind eye to the telescope—a fine gesture, but scarcely fair. Those accustomed to working in committee realise how difficult the drafting of procedure can be made. Is it to be wondered at that assessors make slips, and clever competitors follow the line of least resistance?

Writing to you, Sir, in a dispassionate frame of mind, and as one who never dares to enter the thorny paths of public competitions, I am of the view that our learned and respected assessors would gain fuller confidence from the public if they were to plan the proposed building or buildings in sketch form, grouping the chief items of the programme in order and thereby ascertaining whether a scheme could be worked in agreement with the written word. They would then state in precise and dignified language that any departure from the conditions, however brilliant, would disqualify. Neither would it mean that the assessors would have decided the result before the event. In the words of an old legal document: "to be tried on Tuesday and hanged on Friday." It would at least ensure the assessors knowing beforehand whether the programme was overloaded or not, and also whether the site could carry the requirements. I feel certain, Sir, that such a simple modification would do much to help all parties, and would result in a gain to the art we follow.

EDWARD MASSINGHAM WARBOYS.

Fires Due to Electrical Causes.—"Protective" Metal Casings.

SIR,—I feel that it is necessary to draw the attention of architects and builders and fire insurance companies to the risks attendant upon the use of metal coverings for safety fuse gear, aggravated as it is by the fact that all such metal coverings have to be "earthed" in accord with regulations. On a recent occasion the fuse boxes and interiors were of a well-known manufacture with porcelain carriers of special design where the length of fuse wire channel was appreciably longer than the actual straight line measurement between terminals, the porcelain carriers being in too close proximity to the metal cover.

A fault developed on the installation, with the result that the "safety" distributing fuse created an arc between its terminals and the metal cover ('earth'), the main fuse operating in similar disastrous manner. Fortunately the resultant fire was arrested in its incipient stage, otherwise there might have been another detrimental lay-press report of a fire in a public place of entertainment, believed to be due to electrical causes.

Great care should be exercised in the design of such gear; there should be adequate spacing between terminals and metal covering, or the metal cover should be adequately insulated by an indestructible, fire-proof, non-hygroscopic lining from adjacent sources of possible arcing, "earthed" metal being inflammable under such circumstances, and tending to maintain destructive arcing. The same applies also to iron-clad switch-gear.

Also, adequate means should be provided for the extinguishing of an arc in its incipient stage, and the actual straight-line measurement between terminals and between the latter and the metal covers should not be lessened on the score of reducing the cost of materials. Safety and immunity from fire risk should be the first considerations.

There is still much to be said in favour of the good, though it may be said to be old-fashioned, hardwood cover, suitably ventilated and amply proportioned with long-break cartridge fuses, together with a wiring system now obtainable in which there is an agreeable absence of metal encasements with all their troublesome "earth" bonding gadgets—several of questionable efficiency in permanency of good current-carrying capacity, but all costing money.

I mention long-break fuses in view of the foolhardy temporary expedients that have been and apparently will always be adopted in emergency when proper replacement carriers are not readily available. Trusting you will see your way clear to issue this note of warning in the mutual interests of public safety and the welfare of electricity.

J. C. ELVY.
Chartered Electrical and Consulting Engineer.

(Correspondence continued on page 72.)



Durham Castle and Cathedral.

THE R.I.B.A. CONFERENCE AT NEWCASTLE AND DURHAM

THE ARCHITECTURAL VISITOR TO NORTHUMBRIA.

By PROFESSOR R. G. HATTON, M.A., A.R.C.A.

FROM Middlesbrough to Berwick, and across to Carlisle, is one of the "provinces" into which our land naturally divides itself. Newcastle-upon-Tyne is the social and commercial centre of it, but is not its capital. There is no provincial capital. Our system of local government precludes the development of provincial sentiment, and, instead, only magnifies local jealousies. Hence, while our administrative buildings are many, they are of little consequence, and usually are pretentious, through straining to express importance. Excepting the old Town Hall at Berwick (and Berwick had always a peculiar and doubtful independence of its own), perhaps those at Middlesbrough are the most dignified.

Precisely opposite conditions produced the magnificent pile of Durham. In the old days all eyes, whether for devotional, ecclesiastical, or civil reasons, were turned towards Durham. There, the miraculously incorrupt body of St. Cuthbert lay, and there his powerful successors the Prince-Bishops, ruled supreme over all persons, ecclesiastical and civil. Even the king himself was here of little account.

Durham, or *hill-island*, is built upon a rocky peninsula, long and narrow. Leland wrote:

"The towne self of Durham stondith on a Rokky Hille: and stondeth as men cum from the South Cuntre on the North Ripe of Were: the which water so with his course naturale in a Botom windith about, that from Elvet, a greate Stone Bridg of 14 arches, it crepith about the towne to Framagate Bridge of 3 arches, also on Were, that betwixt the 2 Bridges, or a little lower at S. Nicholas, the toune except the length of an arrow shot is brought in *insulam*: And sum hold opinion that of auncient tyme Were ran from the place where now Elvet Bridge is straite down by S. Nicolas now standing on a Hille: and that the other course, part for policy, and part by digging of stones for building of the Town and Minstre, was made a valley, and so the water-course was conveyed that way,—but I approve not ful this conjecture."

Upon the extraordinary beauty of the city as seen from the railway, there is no need to dwell. It is unsurpassed. And not only do the masses of the Cathedral and the Castle agree perfectly, but the lines of the town itself and of the river, and even the spire of the otherwise negligible church of St. Nicholas, carry out the theme, and melt it away in the

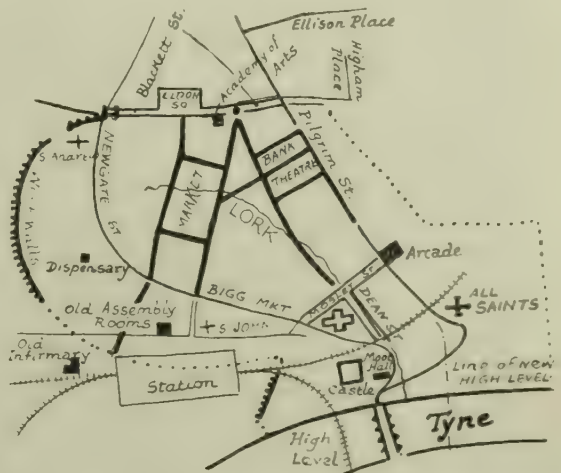
distance. The colour at evening is usually very beautiful. Then, too, the low rays of the sun illuminate the planes of the buildings, and show up their happy proportions.

Perhaps what is of greatest importance in architecture is the relation of the building to the lie of the land. Unless this is perfectly effected, the mind cannot rid itself of the idea that the building ought not to be there. But if it is effected, the buildings seem so to belong to the land that it is as if Nature herself had raised them. It is because this relationship is so perfect at Durham that the place has so poetic an effect. To understand the problem we must grasp in our minds the whole structure—the rocky peninsula and the two bridges—whether we see them or not. With this whole structure the planes and the bulks of the Cathedral and the Castle are in perfect sympathy. The Keep of the Castle is exactly right, both in bulk and in position.

The western towers are extraordinarily beautiful. Nothing could exceed the value of the openings of the upper part. But so quiet is the design that a peculiar solemnity reigns over them, and they seem so aged, and are so attuned to the ground on which they stand, as



Plan of the Valleys and Ridges on which Newcastle stands. The ancient wall is shown.



Plan of the streets laid out by Grainger in the second quarter of the Nineteenth Century (shown in thick line). Dots represent line of old wall, parts still standing being shown in castellated line.

to assume the fixed and unalterable nature of the rock itself. They seem to be returning again to the universal sleep of things, "When Time is old and hath forgot itself."

The central tower, younger and ampler, more proudly rears its head—as if it still bore sway. How slight are the projections which make the beautiful outline!

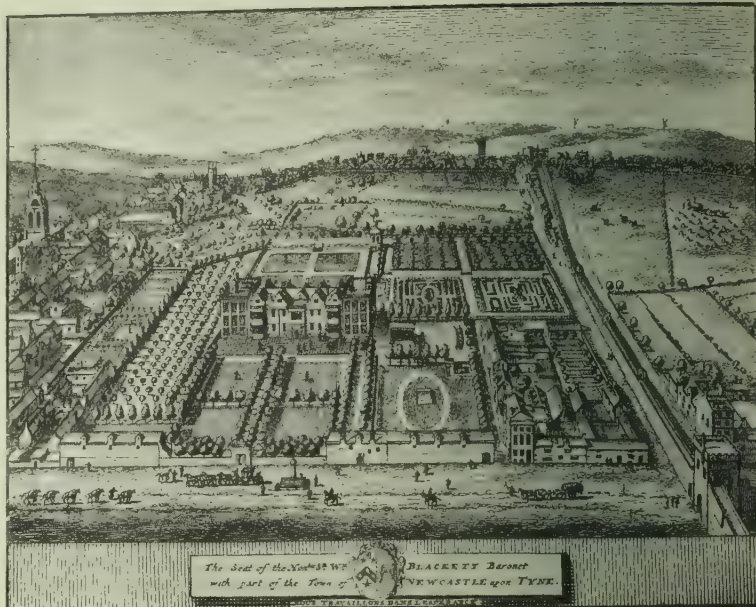
But much of the beauty of Durham lies in its ancient stone bridges. Substitute steel ones, and the peculiar rhythmical beauty of the place is destroyed. And it seems to me that the knowledge of the presence of the bridges, although the two can never be seen at once, is extremely important. If architecture were to be judged and enjoyed solely pictorially—that is, by taking views from this point and that—we might admit that what we cannot see does not matter. But the mind enjoys architecture as a correlation of solids and dimensions, and these it does not apprehend by taking views.

In any bringing of Durham up to date—if that need be done—it is vitally important to preserve the bridges as they at present are, and any new ones should be of stone. The narrow streets, too, should be kept as they are. Some other way to satisfy a petrol-driven world can be found.

Inside the Cathedral the greatest things to me are the columns in the nave. With this article is a reproduction of several photographs of them. To me these columns have somewhat the same quality as have those of the Parthenon. Their proportions are so perfect that they seem verily to be almost alive. Their delicate execution here and there, as on the lower edge of the abacus, will be noted.

The thirteenth-century work of the choir and of the Chapel of the Nine Altars, athwart the east end, is remarkable for its vaulting and for its carving. Some examples are given in the illustrations. Other architectural details are illustrated, too, which the architect will see the importance of. One cannot but mention a few of the principal features in or about the Cathedral—the Galilee Chapel at the west end, the wall-paintings within it, the famous sanctuary knocker on the north door, the iron-work on the south door, the font cover, the tracery of the north window, the vaulting of the Prior's kitchen, and the Dormitory, now the Cathedral library. In the library are preserved fragments of St. Cuthbert's coffin and other relics of his sepulture.

The Castle, overshadowed by its mighty neighbour, is important and rich in interest. But he who visits Durham should fall into the able hands of Mr. W. T. Jones, F.R.I.B.A., than whom nobody knows more about all these things.



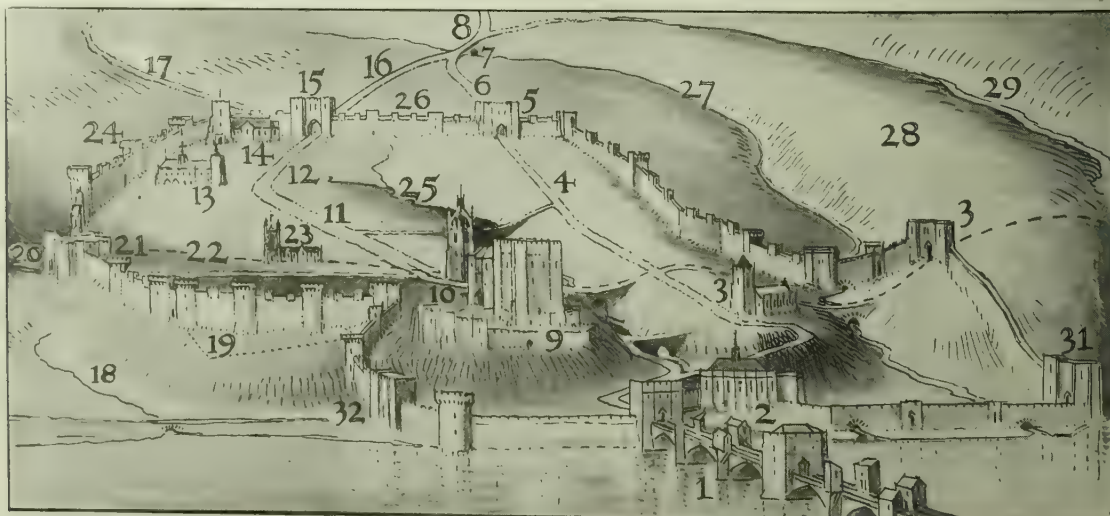
View of Newcastle at end of the Seventeenth Century.

In and about Durham are three or four small parish churches. In St. Oswald's, over the river, there is a window by Ford Madox Brown which is worth seeing, not perhaps as a window, but for the expressive figure subjects included in it. In some of the churches, too, one meets with, and is generally rather shocked by, windows by Wailes of Newcastle, who flourished about 1860. Wailes sent his artists to Chartres and Bourges to study the glass there—the fame of Louis Philippe must have spread to these parts—and they brought back, and kept on using, patterns, figures and canopies which they copied there. Wailes mistook the distance at which work of the type he was imitating should be viewed. Viewed a long way off some of his windows melt into a rather pleasant violet tint.

On the way from Durham to Newcastle we pass Chester-le-Street. Here the body of St. Cuthbert reposed for about a hundred years during that strange pilgrimage of it. The saint had earned in his lifetime a great name. There was every reason to revere him. But when his body was exhumed some few years after his death it was found to be "whole and incorrupt, the joints supple." This miraculous preservation raised him to a position of veneration so high that he became not only the

patron saint of these parts, but the centre of religious, and even of civil life. The story of his body, the *Corsaint*, being carried hither and thither for safety, and its final sepulture at Durham, is a theme which no one who treads the soil of Durham, or indeed of Northumbria, dare omit to be familiar with. The *Lindisfarne Gospels* in the British Museum, which is one of the greatest art-treasures of all time, was made in honour of Cuthbert, not long after his death; made, too, at Lindisfarne, Holy Island as we now call it. Such a work, and the Venerable Bede's learning, attest the high civilisation of our "province" in what, in our impudence, we call the Dark Ages. Perhaps to be properly civilised we have to have soda fountains, oyster dives, movies, and electrically illuminated signs. No, it is highly probable that Cuthbert and Bede were not civilised—but only intellectual. Anyhow, we cannot dispel the material evidences of faith which are here before us—at Jarrow, Monkwearmouth, Holy Island, Hexham, Escombe. At Monkwearmouth are some carvings of more than ordinary interest.

Newcastle-upon-Tyne is a fairly picturesque place as modern industrial towns go, but it is painted in greys. In the old days it must have looked bonnie in its green, blue, white, grey,



Conventional Pictorial View of the Valleys, Ridges, Roads, and Wall of Newcastle in late Mediæval Times.



Cathedral Church of St. Nicholas, Newcastle.

[From an Etching by MR. ROBERT BERTRAM.]



"The Prospect of Durham from the South-East."

[From a Print dated 1745.]



Photo: W. Metland.

Durham Cathedral.



A.



B.



C.

DURHAM CATHEDRAL.

A.—Buttresses of Choir.

B.—Arched Buttresses of Nave.

C.—The Nine Altars. Ribs of the Vault.

D.—Ironwork on the South Door.

E.—Durham Castle from the Air.



D.



E.

brown and red. The Roman Wall passed through it. It was a Roman Station—Pons Ælii—so named from Hadrian's bridge. This bridge was at the point where the Tyne (which is a tidal river for twelve miles) is first passable. But whatever Newcastle was in Roman or in Saxon times, it does not assume architectural importance till the twelfth century, when the present Keep of the Castle was built. The Keep (we call it the Castle) was built about 1180, and was put into repair and roofed early in the nineteenth century. All the outer buildings except the Black Gate, and a short stretch of wall, wherein there is a postern, are gone. Inside the Castle is as gloomy as one could wish. The Chapel has some pretty work, but perhaps what has most distinction is the solitary central pillar in the dungeon. Its proportions make it almost a person—a grim sentinel. The Castle is in the hands of the Society of Antiquaries, and houses an interesting collection. An important collection is also in the Black Gate.

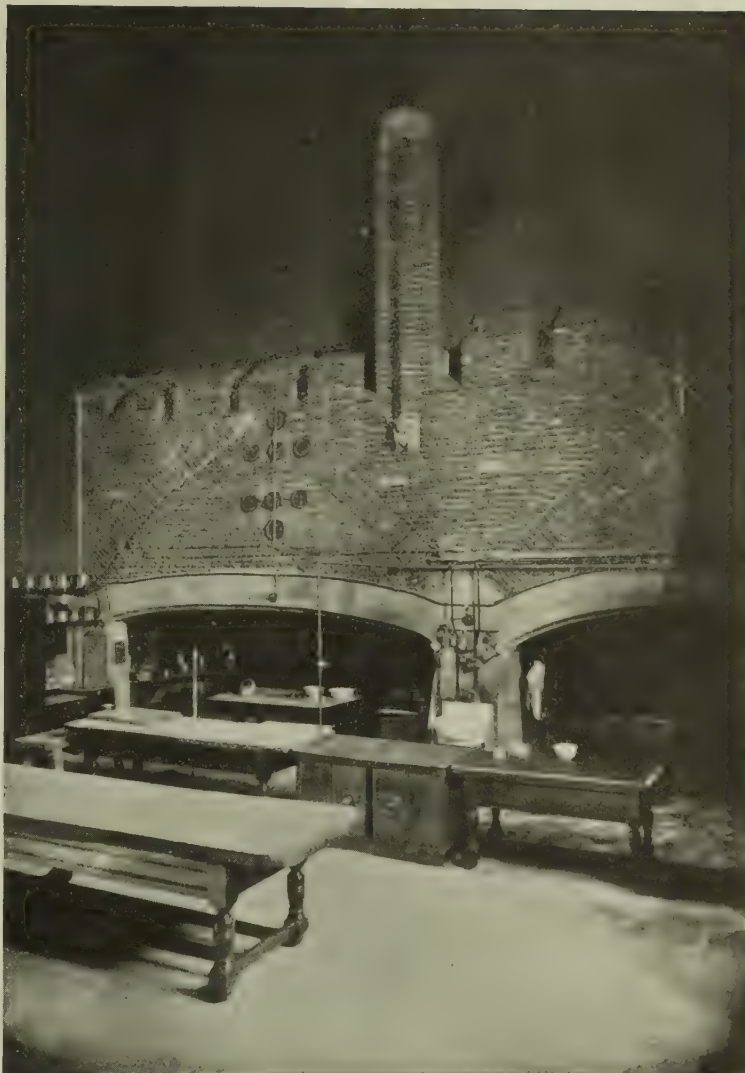
But our Province is rich in castles. Raby in County Durham is one of the best. In Northumberland they are of all sorts, and sizes, from Alnwick down to the Pele-towers, which not infrequently form part of a vicarage. Warkworth Castle (which is now in the hands of the Board of Works) was taken, it will be remembered, by Viollet-le-Duc as an exemplar for a country mansion. Norham Castle, on the Tweed, is also in the hands of the Board, and is being excavated and put into a sound condition. The excavations have revealed most interesting structures. The province, too, includes several ecclesiastical buildings of interest, if eclipsed in importance by others elsewhere. There are Carlisle, and Lanercost, and Hexham and Tynemouth. Lindisfarne is a miniature Durham. Of the churches the most conspicuous are St. Cuthbert's, Darlington; St. Hilda's, Hartlepool; St. Michael's, Alnwick; Ryton, with its early lead-covered spire; Staindrop, and Norham, which has very delicate late Norman mouldings.

But no feature of mediæval architecture is more distinctive than the tower of St. Nicholas Cathedral, Newcastle, with its lantern carried on arches. The upper half of the tower is perfect. The lower part is ordinary, but perhaps was always more or less hidden in the old days. The vaulting under the tower is interesting: an illustration is given of it.

Inside, St. Nicholas's is a plain, spacious affair, and has been rendered peculiarly satisfactory by the wood screening and the reredos which R. J. Johnson put in about thirty years ago.

The stained glass is of little consequence, but is an interesting if not an exhilarating display of the efforts of the nineteenth century. One laments the sacrosanct nature of stained-glass windows. In the Englishman's mind there is no sacrilege equal to that of smashing a stained-glass window. Newcastle, from Wailes onward, has done a good deal of stained glass, reaching often a respectable level of execution. The glass itself is made to-day at Sunderland. Sowerby's, of Gateshead, made some fine material in the days when they experimented with glass which had quality. A window in Walker parish church is made of their glass. In and about Newcastle there are some windows of the less conventional type. There are two good lights by Burne-Jones in St. Cuthbert's, Melbourne-street, and two in St. Helen's, Low Fell. At Brampton there is a good deal of his glass—the east window being particularly fine—and there is a beautiful little window in Lanercost Priory, near Naworth. At Haltwhistle the east window is good, and apparently an early Morris or Madox Brown. There is a window by Dyce at Alnwick. Of modern rebellious efforts there is an example at St. Luke's, Wallsend—worth seeing if only to estimate whether it is right to do windows in that way or not.

The monuments in St. Nicholas's are much better than the glass. There, too, is a picture by Tintoret, which, however inappropriate in other ways, has the same spaciousness as the building itself.



Durham Castle: The Kitchen, showing Bishop Fox's Fireplaces, 1499.

The visitor's chief interest in the architecture of Newcastle will probably be in the layout of the central part of the city. I have indicated at the beginning of this article what seem to me to be the reasons why civic architecture is of small importance in our towns—it is the absence of any local interest greater than that of a few parishes lumped together. Before the railways developed the people of a county flocked to their county town. There was even some sort of a season. Some of the houses of the noblemen and gentry of this county still stand within our walls. But things are changed now, and there is even the danger that the poorer people, as well as the wealthy, will less and less think of a town as a civic centre. They will know where the rate collector's office is, but beyond that they will display little interest. To them the town will be a shopping centre, a cinema centre, a medical centre, and perhaps an educational centre. The trading houses are more likely to make an architectural splash than the municipalities, and perhaps it is symptomatic of this that our best modern buildings in Newcastle are such things as Lloyd's Bank and the Northern Assurance Offices, both in Collingwood-street, and both by R. J. Johnson. The merit of these buildings is obvious. The style which Johnson favoured was followed for a while by other architects. There are two good, though small, commercial buildings in the central part of Pilgrim-street, following this lead. But after these, and a few more, a freer style came into vogue, and buildings ceased to be neighbourly in appearance. Advertising began to be pursued, and necessarily forbade one man's building looking the least like another's—and a

pretty mess things will get into, unless the co-operation amongst architects, now happily arising, comes to the rescue.

The architectural visitor will probably find that town planning is in the air in Newcastle, and he may form some opinion of what has been done in this way in the past, and is likely to be done in the future. For it happens that Newcastle trod the same path between the years 1820 and 1850. To speak of this singularly takes us back to mediæval times, and the "lie of the land."

We have seen that Newcastle is where it is because it is here that the Tyne is first passable. Even now, when railways and bridges are easily flung here and there, Newcastle remains where it was—because it is here that the high grounds on either side of the river come most nearly together, and simplify bridging. But Newcastle unfortunately lies on ground intersected by rivulets, or burns, which, though insignificant, and now mostly underground or drained away, had channelled out valleys which are deep enough to make road-making across them expensive.

The little sketch map shows these valleys and the ridges between them. It shows also the low-level bridge, now the Swing Bridge, where also the ancient bridges were; and branching from it two roads, which are in dotted lines. Each of these roads climbs a ridge by a bent path. Between these ridges is, or was, a small burn—the Lork Burn. The roads encircle the valley of this burn, and then reunite, and pass on to Berwick. By the left road one went to Scotland by way of Otterburn and Jedburgh. The little plan also shows the town wall, and the line of the Roman Wall



Photo: W. Maitland.

Durham Cathedral: The Nine Altars from the Triforium of the Choir.



Photo: W. Maitland.

Durham Cathedral: The Last Bay of the Choir.



Durham Cathedral : The Galilee from the South.



Durham Cathedral: A View of the Nine Altars from the Triforium of the Choir.



Durham Cathedral: The Nave from the Triforium.



Durham : Sculpture.

passing, east to west, to Carlisle. The Cathedral is shown by a cross, with the Castle, a square, beside it. On the other ridge a cross indicates All Hallows, now All Saints, and now a classical building with a conspicuous spire. It will be seen that the Lork Burn occupies the heart of the old town, and it must be remembered that when the nineteenth century opened there was not very much outside the walls. In another drawing is given a conventional view of these conditions (see p. 48). On the walls there now remain only two stretches, the west walls and a stretch in Orchard-street, immediately east of the station. These are marked in dark castellated line in our diagram.

Walls of Newcastle.

1. The old bridge; 2, the Guildhall; 3, All Hallows (All Saints) on the ridge, on which 4, Pilgrim-street, runs north through 5, Pilgrim Gate, to 6, which is now Northumberland-street, which joins at 7, Barras Bridge, the street 16. to proceed north, 8, to Berwick. 9, the Castle Hill, up which the "side," coming from the bridge, winds and passes 10,

between the Castle and St. Nicholas's, and continues as 11, the Bigg Market, and 12 Newgate-street, with 13, the Friars, and 14, St. Andrew's, on the left. passes through 15 New Gate, and so up 16, the street now Percy-street, to the north, or else north-westward by 17, Gallowgate, to Otterburn and Scotland. 18, The Skinner Burn. 19, the site of the railway station. 20, The road to Carlisle, through 21, West Gate. 22, The Line of the Roman Wall, shown with dots and passing to the right past 23, St. John's, and then St. Nicholas's, then down the dene and up over All Saints' Ridge, down over Pandon Bridge, and through the Sally Port, 30, to Wallsend. 24, The west walls. 25, the Lork Burn, making a valley down the middle of the city. 26

The North Walls. 27, Pandon Burn, which has passed under 7, Barras Bridge, and makes a valley east of All Saints' Ridge. 28, Shieldfield. 29, The Ouse Burn. 30, Sally Port. 31, Sand Gate, from which a wall ran parallel to the river to 32, Close Gate.



Newcastle : The Castle.

beginning of the eighteenth century, we see Anderson Place and the open land of the Lork Burn. We see also the North wall of the town, Pilgrim Gate, in the right foreground, the New Gate at the far end of it. Upon the site of this piece of the wall and the sixty foot ditch outside, the present Blackett street runs. Newcastle, therefore, in this particular, follows the Continental system of having a boulevard where was a bulwark.

This open area of the Lork Burn was the ground laid out by Richard Grainger in the years succeeding 1834 in his town-planning scheme, which gave Newcastle its present appearance.

But before we take note of Grainger's work we must refer to two previous periods of building.



Newcastle : Chapel in the Castle.

Leland wrote of the walls : "The strength and magnificence of the wauling of this towne far passeth all the walls of the cities of England, and most of the townes of Europa." One is always sceptical of praise of this sort, but I see no reason to doubt that Leland got this impression, and if he did I do not see why the grouping may not have befallen so as to make a striking picture. For the slope of the ground would permit a spectator standing on the Gateshead side to see practically all the walls and towers at once, and, of course, the castle was then a considerable group of buildings. The view from Gateshead at full tide must have been impressive. Leland's remark merely emphasises the gain obtained by designing sympathetically with the conditions of the site. You get full æsthetic value for your money.

Now the important circumstance in Newcastle's town-planning was the clustering of the buildings around the circumference, within, though not against, the walls, leaving the area of the Lork Burn free for garden space and pasturage. The upper part of this valley, in mediæval times, was in the possession of a nunnery, but by the seventeenth century it belonged to the house of Mr. Blackett. This house ultimately became known as Anderson Place. It stood where the Theatre Royal now stands. In another illustration, which is of the



Bench End, St. Mary's, Gateshead.



Newcastle : Friars' Doorway to the Smith's Hall.



Durham Cathedral: The Nevill Screen.

One is the Tudor-Stuart period, which gave us the beautiful half-timber, half-glass, houses of which a few still remain—fortunately in good hands—on the Sandhill. They are represented in Mr. Bertram's etching on page 61. I should think anyone an utter barbarian who did not like these houses. They are of a craft-work type. Inside they are panelled and have fine fireplaces. One such fireplace is preserved in the castle.

To the same time belongs the Guildhall on the other side of the Sandhill. This building has undergone two or three transmogrifications. The hall itself, upstairs, is a pleasant, clumsy, opulent-looking affair, and is at present disfigured by temporary partitions to provide corporation offices. Adjoining the hall is the old Mayoral Chamber, very good of its kind. Nearby is a lock-up for here formerly the assizes were held, as the furnishings witness. Some legal formalities still go on here, I think. At the east end is the stately Merchants' Court, renovated in 1835.

On the staircase, as he ascends, the visitor with historical sympathies will have doffed his cap to his Sacred Majesty King Charles II. He is in bronze, in a Roman habit, but with his own unmistakable face. His Majesty now presides over a coal-bin, some dust buckets, and, at times, an array of empty milk bottles. There is great sentiment in Newcastle for "Old Newcastle," but there is little regard for the relics of it. Another instance of this neglect is the state of the Friars. The Friars is the remains of the monastic buildings near West Walls. At the Dissolution the buildings passed to the town, and were let out to certain of the trade guilds, mysteries or companies. Two or three still hold their courts there. The doorway to the Smiths' hall is a pleasant, clumsy affair; but the buildings are falling into disgusting squalor. To the Stuart period also belongs the Holy Jesus Hospital, sunk below the north side of City-road, and formerly looking down Pandon Dene. A little further, and a little later in date, and formerly just outside the walls, is the Keelmen's Hospital. Belonging to the same, and to earlier times, is the Trinity House, in Broad Chare, which comes out at the Quay. There is much of interest here, including a good little chapel.

The other period of which we should speak is that which, for convenience, we may call 1775. Then, as now, there was no care for vestiges of

the past; all efforts were towards making the city convenient and elegant for the time being. This 1775 period is one of refined classicalism. The principal examples are All Saints' Church and the Old Assembly Rooms. A front was

stuck on the Guildhall at the same time. A building, now gone, was the Dispensary. The old Infirmary still stands (one passes it as the train draws into Newcastle from the south), and then there are the elegant houses in Savile-row and Ellison-place, a few houses still remain in Northumberland-street. One bowed shop front remains in Percy-street. The style passed on into the nineteenth century. Higham-place (in a house in which the Northern Architectural Association has its home) is an example, and there is a pleasant stretch of houses at the top of Northumberland-street, where their good proportions are helped by slight changes in the angles of the sites. In houses of this type the woodwork is generally delicate. In the county there were many mansions erected of this elegant style. James Payne built Axwell Park, Bywell Hall, and Gosforth Hall. Sir George Trevelyan's house at Wallington is a particularly beautiful example. Earlier, at Seaton Delaval, Vanbrugh had put up one of his stately palaces. We give some photographs on page 68. The place is now more or less a ruin.

The elegant classical buildings in Newcastle embellished the town, but did not alter it, beyond extending the suburbs. The sketch plan given on p. 47 shows some of the places we have mentioned. They are all still on the circumference. The suburb chiefly developed was the area north of the Blackett-street. Probably this development was a bar to Grainger's actions. He may have dreamt of the new property there being scrapped.

Here and there one meets with good ironwork. There are good wrought-iron gates at Tanfield, and a decaying specimen is at the Manor House, Jesmond, Newcastle. Later come the cast-iron gates; of these a good pair are at Gosforth Park—too little thought of nowadays, I think—and there is a good cast-iron railing (not of the spear type) at the corner of Jesmond-road Newcastle.



Photo: W. Maitland.

Newcastle: Holy Jesus Hospital.

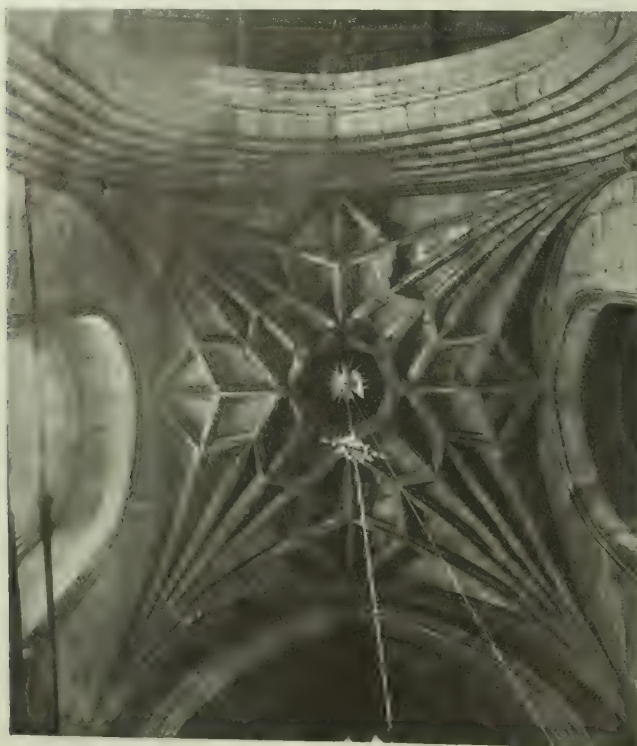


Photo: W. Maitland.

Newcastle: St. Nicholas. Vaulting of the Tower.



"Surtees House," The Sandhill, Newcastle.

[From an Etching by MR. ROBERT BERTRAM.]



War Memorial, St. Thomas's Churchyard, Newcastle.

MESSRS. CACKETT & BURNS DICK, FF.R.I.B.A., Architects; MR. JOHN REID, Sculptor.

Early in the nineteenth century a craze for improvement set in—perhaps it was like our own case, following a war. The most important thing done was the abolition of the prison in the New Gate. New Gate had been the town prison for a long time; so, about 1820, they decided to get a new jail, and pull down the old one. West Gate was at that time also standing. It was to be pulled down as soon as a meeting-place for the “city company,” which met in a room over it, could be accommodated elsewhere. But the most notable improvement was the filling in of the lowest stretch of the Lork Burn, and the making there of a new street—Dean-street. This gave a gentler, if still a steep, ascent from the quay. Across the head of it Mosley-street was also formed, with the Greek “Royal Arcade” at the east end of it. The projectors of Dean-street would have carried it on up if the owners of houses in the Bigg Market and in Pilgrim-street would have sold their gardens which ran down to the Lork Burn.

It was at this time, too, that the Greek Moot Hall was built on an old site. And Dobson, the architect, had a scheme for improving the area round about the castle. He would make the Castle a debtors' prison. Poor debtors! He also designed the Academy of Arts, in Blackett-street, and the Lying-in Hospital in New Bridge-street, nearly opposite his own house. He also added a Greek piece to the Guildhall. His churches are all about, in various styles, according to the books.

In all these buildings, book-learning had taken

the place of invention, and the same reliance upon the copper-plate example was to dominate the great resurgence of the civic spirit which owed itself to Richard Grainger. Dobson was the architectural shade which hovered, and at times the shadow which lay over Newcastle. Grainger was a different sort of person. Perhaps inspired by Regent-street, he was impatient of isolated efforts, and proceeded on a plan. He acquired Anderson-place, and all that parcel of land which lay westward of Pilgrim-street for nearly a quarter of a mile—in short, the upper part of the valley of the Lork Burn.

Grainger was born in 1798. Of poor parentage and charity-school education, apprentice to a house-carpenter and builder, he followed the career of the romantic novel and married an heiress with £5,000. In his early days as master-builder he built Higham-place and Blackett-street, and as a speculator, Eldon-square (1826), Leazes-terrace and crescent, and the Royal Arcade (1832). These projects preceded his great scheme (1834) for building the middle of the city.

Grainger's planning seems to have been controlled by these principles:—1, that main roads should be level, leaving decivities to cross-roads; 2, that blocks should be of some simple geometrical figure; 3, that a uniformity of style and height of building should prevail throughout, no matter what purpose the building served; 4, that there should be some marked difference in important buildings; 5, that regard should be had to vistas; and 6, that services (market,

exchange, theatre) should be in some specified positions.

The style adopted was classic Roman, varying into Greek, but not into the Doric. The sketch plan (see p. 47) shows Grainger's lay-out in thick lines. There are four main streets, two and two, the two innermost meeting at an angle and both, therefore, having Grey's Monument at its head. The monument was designed by John Green, who, with his son Benjamin, also did the Theatre Royal. The base of the monument is so Gargantuan in its detail, though doubtless right according to the book, that one feels uncomfortable when near it. The Bank (Lambton's, now Lloyds) is the best building of the whole scheme, unless the Market, which was one of the first things done—and done by Dobson—is not the best of all. I am speaking of the inside, which is remarkably dignified. It is now made squalid by advertisements and irregularities of all kinds. The market is Corporation property, and is a good place for a modern municipality to show what it can do in the way of having regard for the amenities of life. Dobson's Bank of England, in Grey-street, has a clever double parapet. The building seems to me to lack a central, or a flanking, note. It must not, however, be taken by itself. Grainger always treated a block as a single building, almost invariably with a “centre” and “wings.” The Bank of England is such a centre, but the slope of the street disintegrates the whole.

At the time the buildings were put up



Tynemouth Priory.



Newcastle: The Hall of the Castle.



Borough of Tynemouth War Memorial.

MESSRS. CACKETT & BURNS DICK, FF.R.I.B.A., Architects.



Armstrong College Sports Pavilion, Newcastle.

MESSRS. CACKETT & BURNS DICK, F.F.R.I.B.A., Architects.



Armstrong College, Newcastle: Students' Union Building.

MESSRS. CACKETT & BURNS DICK, F.F.R.I.B.A., Architects.



Armstrong College, Newcastle : Students' Union Building. Ground Floor Corridor.
MESSRS. CACKETT & BURNS DICK, FF.R.I.B.A., Architects.



Armstrong College Sports Pavilion, Newcastle : First Floor Verandah.
MESSRS. CACKETT & BURNS DICK, FF.R.I.B.A., Architects.

Grainger's streets must have looked very well. There must have been some civic feeling about in those days. But his streets were fronts first, and useful buildings afterwards. The part out of sight was not too well planned or built in some cases.

Grainger's scheme stopped at the Bigg Market. Grainger-street West is a later prolongation. The Central Station, also, was not part of the scheme, but it goes with it, largely because Dobson was the architect, and more or less kept the style going. But I do not think the man who made Grey's Monument, to be seen up Grey-street, and up Grainger-street as well, would have given Grainger-street West so poor a view of the Station as it has. And one cannot but wonder what Grainger would have thought of our poles and wires, and huge gilt letters of all kinds disfiguring his trim facades. Surely there is a squalor of civilisation that is not of the slum but in the main street. Even the shade of Dobson—revered name as it once was—has not saved his Station from a particularly vulgar sign—the vista down Grainger-street—but it is proverbial that a railway company has neither soul to save, nor body to kick. The directors, as all our traders generally, can retire to their sweet places in the country, quite contemptuous of the mess which the pursuit of half-crowns makes of the places where the people who make the country's wealth are obliged to live. Whether such societies as the recently-formed Newcastle Society and the Durham Society will have any effect, beyond choosing the paint for the lamp-posts, remains to be seen. Certainly it is rather hard on the architect that his work should undergo such degradation.

I have not felt called upon to say anything



Newcastle : Grey-street.

about the recent work which has been done, or of work by living architects. It is here for all eyes to see. I may, however, call attention to the churches which were designed by the late R. J. Johnson, and the late W. Searle Hicks. St. Matthew's, Westgate Hill, All Saints', Gosforth, St. Chad's, Bensham, are examples. They are remarkable for the beauty

of their mouldings, of their traceries, and of any lettering which occurs in them. They are to me very good instances of working in a past style, and yet not seeming to do it "out of a book."

Finally, perhaps, I should mention the sculpture. There is some very fine figure sculpture in the Nine Altars at Durham. In Newcastle Cathedral there is something by Flaxman, and the other monuments there are for the most part in good taste. The organ case is worth a glance. I have mentioned the statue of Charles II at the Guildhall. An equestrian figure of James II used to stand on Sandhill, but it they threw into the Tyne and then fished it up again, and cast bells of it for All Saints. In the civic days of William IV and Victoria the sculptural giant hereabouts was John Graham Lough. A most depressing collection of his plaster is preserved at Elswick Hall—in Elswick Park in Newcastle. It is best not to go. Enough about Lough can be gathered from his statue of George Stephenson with four god-like workmen at his feet, near the station. It is worthy of note that the statue faces east. Evidently the stream of humanity came from the city and went to the station. Now it is the other way about—for your statue should always meet your crowd. Stephenson wants shifting round. Our other statues are good, though perhaps not always placed to the best advantage.

Most of the photographs which accompany this article are from negatives by Mr. William Maitland, of Newcastle. To Mr. Maitland I am indebted for much help in the selection of these.

[For the principal photographs of Durham Cathedral we are indebted to Mr. W. T. Jones F.R.I.B.A., of Durham.]

THE CONFERENCE PROGRAMME.

The arrangements for the Conference are as follow:—

Wednesday, July 8.—Members are the guests of the Northern Architectural Association, and are welcomed by the President of the Association.

Thursday, July 9.—10.15 to 10.30 a.m.: At the Old Assembly Rooms, Westgate-road, 10.15 a.m., the Conference assembles for the inaugural meeting. Members are officially welcomed by the President. Subject: "Architects and the Public." Afternoon.—Alternative Programmes: (A) Trip down the river to Tynemouth Priory, etc. (B) Local visits.

Friday, July 10.—Visit to Durham. 7.1 p.m. for 7.30 p.m., the Conference Banquet in the Old Assembly Rooms, Westgate-road.

Saturday, July 11.—Informal excursions.



Dame Allan's Endowed School, Newcastle.

R. J. JOHNSON, Architect.



New Offices and Warehouse, Westgate-road, Newcastle.
MESSRS. CACKETT & BURNS DICK, F.F.R.I.B.A., Architects.



Extensions to Tynemouth Infirmary.
MESSRS. CACKETT & BURNS DICK, F.F.R.I.B.A., Architects.

NEWCASTLE: WHAT IT MIGHT BECOME*

A PLEA FOR THE CITY BEAUTIFUL

By J. DOUGLAS MITCHELL.

We should form clearly in our minds the model of what we conceive the City Beautiful should be. No doubt we shall all approach it

turesque to a degree, the central point of the whole picture being the steeple of St. Nicholas Church. Equally picturesque is the view from



Newcastle: Stowell-street Wall.

from slightly differing points of view, but in the effort to form a mental model which we can visualise and look at continually, we shall assuredly be sowing and watering the seeds of civic pride and civic service with their resulting fruit—the betterment of our city for the betterment of all.

When I came north after the war, bearing in my heart a deep love for the ancient city of London, I looked at Newcastle from the point of view of one seeking fresh loyalties and new attachments. I found much to fascinate me, and much to arrest the imagination. I found a city with a past, which carried one back into the times of our earliest history, a past rivalling in historical interest any, and far out-distancing most, of our ancient cities.

Newcastle is a city set upon a hill, and divided from its neighbour by a river with steep, almost mountainous banks. Seen from the top of the high level bridge, it is pic-

* Extracts from a paper read before the Northern Architectural Association. The views expressed in this paper and the plans put forward were based only on the personal opinions of the lecturer, and we are requested to state that they must not be taken as an indication of the opinions of the members of the Newcastle-upon-Tyne Society, which was founded a few months later, and of which the lecturer is hon. secretary.

the river, and Turner selected that aspect for his picture of the city. This view also shows the steeple of St. Nicholas Church as a central feature. This steeple is of amazing beauty, and it is no exaggeration to claim it as one of the wonders of the world. It is a masterpiece of its kind.

Newcastle is also distinguished from other cities by the high costs of rent and of living; it has few main streets—you can number them on one hand. This confines the main shopping area into a very small compass, which is partly the reason for the high rents. I was also struck by the lack of adequate means of communication between the north and south banks of the river. This has since been greatly improved by carrying the trams over the High Level bridge.

Next I noticed what I have not often noticed elsewhere, that slum areas adjoin the leading streets: take, for example, the conjunction of Prudhoe-street and Northumberland-street and all that area immediately behind or north of Eldon-square. Then I noticed the crying need for a town hall worthy of a city with such records, and with such immense latent possibilities; a town hall which would provide the facilities which at present in Newcastle are conspicuous for their absence. I refer to the need for an adequate public hall designed for the purposes of large gatherings, likewise a concert hall for public recitals by the leading vocal and instrumental artists of the day. I noticed also the need for a big modern hotel.

When I looked at the map—and herein I found the main cause of our high rentals—I noticed that Newcastle is like a strong man bound. He is pinned down with a heavy weight upon the small of his back. He is pinned to the river with his head and shoulders at Scotswood and Fenham, his chest at Elswick, the small of his back is the central



Seaton Delaval Hall, Northumberland: West Front.

SIR JOHN VANBRUGH, Architect.



Seaton Delaval Hall, Northumberland: East Front.

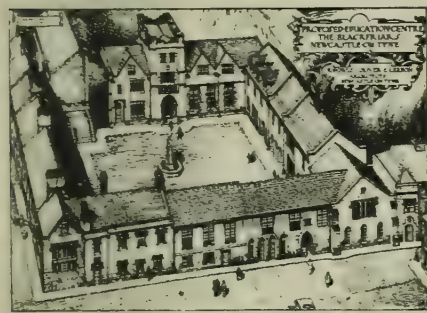
SIR JOHN VANBRUGH, Architect.

portion, with his legs and feet at Byker and Walker. What is it that pins him? It is the Town Moor. In Newcastle the open spaces occupy one-fourth of the whole area. In London the open spaces in the three-mile radius are somewhat similar in total area to those of Newcastle. In Paris, the open spaces in the three-mile radius are very much less in area. The great park areas, the Bois de Boulogne and the Bois de Vincennes are both outside the three-mile radius. Yet no one has ever suggested that central Paris is devoid of open spaces. Far from it—the lay-out and design of Central Paris are the envy of the world.

We must note that whereas the three-mile radius includes the whole of Newcastle, it is only the centre of Paris and but a small fraction of the whole of London. Imagine an open space in the centre of London comprising sixteen times the size of the Town Moor, London being sixteen times the size of Newcastle,

What would happen to London rents, London rates, London housing and over-crowding, London traffic and a hundred other problems? London would be crippled by such a handicap, and however beautiful that vast open space might be, London simply could not afford it. Neither can Newcastle afford it. Paris has shown greater wisdom, and has kept her great park areas on the outskirts where land is cheaper.

It is no part of my plan to seek to absorb into the city the whole of the open space of the Town Moor. Very far from it. What I am appealing for is a reconsideration of the ar-



A.—The Blackfriars, Newcastle.

rangements by which the legend "hands off the Town Moor" has become a creed. My suggestion is that by the common consent of all parties the rights which the Freemen have in the moor should be pre-empted and pass back to the Corporation.*

Presuming, as I will venture to do for a few moments, that their consent to pre-emption is obtained, you will ask me: "What do you want to do with the Town Moor?" I will answer briefly: To lay out certain parts of it as football and recreation grounds, certain parts of it as parks, and certain parts of it as the centre of the city's government and administration. This idea in no way would be capable of the criticism "you are destroying the lungs of the city."

The public buildings put on the moor could comprise all or any of the following: (a) The town hall, which, for reasons I will explain later, I propose to refer to in my plan as the capitol; (b) the city library; (c) law courts; (d) university central buildings; (e) art gallery; (f) mansion house.

There is in Newcastle such a chance to form a noble group of public buildings, worthy of the history and achievements of this ancient city, as exists nowhere else in the world today. Cardiff, amongst English and Welsh cities, has probably gone as far as any to express in its public buildings a full measure of civic pride, but I doubt whether Cathays Park, Cardiff, could compare as a site with the Town Moor, Newcastle.

When Washington entrusted the designing of the Federal City of the United States to Major Pierre L'Enfant, a young French engineer, L'Enfant, after looking over the area selected for the city, referred to the hill upon which he placed the capitol as "a natural pedestal awaiting its monument." The same claim may be made for the spot called Race Hill, overlooking the old racecourse. I propose to refer to it as Capitol Hill. Here, then, is the ideal site for the capitol. Here should be erected a building which should be the pride, not merely of Newcastle, nor of Tyne-side, but the pride of the north.

My idea for the lay-out of the Town Moor is that the capitol building should be approached by a wide avenue which would resemble in dimensions the Champs Elysées in Paris. This runs from the junction of Claremont-road and Back Eldon-street direct to the capitol. At the junction of these two streets a round point would be formed, in the centre of which I would place the Earl Grey Monument,

on the direct axis with the capitol building. A further prolongation of this avenue could later be made leading directly on to Barras Bridge. The public buildings would be approached by avenues leading to them from all directions. All these avenues would be of handsome proportions, and flanked by rows of trees. The other public buildings could be designed as a frame to the central block, and could either be in semi-circular formation or in three sides of a square. It will be argued that I am living in the clouds, but what I plead for is the acceptance of a plan for our city which, even if it takes a hundred years to complete, can be kept continually in view and accomplished bit by bit.

I come now to a specific proposal which I hope will meet with a willing response from the hearts of patriotic Tynesiders and North-umbrians. There is in Crowndale-road, behind St. Pancras and King's Cross stations, a working men's college where education of a university standard is provided for the large working-class population of that area. It was started in 1854 with Frederick Denison Maurice as first principal, and associated with him as its early instructors and tutors, who gave their services free in those days, were John Ruskin, Thomas Hughes, author of "Tom Brown's School-days," Charles Kingsley, Burne-Jones, Rossetti and others. Its present principal is General Sir Frederick Maurice, grandson of the first principal, and its aim now, as it was then, is to stretch out the right hand of brotherhood to the workers, seeking in education to find the true way to the solution of the problems of life.

We have here in Newcastle a little group of buildings which I hope may some day be made available for similar purposes as a branch of Armstrong College and a definite feature of the work of our University. I have to thank my friend, Major Harry Barnes, for first discovering these old buildings and their possibilities to me. I have been surprised to find that very few people whom I have asked have known of the existence or the whereabouts of the old buildings in the Friars. If you proceed along Low Friar Street from Newgate-street you will find half-way along to the right-hand side a narrow arch leading to a narrow street called Monk-street. Up this, on the right-hand side, you will come to a little group of buildings which a great many cities in this world would give their souls to possess. Here are the remains of the Black Friars Monastery. These ancient buildings are redolent with history (Illustration A).

The Black Friars acquired a footing here in 1240. In 1334 Edward Balliol of Scotland did homage for the Crown of Scotland to Edward III of England in the church of the Black Friars, Newcastle.

In 1538 the house was suppressed at the dis-

solution of all the smaller religious houses in England.

In 1543 the King granted the Friary to the Mayor and Burgesses of Newcastle for 458 7s. 6d., and an annual payment of 5s. 11d.,



C.—The Area around Friars' College.

reserving to himself, however, the bells and lead of the church and other buildings.

In 1552 the house, with its gardens and orchards, was granted to nine of the ancient trade guilds of Newcastle, and these have retained possession down to the present time.

Had these trade guilds been possessed of endowed funds like the old City guilds of London, one might confidently have appealed to them for the necessary support for the scheme which I am putting before you.

It will probably interest you to be reminded that the old City guilds of London are great leaders in the cause of education. To give you a few instances, I may mention that the Skinners' Company are the founders and governing body of Tonbridge School; the Mercers' Company of St. Paul's School; the Merchant Taylors' Company of Merchant Taylors' School; the Grocers' Company of Oundle, and various others I could mention.

However, the appeal for the necessary funds to carry this project through will need to be made to all patriotic citizens of ancient Northumbria who have at heart the drawing closer together of the classes on the common ground of education.

The plan I suggest is to acquire this group of buildings on lease, thus assuring to the present owners a stable income, and granting to them the use of their guild rooms on such occasions as may be mutually agreed upon. The buildings would be put, at any rate as regards the exterior walls, in a state as nearly approaching the original as possible, and a college hall would be erected on the north side of the cloister. The University is already doing much useful work of the type mentioned, and under this scheme those activities could be developed, and would find a most suitable location in these interesting old buildings.

Drawings illustrating this scheme have been prepared as a labour of love by Mr. Leeson, of Messrs. Knowles, Oliver and Leeson. The ground floor is planned on the assumption that the institution would become a residential working men's college as well as a tutorial establishment. Some of the corbel stones of the cloister roof are still visible, and the replacing of the cloister would greatly help to revive the old spirit of the buildings, as well as providing covered means of access between the different lecture rooms. To carry out the restoration of the buildings and to erect a college hall would cost approximately £15,000. This surely is a means whereby our university may take the lead in this district in that most pressing need of the hour, the breaking down of the walls of suspicion which at present so often divide employer and em-



B.—The Eldon-square Area.

* See page 357 Charlton's "History of Newcastle-upon-Tyne."

played. It is a blot on the fair reputation of Newcastle any longer to leave these ancient buildings in their present mouldering condition.

The slum area north of Eldon-square could be dealt with in the following way:—Pierce either side of Eldon-square by carrying its two flanks right through to the Haymarket, crossing Prudhoe-street. The right flank street, especially when developed with harmonious architecture, would become quickly one of the prosperous streets of the city, from its close proximity to Blakett-street and Northumberland-street. In the open space formed opposite the junction of St. Thomas-street, with Percy-street, an area would be available for the open street Green Market, which at present is held in Newgate-street. Since the carrying of the trams through this street the conditions for the traders in this market have been somewhat congested. The Corporation have in mind the opening up of a site for this purpose in behind Darnbrook. I suggest that a far more spacious site would be available in this scheme. Ample room for the barrows and stalls would be forthcoming without any hindrance to traffic and the extended facilities would no doubt lead to considerably extended trade (Illustration B).

There is a slum area around Stowell-street which needs clearing away. To provide a more direct approach to Friars College, as I will presume to call it, I would propose a street branching out of Fenkle-street near its junction with Low Friar Street, which would lead into the street called The Friars at the point where the old buildings are situated, thus opening up a view of those buildings. The restoration of these buildings, their opening up by

College. This would give access to the main entrance to the College, and would remove what is at present a particularly noisome slum (Illustration C).

I believe that a street of the same dimensions as Grey-street and running roughly on the line of Pudding Chare and High Bridge would ultimately be a very valuable addition to the business portion of the city. This would include the portico of the Theatre Royal as a vista for its northern end; would link Grey-street more closely with the Central station and Grainger-street, and would tend to



E.—The Central Station.

preserve the business balance of the shopping area, which otherwise may tend to spread farther north (Illustration D).

I have often heard it said by business men in London: "What a pity Newcastle has no really first-class hotel." Where could this hotel be most conveniently placed? The existing site I consider too small to make the cost of reconstructing the present hotel remunerative. To buy another site and demolish existing buildings would be too costly. When I looked at the position I was forced to one conclusion. I am an admirer of the magnificent portico of the Central Station, though not so much enamoured of its flanks. I hesitated before concluding that the place for the hotel was on top of the portico and its flanking buildings. The advantages are obvious, no site to purchase, no difficulties of ancient lights, and you have the right site for a station hotel. The disadvantage is also obvious; you might by your treatment spoil an existing fine architectural feature. But it ought to be quite possible to treat it in such a way that a noble effect could be obtained. As regards the elevation, the height of the building would largely depend upon the number of bedrooms required to give the necessary turnover to cover working costs of the building (Illustrations E and F).

When Hadrian spanned the river, he chose the site of the present Swing Bridge as the most convenient spot. To this day no means of crossing the river exists between this spot and the sea. The idea of a bridge which, linked up with the foot of Pilgrim-street, and which would thus become the direct route from south to north, avoiding the congested area in the centre of the city, has been frequently discussed. The City Engineer has issued a report which shows in the most striking way how the carrying of the trams over the High Level Bridge had increased the traffic between the two towns. It also shows the great sum of money which had passed from the citizens to the railway company in the shape of tolls. The Lord Mayor has become keen on this project, and we all hope he will be successful in seeing it begun during his term of office. With the necessary viaducts and bridge approaches which would be required on both sides of the

river, unique opportunities for architectural treatment would be provided.

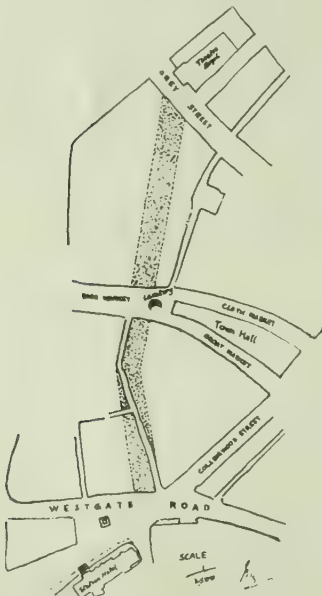
To those who tell me that town improvements are very costly, I would say: Look what you can do by planting a few trees. Most people will agree that the new war memorial at Barras Bridge is a beautiful one. To me it represents a very fine picture, finely hung but lacking a frame. If you examine it in front from the far side of the road you find it has an indefinite background of roofs thinly veiled by a few scattered trees. I would propose a semi-circular frame of cypress trees.

No scheme for a city beautiful can be complete without some reference to the subject of smoke abatement. Recently Sir Aston Webb stated that London could never be the city it deserved to be until the smoke was got rid of. He would encourage the manufacture of smokeless fuel until it was cheaper than soft bituminous coal and forbid the use of the latter in large cities. It certainly does seem high time that some step forward in this direction should be taken. America has shown that it is possible successfully to combat the problem, for example in New York, and a still more striking instance, Pittsburg.

The atmosphere of beauty in surroundings must have an effect upon character. Raise the tone of recreational facilities and you lower the drink bill and the assize list. This is the proved experience of social workers. Well designed and well run cinema halls have great possibilities in this direction. The provision of spacious, well-lighted dance halls, where simple refreshments could be obtained would be all to the good. In this connection we must not forget to welcome the movement for the establishment of repertory theatres. Since the splendid work of Grainger town planning has become a somewhat neglected art in Newcastle.

It does seem that the present time is propitious for a new step forward, and if the endeavour to form a civic society, the object of which will be the practical improvement and the artistic development of Newcastle, should bear fruit, a big step forward will have been taken. Since I had the privilege of proposing at the Rotary Club that a similar society with similar aims should be formed in Newcastle, steps have been taken to explore the possibilities of forming such a society, and I hope they will bear fruit in the near future.

With such a society in Newcastle, widely



D.—Suggested Street Improvement in Business Quarter.

means of such a street, and the general improvement in surrounding property which would inevitably follow, would be a long step towards the transformation of this slum area.

A street is also proposed running between Low Friar-street and Stowell-street, and opening up the area immediately north of Friars



F.—Suggested Hotel over Central Station.

supported by large numbers of intelligent citizens, the city authorities would always be assured of support in development schemes along well considered lines. It would also provide the necessary safeguard against any hasty or ill-considered action in the matter of dealing with open spaces



Eastbourne College War Memorial Building.

MESSES. SYDNEY TACHELL & GEOFFREY C. WILSON, F.F.R.I.B.A., Architects.

MR. RAMSAY MACDONALD ON ARCHITECTURE

THE past few days have been eventful ones for Liverpool. The first happening of importance is the renewed success of Liverpool University School of Architecture, Professor Reilly's students having again carried off not only the Prix de Rome but also the Henry Jarvis Scholarship. We congratulate the school on its success. Mr. G. A. Butling, a fourth-year student, has won the Prix de Rome, and Mr. C. A. Minoprio, a fifth-year student, the Jarvis. The Prix de Rome has now been won by Liverpool four times out of a possible seven. The second interesting event was the conferring of honorary degrees of the University upon three distinguished architects, two of them Americans—Mr. Thomas Hastings, Mr. Harvey W. Corbett, and Professor Stanley D. Adshear. The third event was a memorable speech by the ex-Prime Minister, Mr. J. Ramsay MacDonald, given on Saturday last at the opening of the annual exhibition of drawings by students of Liverpool University at the Walker Art Gallery.

Mr. MacDonald, in opening the exhibition, said that the fame of the Liverpool School had gone far before it. Something would be heard, possibly at the beginning of the ensuing week, which would give them still greater pride in its work and cause for self-congratulation at having Professor Reilly as its presiding genius. Though he could claim no expert learning, and was sure he could not with anything like certainty tell the characteristics of one school of architecture from another, the speaker said he had a claim which they would consider to be a good one—he came as the representative of that section of democracy which hungered and thirsted after spiritual peace and beauty.

Architecture, he supposed, unless they expected music, was the first of all the arts. If architecture was merely meant to provide a shelter for the body of man, then the cheaper and uglier it was, perhaps, the more efficient it would be. But if it was not merely man's body that required a habitation, but man's mind and soul, the architect who simply provided a shelter was not doing his duty. The man who approached his house was not merely a physically shivering creature in the wind and rain, but an unhappy man aspiring for that content which came from beauty, that life which came from chastity of form and circumstance; and until the architect provided that, as well as the physical shelter, he was not performing his whole duty.

"The training of the architect," continued Mr. MacDonald, "is not merely in compasses, in stresses and strains, and in the knowledge of the composition and price of bricks and how to deal with dry-rot—I speak from sad and sorrowful experience—it must be a training in how to grasp the large life and spirit of art. Whether the architect is conceiving the plans of a tiny house that will be a home or a great cathedral, such as I have seen to-day, whether his creation is to be small or large in bulk, we want the man whose creation will reveal to us that glorious winged figure that resides in our own heart and whispers to us thoughts, aspirations, and feelings of the absolutely beautiful. It is not bulk, but spirit; and here the school comes in as opposed to the old-fashioned method of pupillage.

"You cannot produce the architects that the next, or even this, generation will want by merely putting them into architects' offices. You must give them the spirit of the great artist. They are brothers with our painters, poets, and dramatists. No man can build a house for a man unless he understands man. No man can understand man unless he understands him in his absolute completeness in divine perfection. The true architect must be an artist, and to be an artist one must go to a school of architecture modelled like yours. Though the idea expressed by the architect must have its appropriate material, the success of the architect in the end is to hide his material in his idea so that when you approach

the house, the church, or the cathedral the spirit alone is seen and not the material. The artist, whether he works in words, in pigments, or in the solid substances of the sculptor and the architect, reaches his triumphant point of mastery when the material is lost and the form and the spirit alone remain. In order to do that the architect must instinctively feel the unity which he is trying to realise."

Turning to the architectural forms created by the spirit of religion, Mr. MacDonald cited two examples which, he said, were as divorced from each other as Liverpool was from old Sarum. The first, Westminster Abbey, was designed, with all its intricate and elaborate Gothicism, its cross-lights, its shadows and glooms, its brilliant points and its blurs, its heights and its lengths—all designed for a Gothic ritual. "You enter," continued Mr. MacDonald, "and you become a participant at once in the Gothic ritual. You feel that you have donned the robes of those choristers, those priests and bishops, and as you tread the aisles you walk with precisely the step that they must walk in, not because their fathers did it before them, but because no other step is possible in such circumstances."

The other building, said Mr. MacDonald, was that simple, white-washed little place where the Quakers had met for generations—Jordans, at the foot of its gentle, green slope with the little graveyard at its side, where William Penn and others lay buried. As perfect in its appeal, as completely fashioned, as Westminster Abbey!

There one found no ritual, no elaboration. One sprang into the Presence right away. Men entered it with empty hands and with hearts stripped of all pride, pomp, and ceremony. Different, absolutely diverse as they might be, they both made the heart sing for gladness, or hum quietly on account of perfect satisfaction. That was the triumph of art; that was the joy of the architect.

In former days the pupil was taught to be a good workman, but the student of to-day was taught to be a good craftsman, and the difference between the two was world-wide. There was a story told of someone who found two workmen hewing two stones in a quarry. In response to his questions, one of the men said: "I am hewing a stone"; but the other's reply was: "I am building a cathedral." Therein lay the difference. Limit the conception of utility, and there was produced a mechanically-minded man from whom one had no right to expect a response to a fine high communal appeal. It was the difference between the mere mechanical workman who worked his allotted time and took his allotted wages, and the creator, the craftsman who put his heart and life into his work. Generations after generations would never see the two products side by side without being able to distinguish that there was death in the one and life in the other.

It was a profound mistake for architects to imagine that when they were engaged in the production of small domestic architecture they had not the same chances as when planning a great town hall or public building. It was a mistake, more particularly just now, because of what was happening. There was no such thing as an individual house—neither they nor he ever saw it, and no one ever would. If the individual house were put on a plain, they saw it in its relation to the plain; or if in the wilderness, in its relation to the wilderness, and so with the individual house in the street or village. The future of domestic architecture must belong to town planning—and there the community came in. Whatever they built or designed had its setting, and now, by the growth of community conception, the problem of the architect in domestic work was not to put nice little decorations on a nice little house where nice little people might dwell, rear nice little children, play nice little pianos, and sing nice little songs. That was no longer the con-

ception of domestic architecture. The true conception consisted in embodying the communal spirit. The time would come when, in order that our architects might know their business, the public would give them sufficient response, when knowing the right thing when it saw it would encourage the architect to produce what the speaker had in mind. They would then cross the threshold not of their streets and houses, but of their villages and settlements, and feel precisely what they felt when they crossed the threshold of Westminster, or Jordans, or Liverpool Cathedral, or any of the other accepted and acceptable manifestations of the soul of worship combined with the soul of beauty. That was the next great achievement which our architects had to accomplish.

Though man could not live by bread alone, or without it, there was a subtle, mystic satisfaction in being surrounded by beauty and in being able, as it were, to nestle down into their surroundings and circumstances, and say, "I am happy." That was the peace, not of slumber or of negation, which was evil and came from the devil, but of life—the peace that stilled storms and disturbances—and if mankind was ever to reach it the architect would be the major contributor, for it was his power and privilege to give us good surroundings.

CORRESPONDENCE.

(Continued from page 46.)

Eccentric Loads upon Pillars.

SIR,—Referring to my letter in your issue of the 3rd instant, my calculations were for the worst cases, where the girder is not cleated to the stanchion. When it is so cleated, the line of eccentric stress would coincide with the face to which it is cleated. The following figures show the percentages to be added under W. for a web stress and under F for a flange stress, for steel joists most in use as stanchions, whose sizes are under S.

S.	S.	W.	F.
10 in. × 8 in.	..	34	.. 150
9 in. × 7 in.	..	32	.. 153
8 in. × 6 in.	..	34	.. 148
6 in. × 5 in.	..	40	.. 153

GEORGE H. BLAGROVE.

SIR,—In reply to Mr. Blagrove's letter, it is perhaps well that the L.C.C. does not prescribe rules for computing the stresses set up by eccentric loading of pillars, but leaves the matter to the discretion of designers. Pure eccentric loading to which the usual formula applies is seldom met with, there being often forces which tend to reduce the stresses set by eccentric loading. The subject of pillars is not particularly clear at the present time, and there is room for much research in the matter.

"VULCAN."



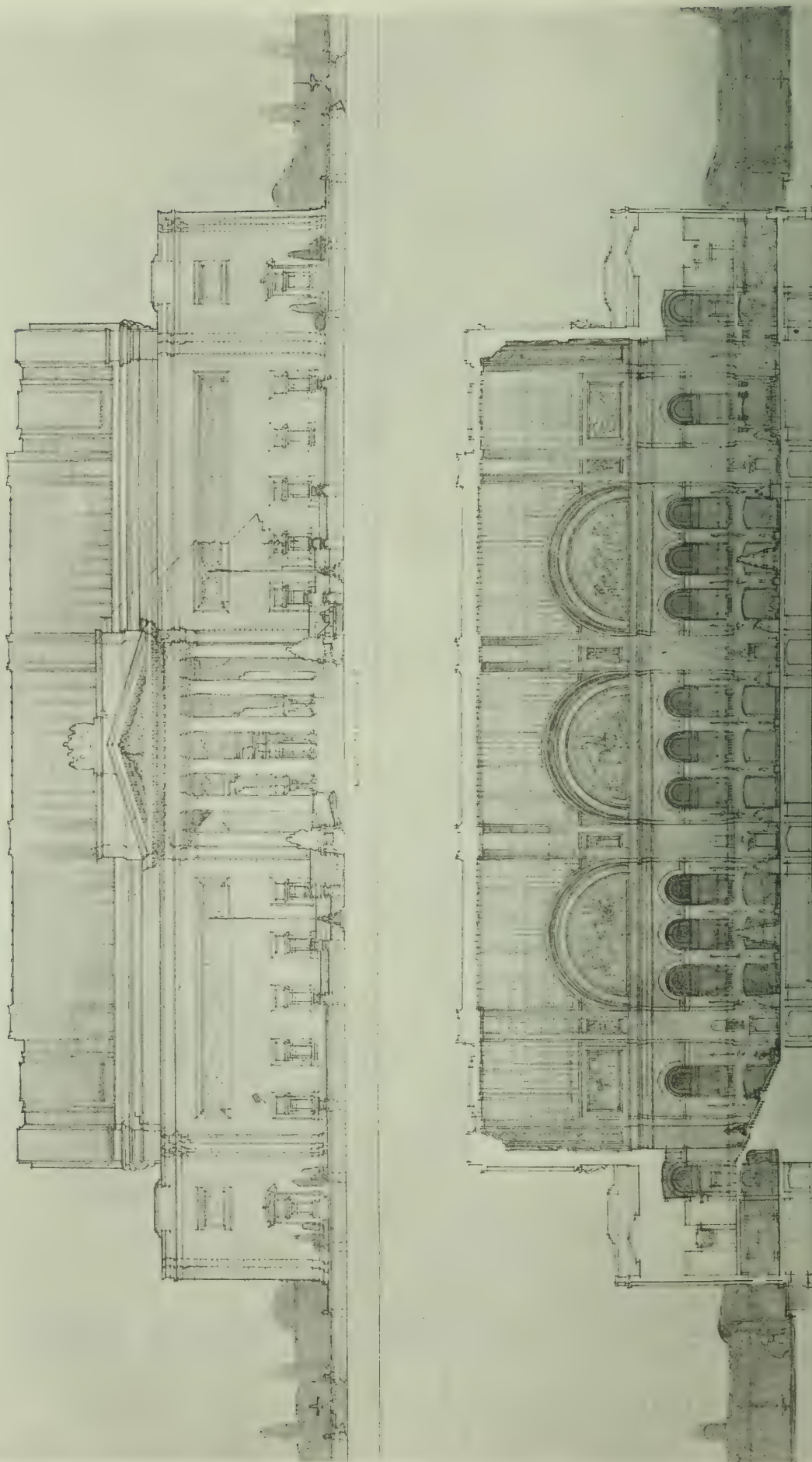
Model for Medal for the Colonial Dames.

By Miss MALVINA HOFFMANN.



Eastbourne College War Memorial Building.

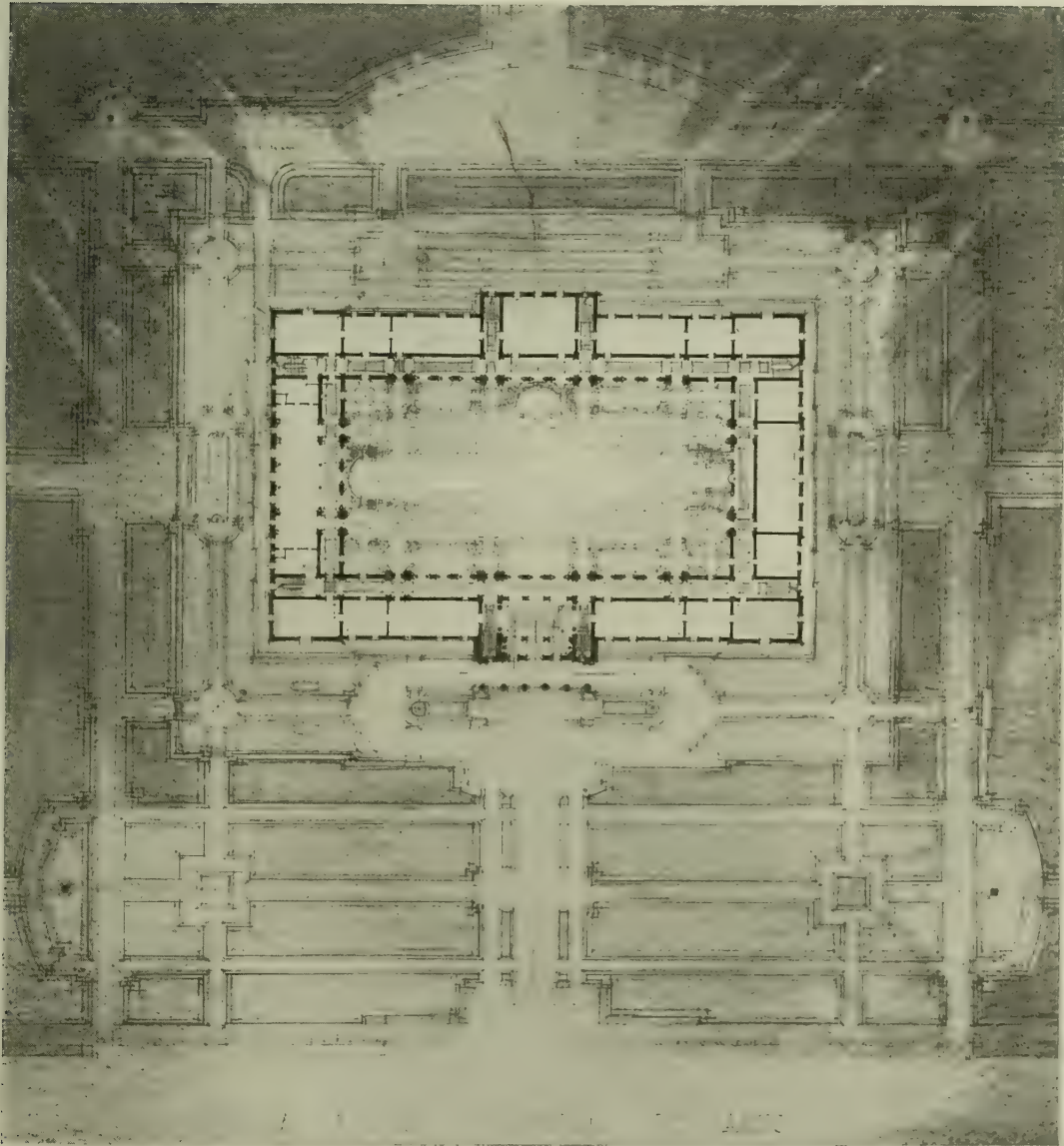
MESSRS, SYDNEY TACHELL & GEOFFREY C. WILSON, FF.R.I.B.A., Architects.



LONG SECTION
A BRITISH PAVILION OF ARTS



SECTION.



The Rome Scholarship in Architecture : Winning Design.
By MR. G. A. BUTLING (Liverpool School of Architecture).

PHILIP WEBB AND HIS WORK.—VII.

By W. R. LETHABY.

THEORY OF ARCHITECTURE.

'Beauty lives with kindness.'

—Two Gentlemen of Verona.

ANOTHER time, having lent him Venturi's *History of Italian Art* (Vol. III), on its being returned I found many little slips between the pages with pencilled remarks showing how he had studied the book. "Fig. 11: It seems that *anything* could be done in this style; see also 80. Fig. 35: First true view of this central steeple I've seen. To me 'tis the most ekilful composition of its kind—anywhere. Fig. 72: Ah! Fig. 94: One can hardly understand what has gone to make such a thing as this, perfect in its way. Fig. 95 is a one-er for mysticism. Fig. 110: Is this a solemn piece of work for a saint bishop? Fig. 127: What a figure! Fig. 482: Such a Sicilian perfection with its balance of parts and with next to no overlay; what a refined effort; even Peterborough almost pales. Fig. 485: Inspiration. Fig. 521: Ain't these Joseph carvings out and out dramatical? Fig. 602: Aren't these Gaeta things touching? Fig 640: These Benevento doors in detail were new to me, and the subject reliefs beautiful beyond telling. Figs. 770 and 771: !!! Fig. 803: Think over these. Figs. 821 and 822: O my! Fig. 827: What an Annunciation! Figs. 892, etc.: This series of Siena pulpit sculptures surely influenced Michael Angelo. Fig. 897: It never occurred to me to make lintel and cornice like this."

Sound Materials.—We owe it to England and the landscape to build in a reverent way with suitable materials. Materials must be used so as to express their essential qualities; these essential qualities are what rhythm is to poetry. This applies as well to decoration as to structure. "Of course the gist of all decorative design is in its hand and glove fitness for the material reception. The very invention depending on facility and adeptness in doing."

Land Love.—The root of architecture is in the land, and without love of the land you can do nothing. Morris and Webb beyond any other men I have known, and apart from most, had a deep religious love for England, not a vague abstract love, or possessive pride and patriotism, but affection and even worship for the very earth, trees, fields, animals, ploughs, wagons and buildings—yes, and the weather, too; 'there is no bad weather, only different kinds of good weather.' The love was particular and personal—this field, this bend of the river, that building and that. The land was not merely 'nature,' it was the land which

had been laboured over by the generations of men; buildings were not 'architecture,' they were built history and poetry. Art was not 'taste' but human spirit made visible. As Morris said, 'To criticise Chartres Cathedral is like criticising a geological epoch.' Then there early came a time when they realised that this England of their love was a little land, that its treasure of ancient buildings was limited, that change and destruction were going forward with frightening rapidity and that it could not stand the racket. I remember Webb saying, "Nature would soon cover up the scars, but I can't think the land will ever be grey with old buildings again."

The intensity of Morris's worship of the earth and what it holds is expressed in his description of the old house in 'Nowhere.' 'O me! O me! How I love the earth, and the seasons, and weather, and all things that deal with it, and all that grows out of it, as this has done!' 'The earth and the growth of it and the life of it! If I could but say it or show how I love it! Passionate acceptance of the fellowship of men; the sacredness of labour, and worship of the earth were items in the belief of these men.

The waking up to a conscious response to Nature and to historical associations and survivals seems to have come about at the end of the eighteenth century—it was probably enough a manifestation of a protective instinct mysteriously aware of what was to happen in the coming machine age. Wordsworth seems first to have seen things in the new way.

Locality and Site.—Webb would most carefully relate his building to its neighbourhood, both in adjusting it to the site and in taking up local manners of building. These were among the sources of his inspiration and I get the impression from his country houses that it 'came to him' what sort of thing he wished to build on a particular site and in its neighbourhood. This idea was worked out in the office, but the inspiration was always local. He felt the loss of local custom and endeavour and agreed with Morris when telling of some new iron bridge atrocity near Kelmscott one evening at the Society for the Protection of Ancient Buildings: 'There's hardly a man left in England who dares build a ten-foot bridge over a brook: an engineer is called from London to plank down iron girders.'

The compelling need to use local material is brought out in a letter to Miss Constance Astley, of Arisaig, N.B., November 29, 1882: "... If you should fail in getting whin stone of sufficient size to do the memorial from

stone got from your own ground, it would seem hardly to the purpose to get that sort of stone from elsewhere—unless it could be got from somewhere near by. Still, I think, in that rude little churchyard, with its ancient ruin standing by, the native stone would look more congruous than any imported stone would; but if the whin stone is not to be come at I think unpolished granite would be the next best though in that case I should have to make a fresh design as the design you have is quite unsuited to the working of granite."

Beyond the general influence of neighbourhood come the particular suggestions of an actual site. This has been dwelt on in the account of Webb's buildings, and I will here only add a passage from a letter of December 21, 1909: "... Do urge on the need for mastering the *possibility* of a site."

Purpose and Humanity.—Expression of essential quality was also much in his mind. It is a commonplace that buildings should have individual character according to their purpose, but Webb's quality went beyond this. His houses embody houseiness; they are homes. All our words are so worn that I must not speak of 'art' or 'poetry,' but perhaps what is meant may be suggested by heartiness, honesty, and humanity—Webb's architecture was Humanity in Building.

The special quality in his work as from the heart of the man. He felt that roofs, chimneys and walls were sacred. When he designed Morris's coped gravestone he said: "I will be a roof for the old man." Once speaking of a too elegantly designed grate and chimney-piece, he said: "Yes, but it is hardly fit for Holy fire." It was the heart in things made which called to him. On a time returning to London he spoke of how the country touched him "with the old houses like open books lying in the fields."

Directness.—Yet another of Webb's thoughts to which he would frequently recur was that all the greatest art preserved some strand of primitive frankness and an element of wonder.

To W. R. L., September 17, 1903: "True the Gothic between 1200 and 1350 was not 'barbaric,' or rather had not the barbaric element left in it, but between 1150 and 1200 the youthful freshness and strength of what I've called barbaric is there; and the very spring in the later more refined chevron decoration is to me a visible sign that 'barbarism' was only partly outgrown and its strength-giving quality backboned the work of the next two centuries. Still how difficult such questions, in their real answering, are! There was heavy-browed 'wonder' built into cathedrals before the wriggings of the 'great worm' had straightened out; and wonder *is*, I feel, an essential of Gothic. Indeed, I'm claiming it should be a primary essential; and only by the Gothic system of multiplication and disposition of parts can 'wonder' be gained (and even in comparatively small buildings, more subtly than in the larger, for these depend on actual size). Do you know the great central doorway under the narthex of the Madeleine at Vezelay? Rooke père sent a picture postcard of it. 'Tis an astounding piece of structural and sculptured work, and by good luck not tampered with by the Viollet [le Duc]. I think the sculpture could not be later than the end of the eleventh century; in any case it is barbarically powerful."

"The glut of big things you saw in this round of French delights must have filled you up, however greedy your swallow. I, too, am touched by the eastern apse of St. Quentin—may we call that 'reasonable selection'? Through the lens it looks as if there was fine glass in this apse? The builders were much in love with bows: the main apse, then the ambulatory colonnade, finished with the chape bows—looking on plan like rose petals—must be astonishingly effective inside. Do not the things in Villars de Honnecourt's book look later than the eastern (apsidal) limb of this church? You must know; I've never seen either of the great soul-filling buildings in this French catalogue of yours—not even Soissons of which I remember something of delight in

(Continued on p. 77.)



Fig. 1.—EXNING, NEAR NEWMARKET.



FIG. 2.—BRAMPTON CHURCH, CUMBERLAND.

letter of W. M.'s about it when he went with Fenny. True, Solomon was never much more in his glory anywhere than at Rheims. He [the image] do 'swagger' with that left arm of his, and there is much 'side' on the right. . . .

To W. R. L., 1903: "That was a heaven-sent chance (the scaffolding at Wells). You see, 'Heaven helps those who help themselves.' . . . For years back my brain has worked at the 'essentials' of 'Gothic,' and in rummaging amongst architectural history books of building have more or less concluded that all architectures had in some stage of them the "Gothic" element—that is, the barbaric; which led the builders to express themselves—and probably when at their best—in direct effectiveness, before consciousness of attractive detail. I have seen it in the Greek, strongly before the Parthenon time—so-called archaic; noted it in the early rock-cut temples of India, with pure Buddhist sculptures; also in the earlyish Byzantine work, where the barbaric element again set architecture on its legs. The question to me, then, has been: how far can detail (ornament, structural or otherwise) be carried without losing the massive, direct, and simple qualities of the 'barbaric' saving element of breadth? I take it the answer would be that you may overlay simplicity with some gain, and without loss of the addition be not too mechanical—the work of slaves. We have not yet told ourselves how much addition of slave work expression there is, say, in the Parthenon or in fourteenth-century French cathedrals, or in our own fifteenth century ditto."

"J. R. once held ('Seven Lamps'?) that a building wasn't architecture without sculpture and painting—to me a fallacy, on the line of Ferguson. What could have been added to the original N. and S. transept ends of St. Alban's without injury? It seems that all depends on what the ornament is. The early folks painted their surfaces and the Egyptians carved in very flat relief, without destroying the breadth of simplicity. Byzantines marbled their surfaces and incised patterns in spandrels. Some literature, too, will carry adjectives without loss of force. To me the whole matter—rightly done—merely means a difference in kind. The incrustation on Wells west front

is broad and simple—only of a different kind to St. Alban's transept. The Italian Lombardic constructional decoration with spandril inlay, etc., like the fronts of the Cathedral at Lucca, do not to my eye destroy the underlying 'barbaric' simplicity of form or surface. Detail, to me, means the sign manual of instinct and imagination, applied only when called for by the object. Here I say a word for that of 'barbaric' (which Wardle would have at no price); it is not barbarous, but is the beginning of throwing off fetters on the impulse of imagination, and is not licentious as the satiety of the unrestrained is but rather the shyness of simplicity in growth. The licence shown in our poor late 'Decorated' and in much of fourteenth-century French and German work is dull, mechanical, unimaginative. Our almost unique 'perpendicular' has in it often revival of imagination which makes it peculiarly interesting and inimitable; having withal breadth. J. R., in an early lecture, produced a drawing of barbarous inexpression, adding that nothing of worth could come out of it.*

I remember dissenting, believing that the progress in the arts had grown from some such stocks. The 'Decline and Fall' gave the new life-spring in Byzantium. Possibly the submerging of commerce and general purification of England from luxury might give fresh inspiration to art with us—and the curse of the great Parjandrum may turn out to have been a blessing disguised in shoddy. One can never say when the inventive frog-nation will cease to be the ingenious people of Europe—such vitality is there in that stock. Still, could these French ever forego their lead of other nationalities, and allow Paris to become *le barbare*? Are they not more likely to clap on steam to a 'Gothic revival'—somewhat after the style of Wagnerian music, or as mighty fox-hunters have done to clear too wide a stream, and come down with a splash?"

[This Part will be concluded in our next issue.]

* "Conventional Art" in *The Two Paths*.



FIG. 3.—BRAMPTON CHURCH, CUMBERLAND.

LONDON UNIVERSITY SCHOOL OF ARCHITECTURE AND ATELIER

By H. P. CART DE LAFONTAINE, A.R.I.B.A.

THE exhibition of the work of students in the School of Architecture and the Atelier of the University of London, which took place at the University during last week, showed that excellent progress is still being made by students under the guidance of Professor Richardson and Mr. Corfiato.

The work shown is good in two respects; in the first place the choice of subjects set for study both in the School and in the Atelier is sufficiently varied to stimulate the imagination of students, and, secondly, because the importance of a good plan is evidently realised.

One saw examples of each year, starting with the elementary work of the first and second years and becoming increasingly interesting in the third and fourth years, when the students' knowledge of architectural composition is most advanced, and in this final year's work I noticed that the same programmes are sometimes given in the School and in the Atelier, but I understand that extra time is allowed in the former case.

The subject of a block of flats on an island site in Bloomsbury was, I think, the most interesting, and has produced several quite up-to-date and practical solutions; one noticed that in a good many cases the mistake had been made of placing bedrooms on the street fronts, where the noise of traffic would be rather a disadvantage, but questions of direct lighting from large courts instead of small areas, the shapes of rooms, and the convenient planning of stairs, lifts and service arrangements have received attention.

In most cases the elevations were rather exotic, and in others the proportions of window openings and between voids and solids had not received quite sufficient consideration, but it was certainly refreshing to see the importance of good planning is at last coming to be realised in a British architectural school.

One also noticed some excellent prize drawings amongst the work of students of the Atelier, including drawings for the Victory Scholarship, the Tite Prize, and the Lever Prize, whilst in an adjoining room were some well-thought-out town-planning studies based on actual areas, and in most cases shown in various colours on large scale Ordnance maps; here one had the impression of business-like thoroughness as was to be expected under the firm hand of Professor Adshead, who is a recognised master of his subject.

My general impression is that the work of students for the most part shows a considerable advance, and has more character and personality than might be expected. The thoroughly worked-out designs for a small factory in reinforced concrete show also that attention is given to the economical solution of problems of construction which constantly confront the modern architect. But one noticed that there are tares even in this excellent harvest, and one trusts that students who have not real ability or sufficient enthusiasm to burn the midnight oil when necessary will be prevented from entering a profession where there is only room for the man who has natural ability as a designer, and who is not afraid of hard work and disappointments.

THE BUILDING TRADE.

SOME OBSERVATIONS ON THE RIGHT TO LIGHT AND THE LAW RELATING THERETO.—X

REMEDIES.

IN the previous articles we have considered in general terms the prescriptive right to light, how it can be acquired and how it may be lost, and what degree of obstruction must be proved to constitute an actionable wrong; but now we come to a point no less important, which is the form of the remedy for an actionable interference with the access of light.

Where a nuisance has been committed, there is one method of dealing with it—which is for the party aggrieved to abate it himself.

That is a form of remedy which we do not propose dealing with in these articles. From the nature of the easement of light it is obvious that to abate the nuisance an entry on the land of the other party is essential. That is, what would be a trespass must be committed were it not justified by the act of abatement. It is also equally clear that this form of remedy cannot be resorted to in the case of serious obstruction where a building has been erected or is even in course of erection, and that practically it must be confined to cases where a temporary obstruction has been erected either to prevent the right of light from being acquired or to test the existence of the right. As an obstruction to light cannot be abated without entry on the land of another, where such a course is adopted it falls within the category of cases where notice should be given either calling upon the person to remove the obstruction or of the intention of the party aggrieved to do so (see *Lemmon v. Webb*, 1895 A.C.1).

There must always be some risk where a party, so to speak, takes the law into his own hands. For instance, there are the rights of possible third parties to be considered, and such a course is certainly not calculated to engender good feeling between the parties; and unless it is very urgent that the obstruction should be removed without delay, recourse to abatement is hardly to be recommended even where the obstruction is merely of a temporary character. There may, however, be cases, as we pointed out in our fourth article, where immediate action is essential.

The legal remedies for an infringement of the right to light are an injunction, or damages, or both damages and an injunction, and speedy action there is the interim injunction also. In the Courts of Common Law the only remedy was by way of damages, whilst injunctions were granted by the Courts of Equity. In the Courts of Common Law, however, damages were given only in respect of a cause of action which had accrued at the date of the commencement of the action, and no damages could be recovered for injury which was merely threatened although the damages might include compensation for consequences of the injury already committed which it was proved would occur in the future. (See per Lord Findlay in *Leeds Industrial Co-operative Society, Ltd., v. Slack*, 1924, A.C. 851; *The Builder*, January 2, 1925.)

In 1858 an Act, 21 and 22 Vic. c. 27, known as Lord Cairns' Act, was passed, section 2 of which provided that in all cases in which the Court of Chancery had jurisdiction to entertain an injunction against . . . the commission or continuance of any wrongful act . . . it should be lawful for the same Court if it should think fit to award damages to the party injured either in addition to or in substitution for such injunction . . . and such damages might be assessed in such manner as the Court might direct.

The Judicature Act, 1873, practically fused the jurisdiction of the Courts of Chancery and the Courts of Queen's Bench into one court, "the High Court," and they were thereafter known as "Divisions of the High Court," so the

material distinctions between the jurisdiction of the Courts of Common Law and the Courts of Equity were removed, although, as we shall show below, it was only last year that it was finally settled that damages could be awarded in lieu of an injunction where the obstruction to light was only threatened. In cases where immediate legal intervention is necessary an interim or interlocutory injunction may be applied for. Such an injunction does not determine the rights of the parties; it is granted on a *prima facie* case being shown, and is entirely in the discretion of the Court.

Injunctions may be perpetual, and whether merely interim or perpetual may take the form not only of being prohibitive, but also mandatory; that is, they may take the form of an order to remove the whole or part of the obstruction. An example of an interim mandatory injunction will be found in the case *Von Joel v. Hornsey* (1895, 2 Ch. 774). In that case the defendant was erecting a building near the plaintiff's house. The plaintiff had warned the defendant that if the building was continued he would take proceedings to restrain it as infringing his right to ancient lights. Subsequently he issued the writ in an action, but the defendant evaded service and continued the building until substituted service had been effected upon him. In these circumstances the Court, without inquiring into the merits of the case, granted a mandatory injunction, ordering the defendant to pull down so much of the building as had been erected after the plaintiff had warned him that he intended to take proceedings. This case followed *Daniel v. Fergusson* (1891, 2 Ch. 27), where the defendant had continued and hurried on with the building after the service of the writ. Both these decisions were given in the Court of Appeal. When an interim injunction is granted it is the practice for the Court to require the plaintiff to give an undertaking as to damages if it is afterwards established at the trial that the plaintiff has no claim, and an inquiry as to these damages may be directed, although the plaintiff has been guilty of no misrepresentation, suppression or other default in obtaining the interim injunction (*Griffith v. Blake*, 1884, 27 Ch. Div. 474). In *Smith v. Day* (1882, 13 Ch. Div. 651) *Jessel M.R.*, had questioned whether such an inquiry should be directed where the interim injunction had been granted owing to a mistake in law by the Judge, but the Court of Appeal in *Griffith v. Blake* dissented from this dictum.

The onus, of course, is laid upon the party applying for an interim injunction, and the Court, in exercising its discretion, will consider the balance of convenience involved in granting the injunction or in allowing the defendants to continue their building operations (*Newson v. Pender*, 1884, 27 Ch. Div. 48). Passing from interim injunctions, the next question is, on what principle the Courts will grant either damages or an injunction, or both, and when a mandatory injunction will be granted.

Some of these questions were considered in *Colls v. Home & Colonial Stores* (1904, A.C. 179), and it may be well first to consider what was said on this subject in that case. Lord Macnaghten is reported as having said, "Then in regard to giving damages in addition to or substitution for an injunction—that, no doubt, is a delicate matter. It is a matter for the discretion of the Court, and the discretion is a judicial discretion. It has been said that an injunction ought to be granted when substantial damages would be given at law; I have some difficulty in following out this rule. I observe that in some cases juries have been directed to give one shilling damages as a notice to the defendant to remove the obstruction complained of, and

then, if the obstruction was not removed, in a subsequent action, the damages were largely increased. In others, a substantial sum has been awarded, to be reduced to nominal damages on the removal of the obstruction. But the recovery of damages whatever the amount may be, indicates a violation of right and in former times, unless there was something special in the case, would have entitled the plaintiff, as of course, to an injunction in equity. I rather doubt whether the amount of damages which may be supposed to be recoverable at law affords a satisfactory test. In some cases, of course, an injunction is necessary; if, for instance, the injury cannot fairly be compensated by money; if the defendant has acted in a high-handed manner; if he has endeavoured to steal a march upon the plaintiff, or to evade the jurisdiction of the Court. In all these cases an injunction is necessary in order to do justice to the plaintiff and as a warning to others. But if there really is a question as to whether the obstruction is legal or not, and if the defendant has acted fairly and in a neighbourly manner, I am inclined to think that the Court ought to incline to damages rather than to an injunction. It is quite true that a man ought not to be compelled to part with his property against his will without an Act of Parliament; on the other hand, the Court ought to be very careful not to allow an action for the protection of ancient lights to be used as a means for extorting money. Often a person who is engaged in a large building scheme has to pay money right and left in order to avoid litigation which will put him to even greater expense by delaying his proceedings. As far as my own experience goes, there is quite as much oppression on the part of those who invoke the assistance of the Court to protect some ancient lights which they have never before considered of any great value, as there is on the part of those who are improving the neighbourhood by the erection of buildings which must necessarily to some extent interfere with the light of adjoining premises."

It is to be observed that Lord Macnaghten, in making the above observations, expressly stated that they were only practical suggestions and were not put forward with authority, but they are suggestions which must receive great consideration, coming from such a source, and they are particularly important under existing conditions, when it is desirable that building operations should be encouraged and not be unnecessarily fettered.

In our ninth article we ventured to suggest that the decision in *Colls' case* has, in fact, tended to lessen litigation and do away with unnecessary fine points.

Lord Findlay, in *Colls' case*, held very strongly that, even if the plaintiffs in that case had any cause of action, the damages which could be awarded would be very small, and it certainly was not a case for a mandatory injunction. He further pointed out that the doctrine that where a legal right is continuously infringed, an injunction to protect it ought to be granted, is subject to qualification. In support of the first proposition that the smallness of the damage might make the granting of an injunction oppressive, he cited *Curriers Company v. Corbet* (1865, 2 Drew & Sm. 355); *Robson v. Whittingham* (1866, 1 Ch. App. 442); and *National Provincial Plate Glass Insurance Co. v. Prudential Assurance Co.* (1877, 6 Ch. Div. 757); and in support of the second proposition that, even where the injury is continuing, an injunction need not necessarily be granted, he cited *Aynsley v. Glover* (1847, L.R. 18, Eq. 544) and *Shelfer v. City of London Electric Lighting Co.* (1895, 2 Ch. 388).

These observations must be taken as only preliminary remarks on the question of remedies as in the next article we propose more closely to consider the principles upon which an injunction or a mandatory injunction will be granted.

NEW BUILDINGS IN LONDON

Barking.—A housing scheme of about 50 houses is to be carried out in Netherfield-road, Barking, by Mr. Charles Gray, Cecil Gardens Estate Office, 11, Salisbury-avenue, Barking.

Becontree.—Nine shops with two stories of flats above are included in the plans for the development of the site at the corner of Bennett's Castle-lane and Green-lane, Becontree. The contractors are Messrs. T. N. Hughes, Ltd., Clements-road, Ilford. Mr. H. Meredith, A.R.I.B.A., 7, Goodmayes-road, Goodmayes, Essex, is the architect.

Billiter-street.—A new block of modern offices is to be erected at 18, Billiter-street, E.C.3. The contractors are Messrs. F. G. Minter, Ltd., Ferry Works, Putney, S.W., and the architects Messrs. Gunton & Gunton, F.R.I.B.A., Finsbury House, Blomfield-street, E.C.2.

Bishopsgate.—It is proposed to make an early start on the £100,000 block of office premises to be erected on the west side of St. Helen's-place, E.C.3. Plans have been prepared for the ground landlords, the Leathersellers' Company, by Mr. Henry A. Saul, F.R.I.B.A., 10, Gray's Inn-square, W.C.1.

Bishopsgate.—Foundations are now being constructed for the new offices in Bishopsgate, E.C.3, for the Hudson's Bay Co., Ltd. The general contractors are Messrs. Dove Bros., Ltd., Cloudesley-place, N.1, the steelwork is by Messrs. Dorman, Long & Co., Ltd., 4, Central Buildings, S.W.1, and the granite by Messrs. H. T. Jenkins & Sons, 132, Union-street, Torquay. The architects are Messrs. Lewis & Davis, 22, Conduit-street, W.1.

Bushey.—Extensions are to be carried out at the Royal Caledonian School at Bushey. Mr. Francis W. Troup, 14, Gray's Inn-square, W.C.1, is the architect.

Catford.—At Southend Village, Catford, S.E.16, a new church to seat 800 is to be built of brick with stone dressings. Sir Charles Nicholson, Bart., 2, New-square, Lincoln's Inn, W.C.2, is the architect.

Chelsea.—Messrs. Lole & Co., Trafalgar-square, Chelsea, S.W.3, are building new wards, operating theatre, &c., at the Cheyne Hospital for Children, at Cheyne-walk, S.W.3. The work is estimated at £6,000. The architect is Mr. R. M. Pigott, A.R.I.B.A., 35, Bedford-row, W.C.1.

Croydon.—A new bakehouse and stores are to be added to the premises of Messrs. Alfred French, Ltd., bakers, at 97, George-street, Croydon. The builder will be Mr. H. T. Blandford, 75a, George-street, Croydon.

Ebury-street.—The foundations are now being constructed for the new wing of the Goring Hotel, in Ebury-street, S.W.1, to the plans of Messrs. Giles, Gough & Trollope, 28, Craven-street, W.C.2. The contractors are Messrs. Dove Bros., Ltd., Cloudesley-place, Islington, N.1.

Edgware-road.—The site at 45, 47 and 49, Edgware-road, W.2, has been purchased by Messrs. J. H. Kenyon, Ltd., Edgware-road, W.2, who propose to erect a block of offices with several floors of flats above. Messrs. George A. Lansdown & Brown, 9, Regent-street, W.1, have prepared plans.

Ennismore-gardens.—No. 35, Ennismore-gardens, S.W.1, is to be converted into a number of self-contained flats. Messrs. Welshman & Wise, 38, Ennismore-gardens, S.W., are the architects.

Euston-road.—A new building for the Elizabeth Garrett Anderson Hospital for Women is to be erected in Euston-road, N.W.1. The cost is estimated at about £100,000. The hon. architect is Sir Brumwell Thomas, F3, The Albany, Piccadilly, W.1.

Gray's Inn-road.—A further section of the rebuilding scheme of the Central London Throat, Nose and Ear Hospital in Gray's Inn-road, W.C.1, is shortly to be put in hand, at a cost of £35,000. The architects are Messrs. Young & Hall, 17, Southampton-street, W.C.

Houndsditch.—Messrs. S. Lesser & Sons, Ltd., merchants, intend to rebuild their business

premises at 25-27, Houndsditch, E.C.3. The architects are Messrs. Lewis Solomon & Son, 133, Moorgate, E.C.2.

Kensington.—A block of flats, with shops on the ground floor, extending to six stories, is to be erected on the site of 26-28, Church-street, W.8. The builders and owners are Messrs. N. A. Cooper & Co., 47, Earls Court-road, W.8.

Kingston.—Plans have been prepared by Messrs. Yetts, Sturdy & Usher, 115, Moorgate, E.C.2, on the instructions of Messrs. Hodgson's, Kingston Brewery, Ltd., Kingston-on-Thames, for a new public-house on a site on the west side of Villiers-road and Grove-lane, Kingston.

Lewisham.—A new nurses' home at the Lewisham Infirmary, S.E., is shortly to be erected at a cost of £159,892, and Messrs. Leslie & Co., Ltd., Kensington-square, W.8, are the contractors. The architects are Messrs. J. Douglass Mathews, Son, & Ridley, 3, Paul's Bakehouse-court, E.C.4.

Loughborough Junction.—The Salvation Army are considering the question of building a new hall to accommodate 400 persons in Wanless-road, Loughborough Junction, S.E. Plans have been prepared by Mr. Oswald Archer, 101, Queen Victoria-street, E.C.4.

North Kensington.—The proposed Princess Louise Kensington Hospital for Children, at St. Quinton-avenue, W.10, will provide 50 beds, costing £80,000. The joint architects are Messrs. J. T. Saunders, F.R.I.B.A., 1a, Lindengardens, W.2, and George A. Lansdown, F.R.I.B.A., 9, Regent-street, W.1.

Old Bond-street.—On a site at the corner of Old Bond-street and Burlington-gardens, W.1, J. & E. Atkinson, Ltd., perfumiers, Southwark Park-road, S.E.16, are to erect a six-story West End branch. The builders are Messrs. E. A. Rooome & Co., Ltd., 7, Chiswick-street, E.9, the architects being Messrs. Stanbrough & Harris, 29, St. James's-square, S.W.1.

Orange-street.—A new church and school are to be built in Orange-street, Leicester-square, W.1. Messrs. Kieffer, Fleming & Keesey, 83, Pall Mall, S.W.1, are the architects.

Regent-street.—Messrs. Henry Tanner, 3, Hanover-square, W.1, have prepared plans for the rebuilding of shop and showroom premises at 163-165, Regent-street, W.1, for the International Fur Stores. The contractors are Messrs. Hall, Beddall & Co., Ltd., Waterloo Bridge, S.E.1.

Regent-street.—New premises for Messrs. Negretti & Zambra, and Messrs. T. & J. Perry, jewellers, are to be built at 124, Regent-street, W.1. The contractors are Messrs. G. Godson & Sons, Ltd., Pembroke Works, Kilburn-lane, W.10, and the architects Messrs. E. Harry Major, 2, John-street, Bedford-row, W.C.2, and W. Jennings Cox, Shamley Green, Guildford.

Richmond.—A site in George-street, Richmond, has been acquired by Messrs. Edwards & James, Ltd., dairymen, 57, Friars Style-road, Richmond, for the erection of a model dairy and bottling depot. Plans have been prepared by Mr. Dear, chief architect to the United Dairies, Ltd., 34, Palace Court, W.2.

St. John's Wood-road.—It is proposed to spend £40,000 to £50,000 on new stands at Lord's Cricket Ground. Mr. Herbert Baker, F.R.I.B.A., 14, Barton-street, S.W.1, is architect to the M.C.C.

St. Mary Axe.—New offices and warehouses are to be erected in St. Mary Axe, E.C.3, with frontages to Houndsditch and Camomile-street, for Messrs. Bunge & Co., Ltd., grain and rubber merchants, Bury-street, E.C. Mr. Delissa Joseph, F.R.I.B.A., 2, Basinghall-avenue, E.C.2, is the architect.

Woolwich.—An assembly hall and school, costing £57,000, is to be erected at Woolwich in Red Lion-lane, S.E. Mr. G. Topham Forrest, F.R.I.B.A., is the architect.

Canada House.

In connection with the new Canadian Headquarters, Trafalgar-square, illustrated in our last issue, Messrs. Stevens & Adams, Ltd., ask us to state that they supplied, fixed and polished the whole of the oak, birch and maple flooring in the building.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting!—Ed.

Foreign Slates.

[REPLY TO "BUILDERS' MERCHANT," JUNE 19.]

SIR,—I should personally be very reluctant to make use of the slates described by your correspondent. The toughness of a slate depends very much upon the compactness and homogeneity of its structure, and it must be remembered that slates cleave across their natural bed so that the adhesion of particles is not ensured by the natural weight of the slate bed. The pyritic impregnations observed are really interruptions in the structure of the slate, and I should anticipate from such signs a variably brittle slate, and one not to be compared with the excellent slates obtainable from the Welsh quarries. French slates, from dark blue to black, are considered at best only of fair quality, and I should strongly advise your correspondent to stick to the British article unless supplies are definitely not obtainable by the date required.

"BRITISH."

Subsidy Houses.

[REPLY TO REGINALD J. SLATER, JULY 3.]

SIR,—Everyone who is an owner of land is entitled to utilise it to its full advantage and to his own interests provided he (1) conforms to the restrictive and other covenants under which he purchased the land; (2) complies with the requirements of the by-laws of the local authority, or any local Act or Acts of Parliament in force in the district where the land is situated.

The fact that the inquirer purchased a house on which the builder, and not the purchaser, was paid a subsidy, does not of itself preclude him from utilising vacant land adjacent for the erection of a garage. Further, if, as it appears, the plans of the garage have been submitted to the local authority, and that authority, as it is bound to do, has signified its approval or disapproval, and has disapproved them, on account only of the Ministry of Health stating that "No house shall be granted government subsidy if a garage is included," it is open to inquirer to risk proceeding with the work. In the matter of contravention of by-laws the local authority is only concerned with what is done on the land, not what is shown on plans, etc. (See *Robinson v. Barton Eccles L.B.*, 1883, 6 A.C. 798). Here it is clear the garage was not included in the house upon which the subsidy has been paid. The obvious intention of the Ministry was to exclude a garage from reaping any advantage from the subsidy or being built thereunder, and in this case the proposed garage is to be built as a matter quite apart from the subsidy.

Electric Lighting.

[REPLY TO "PLANNER," JULY 3.]

SIR,—A "rough-and-ready" rule for ascertaining the number of lamps, of given candle-power, required for evenly illuminating unobstructed floor space in warehouses is as follows:—

Let N = Number of lamps required.
 P = Candle-power of the lamp.
 L = Length in feet of apartment to be lighted.
 B = Breadth in feet of apartment to be lighted.

$$\text{Then } N = \frac{L \times B}{4P}$$

This assumes that height of lamp above floor does not exceed 10 ft., and that lamps are equally distributed. If height is 12 ft., take 3 P ; if 14 ft., 2 P .

W. G. W.

THE WEEK IN PARLIAMENT

WESTMINSTER, Wednesday.

Scottish Housing.

Sir J. Gilmour, Secretary for Scotland, informed Mr. Stephen that 3,938 houses had been built in Scotland under the Act of 1923, of which 934 were built in Glasgow; 75 houses had been built under the Act of 1924, of which none were built in Glasgow.

Steel Houses.

Sir K. Wood informed Mr. R. Smith that the following was a statement of the number of houses of external steel construction which local authorities had been authorised to erect:—

Name of Authority.	No. of Houses.	Type.
Birmingham ..	8 ..	Telford
Bristol ..	20 ..	"
Bolton ..	100 ..	"
Hastings ..	8 ..	"
Smethwick ..	6 ..	"
Swansea ..	2 ..	Own design resembling Weir type

Woolwich a small number (not exceeding 20) .. Telford

The average cost of the Telford houses was £490 each, and the estimated cost of the two houses to be erected at Swansea was £500 each. All the houses were of the non-parlour type. The figures did not include the 150 houses to be erected under special arrangements for demonstration purposes.

London Housing.

Mr. Viant asked the Minister of Health if any meetings had been held of the local building industry committee for London to deal with the supply of labour for housing under The Housing (Financial Provisions) Act, 1924; and, if not, what were the reasons for the delay.

Mr. N. Chamberlain said he was informed that there had been four meetings of the Central Local Building Industry Committee for London. In addition to the meetings held by the Central Committee, which was a Co-ordinating Committee, five District Committees had held meetings for the purpose of augmenting the labour supply in London, and other District Committees were now being set up.

Subsidy for Mass Production.

Lieut.-Colonel Horlick asked the Minister of Health whether he had considered encouraging the development of house building by mass production by offering the subsidy now being given under the Wheatley Act for houses that could be sold as well as leased?

Mr. N. Chamberlain said he had considered the suggestion contained in the question, but he was not satisfied that the desired effect would be obtained by an increase of subsidy, or that the subsidy at present available for houses built for sale was inadequate. In any case fresh legislation would be necessary, and he could hold out no hope of this in the present Session.

Price of Bricks.

Captain Bullock asked the Minister whether he would state the increases in the price of bricks since the beginning of April; whether he was aware that in some instances the price had risen from 71s. 9d. per thousand to 81s. per thousand; whether there was any explanation of this serious advance; whether he had made inquiries into its effect on housing; and what action, if any, he proposed to take in the matter.

Mr. N. Chamberlain said that the information in his possession did not indicate that there had been any general increase in the price of bricks since the beginning of April, but if the hon. and gallant member would furnish him with particulars, he would refer the matter to the Committee on the Prices of Building Materials for inquiry.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	C'p'ters. Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers.
Aberdare ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Accrington ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Altrincham ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Ashton-under-Lyne ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barnsley ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barrow-in-Furness ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barry ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bath ..	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bedford ..	1/5	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Birkenhead ..	1/9	1/9	1/8 1/2	1/9	1/9	1/9	1/9	1/2 1/2
Birmingham ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bishop Auckland ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Blackburn ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Blackpool ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bolton ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bournemouth ..	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bradford ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Brentwood ..	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Bridgwater ..	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1 1/2
Cardiff ..	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Cardtham ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chelmsford ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chertsey ..	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Burton-on-Trent ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bury ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Cambridge ..	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Cardiff ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Cardtham ..	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Chelmsford ..	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Chertsey ..	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Cheltenham ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chester ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chertsey ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Colchester ..	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Coventry ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Crewe ..	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Darlington ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Derby ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Doncaster ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Dudley ..	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Durham ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
E. Glam.(Mon. Vall.) ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Eastbourne ..	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Exeter ..	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Folkestone ..	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/1 1/2
Gloucester ..	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Grantham ..	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Grays ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Grimsby ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Great Yarmouth ..	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Guildford ..	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Hallux ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Harrigate ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hartlepool ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hastings ..	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/1 1/2
Hertford ..	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Huddersfield ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hull ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Ipswich ..	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Launceston ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leamington Spa ..	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Leeds ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leicester ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Lichfield ..	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Lincoln ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Liverpool ..	1/9	1/9	1/8 1/2	1/9	1/9	1/9	1/9	1/4
Llanelli ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
London { 12 m. radius ..	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/4 1/2
London { 12-15 m. radius ..	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
Loughborough ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Luton ..	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Maidstone ..	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Manchester ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Mansfield ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Merthyr Tydfil ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Middlesbrough ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Newcastle-on-Tyne ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Newport Mon. ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Northampton ..	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Norwich ..	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Nottingham ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Oldham ..	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Oxford ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Oxford ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Plymouth ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Pontypool ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Portsmouth ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Preston ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Reading ..	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Rochdale ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Rochester ..	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Rugby ..	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
St. Albans ..	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
St. Helens ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Scarborough ..	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/1 1/2
Sheffield ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Shrewsbury ..	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Southampton ..	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Southend-on-Sea ..	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Southport ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
South Shields ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stockport ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stockton-on-Tees ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stoke-on-Trent ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stroud ..	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Sunderland ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Swansea ..	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Swindon ..	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Taunton ..	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Torquay ..	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Tunbridge Wells ..	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Wakefield ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Walsall ..	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Warrington ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
West Bromwich ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Wigan ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Windsor ..	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Wolverhampton ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Worcester ..	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
York ..	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the name of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, &c.

JULY 13.—**Chelmsford**.—ADDITIONS.—To the offices in Waterloo-lane, for the R.D.C. J. Dewhurst, Engineer and Surveyor, Council Offices, Waterloo-lane. Deposit £2 2s.

JULY 13.—**Chelmsford**.—COTTAGES.—Two pairs of cottages at Great Leighs, for the R.D.C. J. Dewhurst, Engineer and Surveyor, Council Offices, Waterloo-lane.

JULY 13.—**Chelmsford**.—PAINTING.—Cleaning and painting the iron and woodwork of the water tower, engine-house, and other buildings at Great Baddow, for the R.D.C. J. Dewhurst, Engineer and Surveyor, Council Offices, Waterloo-lane.

JULY 13.—**Chesterfield**.—HOUSES.—Sixteen A 3 type houses and 21 A 2 type houses, for the T.C. Bailey Deering, Architect, 12, Gluman Gate. Deposit £1 1s.

JULY 13.—**Crook**.—ALTERATIONS.—Alterations and improvements to the Sunnyside school building, for the Durham C.C. F. Willey, F.R.I.B.A., 34, Old Elvet, Durham.

JULY 13.—**Edinburgh**.—LIGHTING.—Installation of electric lighting circuits at the Public Washhouse, Abbeymount, for the T.C. A. Grierson, Town Clerk. Deposit £1 1s.

JULY 13.—**Edinburgh**.—LODGE.—Entrance lodge at the Institution, Gillespie-crescent, for the Royal Blind Asylum Committee. J. L. Hill, Dougal & Co., W.S., Secretaries, 18, Hill-street.

JULY 13.—**Fowey**.—HOUSE.—Residence at Fowey, Cornwall. A. J. Cornelius, F.R.I.B.A., architect, Truro.

JULY 13.—**Glamorgan**.—BUILDING.—For (1) new intermediate school for 340 boys, caretaker's house, boundary walls, cycle house, &c., at Neath, and (2) painting 55 schools in the Eastern Division and 20 schools in the Western Division, for the C.C. T. Mansel Franklin, Secretary of Glamorgan E.C., County Hall, Cardiff.

JULY 13.—**Hendon**.—BUILDINGS.—Garages, workshop, messroom, &c., together with the construction of a roadway and other incidental works in connection with a refuse disposal works at Warner-road, Hendon, N.W. 4, for the U.D.C. A. O. Knight, Engineer and Surveyor, Town Hall, Hendon, N.W. 4. Deposit £3 3s.

JULY 13.—**Highgate**.—N.S.—ALTERATIONS and additions to the administrative block, nurses' home (45 beds), ward block (20 cubicles), entrance lodge, main entrance, roads, paths, &c., for the Hornsey, Finchley and Wood Green Joint Hospital Committee. E. J. Lovegrove, Town Hall, Southwood-lane, Highgate, N.6, between 10 and 12 o'clock.

JULY 13.—**Leeds**.—ROOF.—Waterproof reinforced concrete roof for the service reservoir at Moortown, for the T.C. H. Shortreed, Assistant Waterworks Manager. Deposit £1.

JULY 13.—**London**.—W.—REPAIRS AND PAINTING.—Interior of Public Library, High-street, Acton, for the Corporation. Borough Surveyor, Municipal Offices, Acton, W.3.

JULY 13.—**London**.—N.W.6.—Repairs and internal and external painting and redecoration of No. 1 Clinic, 9, Willesden-lane, and 24, St. Julian's-road, for the D.C. Engineer to the Council, Town Hall, Dyne-road, Kilburn, N.W.6.

JULY 13.—**Mapplewell**.—BUNGALOW.—At Darton-lane, Mapplewell. Crawshaw & Wilkinson, architects, 13, Regent-street, Barnsley.

JULY 13.—**Leeds**.—PAINTING.—For painting exteriors of houses on the Wyther House estate, and (2) painting at the Town Hall and Judges' House, &c., for the T.C. W. T. Lancashire, City Engineer.

JULY 13.—**Monmouthshire**.—PAINTING.—Thirty eight elementary schools, for the E.C. J. Bain, F.R.I.B.A., County Hall, Newport.

JULY 13.—**Nottingham**.—PAINTING.—Internal cleaning and painting at the Central Home, Harley-road, for the T.C. J. Allan Battersby, Clerk to the Board, Poor Law Offices, Shakespeare-street.

JULY 13.—**Sheffield**.—PAINTING.—Internal painting, &c., at the Central Reference Library, Surrey-street, for the T.C. F. E. P. Edwards, City Architect. Deposit £1.

JULY 13.—**Wallasey**.—PAINTING.—External painting of 56 Council houses situate in Mill-lane, Ruskin-avenue, and Rostherne-avenue, for the C.B. Borough Engineer. Deposit £1 1s.

JULY 14.—**Belfast**.—OFFICES.—Depot and offices in Gardiner-street, for the C.B. R. B. Roe, Quantity Surveyor, Kings-court, Wellington-place. Deposit £1 1s.

JULY 14.—**Birtley**.—CHAPEL.—Building a chapel, school-house, and other work, and supplying about 550 yds. of 5 ft. 6 in. creosoted military fencing, for the P.C. Mr. Milburn, Warwick House. Deposit £1.

JULY 14.—**Cardiff**.—ADDITIONS.—At Canton Secondary School, for the E.C. T. Peirson Frank, Architect to the E.C. Deposit £2 2s.

JULY 14.—**Cardiff**.—HOUSE.—Caretaker's house at Llandaff Council School, Bridge-road, Llandaff, for the E.C. T. Peirson Frank, Architect to the E.C. Deposit £1 1s.

JULY 14.—**Cardiff**.—REPAIRS.—(1) Internal renovations, &c., Homes in Canton, north of Cowbridge-road; (2) internal renovations, &c., Cowbridge-road and Headquarters Homes, Ely; and (3) external renovations, &c., Headquarters Homes, Ely, for the B.G. R. Stephenson, Clerk, Union Offices, 11, Park-place.

JULY 14.—**Carlton**.—HOUSES.—Four parlour-type and 12 living-room type houses on the Conway-road site, for the U.D.C. J. A. West, A.R.I.B.A., surveyor Manor-road. Deposit £1 1s.

JULY 14.—**Dartford**.—Extension of the Grammar School for Boys, Dartford, Kent, for the E.C. County Education Architect, Room 69, Sessions House, Maidstone. Deposit £2 2s. in the form of a cheque, payable to the Kent Education Committee, and crossed "National Provincial Bank, Ltd."

JULY 14.—**Deptford**.—S.E.—Demolition of an existing overground urinal and the construction of an underground convenience at Clifton Hill, for the Metropolitan Borough Council. Borough Surveyor, Deptford Town Hall, New Cross, S.E.14.

JULY 14.—**Exmouth**.—HOUSES.—Two blocks of four houses, and main drainage of houses and construction of sewage filter works, at Littleham, for the U.D.C. S. Hutton, engineer, surveyor, and architect.

JULY 14.—**Golear**.—RECONSTRUCTION.—Of Market-street, Milnsbridge, from the centre of the River Bridge to the Golear boundary, with reinforced concrete foundation and rock asphalt surface, for the U.D.C. L. Lunn, Clerk to the Council.

JULY 14.—**Great Berkhamsted**.—COTTAGES.—Fourteen cottages and incidental work at Swing Gate-lane, Berkhamsted, for the U.D.C. J. R. Hadfield, Surveyor, 135, High-street.

JULY 14.—**Jarrow**.—HOUSES.—100 "A3" non-parlour type houses on the Monkton estate, for the T.C. J. Scott Weir, Borough Engineer.

JULY 14.—**St. Albans**.—For the erection of a wireless station. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s, payable to the Commissioners.

JULY 14.—**Sefton**.—COTTAGES.—Six in Victoria-road, Ince Blundell; 13 described in quantities as Lydiat-lane, Russell's-lane, Sefton, for the R.D.C. E. B. Bailey, architect, 9, Cook-street, Liverpool. Deposit £1 1s.

JULY 14.—**Thirsk and Sowerby**.—WORKS.—In connection with the Institute, viz. 1.—Bricklayer and draining, joiner, plumber, central heating, electrician, painting, for the Committee. A. Mather, Westbourne-terrace, Thirsk.

JULY 14.—**Uxbridge**.—EXTENSIONS.—Of bathing shed and additional boxes at the bathing place, Frays River, for the U.D.C. W. L. Eves, surveyor, 54, High-street.

JULY 14.—**Walthamstow**.—E.17.—Sundry works of improvements and interior and exterior renovation in painting, distemping, &c., to various schools, &c., for the E.C. Architect to the Committee, 263, High-street, Walthamstow, E.17, between 10 and 4 p.m., SEPT. 1935 10 5 1 p.m.

JULY 14.—**Walton-upon-Thames**.—HOUSES.—Sixteen non-parlour in eight semi-detached pairs on a site north of Rodney-road, for the U.D.C. Council Offices, Hershman-road, Walton-upon-Thames. Deposit £2 2s.

JULY 14.—**West Derby**.—ADDITIONS.—To the lavatory accommodation at Walton Institution, for the B.G. Ernest B. Bailey, L.R.I.B.A., architect, 9, Cook-street, Liverpool.

JULY 14.—**West Riding**.—BUILDING.—For brick wall and iron fencing to the additional land at Royston Council school, and additional conveniences at South Kirkby Council school, for the E.C. Education Department, County Hall, Wakefield.

JULY 14.—**Willesden**.—EXTENSIONS.—For (a) extensions to central heating plant, (b) heating and hot-water supply to new nurses' home, (c) extension of storage tanks to water-softener, and repairs to same, at the Park Royal Hospital, for the B.G. W. M. Binny, engineer, 39, Carlton-road, Putney, S.W.15. Deposit £2 2s.

JULY 15.—**Admiralty, Whitehall**.—For the external and internal painting, &c., of the Admiralty, Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s, payable to the Commissioners.

JULY 15.—**Armagh**.—REPAIRS.—At H.M. Prison, for the Government of Northern Ireland. Secretary, Ministry of Finance, 15, Donegal-square West, Belfast.

JULY 15.—**Brentford**.—DECORATIONS.—Internal decorations, &c., at the Maternity Hospital, Clayponds-lane, for the Chiswick and Ealing Hospital Committee. E. Willis, Town Hall, Chiswick, W.4.

JULY 15.—**Garshalt**.—Surrey.—COTTAGES AND FLATS.—Ten cottages and four flats at St. Andrews-road, and Stanley-road, for the U.D.C. Council's Architect, District Council's Offices, The Grove, Garshalt. Deposit £2.

JULY 15.—**Garshalt**.—Surrey.—Public convenience, with necessary drainage works, at The Grove, for the U.D.C. Surveyor to the Council, District Council Offices, The Grove, Garshalt. Deposit £2.

JULY 15.—**Darlington**.—HOSPITAL BUILDINGS.—Erection of the administrative block of the War Memorial Hospital, Darlington. W. J. Moscrop, architect, Feethams, Darlington.

JULY 15.—**Denbigh**.—REDECORATING.—Repainting and redecoration of dining and recreation hall, for the Mental Hospital Committee. Wm. Barker, Clerk to the Committee.

JULY 15.—**East Ashford (Kent)**.—REPAIRS.—To the Workhouse Chapel, for the B.G. E. A. Jackson, architect, North-street, Ashford.

JULY 15.—**Gosport**.—SCHOOL.—School for 200 children at Gordon Park, for the E.C. G. R. Walker, Secretary, "Rostellan," Stoke-road. Deposit £1 1s.

JULY 15.—**Hambleton**.—BUILDING.—An engine-house and laying 1,800 yards of 10 in. cast-iron pumping main, the construction of sewage disposal works, comprising sedimentation tanks, percolating filters, humus tanks and various other works in connection with sewage disposal for the parishes of Bramley and Womersley, for the R.D.C. Gerald Swayne, engineer, 1, Victoria-street, Westminster, S.W.1. Deposit £3 3s.

JULY 15.—**Ilkerton**.—PAINTING.—Painting and decorating (1) Bennerley-avenue Infants' school, (2) Bennerley-avenue Girls' school, (3) Granby Boys' and Girls' schools, (4) Gladstone-street Infants' and Cooks schools, (5) Hallcroft Boys' and Girls' schools, and (6) Trinity schools, for the E.C. H. Tatham Sudbury, Architect, Rutland Chambers, Lord Haddon-road. Deposit £1 1s.

BUILDING TRADE WAGES IN SCOTLAND.

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters. Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Brick-Plas- Masons' layers' tress' Labourers.
Aberdeen	1/8	1/8 1/2	1/8	1/8	1/8	1/3	1/7	1/0 1/2
Airdrie	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1/3
Alexandria	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1/2 1/2 to 1/3 1/2
Arbroath	1/7	1/7	1/7 1/2	1/7	1/7	1/3	1/5 1/2	1/1 1/2
Ayr	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1/3
Bathgate	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1/2 to 1/3
Bairgowrie	1/7	1/7	1/7	1/7 1/2	1/5	1/7	1/4	10d. to 1/-
Boness	1/8	1/8	1/8	1/8	1/8	1/3	1/8	1/3
Bombarton	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1/3 to 1/3 1/2
Bumfries	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/3 1/2	1/6 1/2	1/2
Dundee	1/8	1/8	1/8	1/8	1/8	1/3	1/8	1/3
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/3	1/8	1/3 1/2
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/3	1/8	1/3 1/2
Falkirk	1/7 1/2	1/7 1/2	1/7	1/8	1/7	1/7	1/6 1/2	1/2 1/2
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/8	1/2
Glasgashiel	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Glasgow	1/8	1/8	1/8	1/8	1/8	1/3	1/8	1/3 1/2
Greenock	1/8	1/8	1/8	1/8	1/8	1/3	1/7	1/0 1/2 to 1/3 1/2
Hamilton	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1/3 1/2
Hawick	1/7	1/7	1/7	1/7 1/2	1/7	1/7	1/7	1/2 1/2
Helensburgh	1/8	1/8	1/8	1/8	1/8	1/3	1/7	1/3 1/2
Inverness	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/- to 1/2
Kilmarnock	1/8	1/8	1/8	1/8	1/8	1/3	1/8	1/3 1/2
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/3	1/8	1/3 1/2
Kirkwall	1/6	1/6	1/6	1/6	1/6	1/6	1/4	1/
Lanark	1/8	1/8	1/8	1/8	1/8	1/3	1/8	1/3 1/2
Leith	1/8	1/8	1/8	1/8	1/8	1/3	1/8	1/3 1/2
Motherwell	1/8	1/8	1/8	1/8	1/8	1/3	1/8	1/3 1/2
Perth	1/8	1/8	1/8	1/8	1/8	1/3	1/8	1/3
Stirling	1/3	1/3	1/3	1/3	1/3	1/3	1/8	1/3 1/2
Stirlingshire (Eastern District)	1/3-1/10	1/3-1/10	1/3	1/3	1/7	1/3	1/6 1/2	1/3 1/2
Wishaw	1/8	1/8	1/8	1/8	1/8	1/3	1/7	1/3 1/2

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 80.

JULY 15.—Jarrow.—PAINTING.—Painting and distemping the Central Council and the St. Bede's Senior Boys', Senior Girls' and Infants' schools, for the E.C. T. H. Spencer, Secretary.

JULY 15.—Jarrow.—OFFICES.—New offices at the Central Council School, for the E.C. T. H. Spencer, Secretary.

JULY 15.—Leamybrien.—RESTORATION.—Of Leamybrien ex-R.I.C. Barracks, Co. Waterford, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

JULY 15.—Leeds.—ELECTRIC LIGHTING.—Electric lighting installation at 40, Park-lane, for the T.C. W. T. Lancashire, City Engineer.

JULY 15.—Leeds.—FLOORING.—Provision and laying of jointless composition flooring at 40, Park-lane, for the T.C. W. T. Lancashire, City Engineer.

JULY 15.—Leyburn.—PAINTING.—The outside of the Workhouse, also for renewing and repairing part of the woodwork, for the B.G. C. E. Dixon, Clerk to the Guardians.

JULY 15.—Liverpool.—ALTERATIONS.—To 90, Allerton-road, to convert same into Reading Room and Lending Library, for the T.C. Land Steward and Surveyor. Deposit £1 1s.

JULY 15.—London.—REPAIRS.—Extension of mess room at the Northern Hospital, Winchmore Hill, N., and for cleaning and painting works and repairs at (a) Caterham Mental Hospital, Caterham, Surrey; (b) High Wood Hospital for Children, Brentwood; (c) Colindale Hospital, Hendon; (d) Sheffield-street Hospital, Kingsway, W.C.; (e) South Wharf, Rotherhithe, S.E.; (f) North Wharf, Blackwall, E.; (g) T.S. "Exmouth," Infirmary and Shore Buildings, Grays, Essex; (h) Pinewood, Wokingham, Berks.; (i) Belmont Laboratories and stables, Sutton, Surrey; (j) Southwark Casual Ward, Great Guildford-street, S.E.1, for the M.A.B. T. Cooper, M.Inst.C.E., M.I.Mech.E., Engineer-in-Chief, Office of the Board, Victoria Embankment, E.C.4. Deposit £1 each.

JULY 15.—London.—REPAIRS.—Painting and repairs at the Observation Wards of the City of Westminster Institution, 367, Fulham-road, S.W.10, for the B.G. W. J. Lickley, Clerk to the Guardians, Guardians' Offices, Princes-row, Buckingham Palace-road, S.W.1.

JULY 15.—London, S.W.1.—Painting and repairs at the Administrative offices and ambulance station, Princes-row, and Receiving House, Wallis'-yard, for the Guardians of the City of Westminster. The Clerk, Guardians' Offices, Princes-row, Buckingham Palace-road, S.W.1.

JULY 15.—Newcastle-upon-Tyne.—PAINTING.—Re-painting externally 310 houses on the Walker housing estate and 41 houses at Tynevale-terrace, Walker, for the T.C. Housing Architect, 18, Cloth Market.

JULY 15.—Nottingham.—PAINTING.—External cleaning and painting at the Northern Baths, Basford, for the T.C. T. Wallis Gordon, City Engineer. Deposit £1.

JULY 15.—Portadown.—ADDITIONS.—Alterations and additions to the R.U.C. Barracks, Edward-street for the Government of Northern Ireland. Ministry of Finance, 15, Donegall-square West, Belfast.

JULY 15.—Pontardawe.—HOUSES.—Ten parlour type houses at Hodgson-road site, Godregraig, for the R.D.C. E. D. Jones, Architect to the Council. Deposit £2.

JULY 15.—Richmond (Surrey).—PAINTING.—Painting, paperhanging and distemping at the Workmen's dwellings, situate in Manor-grove, North Sheen, and Victoria-place, Richmond, for the T.C. Borough Surveyor. Deposit 10s. 6d.

JULY 15.—Various Places.—Cleaning and painting works and repairs at (a) River Hospitals, Dartford; (b) Queen Mary's Hospital, Carshalton; (c) The Hostel, Gray's Inn-lane, W.C.; (d) Brook Hospital, S.E.18, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

JULY 15.—Wandsworth, S.W.18.—HOUSES.—Erection of seven (14 sets of flats) on a site at Blackshaw-road, Tooting, for the Borough Council. F. Leonard Poole, Architect, 29, New Bridge-street, E.C.4. Deposit £2 2s.

JULY 15.—Woolwich.—Repair and decoration work at the Goldie Leigh Homes, Lodge-lane, Abbey Wood, S.E.2, for the Guardians. Whinco & Channer, architects, 47, Thomas-street, Woolwich.

JULY 16.—Aberangell.—HOUSE.—In connection with "Bethania" C.M. Chapel, Aberangell. G. T. Bassett, A.R.I.B.A., architect and surveyor, Aberystwyth.

JULY 16.—Bournemouth.—Tea rooms, shelters, steps, &c., at Overstrand, Boscombe Pier Approach, for the County Borough Council. Borough Engineer, Town Hall, Bournemouth. Deposit £1 1s.

JULY 16.—Cockermouth.—HOUSES.—Thirty-six non-parlour type houses at Great Clifton, for the R.D.C. J. B. Wilson, Chartered Civil Engineer, Grecian Villa.

JULY 16.—Ealing, W.5.—HOUSES.—Ninety-six parlour houses, 132 non-parlour houses, 54 pairs of flats, for the T.C. Borough Engineer, Town Hall, Ealing, W.5. Deposit £1 1s.

JULY 16.—Fordingbridge, Salisbury.—For alterations and additions to the Post Office, Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s., payable to the Commissioners.

JULY 16.—Greenwich, S.E.10.—Extensions and alterations to the administrative offices of the Greenwich Union, including men's receiving ward, offices, board room, &c. The buildings will be generally of brickwork, with fireproof floors and roofs, for the Guardians. The Surveyor, Guardians' Offices, Board Room, East Greenwich, S.E.10. Deposit £3 3s.

JULY 16.—Guildford.—BUILDING.—Adapting a present ward for an operating theatre, and other works at the Institution, Warren-road, for the B.G. Norris & Shattock, Chartered Architects, 51, High-street.

JULY 16.—Havant.—HALL.—Of St. Faith's Parish Hall, for the Church Council. A. E. Cogswell & Sons, architects, Prudential Buildings, Portsmouth.

JULY 16.—London, N.W.1.—Painting and pointing works at Highgate Hospital, Dartmouth Park Hill, N.19, for the Guardians of the Parish of St. Pancras. The Clerk, Town Hall, Pancras-road, N.W.1.

JULY 16.—Salisbury.—Secondary School at Salisbury, for the Wilts C.C. County Architect, County Offices, Trowbridge. Deposit £2 2s. (cheques only).

JULY 16.—Sheerinez.—Erection of eight houses, for Epping R.D.C. Clerk to the Council, High-street, Epping, Essex.

JULY 16.—Smethwick, L.O.G.E.—Park keeper's lodge at the West Smethwick Park, for the C.B. R. Fletcher, Borough Engineer and Surveyor.

JULY 16.—South Shields.—HOUSES.—Eighty-six at Boldon Colliery, 38 at West Boldon, and 30 at Whitburn, for the R.D.C. T. Ernest Gilchrist, Surveyor and Architect, Council Offices, East Boldon. Deposit £3 3s.

JULY 17.—Aberillery.—PAINTING.—Painting outside of school premises—Bryngwyn Boys', Ty'r Traig Mixed and Infants, Arael Mixed and Infants, Six Bells Mixed, Brynhyfryd Mixed and Infants, Blaenau Gwyn Infants—for the U.D.C. A. Gordon Jones, Surveyor.

JULY 17.—Brighouse.—HOUSES.—Fifty-two houses on the Smith House estate, for the T.C. E. C. Brooke, architect.

JULY 17.—Camberley.—For the erection of a Telephone Exchange, Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s., payable to the Commissioners.

JULY 17.—Chatham.—Fourteen houses at Holcombe-road, for the T.C. Mr. R. H. Honey, Borough Engineer and Surveyor, Town Hall, Chatham.

JULY 17.—Cilfynydd.—MONUMENT.—War memorial monument at Cilfynydd, for the Committee. H. M. R. Burgess, A.R.I.B.A., Chartered Architect and Surveyor, 77, Taft-street, Pontypridd.

JULY 17.—Galashiels.—HOUSES.—Five blocks of houses (twenty houses in all) at Glendinning-terrace, for the T.C. J. & J. Hall, architects, Galashiels.

JULY 17.—Leyton.—SCHOOLS.—Sybourn-street infants' schools, to accommodate 350 children, for the U.D.C. J. H. Jacques, L.R.I.B.A., 61, West Ham-lane, Stratford, E.15. Deposit £2.

JULY 17.—London.—HOUSES.—Seven houses on a site at Blackshaw-road, Tooting, S.W.17, for the Wandsworth B.C. F. Leonard Poole, architect, 29, New Bridge-street, E.C.4. Deposit £2 2s.

JULY 17.—Manchester.—ADDITIONS.—Alterations to schools and the erection of new homes, &c., at the Styl Cottage Homes, Handforth, near Manchester, for the B.G. F. H. Overmann, 183, Oxford-road, Manchester. Deposit £2 2s.

JULY 17.—Middlebrough.—SCHOOL.—At Marton-grove to accommodate 1,432 scholars, together with Special Subjects Centre, for the E.C. Jas. Forbes, architect, 19, Grange-road West. Deposit £2 2s.

JULY 17.—Morley.—HOUSES.—Forty-two houses on the Middleton-road housing site, for the T.C. F. Turner, Borough Engineer and Surveyor.

JULY 17.—Near Bristol.—COURT.—Petty Sessional Court at Staple-hill, near Bristol, for the Gloucestershire C.C. E. S. Sinnott, County Surveyor, Shire Hall, Gloucester.

JULY 17.—Thornbury.—HOUSES.—Twelve houses at Henbury, near Bristol, for the R.D.C. F. W. Davies, Surveyor, High-street.

JULY 17.—Tipton.—SCHOOL.—Central school in Alexandra-road, for 640 scholars, for the Urban District E.C. Scott & Clark, architects, Regent Chambers, Wednesbury. Deposit £3 3s.

JULY 17.—Tipton.—REPAIRS.—Repairs and painting at certain schools, for the E.C. Scott & Clark, architects, Wednesbury.

JULY 18.—Birkenshaw.—HOUSES.—Sixteen scullery houses and six parlour houses in blocks of twos and threes on the Old Lane site, for the U.D.C. Mr. Brooks, Surveyor and Architect. Deposit £1 1s.

JULY 18.—Halifax.—FOUNDATIONS.—For cooling towers at Electricity Power Station, for the C.B. Borough Engineer, Crossley-street. Deposit £2 2s.

JULY 18.—Hanwell.—ELECTRIC LIGHTING.—At Central London District School, Greenford-avenue, Hanwell, G. P. Morrell, Clerk to the Managers.

JULY 18.—Lowestoft.—WRING.—Of the Technical Institute and School of Art, Clapham-road, Lowestoft, and the supply of electrical fittings, &c., for the East Suffolk C.C. and the T.C. C. Ashton Stray, Town Clerk and Secretary to Joint Committee, Town Hall.

JULY 18.—Near Pontypridd.—REPAIRS.—To Siloam C.M. Chapel, Gyeifellon, near Pontypridd. R. H. Griffiths & Son, architects, Tonypandy. Deposit £2 2s.

JULY 18.—Soke of Peterborough.—PAINTING.—For (a) painting and distemping the interior of the County School for Girls, Lincoln-road, Peterborough, and the County Technical School, Broadway, Peterborough; and (b) painting the exterior of the County School for Girls, for the E.C. W. J. Deacon, Clerk to the Committee, County Education Offices, Cross-street, Peterborough.

JULY 18.—Tankerton-on-Sea, Kent.—Hospital buildings for the Committee of the Whitstable and Tankerton Cottage Hospital. Robert H. Goodhall, 66, Northwood-road, Tankerton-on-Sea. Deposit £3 3s.

JULY 20.—Aberdare.—ALTERATIONS.—Alterations, renovations, and for reseating "Siloah" Welsh Congregational Church, Aberdare. E. G. Henton, architect, 22, Cardiff-street. Deposit £2 2s.

JULY 20.—Blackpool.—SCHOOL.—In Claremont-road, North Shore, for the C.B. F. Wood, Borough Engineer and Surveyor. Deposit £2 2s.

JULY 20.—Bournemouth.—Jarrah decking, timber shelters, stage, tea rooms, etc., in connection with the reconstruction of Boscombe Pier Head, Contract No. 2, for the Borough Council, Borough Engineer and Surveyor, Town Hall, Bournemouth. Deposit £1 1s.

JULY 20.—Chelmsford.—ENGINE-HOUSE.—Engine-house and other building work at the Admirals Park waterworks, Rainsford-road, for the T.C. E. J. Miles, Borough Engineer and Surveyor. Deposit £2 2s.

JULY 20.—Chester.—SCHOOL.—Elementary school at Moreton for 400 scholars, with Special Subjects Centre, for the C.C. H. Beswick, F.R.I.B.A., County Architect, Newgate-street, Chester. Deposit £1 1s.

JULY 20.—Hartismere.—WORKSHOP.—In the grounds of the New Infirmary, Victoria-road, Eye, Suffolk, for the B.G. H. Barnes, Clerk to the Guardians, Union Office, Victoria-road, Eye, Suffolk.

JULY 20.—Heckmondwike.—HOUSES.—Forty-six scullery type houses at Stubley Farm housing site, for the U.D.C. F. W. Littlewood, Surveyor.

JULY 20.—Huddersfield.—DECORATING.—Fartown Trinity Wesleyan Church, Minister, 130, Halifax Old road.

JULY 20.—Lincoln.—REINFORCED CONCRETE WORK (B.R.C. SYSTEM).—Widening of the bridge over the Upper Witham River at Newark-road, for the Highways Committee of the City. City Engineer and Surveyor, Corporation Offices. Deposit £1 1s.

JULY 20.—London, E.C.4.—PAINTING AND DECORATIONS.—Painting and decorating certain chambers and other buildings in the Middle Temple. Treasury Office, 2, Plowden Buildings, Middle Temple-lane, E.C.4.

JULY 20.—Maidenhead.—DWELLING-HOUSES.—Erection of 50 and two with shops attached, for the T.C. Borough Surveyor, Guildhall, Maidenhead. Deposit £3 3s.

JULY 20.—Maidstone, Kent.—Erection of Court House at Dartford, for the Kent C.C. County Architect, 86, Week-street, Maidstone. Deposit £2 2s.

JULY 20.—Southampton.—BUILDING.—Engine-house, workshop, fuel economiser house, and extensions to boiler and filter houses, at the Otterbourne Pumping Station, for the C.B. Waterworks Engineer, 21, Shirley-road, Southampton. Deposit £5 5s.

JULY 20.—Wallasey.—HOUSES.—Thirty-two houses on the Belvidere road site, for the C.B. Borough Engineer and Surveyor. Deposit £1 1s.

JULY 20.—Winchester.—Erection of certain additions to the Electricity Works, Gordon-road Winchester. Town Clerk, The Guildhall, Winchester. Deposit £2 2s.

JULY 20.—Windsor.—HOUSES.—Twenty parlour type, fences, paths, &c., on the building site at Bedford lane, Sunningdale, Berks, for the R.D.C. W. Menzies, architect, Englefield Green, Surrey. Deposit £1 1s.

JULY 21.—Belfast.—VARIOUS.—Pavilion at the bowling green, Musgrave Park, sanitary accommodation at Balmoral Industrial School, and painting work Templemore-avenue Baths, for the C.B. City Surveyor.

JULY 21.—Brighton.—Erection of Telephone Exchange at Rottingdean, for the Commissioner H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s. (Cheque payable to the Commissioners.)

JULY 21.—Bristol.—SUB-STATION.—At Filton-road Filton, for the T.C. H. Faraday Proctor, Chief Engineer and General Manager, Colston-avenue. Deposit £2 2s.

JULY 21.—Exeter.—HOUSES.—Erection of 54 various blocks, for the City Council. City Architect, 2, Southernhay West, Exeter. Deposit £2 per set.

JULY 21.—Great Osburn.—ADDITIONS.—Alterations and additions to the low pressure hot water installation at the Council school, for the West Riding E.C. Education Department, County Hall, Wakefield.

JULY 21.—Gretna.—PRESSURE.—Low pressure hot water boiler at the Council school, for the West Riding E.C. Education Department, County Hall, Wakefield.

JULY 21.—Kilburn, N.W.5.—CLEANING AND PAINTING WORKS.—(1) Exterior of 259 houses, (2) exterior and interior of the Lodge, Roundwood Park for the Willesden District Council. Engineer to the Council, Town Hall, Dyne-road, Kilburn, N.W.6.

JULY 21.—Nottingham.—PAINTING.—External cleaning and painting 27 to 37 (inclusive), Huntingdon street, and 1 to 25 (inclusive), Howard-street, cottages at rear, and Victoria Buildings, Bath-street for the T.C. Estates Surveyor. Deposit £1 each.

JULY 21.—Preston, Lancs.—Alterations to the Post Office and Telephone Exchange, Contract Branch, H.M. Office of Works, King Charles-street S.W.1. Deposit £1 1s., payable to the Commissioner.

JULY 21.—Richmond (Surrey).—WALL.—Raising the existing concrete wall (about 500 yds. in length) to protect Petersham Meadow from the flood waters of the River Thames, for the T.C. Hugh P. Williamson, engineer, Riverside, Richmond, Surrey. Deposit £1 1s.

JULY 21.—Swadlincote.—HOUSES.—Erection of 50, fencing and drainage, for the U.D.C. Baines & Provis, architects, 22, Friar-lane, Leicester. Deposit £2.

JULY 21.—West Riding.—BUILDING.—For (1) brick wall and iron fencing to the additional land at Royston Council School, and (2) additional conveniences at South Kirby Council School, for the E.C. Education Department, County Hall, Wakefield.

JULY 22.—Acton, W.3.—HOUSES.—Fifty, on the extension of Noel-road, Acton, for the Great Western (London) Garden Village Society, Ltd. T. Alwyn Lloyd, F.R.I.B.A., 6, Cathedral-road, Cardiff. Deposit £3 3s.

JULY 22.—Bentley-with-Arksey.—BUILDING.—Two shelters, pavilion, dancing floor and one sandpit in the Welfare Park, for the U.D.C. P. C. Woodhall, Architect and Surveyor, Council Offices, Bentley. Deposit £1 1s.

JULY 22.—Hammersmith, W.6.—SANITARY WORK.—Work and materials required in the erection of a timber framed and corrugated iron structure, and the provision and fixing of sanitary fittings, adjoining the Town Hall Annex, Brook Green-road, W.6, for the Metropolitan Borough Council. Borough Engineer and Surveyor, Town Hall. Deposit £2 2s.

JULY 22.—Newport.—REPAIRS.—For (1) adaptation of Spring-gardens School to form Belle Vue Central School, and (2) conversion of hut at Somerton for temporary school, for the E.C. Borough Architect Municipal Chambers, Corn-street.

JULY 22.—Norfolk.—BUILDING.—School at Walpole St. Andrew Cross Keys, alterations and additions to Walpole St. Andrew School, and alterations and additions to Buxton Mixed School, for the E.C. J. S. Davis, Secretary, Shirehall, Norwich. Deposit £2 2s. each.

JULY 22.—Primrose Hill.—Erection of temporary Telephone Exchange, for the Commissioners H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

JULY 19.—Hatfield.—SEWER.—600 yards of 6 in. stoneware sewer and about 440 yards of 6 in. C.I. sewer with manholes, &c., at Little Heath, North Myms, for the R.D.C. H. T. Sidwell, surveyor. Deposit £2 2s.

JULY 18.—Paignton.—SEWERS.—Forming, ballasting, and metalling roads; forming footpaths, laying sewers and drains, and contingent works in connection with the Preston housing scheme, for the U.D.C. Harris & Hill, surveyors, Hyde-road.

JULY 20.—Beddington and Wallington.—SEWERS.—600 lin. yds. of 6 in. diameter stoneware pipe sewers with the works appurtenant thereto, on the Bute-road site, for the U.D.C. S. F. R. Carter, Engineer and Surveyor, Council Offices, Wallington. Deposit £1 1s.

JULY 20.—Carlisle.—SEWERING.—Sewering and street works required in the formation of a new street connecting Fisher-street and Castle-street, for the C.B. H. C. Marks, City Engineer and Surveyor. Deposit 10s.

JULY 20.—Chester.—RECONSTRUCTION.—Concrete foundations, surfaced with granited mastic asphalt:—(1) Frodsham-street; (2) Victoria-road; (3) Castle Esplanade; and (4) Nuns-road, for the T.C. C. Greenwood, City Engineer and Surveyor. Deposit £2 2s.

JULY 20.—Manchester.—SEWER.—Construction of the Gorton relief sewer, from Mount-road to Reddish-lane and along Debdale-lane, for the T.C. City Engineer. Deposit £5 5s.

JULY 20.—Kensford.—SEWERS.—2,215 yds. of 9 in. stoneware pipe sewer, together with 25 manholes and other works, in Hardley Green-road, for the R.D.C. W. Fairley, consulting engineer, Parliament Mansions, Victoria-street, S.W.1.

JULY 20.—West Riding.—PAVING.—Paving with granite setts on reinforced concrete as follows:—(1) Eiland Main road at Moorbottom, Cleckheaton, approximate area 3,600 sq. yds.; (2) Wakefield and Halifax main road, Liversedge, approximate area 5,400 sq. yds.; (3) Wakefield and Austerlands main road, approximate area 2,300 sq. yds., for the C.C. West Riding Surveyor, County Hall, Wakefield. Deposit £1 each.

JULY 21.—Frimley.—SEWER.—640 lin. yds. of 9 in. diameter stoneware pipe sewer, together with manholes and vent pipe, for the U.D.C. H. Fox Hill, Engineer, Municipal Buildings, London-road, Camberley. Deposit £2 2s.

JULY 21.—London, S.W.1.—Beverley Brook Relief culvert, construction of concrete culvert from Beverley Brook, near Priests Bridge, Upper Richmond-road, and various works in connection therewith for the L.C.C. Chief Engineer of the Council, Old County Hall, Spring Gardens, S.W.1. Deposit £10.

JULY 22.—Tredegar.—IMPROVEMENTS.—To the Tredegar and Argoed main road at Tredegar, for the Monmouthshire C.C. S. A. Bennett, County Surveyor, County Hall, Newport, Mon. Deposit £1 1s.

JULY 23.—Cannock.—SEWERS.—Provision, laying and jointing 460 lin. yds. of 6 in. stoneware pipe sewers at Great Wyrley, the construction of nine manholes and other incidental works, for the R.D.C. H. M. Whitehead, engineer.

JULY 24.—Claypole.—MAINS.—Supply, laying and jointing about 1½ miles of 4 in. diameter and 2 miles of 3 in. diameter cast-iron mains, irregulars, valves and other works of water supply, for the R.D.C. T. W. Mawer, Engineer and Surveyor to the Council, Foston, Grantham.

JULY 27.—Edinburgh.—ROAD.—Construction of Section F.G. (Dechmont to Broxburn), Contract No. 5 East, of a new road from Glasgow to Edinburgh, for the T.C. D. A. Donald, engineer, 271, Alexandra-parade, Glasgow. Deposit £3 3s.

JULY 27.—Greenford.—MAINS.—Extension of the main drainage system, for the U.D.C. Howard Humphreys & Sons, engineers, 28, Victoria-street, Westminster. Deposit £2 2s.

NO DATE.—Burnham-on-Sea.—ROADS.—Construction of new roads, including sewers, &c., on the Manor estate, for the U.D.C. F. H. J. Gabbutt, architect and surveyor, Victoria-street.

Competitions.

(See Competition News, page 42.)

Auction Sales, Tenders, etc.

JULY 14.—Berks.—Hampton & Sons, freehold, residential and building property, "Grove Hall," gardens and parkland, in all about 4 or 12 acres, at the St. James's Estate Rooms, 20, St. James's-square, S.W.1. Auctioneers' offices.

JULY 14.—Bracknell, Berks.—J. T. Skelding & Co., by order of Mr. E. F. Blow, who is giving up the business, on the premises, Station-road, Bracknell, Berks, freehold residence, builders' yard and premises in rear, with vacant possession; also in separate lots, without reserve, the builders' stock and plant. Auctioneers, 48, Gresham-street, Guildhall, E.C.2.

JULY 14.—Merton.—Opposite "Six Bells" Hotel, Verward & Yates will sell useful timber and building material. Auctioneers, 365, Norwood-road, S.E.27.

JULY 16.—Evesham, Worcestershire.—Dicks & Badham, on the premises at Evesham, by order of Mr. John Knox, woodworking machinery, builders' sundries and numerous other effects. Auctioneers, 1, Market-place, Evesham.

JULY 16.—London, N.W.1.—Henry Butcher & Co., will sell by order of Messrs. Fred. Hodge, Ltd., who have acquired the premises, 102, Hampstead-road, N.W.1, builders' and general hardware, workshop plant, tools, &c., paints, enamels, varnishes, &c. Auctioneers, 63 and 64, Chancery-lane, W.C.2.

JULY 17.—London, W.C.1.—Henry Butcher & Co., without reserve, at the Sale Rooms, 13, High Holborn, W.C.1, ten tons assorted ready mixed paints, undercoating, varnishes, &c. Auctioneers, 63 and 64, Chancery-lane, W.C.2.

JULY 21.—London, S.W.1.—Hampton & Sons, at the St. James's Estate Rooms, 20, St. James's-square, freehold house, Burnham Beeches, Bucks, known as the "Greenlanes." Auctioneers, 20, St. James's-square, S.W.1.

JULY 21.—London, W.1.—Knight, Frank & Rutley, freehold building estate overlooking Kingsbury Green. Auctioneers, 20, Hanover-square, W.1.

JULY 21.—Surrey.—Hampton & Sons, at the St. James's Estate Rooms, 20, St. James's-square, S.W.1 (unless previously sold), in one or four lots, freehold residence, "Woodhurst," Upper Warrington, with excellent building sites; vacant possession. Auctioneers, as above.

JULY 21 AND 22.—Warwick.—Messrs. James Styles & Whitlock will sell, by direction of the trustee of Mr. S. L. Lloyd, demolition sale of the ancient manor house, "The Priory," comprising about 550 lots. Auctioneers, Albert-street, Rugby.

JULY 21, 22 AND 23.—London, E.—Joseph Hibbard & Sons will sell, without reserve, by order of Mr. G. Lewis, on the premises, Norway Yard, No. 636A, Commercial-road, E., stock of English timber, ash and beech wrest planks, deals, battens and boards, office furniture and rolling stock. The extensive leasehold wharf premises are to be sold. Auctioneers, 15, Newington Green, Islington, N.16.

JULY 22.—Halifax.—James Styles & Whitlock have received instructions from the executors of the late Major A. H. Edwards to sell, in convenient lots, at the Old Cock Hall, the valuable freehold property known as the Pye Nest Estate, comprising the well-known mansion house, &c., comprising about 82 acres. Auctioneers, The Estate Offices, Rugby; also at 44, St. James's-place, London, S.W.1.

JULY 22.—London, E.C.—Densham & Lambert, at the London Auction Mart, 155, Queen Victoria-street, E.C., freehold building estate, as a whole or in lots, known as the Effingham Estate, Surrey, of about 350 acres; also freehold building estate known as "The Firs," Cranford, Hounslow, of about 24 acres. Auctioneers, 23A, Savile-row, London, W.1.

JULY 23 AND 24.—Whitchurch (Salop).—Perry & Phillips, at Cloverley Hall, Whitchurch, interior and exterior fixtures and fittings previous to demolition of part of the mansion. The fabric of the mansion will also be sold for demolition after the above sale. The Agent, Estate Office, Cloverley, Whitchurch. Auctioneers, 59, High-street, Bridgnorth.

JULY 29.—Ickenham.—Knight, Frank & Rutley, in conjunction with Joshua Baker, Cooke & Standen, at the Auction Mart, 155, Queen Victoria-street, E.C.4. Portion of Swakeley's Estate, comprising freehold building land extending to 190 acres. Auctioneers, J. B. C. & S. 62, High-street, Uxbridge; Knight, Frank & Rutley, 20, Hanover-square, W.1.

JULY 30.—London.—Knight, Frank & Rutley will sell, in the Hanover Estate Rooms, freehold building estate overlooking Kingsbury Green. Auctioneers, 20, Hanover-square, W.1.

JULY 31.—Sevenoaks.—Knight, Frank & Rutley will sell, by direction of Mr. Robert Mond, J.P., at the "Royal Crown" Hotel, valuable freehold properties forming the remaining portions of the Combe Bank Estate, including Combe Bank Farm, also valuable building sites. Auctioneers, 20, Hanover-square, London W.1.

Public Appointments.

JULY 13.—Gloucester.—Architectural Assistants required by Gloucestershire C.C. R. S. Phillips, County Education Architect, Shire Hall, Gloucester.

JULY 13.—West Ham.—Evening Visiting Teacher for Elementary Building Construction on Friday evenings; candidates must be Associates R.I.B.A. The Principal, County Borough of West Ham, Municipal College, Romford-road, Stratford, E.15.

JULY 14.—Leicester.—Clerk of Works required to supervise work on the Council's Housing Estate, Housing Architect, The Housing Department, Wyggeston House, 18, Highcross-street, endorsed "Clerk of Works."

JULY 15.—Somerset.—Architectural Assistant required in the County Architect's Department by the County Council. County Architect, Lloyds Bank Chambers, Weston-super-Mare.

JULY 17.—Acton, W.3.—Temporary Clerk of Works required by the Borough Education Committee to superintend the erection of a new school at East Acton, for 200 children. The Secretary, Municipal Offices, Acton, W.3.

JULY 17.—Deptford, S.E.—Clerk of Works required to superintend the erection of the first section of the North Ward Baths and Washhouses by the Borough Council. The Town Clerk, Deptford Town Hall, New Cross, S.E.14.

JULY 17.—Tottenham, N.—Clerk of Works for housing scheme required by the District Council for 104 additional houses, in the course of erection. The Clerk, Town Hall, Tottenham.

JULY 20.—London, S.W.2.—Third Engineering Assistant in the Borough Engineer's Department required by the Lambeth Borough Council. Town Clerk, Lambeth Town Hall, Brixton Hill, S.W.2.

JULY 21.—Tottenham, N.16.—(a) Architect; (b) Quantity Surveyor, required by the District Council in connection with the development of the remainder of their housing estate at White Hart-lane. The Engineer, Town Hall, Tottenham, N.15.

JULY 22.—Amersham, Bucks.—Highways Surveyor required by the R.D.C. The Clerk, High-street, Amersham, Bucks.

JULY 25.—Southampton.—Assistant Quantity Surveyor required in the County Architect's Department by the County Council. County Architect, The Castle, Winchester.

AUGUST 22.—Croydon.—Architect required to superintend the erection of an elementary school within the borough to accommodate 800 scholars. Clerk to the Education Committee, Katherine-street, Croydon.

NO DATE.—Uganda.—Draughtsman and Quantity Surveyor required by the Government for the Public Works Department for a tour of 20 to 30 months' service, with possible extension. Crown Agents for the Colonies, 4, Millbank, London, S.W.1 quoting M/13748.

PROPOSED NEW BUILDINGS & OTHER WORKS.

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owner taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylum Board; and M.W.B. for Metropolitan Water Board.

ABERCARN.—The Trustees of the Gellygaer Lecture ship Endowment have granted £4,000 out of the required £5,000 to St. Luke's Church, Abercarn, for the erection of a new church.

ACCRINGTON.—The Accrington District Gas and Water Board are to carry out their project to erect a bridge over the valley.—A sketch plan has been prepared of the proposed new shelter to be erected at the upper end of the bowling green at Milnshaw Park. The Borough Surveyor has been authorised to proceed with the erection forthwith.

ALDERSHOT.—The M.H. has sanctioned the erection of a further 100 houses on the Aldershot Park estate, by direct labour, for the T.C.

ATHERSTONE.—The R.D.C. are to carry out a slum clearance scheme.

AUDENSHAW.—The U.D.C. passed plans: Eighteen houses, Manchester-road, Dryolesden-road, and Boggart-lane, for Paton & Wood, Ltd.

BACUP.—The M.H. has sanctioned a loan of £18,97 for the erection of 40 houses at Heath Hill and street works on the estate.

BATLEY.—The West Riding C.C. has received amended plans of the proposed extensions at the Technical School submitted by the managers, while the Committee has approved.

BENTLEY.—The U.D.C. have decided to proceed with the erection of a batch of 94 houses on the Old Hall estate.

BENTLEY-WITH-ARKSEY.—The West Riding E.C. recommend that the fencing of the site of the proposed Middle school be carried out, at a cost not exceeding £500.

BLAENAVON.—The Blaenavon (Mon.) Medical Society is to convert, at an estimated cost of £3,000, premises presented by the Blaenavon Coal Co. into an hospital.

BOLTON.—The Rev. Father Burke has secured "Thornleigh," with the adjoining house "Hayward Leigh" at Sharples, which it is proposed to alter and adapt as a secondary school for boys.—The T.C. have agreed to prepare the site on Victoria-square for the War Memorial, and to allow the front portion of the Town Hall to be utilised for the Hall of Memory. The memorial has been designed by Messrs. Bradshaws Gass & Hope, F.R.I.B.A., architects, 19, Silverwell street.

BRAINTREE.—The Essex C.C. recommend the purchase of "Old County Court," for purposes of a combined clinic.

BRAITHWELL.—The West Riding E.C. recommend that a plot of land containing two acres be purchased as a site for the proposed new Council school.

BRIGHTON.—Messrs. J. L. Murdoch's premises in Western-road are to be rebuilt at a cost of £9,000. Plans have been approved and application is to be made to the M.H. for sanction to borrow the sum £9,000 to defray the cost of the work.—Application to be made to the M.H. for sanction to the borrow by the T.C. of £9,950 for the erection of houses.—The T.C. passed a new £100,000 reconstruction scheme for Brighton Aquarium. Application is to be made to the M.H. for sanction to borrow the money.

BURNLEY.—A tender has been accepted for £24.45 for the demolition of the old stone culvert in Yorkshir street, and for the erection of a new steel reinforced concrete aqueduct with concrete retaining walls.—A contract has been provisionally let to a local firm for the erection of the new Lionel-street schools.

BURTON-ON-TRENT.—The Corporation are acquiring a site in High Bank-road for the erection of house. A motor bus garage is to be erected in Hornblow street, at an estimated cost of £3,000.

BURY ST. EDMUNDS.—The T.C. propose erecting 1 cottages.

CAMBRIDGE.—The T.C. passed plans for a sub-station in Cam-road, for the Cambridge Electric Supply Co. Ltd.

CARDIFF.—The B.E. and the local authority have approved the plans for the erection of a new school for the parish of St. Joseph's R.C. Church.

CHORLEY.—The T.C. are to acquire land between Crosse Hall-lane and Cowley in East Ward for housing purposes. Further housing development is to be carried out on land off Queen's-road, where the E.C. propose to erect an open-air school.

CLAVERING.—The Essex E.C. recommend the erection of a house for the teacher at the Council school, for £650.

COLNE.—Application is to be made to the M.H. for sanction to borrow £30,724 in connection with the Haverholt housing scheme.

CROMPTON.—The U.D.C. have decided to complete the war memorial site by laying out the rear portion

* See also our List of Contracts, Competitions, etc.

as a small park with a bandstand and rest gardens. The District Surveyor, Mr. J. Fothergill, has prepared the plans.

CUDWORTH.—The M.H. has agreed to the U.D.C. erecting 64 houses on the Albert-street site.

DAGENHAM.—The Essex C.C. are to build a school on the new housing estate by direct labour.

DARLINGTON.—The Corporation is to make application to the M.H. for sanction to borrow £6,850 for alterations and improvements to the cattle market.

DARWEN.—The Corporation have decided to loan £5,000 to the Spring Vale Garden Village, Ltd., for the purpose of erecting further houses. Mr. T. C. P. Catchpool, of Greenfield Mill, is the architect.

DERBY.—Plans for the provision of the Mental Hospital of a nurses' home at a cost of £20,200 are to be submitted to the Board of Control. The Housing Committee recommend the purchase of a housing site of 16,030 square yards of land on the Rykneld estate, and that the M.H. be asked to sanction the borrowing of £1,378 15s. for the scheme.

DINNINGTON.—The West Riding C.C. recommend the purchase of a site for the proposed Mining and Technical Institute.

DONCASTER.—The site of the old Doncaster aerodrome, near the race common, has been purchased by the Doncaster Corporation for use as a garage for motor buses. The Darlington Fencing Co., Ltd., of London and Harlow, Essex, have purchased a large site at Balby Carr for the proposed erection of new works. New railway sidings are to be constructed. The contractors for the works are Messrs. W. Millins & Co., of Doncaster. A number of houses are also about to be erected for the employees. A new open-air school is to be erected at Church-lane, Warnsworth, by the E.C.

DUNBAR.—The Scottish Board of Health has held an inquiry regarding the improvement scheme which the T.C. propose making.

DUNDEE.—Plans and sections of proposed new buildings, &c., have been lodged at the office of the City Engineer: Arbroath-road and Ferry-road, dwelling houses for the Northern Housing Association, Ltd.; architect, W. B. D. Keith, 10, Whitehall-street; Craigie-avenue, Greendykes-road, and Arbroath-road, dwelling houses for the T.C., plans by Housing Director; Stirling-avenue, dwelling houses for the T.C., plans by Housing Director.

DURHAM.—The R.D.C. is to erect sixteen houses at Pitlington.

EBBW VALE.—The U.D.C. is to borrow £59,000 for the erection of 100 additional houses.

EDINBURGH.—Plans passed by the Dean of Guild Court: The E.C., new science room at Canon Canongate school; G. Graham, thirty flat-houses, in continuation of Reliance-road.

ELLSMERE PORT.—The M.H. has sanctioned a loan of £3,000 for the erection of eight houses at the gas works. The U.D.C. surveyor has prepared plans for the lay-out of land in Stanney-lane, for housing and recreation ground purposes. Plans have now been passed for the maternity and child welfare centre to be erected in Wilkinson-street. An improvement scheme is proposed in Crescent-road and Meadow-lane.

ESSEX.—The C.C. recommend the following:—Repairs to Bath Bridge, at £250; repairs to Twizzlefoot Bridge, at £100; reconstruction of Hoppit Bridge, at £3,600.

FLEETWOOD.—The E.C. sub-committee recommend that central schools be erected for 300 boys and 300 girls, and a new school for infants to accommodate 150. A site of about 6 acres is to be acquired.

GORSEINON.—The Glamorgan C.C. is to erect a mining instruction school.

GRAYS.—The Essex E.C. recommend the adaptation of the Intermediate School premises, at £550.

HADLEIGH.—The Essex E.C. recommend additional accommodation at the Council school at £2,900.

HALESTAD.—The Essex C.C. recommend the widening of Stone bridge, at £1,616.

HARTSHORNE AND SEALS.—The R.D.C. decided to apply for the M.H.'s sanction to purchase land for housing at Woodville.

HAYES.—The U.D.C. are to build 21 houses in Cranmer-road. The Council has approved plans for a new church in Station-road.

HEMSWORTH.—The West Riding C.C. recommend that electric lighting be installed at the Secondary School and the Headmaster's house, at £343.

HICKLEY.—The R.D.C. propose erecting 150 houses. **HORNSEY.**—The T.C. passed plans: Five houses and garages at Lauradale-road; eight in Creighton-avenue; 10 garages at the rear of 42, High-street, Highgate; and a Friends' meeting house at Church-crescent.

KINGSTON.—The T.C. are to make application to the M.H. for sanction to borrow £10,000 more for housing.

LAINDON HILLS.—The Essex E.C. recommend the provision of two additional classrooms, at the Council school, at £3,040.

LEEDS.—The T.C. passed plans: Winder & Jones, ten semi-detached houses, Stainbeck-lane; G. Monkman, thirteen houses, Farm-road, Cross Gates; A. Beol, ten semi-detached houses, Jessamine-avenue and Old-lane, Beeston.

LEICESTER.—The E.C. recommend the following expenditure and alterations, &c., to various schools:—Alterations, St. Mary's Fields School, £2,348; new school, Knighton Fields, £19,276; extension, Coleman-road school, £3,438; Talley estate school, £17,096; site for Barkby-lane school, £500; Park estate school, £19,276; Wyggeston Girls' school, £89,500; sports pavilion at Wyggeston Boys' school playing fields, £1,800; and a new art room, Newark Secondary School, £1,997.

LINTWHAITE.—The West Riding E.C. propose to provide a new "middle" school for about 500 scholars. **LLANELLY.**—The B.C. is to erect a new school in Queen Mary's Walk.

LITTLEBOROUGH.—The school managers have recommended the County authorities to provide a higher standards school on modern lines fully equipped with cookery centre, handicraft centre and playing fields for the district of Wardle.

LONDON (BATTERSEA).—The L.C.C. Education Committee have decided to build a workshop at the Linden Lodge residential school, Battersea, at a cost of £1,645.

LONDON (BETNAL GREEN).—The M.H. held an inquiry into the B.C.'s application to borrow £115,000 for the erection of public baths and washhouses.

LONDON (GREENWICH).—The L.C.C. recommend the borrowing by the B.C. of £63,048 for housing purposes.

—The L.C.C. Education Committee have selected a site in Thornlee-road for the erection of an elementary school.

LONDON (HACKNEY).—Extension of Hackney Institute, at a cost of £62,370 is recommended by the L.C.C. Education Committee.

LONDON (ISLINGTON).—The L.C.C. recommend the borrowing by the B.C. of £7,906 for housing purposes.

LONDON (KENSINGTON).—The B.C. has prepared a scheme for the erection of 38 flats, at a cost of about £17,000, on land in Virginia-place, and tenders for the work are to be invited.

LONDON (LEWISHAM).—The L.C.C. Education Committee decided to erect a domestic economy centre at the Rangefield School, at a cost of £1,334.

LONDON (POPLAR).—The L.C.C. recommend the borrowing by the B.C. of £4,398 for housing purposes. —A site in South East-row, Poplar, is to be purchased by the L.C.C. Education Committee for the erection of an elementary school for 768 children.

LONDON (STOKE NEWINGTON).—The L.C.C. recommend the site in Albion-road for the erection of a central school.

LONDON (ST. PANCRAS).—The B.C. passed plans: New building at Huntley-street, Pancras-street and Shropshire-place for the Royal Ear Hospital.

LONDON (ST. JOHN'S WOOD).—The M.C.C. Committee are to consider the proposed improvements to the cricket ground. One scheme is to increase the accommodation on the Mound Stand by about 1,000 seats, at a cost of about £8,000, and the other, a bigger one, would include the rebuilding of the grand stand and the erection of an upper tier to the ring seats, which would cost nearly £35,000.

LOXTON (STREATHAM).—Additional science accommodation is to be provided by the L.C.C. Education Committee, at the County Secondary School, at a cost of £1,410.

LYTON.—The T.C. recommend that, subject to the approval of the B.E., the Boys' and Girls' Departments, Denbigh-road school be enlarged by the addition of one class-room to each in accordance with the plans submitted. Tenders are to be invited for the work, and application made to the M.H. for sanction to borrow £500 to meet the cost of buildings and furniture.

LYTHAM ST. ANNES.—The B.C. propose to erect a further 50 houses, viz., 26 at Preston-road and Mornington-road, Lytham, and 16 in Cross-street, and eight in Heeley-road, St. Annes.

MALDON.—The T.C. are to make application to the M.H. for sanction to the borrowing of the sum of £500 for carrying out the works suggested by H.M. Office of Works at St. Giles' Hospital ruins. Application is to be made to the M.H. for sanction to borrow £8,500 to cover the cost of 16 houses.

MALTRAY.—A further 50 houses are to be erected by the U.D.C.

MARKET HARBOROUGH.—The U.D.C. have decided to subsidise a further 30 houses. The Kettering U.D.C. electricity department are to construct a sub-station at the Green, Great Bowden. The Council are to construct stables and cottage at Springfield-street, at a cost of £950.

MERTON.—The governors of the Nelson Hospital have prepared a scheme for extensions, including the provision of public and private maternity wards and clinics.

MERTHYR TYDFIL.—The B.C. is to borrow £30,000 for public improvements, including baths extensions and the construction of new roads.

MIDLESTOWN.—The West Riding E.C. recommend that two plots of land be purchased as a site for the Shitlington Middletown proposed new school.

MIDDLETON-IN-WHADEFALD.—The West Riding C.C. recommend that renovations at the Sanatorium be carried out at an estimated cost of £645 7s. 6d.

MITCHEM.—Surrey E.C. are inquiring for a site for a new infants' school.

MORECAMBE.—The Lancashire Higher Education Sub-Committee are to ask the C.C. to authorise application to be made to the M.H. for sanction to a loan of £5,800 to cover the cost of the purchase, fencing and forming of a playing ground, and the erection and equipment of a gymnasium in connection with the Morecambe Grammar School.

NEWBURY.—The Housing Committee submitted a scheme for the erection of thirty-two houses on a site adjoining St. George's-road, between Bartholomew-street and Rockingham-road, at an estimated cost of £440 per house, which was approved by the T.C. Application is to be made to the M.H. to borrow £3,000 for the work.

NEWMARKET.—The R.D.C. are to erect 200 cottages during the next two years.

NORTH FLEET.—The U.D.C. surveyor is preparing plans for a new housing scheme. Plans have now been lodged for the new building at Messrs. Bevan's works The Shore.

OLDFHAM.—Application is to be made to the M.H. for sanction to the borrowing of the sum of £5,810 for the reconstruction of conveniences in the Market-place.

—The C.B. are to submit an alternative scheme for the erection of an administrative block at Strinesdale Sanatorium, and the Sanatorium at Westhulme be adapted for use as a Children's Hospital. The Borough Engineer and Surveyor submitted a plan and estimate of the cost of a proposed workshop at the Central Baths, and the C.B. resolved that the plan be approved and tenders be obtained. Plans are to be prepared and tenders obtained for the proposed extension of the Ascroft-street School. The Council considered the question of the proposed extensions at the Castleshaw School of Recovery. The Waterworks Committee have decided to provide the land on which the proposed extension could be built. The C.B. passed plans: J. Bewley, 22 houses, Gordon-avenue; Central Mill

Co., transformer house in Mill-yard, Central Mill, Woodstock-street; The Corporation Park and Cemeteries Committee, new pavilion, Watersheddings Recreation Ground.

OSSETT.—The Governors of the Grammar School have received sanction for the proposed alterations and extensions to the Grammar School building. The County Architect has been instructed to push forward the preparation of plans as it is hoped to let the tenders before the end of the year. Sanction has been received from the M.H. authorising the borrowing of £15,640 to cover the cost of the proposed new Council School at Gawthorpe.

OTLEY.—The B.E. has intimated their approval of the carrying out of the Grammar School scheme of extensions to the new buildings.

PENRITH.—The U.D.C. are considering plans submitted by Mr. J. Harding for the development of the Croft House estate. The R.D.C. are to erect a bridge at Glassenby Wath at a cost of £186. The rural surveyor reports that a bridge over the Newton Reigny Wath will cost £700 or £800.

PETERBOROUGH.—The City Engineer and the Electrical Engineer has been asked to prepare plans for extensions at the electricity station, and tenders are to be invited.

POPLAR.—The managers have now prepared plans for the proposed Roman Catholic School, to be erected in Grundy-street, providing accommodation for 264 children.

PRESTON.—Mr. G. H. Broadbent, architect, 12, Guildhall-street, has prepared the plans for the proposed new branch stores to be erected on a site at Freckleton for the Fylde Industrial Co-operative Society, Ltd.

RAMSBOTTOM.—Plans have been approved for the erection of 10 subsidy houses in Dundee-lane.

RAWFESTALL.—The U.D.C. propose to erect a number of dwellings of the bungalow type.

ROMFORD.—Funds are being raised towards the cost of a new Baptist Church, which is to be erected on a site on the main road, near Junction-road. The cost is estimated at between £8,000 and £10,000.

ROTTERHAM.—The T.C. approved the Housing Committee's proposals to build the following houses in the next two years: Aston-cum-Aughton, 120; Bramley, 50; Brampton-Bierlow, 100; Brinsworth, 100; Catcliffe, 100; Dalton, 76; Hooton Levitt, 20; Hooton Roberts, 24; Ravenfield, 120; Thrybergh, 120; Thurcroft, 200; Treeton, 100; Wentworth, 20; Whiston, 50; Wickersley, 50. —A site has been given for the proposed erection of a new church and mission room at Bramley.

SHARLTON.—The West Riding E.C. recommended that a caretaker's house be erected on the site of the Sharlston New Sharlston Council School, at an estimated cost of £550.

SHEFFIELD.—Messrs. Wilkes Bros. are proposing to erect new premises on Exchange-street. The plans are in the hands of Mr. A. Nunweek, architect, of Sheffield.

SIPLEY.—The U.D.C. passed plans for 12 houses in Gaisby Mount, for F. Dalby.

SOUTH KIRBY.—Plans have been approved for the erection of a new school to accommodate 600 scholars, at an estimated cost of £18,000.

STAMFORD.—The T.C. decided to utilise part of the Butter Market for the provision of a waiting-room and other conveniences. Plans passed: Twenty-four houses to be erected on the New Cross-road site.

SWINDON.—The T.C. passed plans for 27 houses for A. J. Colborne in various places.

SWINTON.—The Council has received the approval of the District Valuer for the purchase of two fields and the provisional sanction of the M.H. for the erection of another hundred houses on the site.

THEDWASTRE.—The R.D.C. instructed the architect to prepare plans for the erection of 42 cottages. Tenders are to be invited.

THORNE.—The B.E. has intimated approval of the purchase by the Governors of Thorne Grammar School, of a site containing approximately 10½ acres, at a cost of £2,353, for the erection of new school buildings.

TIVERTS.—The Nenagh County Board of Health propose renovating the County Home, at a cost estimated of about £10,000.

TROWBRIDGE.—The T.C. has approved plans for the erection of new police buildings.

UXBRIDGE.—The M.H. held an inquiry into the application of the R.D.C. to borrow £81,000 for a sewerage scheme for the parishes of Harefield, Hillingdon, and Ickenham. The full scheme will cost £127,000. The engineers are W. H. Radford & Son, of Nottingham.

WATH.—The B.E. has approved the plans of temporary extensions at the secondary school, at an estimated cost of £3,500.

WEST BROMWICH.—A new police station is to be erected at Greet's Green by the T.C. at a cost of £1,800.

WORTLEY.—The West Riding C.C. recommend that the Highways Committee be authorised to expend a sum not exceeding £824 in reconstructing a length of 240 yards of burr wall and fence wall or erecting post and rail fence along the Wadley, Langsett and Sheffield main road.

FIRES,

RAMSBOTTOM.—Damage estimated at between £30,000 and £40,000 was caused by a fire at Ramsbottom Paper Mill.

Shredded Wheat Factory, Welwyn.

With reference to the article and illustrations appearing on the above factory in our issue for June 26, we are informed by Messrs. Broad & Co., Ltd., of 4, South Wharf, Paddington, W.2, that more than 1,000 tons of their "Blackfriar" Brand of Portland cement was used in this building.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.	£ s. d.
Best Stock Bricks	3 13 6
Second Hand Stocks	3 13 6
Per 1,000, Delivered at London Goods Stations.	
Flettons, at	£ s. d.
Kings Cross	2 13 3
Do. grooved for plaster	2 15 3
Do. Bullnose	3 3 3
Best Stourbridge Fire brick—	
2½ in.	8 11 0
3 in.	10 3 0
GLAZED BRICKS—	
Best White	D'ble Str'ch'rs 30 10 0
Ivory, and	D'ble Headers 27 10 0
Salt Glazed	One Side and two Ends 31 10 0
Stretchers	2 0 0
Headers	21 10 0
Quoins	Two Sides and one End 32 10 0
Bullnose and 4 in.	Splays and Squints 30 0 0
Flats	28 10 0
Second Quality, £1 per 1,000 less than best.	
and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.	

BREEZE CONCRETE SLABS.

Delivered London	
2 in. per yd. super	1 11
2½ in.	2 4
3 in. per yd. super	2 9
4 in.	3 6
Thames Ballast	10 6 per yd.
Pit Sand	13 9
Thames Sand	14 6
Best Washed Sand	14 6
1 in. Shingle for Ferro-Concrete	12 9
3 in.	14 0
3 in. Broken Brick	11 6
Pan Breeze	7 6
Per ton delivered in London area in full van loads.	
Best Portland Cement. British Standard Specification. Test £2 18 0 to £3 3 6	
51s. alongside at Vauxhall in 80-ton lots.	
Ferrocete per ton extra on above.	0 10 0
Super Cement (Waterproof)	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	17 0 0
Granite Chippings	1 12 0
NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, cart. pd.	
Stourbridge Fireclay in sacks 35s. 0d. per ton at rly. dpt.	

STONE.

BATH STONE—delivered in railway trucks at	s. d.
Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube.	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube.	2 11½
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube.	4 4
Do. do. delivered on road wagons at above stations, per ft. cube.	4 5
White basebed, 3d. per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every foot over 20 ft. average, and ½d. beyond 30 ft.	
HOPTON-WOOD STONE—	
Delivered at any Goods Station, London.	
Small random blocks, up to 10 ft. cube, P. ft. cb.	7 0
Random blocks from 10 ft. and over	17 0
Sawn two sides	27 0
Sawn three or four sides	32 0
YORK STONE, BLUE—Robin Hood Quality.	
Delivered at any Goods Station, London.	
6 in. sawn two sides landings to sizes (under 30 ft. super).	Per ft. super 5 6
6 in. rubbed two sides, ditto	6 0
3 in. sawn two sides slabs (random sizes)	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes)	1 6½
1½ in. to 2 in. ditto, ditto	1 4
HARD YORK—	
Delivered at any Goods Station, London.	
Scrapped random blocks	Per ft. cube 6 3
6 in. sawn two sides landings to sizes (under 40 ft. super).	Per ft. super 5 1½
6 in. rubbed two sides, ditto	6 1½
4 in. sawn two sides slabs (random sizes)	2 10
3 in. ditto	2 1½
2 in. self-faced random flags	Per yd. super 9 0

ARTIFICIAL STONE

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£32 0	3 × 6	£23 0
4 × 9	28 0	3 × 11	28 0
4 × 8	26 0	2 × 11	28 0
4 × 7	25 0	3 × 9	25 0
3 × 8	24 0	2 × 9	25 0
2 × 7	22 0	3 × 4½	23 0
1 × 11	£32 0	1 × 9	£30 0

PLANED BOARDS.

1 × 11	£32 0	1 × 9	£30 0
--------	-------	-------	-------

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
1½	21/-	1½	32/6
1½	23/-	1½	37/6
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.	Inches.	per sq.
1	25/-	1	16/6
1½	32/6	1	20/-
1½	37/6	1	25/-

BATTENS.

Inches.	s. d.
2 × 2	2 6 per 100 ft.

SAWN LATHS.

Per bundle	1" AND UP THICK.
	0 2 4

Dry Austrian Wainscoat, per ft. cube	0 16 0 to 0 18 0
Dry American and/or Japanese Figured Oak, ft. cube	0 15 0 —
Dry American and/or Japanese Plain Oak, ft. cube	0 11 0 to 0 13 0
Dry sq. edged Honduras Mahogany, ft. cube	0 16 0 to 0 18 0
Dry Log cut Honduras Mahogany, ft. cube	0 13 0 to 1 1 0
Dry Cuba Mahogany, ft. cube	1 4 0 to 1 10 0
Dry Teak, ft. cube	0 13 0 to 0 15 0
Dry American Whitewood, ft. cube	0 11 0 to 0 14 0
Best Scotch glue, per cwt.	4 10 0 to —
Liquid Glue, per cwt.	4 7 0 to 5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
18 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

	Per 1,000 f.o.r. London.
Best machine-made tiles from Broseley or Staffordshire district	£ 5 12 6
Ditto hand-made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen)	Hand-made 0 9 6 Machine-made 0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—	£ s. d.
R.S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	16 10 0	½ in. to 1 in.	13 10 0
1 in.	14 10 0	1 in. to 2½ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes.	Fittings.	Flanges.
	Sizes 1½" to 6"	1½" & Over	1½" & Over
Black Gas	55% under. 47½% to 6"	50% under. 57½% to 6"	50% under. 57½% to 6"
Blue Water	50% under. 42½% to 6"	45% under. 52½% to 6"	45% under. 52½% to 6"
Red Steam	45% under. 37½% to 6"	40% under. 47½% to 6"	40% under. 47½% to 6"
Galv'd Gas	40% under. 37½% to 6"	35% under. 42½% to 6"	35% under. 42½% to 6"
" Water	38½% under. 32½% to 6"	32½% under. 37½% to 6"	32½% under. 37½% to 6"
" Steam	27½% under. 27½% to 6"	30% under. 37½% to 6"	30% under. 37½% to 6"

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Nozzles.	Stop Ends.
3 in.	1 12½	1 14	3 14
3½ in.	1 14	1 16	3 16
4 in.	1 16	1 18	3 18
4½ in.	1 18	1 20	3 20
5 in.	1 20	1 22	3 22

O.G. GUTTERS.

	Gutters.	Nozzles.	Stop Ends.
3 in.	1 17	1 18½	3 18½
3½ in.	1 18	1 20	3 20
4 in.	1 20	1 22	3 22
4½ in.	1 22	1 24	3 24
5 in.	1 24	1 26	3 26

RAIN-WATER PIPES, &c.

Per yd. in 6 ft. lengths.	Pipe.	Bends, stock Branches, angles.
2 in. plain	1 19½	1 22½
2½ in.	1 21½	1 24½
3 in.	2 4	1 26
3½ in.	2 10	2 10½
4 in.	3 8	2 14

L.C.C. COATED SOIL PIPES—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Pipe.	Bends, stock Branches, angles.
2 in. plain	2 11	2 3
2½ in.	3 5	2 9
3 in.	4 1	2 9
3½ in.	4 5	3 5
4 in.	4 11	3 9½

L.C.C. COATED DRAIN PIPES—London Prices ex Works.

Per yd. in 9 ft. lengths.	Pipe.	Bends, stock Branches, angles.
3 in.	4 3	5 11
4 in.	6 3	6 9
5 in.	7 10	12 0
6 in.	9 6	15 0

Gasken for jointing. 88/6 per cwt.

IRON—

Common Bars	£ s. d.	£ s. d.
	13 10 0	to 14 10 0

Staffordshire Crown Bars—

good merchant quality	£ s. d.	£ s. d.
	14 5 0	to 15 5 0

Staffordshire	"Marked"	£ s. d.	£ s. d.
Bars		16 10 0	to 18 10 0
Mild Steel Bars		11 0 0	to 12 0 0
Steel Bars, Ferro-Concrete quality, basis price		11 0 0	to 12 0 0
Hoop iron, basis price		16 0 0	to 17 0 0
Galvanised		31 0 0	to 32 0 0

Soft Steel Sheets, Black—	Ordinary sizes to 20 g.	£ s. d.	£ s. d.
		14 10 0	to 15 10 0
		15 10 0	to 16 10 0
		17 10 0	to 18 10 0

Sheets Flat Best Soft Steel, C.R. & C.A. quality—

Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	£ s. d.	£ s. d.
	19 10 0	to 21 10 0

Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g.

£ s. d.	£ s. d.
21 10 0	to 22 10 0

Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.

£ s. d.	£ s. d.
23 10 0	to 25 10 0

Flat and Galvanised Corrugated Sheets—

Ordinary sizes, 6 ft. to 9 ft. to 20 g.	£ s. d.	£ s. d.
	19 0 0	to 20 0 0

Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.

£ s. d.	£ s. d.
19 10 0	to 20 10 0

Ordinary sizes, 6 ft. to 9 ft. to 26 g.

£ s. d.	£ s. d.
22 10 0	to 23 10 0

Sheets Galvanised Flat, Best quality—

Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker.	£ s. d.	£ s. d.
	22 10 0	to 23 10 0

Best Soft Steel Sheets, 22 g. and 24 g.

£ s. d.	£ s. d.
24 10 0	to 26 10 0

Best Soft Steel Sheets, 26 g.

£ s. d.	£ s. d.
26 0 0	to 27 0 0

Cut Nails, 3 in. to 6 in. (under 3 in. usual trade extras.)

£ s. d.	£ s. d.
20 0 0	to 21 10 0

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up.	45 0 0
Pipe in coils	46 10 0
Soil Pipe	48 10 0
Compo pipe	49 10 0
NOTE.—Country delivery, 30s. per ton extra; lots under 5 cwt., 1s. 6d. per cwt. extra, and over 5 cwt. and under 5 cwt., 1s. 3d. per cwt. extra. Cut sizes, 2s. cwt. extra.	
Old lead, ex London area, at Mills. (per ton)	31 0 0
Do., ex country, carriage forward (per ton)	32 0 0

COPPER.

Seamless Copper tubes (basis).	per lb.	£ s. d.
Strong sheet	"	2 4
Thin	"	2 3
Copper nails	"	2 4
Copper wire	"	2 4

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BID COCKS FOR IRON.

½ in. 1 in. 1½ in. 2 in.	per doz.
29/- 45/- 76/- 153/-	246/- 510/-

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in. 1 in. 1½ in. 2 in.	per doz.
41/6 62/- 92/- 174/-	300/- 588/-

NEW RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in. 1 in.	per doz.
39/6 60/-	116/6

CAPS AND SCREWS.

1½ in. 1 in. 2 in. 3 in. 3½ in. 4 in.	per doz.
7/6 10/- 14/- 23/- 30/- 42/-	

DOUBLE NUT BOILER SCREWS.

½ in. 1 in. 1½ in. 2 in.	per doz.
7/6 11/- 17/- 29/-	36/- 63/-

BRASS SLEEVES.

1½ in. 2 in. 3 in. 3½ in. 4 in.	per doz.
10/- 12/- 20/- 24/- 31/-	

NEW RIVER PATTERN CROYDON BALL VALVES, S.F.

1½ in.	2 in.	3 in.	3½ in.	4 in.	
10/-	12/-	20/-	24/-	31/-	per doz

PRICES CURRENT OF MATERIALS (contd.)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.	Per Ft.
15 oz. fourths .. 3 1/4 d.	32 oz. fourths .. 8 1/4 d.	
15 " thirds 4 1/4 d.	32 " thirds 10 1/4 d.	
21 " fourths .. 4 1/4 d.	Obscured Sheet, 15 oz. 4 1/4 d.	
21 " thirds 5 1/4 d.	21 " 5 1/4 d.	
28 " fourths .. 5 1/4 d.	Fluted 15oz. 6 1/4 d., 21oz. 9 1/4 d.	
28 " thirds 7 1/4 d.	En'lied 15oz. 5 1/4 d., 21 oz. 7 1/4 d.	

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
1/4 Rolled plate .. 4 1/4 d.	
3/8 Rough rolled .. 5 1/4 d.	
1/2 Rough rolled .. 5 1/4 d.	
Figured Rolled, Baltic, Oceanic, Arctic, Stipolyte, and small and large Flemish white.. 6 1/4 d.	
Ditto, tinted .. 6d.	
Rolled Sheet .. 6d.	
White Rolled Cathedral .. 5 1/4 d.	
Tinted do. .. 7 1/4 d.	

Cast Plate is same price as rough rolled.

VARNISHES, &c.

	Per Gallon.
Oak Varnish .. Outside	£ 8. d. 0 14 0
Fine ditto .. ditto	0 16 0
Fine Copal .. ditto	0 18 0
Pale Copal .. ditto	1 0 0
Pale Copal Carriage .. ditto	1 4 0
Best Ditto .. ditto	1 12 6
Flour Varnish .. Inside	0 18 0
Fine Pale Paper .. ditto	0 18 0
Fine Copal Cabinet .. ditto	1 2 6
Fine Copal Plating .. ditto	1 0 6
Hard Drying Oak .. ditto	0 13 0
Fine Hard Drying Oak .. ditto	0 13 0
Fine Copal Varnish .. ditto	1 0 0
Pale ditto .. ditto	1 2 0
Best ditto .. ditto	1 12 0
Best Japan Gold Size .. ditto	0 12 6
Best Black Japan .. ditto	0 10 6
Oak and Mahogany Stain (water) .. ditto	0 12 0
Brunswick Black .. ditto	0 7 6
Berlin Black .. ditto	0 14 6
Knottling (patent) .. ditto	1 5 0
French and Brush Polish .. ditto	0 17 0
Liquid Dryers in Terebine .. ditto	0 9 0
Cuirass Black Enamel .. ditto	0 7 0

NEW BUILDINGS IN SCOTLAND

Renfrew.—HOUSES.—The T.C. has decided to erect 12 houses in the High-street.

Sanquhar.—HOUSES.—The Board of Health have passed plans for 14 houses to be erected by the T.C., on the piece of ground between the monument in High-street and the Hermitage.

Thornton.—HOUSES.—Arrangements are being made for the erection of 40 houses in Strathore Park. The architect is Mr. Williamson, of Kirkcaldy.

Perth.—HOUSES.—The Town Council have decided to erect 150 houses.

Aberdeen.—HOUSES.—The Housing Committee of the Town Council have been notified that the Board of Health approve of their proposal to erect 300 houses on the Hilton estate, and the Committee have now recommended it for the approval of the Council. The total cost of the scheme will be £120,000.

Longest Concrete Arches.

A reinforced concrete bridge, 3,935 ft. in length, which is about to be built over the River Elorn, in Brittany, will contain the world's longest concrete arches. Three of these will have each a span of 590 ft.

Atmospheric Pollution Report.

The Committee for the Investigation of Atmospheric Pollution, appointed by a conference of delegates of municipal authorities in connection with the Smoke Abatement Exhibition in 1912, has issued a report which covers the year ended March 31, 1924. Following a short introduction, the report is divided into eight sections. Three of these deal with the results obtained by the standard deposit gauge; the automatic filter, which measures hourly the amount of impurity suspended in the air; and the jet dust counter, which allows a microscopic examination of dust particles to be made. The remaining sections deal with experimental aspects of the work and observations in connection with the study of atmospheric pollution.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes accepted. † Denotes provisionally accepted.
‡ Denotes recommended for acceptance.
§ Denotes accepted subject to modifications.

ABERDEEN.—Spray baths buildings, in Hanover-street, for the E.C. Mr. J. A. O. Allen, architect, 25, Union-terrace:—

*Alex. Masson	£1,617 10 0
*W. D. Forbes & Co.	625 17 0
*Alex. Stephen	678 11 3
*Alex. Anderson, Ltd., Glasgow..	822 4 10
*Andrew McLoob	147 5 6

(All of Aberdeen except as otherwise stated.)

BALLYMENA.—Annexe to the hospital, for the B.G.:—

*W. J. Campbell & Sons, Belfast. £7,927

BIRKENHEAD.—Installation of heating apparatus required in connection with the new motor omnibus garage, for the T.C.:—

*Young, Austin & Young, Liverpool £760

BIRKENHEAD.—Painting of the offices and corridors of the basement and ground floor of the Town Hall, for the T.C. Borough Surveyor:—

*Stott & Ward, Birkenhead £783 1 9

BIRKENHEAD.—Alterations to the office accommodation in the Town Hall, for the T.C. Borough Surveyor:—

*W. E. Hughes, Birkenhead £1,131

BIRMINGHAM.—Bridge over the Canal at Stockfield-road, Tyseley, for the T.C. Mr. H. H. Humphries, City Engineer:—

*A. Langley, Birmingham.

BURLEY-IN-WHARFEDALE.—Aeration tanks, paddle power-house, pumping chambers, settling tanks, sludge filters and incidental works at the Sewage Disposal Works, Skipton-road, Otley, for the Sewerage Board. Mr. H. Riding, Engineer, Council Offices, Menston, near Leeds. Quantities by the Engineer:—

*F. A. Whitaker, Leeds. £14,024

CAMBRIDGE.—New female ward and nursery at the Institution, 81A, Mill-road. Mr. S. French, L.R.I.B.A., architect, Landaff Chambers, Regent-street:—

F. Hith & Co., Ware, Herts ..	£11,443 10 0
P. C. Marsh, Cambridge	11,250 0 0
J. Brignell, Cambridge	11,050 9 6
H. E. Ambrose, Cambridge ..	11,028 0 0
C. Kerridge, Junr., Cambridge ..	10,292 0 0
Clark & Sons, Cambridge	10,121 0 0
†Kidman & Sons, Cambridge ..	9,921 0 0

(Subject to approval of M.H.)

CANTERBURY.—Four non-parlour and three blocks of semi-detached parlour houses, on the "Forty Acres" site, for the C.B.:—

R. J. Barwick, Dover, Kent	£7,018
W. S. Cozens, Canterbury	6,497
A. Wiltshire, Canterbury	6,465
L. T. Dadds, Canterbury	6,359
W. Rumbold, Ashford, Kent	6,170
J. E. Wiltshire & Co., Canterbury ..	6,151
G. Brownings, Canterbury	5,631
C. W. Lyons & Son, Canterbury	5,570
*J. B. Barton & Co., Whitstable, Kent ..	4,710

DERBY.—Three pairs of houses on the Cowsley estate, for the T.C.:—

*Carney & Son, Derby £923 per pair

DUNDEE.—216 houses on the Alphin-road housing site, for the T.C.:—

Brick work—	
*C. Dick, junr., Monifieth	£26,842 16 8 1/2
Carpenter and joiner work—	
*J. L. Bruce, Dundee	8,371 2 4
*A. Bruce & Sons, Dundee	8,336 14 4
*Wm. Combe & Son, Dundee	4,456 2 4
Glazier work—	
*G. & G. Kirk, Ltd., Dundee	490 17 4
Slater and roughcast work—	
*D. & G. Law, Dundee	2,785 9 0
*Wm. Brand & Son, Dundee	4,091 11 3
Plumber work—	
*P. Anderson & Sons, Dundee ..	8,834 17 2
Plaster work—	
*Wm. Brand & Son, Dundee	2,127 14 5
*G. Potts & Son, Dundee	1,111 2 10
*W. & A. Stensons, Dundee	1,111 17 2
*John Adam & Son, Dundee	1,215 0 0
Painter work—	
*Wm. McKerracher, Glasgow ..	1,879 13 4 1/2
Electrical lighting—	
*R. Kilpatrick & Co., Dundee ..	1,695 12 0
Grates—	
*Ingram & Miller, Dundee	1,877 4 0

DURHAM.—Remodelling North Brancepeth Council School, for the C.C. Mr. F. Willey, F.R.I.B.A., Architect, 34, Old Elvet:—

†T. Coates, Durham £368

DURHAM.—Remodelling Ryhope-street Council school, for the C.C. Mr. F. Willey, F.R.I.B.A., architect, 34, Old Elvet:—

†W. Pearson & Son, West Hartlepool.. £365

EXETER.—Reinforced concrete grand stand at the Exeter County Ground, for the Devon County Athletic Ground Co., Ltd., Exeter. Mr. E. Jenkin, architect and engineer, 25, Queen-street, Exeter.

Frank Bevis, Ltd., Portsmouth	£5,400 0 0
Hayward & Wooster, Ltd., Bath	4,565 0 0
Soper & Ayers, Ltd., Exeter ..	4,415 0 0
A. Barton, Plymouth	3,198 10 0
Westcott, Austin & White, Ltd., Exeter	3,149 0 0
*W. Dart & Son, Dawlish	2,848 7 6

FOLKESTONE.—Thirty-two pairs of flats on the Canterbury-road housing site, for the C.B. Mr. A. E. Nicholls, Borough Engineer, 11, Church-street:—

*S. Vant & Son, Folkestone £23,929

FOREHOE.—Four pairs of cottages at Browick, Wymondham, for the R.D.C.:—

H. C. Tofts, Hingham	£3,503 12
Mr. Hipperson, Great Melton ..	3,444 0
*H. Bidwell, Wymondham	3,440 0

GRAYTHORP.—Tiler's work at the new Council school, for the Durham C.C. Mr. F. Willey, F.R.I.B.A., architect, 34, Old Elvet, Durham:—

‡Dawber, Townsley & Co., Darlington .. £128

HALSTEAD.—Widening stone bridge, for the Essex C.C.:—

*J. S. Norton, Halstead

HARROGATE.—102 houses on the Ripon-road Farm, for the T.C. Mr. C. E. Rivers, Borough Engineer and Surveyor:—

Bricklayer—

W. Birch & Son, York (52 houses)	£12,482 0 0
Kershaw & Hill, Harrogate (50 houses)	11,787 0 0

Joiners—

G. H. Carrick, Harrogate	7,371 0 0
F. Harvey, Harrogate	2,890 10 0
Wardman & Forrest, Harrogate ..	2,310 0 0

Plumbers—

Higginbotham & Son, Bradford	3,771 0 0
W. Prest, Harrogate	1,697 0 0
R. Hewson & Son, Harrogate ..	1,854 0 0

Plasterers—

F. & H. Barker, Harrogate	1,239 5 0
J. Tomlinson, Harrogate	2,065 16 0

Slaters—

Wright Bros., Harrogate	1,755 10 0
H. Luty & Son, Harrogate ..	1,696 16 0

Painter—

J. Morley & Son, Harrogate ..	1,972 14 7
-------------------------------	------------

HASTINGS.—Seven blocks of flats on the Halton House estate, Harwardie-road, for the T.C.:—

‡Simms, Sons & Cooke, Ltd.,

Nottingham	£21,279
------------------	---------

(Subject to M.H. approval.)

HILTON.—Two hostels at Hilton, Kittybrewster, Aberdeen, for the National Committee for the Training of Teachers. Mr. J. A. O. Allen, F.R.I.B.A., architect and surveyor, 25, Union-terrace, Aberdeen:—

*Trustees of late G. Hall.

Aberdeen	£21,240 6 11
----------------	--------------

HORNSEY.—Thirty-three cottages on the Muswell Hill site, for the T.C.:—

*Rowley, Ltd.

HULL.—100 brick houses on the East Hull site, for the T.C.:—

E. Quibell & Son, Ltd., Hull	£51,900
J. H. Fenwick & Co., Ltd., Hull ..	50,160
Kettlewell, Son & Co., Hull	48,200
*A. E. Jones (Hull), Ltd., Hull	20,050

HULL.—Heating and ventilation and domestic water supply, at the Ferens Art Gallery, for the T.C. Messrs. Cook & Davies, architects:—

*King & Co. £1,654

HULL.—Electric light installation at the Disinfecting Station, Scarborough-street, for the T.C.:—

*City Electrical Co., Hull £210 9 9

HULL.—Street works and sewers of the East Hull housing site, for the T.C.:—

H. Coxhead & Co., Ltd., Beverley	£40,425 12 0
Purdie, Lumsden & Co., Ltd., Newcastle	39,963 7 4
G. Currie, Hull	38,174 19 4
G. Boyce, Hesse	37,956 13 10
Sangwin Ltd., Hull	35,633 15 8
*H. Langton & Son, Hull	35,450 0 0
City Engineer's estimate	37,879 11 10

KILRUSH.—Waterworks, for the U.D.C.:—

*Con. O'Neill, Kilkishan £11,270

KINNETT.—Repairs to the dispensary, for the Offaly Board of Health:—

*W. Egan £145

LEEDS.—Unclimbable fencing and gates for Hencomer-lane Improvement, for the T.C.:—

*T. Green & Sons, Ltd. £1,772

LEEDS.—Installation of central heating system and structural alterations at the Hope Hospital, for the T.C.:—

*E. Oldroyd & Co. £297

LEEDS.—Sub-station at the junction of Crown Point-road and Black Bull-street, for the T.C.:—

*S. J. Flockton £1,322

LEEDS.—Painting the exterior of the Town Hall, for the T.C.:—

*H. Shann £350 10

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	s. d.
		11 0
Add if in clay	" "	1 0
Add for every additional depth of 6 ft.	" "	0 6
Planking and strutting to trenches	per foot super	0 5
Do. to sides of excavation, including shoring	" "	1 0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	s. d.
		32 0
Add if in underpinning in short lengths	" "	7 0
Add if in floors 6 in. thick	" "	3 3
Add if in beams	" "	3 9
Add if aggregate 1: 2: 4	" "	10 0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2 6

BRICKLAYER.

Reduced brickwork in lime mortar and Fletton bricks	per rod	s. d.
		30 0 0
Add if in stocks	" "	7 10 0
Add if in Staffordshire blues	" "	22 0 0
Add if in Portland cement and sand	" "	1 10 0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	s. d.
		0 0 1½

POINTING.

Neat flat struck or weathered joint	" "	s. d.
		0 0 3

ARCHES.

Extra only to the price of ordinary brickwork:—		
Fair external in half brick rings	" "	0 0 10
Axed in stocks	" "	0 1 9
Rubbed and gauged jointed in putty camber or segmental	" "	0 6 0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	s. d.
		0 1 0
Setting ordinary register grates and stoves	each	1 0 0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	" "	4 15 0

ASPHALTER.

Half-inch horizontal damp course	per yard sup.	s. d.
		4 3
Three-quarter-inch vertical damp course	" "	8 6
¾ inch on flats in two thicknesses	" "	6 3
Angle fillet	per foot run	0 3
Skirting and fillet 6 in. high	" "	1 2

MASON.

York stone templates fixed	per foot cube	s. d.
		13 0
York stone sills fixed	" "	22 0
Bath stone and all labour fixed	" "	10 6
Portland stone fixed	" "	20 0

SLATER.

Welsh 16 in. x 8 in. 3 in. lap, including nails	per square	s. d.
		72 9
Do. 20 in. x 10 in. Do. Do.	" "	80 9
Do. 24 in. x 12 in. Do. Do.	" "	90 0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	s. d.
		5 0
Do. joists	" "	5 6
Do. roofs, floors and partitions	" "	6 0
Do. trusses	" "	8 6

Deal rough close boarding	per sq.	30/6	40/-	45/-	72/-
Flat centering for concrete floor, including struts or hangers	" "				50 0
Do. to beams	per ft. sup.				1 0
Centres for arches	" "				1 6
Gutter boards and bearers	" "				1 0

FLOORING.

Deal-edges shot	per sq.	44/6	53/-	60/6	
Do. tongued and grooved		49/-	57/6	65/-	
Do. matchings		45/-	51/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

One-and-a-half moulded sashes or casements	per foot super	s. d.
		1 10
Two Do. Do. Do.	" "	2 1
Add for fitting and fixing	" "	0 3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights: average size	" "	3 9

DOORS.

Two-panel square framed	per ft. sup.	1½"	1¾"	2"
		2/1	2/4	2/6
Four-panel Do.	" "	2/5	2/8	2/11
Two-panel moulded both sides	" "	2/8	2/11	3/2
Four-panel Do. Do.	" "	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

FRAMES.				
Deal wrot moulded and rebated	 per foot cube	1"	1½"	1¾"
		1/7	1/8	1/11
Plain deal jamb linings framed	 per ft. sup.	1/4	1/6	1/9
Deal shelves and bearers	 "	2d.	2d.	2d.
Add if cross tongued	 "			

STAIRCASES.

Deal treads and risers in and including rough brackets	per ft. sup.	1"	1½"	1¾"	2"	2½"
		2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	" "	1/8	2/	2/2	2/8	—

Housings for steps and risers	each	s. d.
		0 11
Deal balusters, 1 in. x 1½ in.	per ft. run.	0 9
Mahogany handrail: average 3 in. x 3 in.	" "	6 0
Add if ramped	" "	11 10
Add if wreathed	" "	23 9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/3
Casement fasteners	1/5	Patent spring hinges and	
Casement stays	1/2	letting in to floor and	
Cupboard locks	1/5	making good	19/-

FOUNDER AND SMITH.

Rolled steel joists	per cwt.	s. d.
		16 3
Plain compound girders	" "	19 0
Do. stanchions	" "	21 9
In roof work	" "	27 6

RAIN-WATER GOODS.

Half-round plain rebated joints	ft. run	3"	4"	5"	6"
		1/6	1/9	2/-	2/6
Ogee Do. Do.	" "	1/9	2/-	2/6	3/3
Rain-water pipes with ears	" "	1/9	2/7		
Extra for shoes and bends	each	4/4	5/11		
Do. stopped ends	" "	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	" "	2/2	2/7	3/10	4/3

PLUMBER.

Milled lead and laying in flashings and gutters	per cwt.	s. d.
		60 0
Do. Do. in flats	" "	59 0
Extra labour and solder in coated cesspools	each	6 9
Weld joint	per ft. run.	0 6
Soldered seam	" "	1 6
Copper nailing	" "	0 6

Drawn lead waste per ft. run	1"	1½"	2"	2½"	3"
	1/2	1/9	2/0	3/4	4/0
Do. service	1/8	2/2	2/7	3/10	
Do. soil	" "	" "	" "	" "	6/9
Bends in lead pipe	each	" "	" "	" "	8/2
Soldered stop ends	" "	1/2	1/8	2/1	2/10
Red lead joints	" "	11d.	1/-	1/3	1/11
Wiped soldered joints	" "	2/10	3/6	4/-	4/11
Lead traps and cleanings	" "	" "	" "	" "	6/6
ing screws	" "	" "	" "	" "	14/7
Bib cocks and joints	" "	6/4	9/7	15/4	41/-
Stop cocks and joints	" "	15/4	17/2	25/8	14/-

PLASTERER.

Render, float and set in lime and hair	per yard sup.	s. d.
		2 4
Do. Do. Sirapite	" "	2 7
Do. Do. Keen's	" "	3 7
Add sawn lathing	" "	1 7
Add metal lathing	" "	2 6
Portland cement screed	" "	2 2
Do. plain face	" "	3 3
Mouldings in plaster	per 1 girth	0 11
One-and-a-half granolithic pavings	per yard sup.	6 9

GLAZIER.

21 oz. sheet plain	per foot sup.	s. d.
		0 8½
26 oz. Do.	" "	1 0
Obscured sheet	" "	1 1
¾ in. rolled plate	" "	0 9
¾ in. rough rolled or cast plate	" "	0 10½
¾ in. wired cast plate	" "	1 4

PAINTER.

Preparing and distempering, 2 coats	per yard sup.	s. d.
		0 9
Knotting and priming	" "	0 7
Plain painting 1 coat	" "	0 9
Do. 2 coats	" "	1 2
Do. 3 coats	" "	1 9
Do. 4 coats	" "	2 4
Graining	" "	2 3
Varnishing twice	" "	1 9
Sizing	" "	0 3
Flattening	" "	0 7
Enamel	" "	1 1
Wax polishing	per foot sup.	0 6
French polishing	" "	1 2
Preparing for and hanging paper	per piece	2/- to 4/

*These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1% should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.



LEYTON.—Hot-water and heating apparatus at Trumpington-road School, for the U.D.C. :—

*J. Coombe & Co. £1,700

LIVERPOOL.—Internal painting at the Highfield Sanatorium, for the T.C. Land Steward and Surveyor :—

*F. Bage & Son, Liverpool £948

LIVERPOOL.—Alterations to the Marsh-lane electric sub-station, for the T.C. :—

*Rimmer Bros., Liverpool £1,184

LIVERPOOL.—Alterations and additions to the Fairclough-lane electric sub-station, for the T.C. :—

*Joshua Henshaw & Sons, Liverpool .. £10,460

LIVERPOOL.—Alterations to 30, Clarence-street, for the T.C. Corporation Surveyor and Architect, Quantities by Mr. W. T. Clarke, Liverpool :—

*J. Connor, Liverpool £700

LIVERPOOL.—Alterations and additions to the Anfield-road Council School, for the T.C. :—

*F. & T. Chappell £2,270

LONDON.—Minor alterations to the following schools, for the L.C.C. :—

*J. C. Mather (Catherine-street, Shore-ditch) £126 0

*T. Carr (Central-street, Finsbury) .. 148, 0

*G. Keetch (Rushmore-road, Hackney) 198 0

*Stevens & Sons (New-end, Hampstead) 136 16

*Sims & Russell (Bell-street, St. Mary-lebone) 153 0

*J. & C. Bowyer, Ltd. (Bow-road day open-air, Bow and Bromley) 396 0

*S. Blow, Ltd. (Keeton's-road, Rotherhithe) 132 0

LONDON.—Provision of low-pressure hot-water heating apparatus at New-road, Clapham, for the L.C.C. :—

Edward Deane & Beal, Ltd. £1,775 0 0

Davis, Bennett & Co. 1,725 0 0

Brightside Foundry & Engineering Co., Ltd. 1,673 0 0

Palowkar & Sons 1,641 0 0

Heywood & Brvett 1,599 0 0

Clark, Hunt & Co., Ltd. 1,499 13 6

H. J. Cash & Co., Ltd. 1,468 0 0

Ashwell & Nesbit, Ltd. 1,426 0 0

*Barrett & Wright, Ltd. 1,339 0 0

The architect's comparable estimate is £1,508.

(All of London.)

LONDON.—Painting and cleaning of schools, for the L.C.C. :—

Basnett-road (Battersea, S.)—

Chappell Bros. £1,829 0 0

H. S. Lee, Ltd. 1,808 0 0

F. Jones 1,785 0 0

F. J. Rashbrook, Ltd. 1,783 0 0

S. Ronald 1,773 0 0

*Triggs & Co. 1,697 0 0

The architect's comparable estimate is £1,642.

Sellenden-road (Camberwell, N.W.)—

J. Marsland & Sons, Ltd. £2,234 0 0

Higgs & Hill, Ltd. 2,080 0 0

Prestige & Co. 1,837 0 0

*W. J. Dixon & Son 1,785 0 0

The architect's comparable estimate is £1,838.

Blackheath-road (Greenwich)—

J. H. Sutcliff & Sons £2,511 0 0

Hill & Gurr 2,119 17 6

W. Mills & Sons (Builders & Contractors), Ltd. 2,073 0 0

Thomas & Edge 2,055 0 0

H. Groves & Son 1,959 0 0

J. Scott Fenn 1,884 16 0

W. Bickerton 1,876 0 0

Cole, Loasby & Co., Ltd. 1,576 0 0

*Edwards Construction Co., Ltd. 1,540 0 0

The architect's comparable estimate is £1,842.

Bolingbroke-road (Battersea, N.)—

H. S. Lee, Ltd. £1,736 0 0

Curd Bros. 1,402 0 0

R. S. Ronald 1,396 0 0

F. Jones 1,384 0 0

Triggs & Co. 1,294 0 0

*F. J. Rashbrook, Ltd. 1,132 0 0

The architect's comparable estimate is £1,301.

Church-street (Stoke Newington)—

E. A. Roome & Co., Ltd. £2,198 0 0

F. Cotterell, Ltd. 2,079 0 0

The Pitcher Construction Co., Ltd. 1,974 0 0

Stapleton & Sons 1,939 0 0

*W. M. Brand 1,895 0 0

The architect's comparable estimate is £1,978.

Crampton-street (Southwark, C.)—

Bostels £2,279 0 0

Prestige & Co., Ltd. 2,146 0 0

Sims & Russell 1,986 0 0

*Breves, Ltd. 1,547 0 0

The architect's comparable estimate is £1,845.

Creek-road (Greenwich)—

Cole, Loasby & Co., Ltd. £2,099 0 0

J. Scott Fenn 1,986 0 0

*W. Bickerton 1,741 0 0

The architect's comparable estimate is £1,891.

Dempsey-street (Mile End)—

W. S. Sharpin £2,964 0 0

Turnbull & Son 2,719 0 0

Whitbys, Ltd. 2,640 0 0

W. Simms 2,111 10 0

G. Barker 2,109 0 0

A. H. Inns, Ltd. 2,092 0 0

Barrett & Power 2,059 0 0

R. Woollaston & Co. 1,986 14 0

*Samuel Blow, Ltd. 1,880 10 0

The architect's comparable estimate is £1,859.

Deptford Park (Deptford)—

W. Mills & Sons (Builders & Contractors), Ltd. £2,271 0 0

Thomas & Edge 2,235 0 0

N. Harris & Sons 2,203 0 0

H. Groves & Son 2,159 0 0

J. Scott Fenn 1,876 0 0

Hill & Gurr 1,720 0 0

*Edwards Construction Co., Ltd. 1,669 0 0

The architect's comparable estimate is £1,767.

Ecclesbourne-road (Islington, E.)—

Patman & Fotheringham, Ltd. £2,664 0 0

Runham Brown Bros. 2,614 0 0

The Pitcher Construction Co., Ltd. 2,583 0 0

Marchant, Hirst & Co. 2,521 0 0

*J. C. Mather 2,509 0 0

The architect's comparable estimate is £2,428.

Elliott Central (Putney)—

J. McManus, Ltd. £3,001 0 0

W. H. Cooper & Son 2,785 0 0

Curd Bros. 2,529 14 0

A. Soden 2,041 9 0

H. S. Lee, Ltd. 1,849 0 0

R. S. Ronald 1,767 10 0

*F. J. Rashbrook, Ltd. 1,753 0 0

The architect's comparable estimate is £1,815.

Gainsborough-road (Hackney, S.)—

A. E. Symes £2,538 0 0

E. Pollard & Co., Ltd. 2,513 0 0

L. H. & R. Roberts 2,504 0 0

C. P. Roberts & Co., Ltd. 2,454 0 0

W. Silk & Son 2,432 0 0

G. Butters 2,320 15 4

*H. C. Hoswill 2,151 0 0

The architect's comparable estimate is £2,117.

Heber-road (Dulwich)—

G. Hill & Son £2,839 0 0

Chappell Bros. 2,590 0 0

T. Brown & Son 2,438 0 0

D. C. Bowyer 1,837 0 0

*Bridge & Co. 1,783 0 0

The architect's comparable estimate is £2,043.

Johanna-street (Lambeth, N.)—

Bostels £1,762 0 0

E. C. Sames & Co. 1,434 19 0

*Breves, Ltd. 1,260 0 0

The architect's comparable estimate is £1,373.

Kilburn-lane Elementary and Central (Paddington, N.)—

L. Kazak £1,930 0 0

Harrison & Co. 1,900 0 0

*M. Greenwood & Son, Ltd. 1,853 0 0

The architect's comparable estimate is £1,906.

Malmesbury-road (Bow and Bromley)—

W. J. Clemens £2,386 0 0

G. Keetch 2,248 0 0

Stoneley & Co. 1,848 0 0

A. E. Symes 1,564 0 0

Griggs & Son 1,535 0 0

E. A. Roome & Co., Ltd. 1,529 0 0

Vigor & Co. (Poplar), Ltd. 1,488 0 0

*W. S. Sharpin 1,449 0 0

The architect's comparable estimate is £1,522.

Park Walk (Chelsea)—

J. McManus, Ltd. £2,681 0 0

B. Colley & Sons 2,502 0 0

A. Roberts & Co. 2,493 0 0

W. Daley & Co. 2,288 0 0

Lole & Co. 2,180 0 0

H. A. Murphy & Co. 2,104 0 0

Aldin Bros. & Davies 1,999 0 0

*A. & F. Polden, Ltd. 1,830 0 0

The architect's comparable estimate is £1,913.

Rhyl-street (St. Pancras, N.)—

N. Lidstone & Son £1,936 0 0

F. Cottrell, Ltd. 1,896 0 0

Marchant, Hirst & Co. 1,785 0 0

H. J. Goodman 1,779 0 0

Nox, Ltd. 1,706 0 0

Stevens & Sons 1,628 0 0

Hooper & Hooper 1,575 0 0

*F. Cousins 1,537 15 4

The architect's comparable estimate is £1,582.

Tottenham-road (Hackney, C.)—

G. Butters £2,601 0 0

W. Silk & Son, Ltd. 2,576 0 0

L. H. & R. Roberts 2,518 0 0

*Whitbys, Ltd. 2,487 0 0

C. P. Roberts & Co., Ltd. 2,410 0 0

The architect's comparable estimate is £2,390.

Waller-road (Deptford)—

A. V. Goad £1,926 0 0

J. & C. Bowyer, Ltd. 1,900 0 0

Rice & Son 1,860 0 0

J. Marsland & Sons, Ltd. 1,784 0 0

T. Carr 1,642 0 0

W. Bailey 1,572 0 0

*D. C. Bowyer 1,464 8 0

The architect's comparable estimate is £1,624.

Westminster Bridge-road (Southwark, N.)—

Castle Bros. Ltd. £1,597 0 0

Bostels 1,577 0 0

*Breves, Ltd. 1,063 0 0

The architect's comparable estimate is £1,003.

(All of London.)

LONDON.—Painting and repairs to the Infirmary, 285, Harrow-road, W.9, for the Paddington B.G. :—

*Arthur Vigor, Ltd., London £867

LOUTH.—Repairs to Taylor's & Thompson's Bridge, for the C.C. :—

*T. Byrne £185

LUTON.—For (a) 24 houses in Selbourne-road, and (b) two in Stratford-road, for the T.C. :—

(a) *Luton Building Co. £12,840

(b) *T. Day & Son 1,096

(Subject to M.H. approval.)

MALDON.—Sixteen houses in Cross-road, for the T.C. Mr. Thos. R. Swales, M.I.C.E.I., architect :—

F. H. Sherling, Maldon £7,796 0

B. T. Annereau, Westcliff-on-Sea .. 7,655 0

*W. A. Claydon & Son, Ulting. 7,500 15

MALDON.—Bungalow in the recreation ground, for the T.C. Mr. Thos. R. Swales, M.I.C.E.I., architect :—

W. A. Claydon & Son, Ulting. £747 13 0

F. H. Sherling, Maldon 636 9 6

*G. H. Taylor, Maldon 550 10 0

MANSEFIELD.—Seven handicraft centres for the E.C. :—

*A. R. Roe £3,219 4 1

MILNROW.—Fifty-two houses on the Holt Estate, for the U.D.C. Mr. A. Travis, architect, Union Bank Chambers, Rochdale; quantities by the architect :—

J. L. Clegg, Milnrow.

J. Smith (Norden), Ltd., Rochdale.

James Fielding, Milnrow.

R. Blincoe, Rochdale.

Dryland & Preston, Littleborough.

Allen & Chadwick, Rochdale.

James Mann, Ltd., Newhey.

W. & E. Cryer, Newhey.

Wm. England, Dearnley.

W. H. Ashworth, Rochdale.

*R. & T. Howarth, Rochdale.

NEW ROSS.—Extensions to the

SOUTH SHIELDS.—Installation of electric light at the Westor Boys' Girls' and Infants' Departments, Domestic Subjects Centre, Chemical Laboratory, and two caretakers' houses, for the T.C. Borough Electrical Engineer :—

‡A. J. Wares, Ltd., South Shields.... £295 10

SOUTH SHIELDS.—Roofing the engine house in connection with the extensions to the electricity works at West Holborn, for the C.B. Mr. S. G. Stanton, Borough Engineer; quantities by Borough Engineer :—

*Ainwick Construction & Engineering Co., Ltd..... £2,750

SOUTH SHIELDS.—356 houses on the Cleadon Park Estate, for the Corporation. Mr. S. G. Stanton, Borough Engineer; quantities by Borough Engineer :—

*J. G. Mark, Grange-avenue, Sunderland..... £164 078

SPENNYMOOR.—Improvements to headmaster's room, staffrooms, and boys' and girls' latrines, at Spennymoor Alderman Wraith Secondary School, for the Durham C.C. Mr. F. Willey, F.R.I.B.A., Architect, 34, Old Elvet, Durham :—

†W. Fairless, Bishop Auckland .. £227 9 3

STAINES.—Painting a portion of the exterior of the institution, for the B.G. :—

*J. Hedges, Ashford..... £287

STANLEY.—Thirty-eight houses in Limepit-lane, for the U.D.C. Mr. J. D. Macleod, architect, 4, Frenchgate, Doncaster :—

*W. J. Kendall & Sons, Wakefield.

STOURBRIDGE.—Twenty-six houses on the Grange Estate, for the T.C. :—

*E. R. R. Tooby, Stourbridge.

TEMPLEMORE.—Town Hall, for the U.D.C. :—

*C. Cahill, Rathdowney..... £1,800

TWICKENHAM.—Adaptation work at York House, for the D.C. Messrs. Knott & Collins, architects :—

Arthur Vigor, Ltd.....	£41,574
W. Lawrence & Co., Sons, Ltd.....	37,726
Holloway Bros. (London), Ltd. ..	37,420
Soole & Son, Ltd.	37,420
J. Dorey & Co., Ltd.	36,833
General Building Co.	36,632
Trollope & Colls, Ltd.	36,319
Holland & Hannen and Cubitts, Ltd.	36,240
W. Lacey	35,908
F. C. Minter	35,279
G. E. Wallis & Sons, Ltd.	35,127
Speechley & Smith.....	35,100
Dove Bros., Ltd.	35,035
W. H. Gaze & Sons, Ltd.	34,833
W. F. Blay, Ltd.	34,530
‡F. & H. F. Higgs, Ltd.	33,333

WALTHAMSTOW.—Installation of electric lighting at the Selwyn-avenue Schools, for the U.D.C. :—

C. E. McComie	£656 0
Eastern Armature Co.	475 0
Heath Pritchard, Ltd.	471 0
British Electrical Installations Co. .	446 10
Bennetts (Electrical Engineers), Ltd	400 0
Bell Brothers & Co., Ltd.....	396 0
J. Fraser & Co.	348 0
Linzell, Dickinson & Co.	330 0
G. A. Weston	329 0
G. Martin	320 0
*Belgravia Electrical Co.	300 0
Alexander Hawkins & Sons	292 0

WEST PENNARD.—Cottage, for the Somerset C.C. County Architect, Lloyds Bank Chambers, Weston-super-Mare :—

G. V. Sheppard, Highbridge..... £639
*Wright & Son, Glastonbury..... 621

WEYMOUTH.—Pavilion, Recreation Ground, for the T.C. :—

*Jesty & Baker..... £916 19

WEYMOUTH.—Renovation of the engine room floor, &c., for the T.C. :—

*J. A. Parsons..... £118

CORRECTION.—With regard to the result of the tender for building twelve houses in Perth and Thorold roads, for the Ilford U.D.C., published in our issue for July 3, the successful contractor was Mr. William Simms, of 137-139, Brook-street Stepney, whose price was £8,500.

J. J. ETRIDGE, J^r._{LU}

SLATING AND TILING

SLATE MERCHANTS
CONTRACTORS.

Inspections and Reports made on
OLD OR FAULTY ROOFS
in any part of the country.

Telephone: Bishopsgate 1944/5, or write,

Bethnal Green Slate Works,
BETHNAL GREEN, LONDON, E.

BEST SEASONED

OAK FLOORING

AUSTRIAN
&
JAPANESE

PREPARATION TO ANY SECTION
CAN BE UNDERTAKEN AT ONCE

SYDNEY PRIDAY & SONS

WAINSCOT OAK MERCHANTS (EST. 1880)

25 Monument St., London, E.O.3

Tel: ROYAL 1162-S.

FITZPATRICK & SON

Masons and Paviers,

455, OLD FORD ROAD, BOW, E.3

Phone: EAST 4808.

Granite Setts and Kerb (redressed and second-hand), York Paving Spur Stones, Granite Chippings, and Granolithic and Sett Paving.

HIGH-CLASS

FLOORINGS

of every description in

WOOD BLOCKS. PARQUETRY
SEASONED T. & G. WAINSCOT OAK
TEAK AND MAPLE.
FACTORY AND ROADWAY PAVING

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASANT

WANDSWORTH, S.W.18.

(Phones: Putney 1700 & 2457)

School & Hospital Stoves

MAKERS OF

WRIGHT'S IMPROVED and also SHORLAND PATENT
WARM AIR VENTILATING PATTERNS.

GEO. WRIGHT (LONDON) LIMITED

19, Newman St., Oxford St., London, W.1
Burton Weir Works, Rotherham.

J. GLIKSTEN & SON

LIMITED

Specialities in

SEASONED

HARDWOODS

MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.

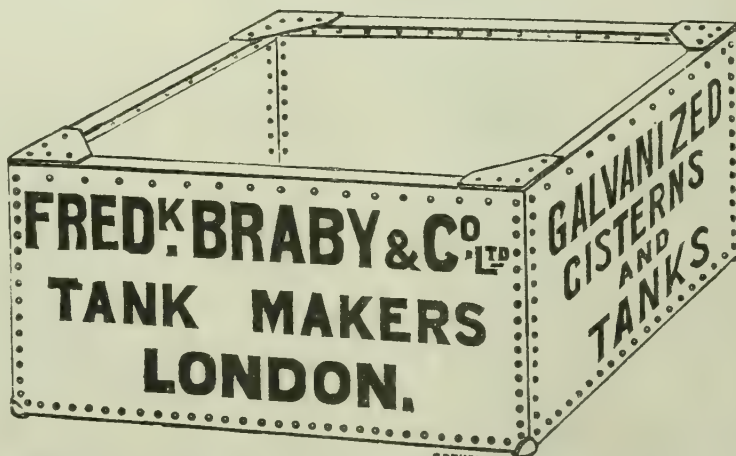
REGISTERED OFFICE AND WHARF

CARPENTERS RD.
STRATFORD
LONDON E.15

Telephone :
EAST 3771
(5 lines)

Telegrams
GLIKSTEN 'PHONE
LONDON

OUR
CISTERNS,
TANKS, and
CYLINDERS



ARE
BRANDED
"SUN"
BRAND.

TELEPHONE :
MUSUM 302 (5 Lines).

Chief Offices : 352 to 364, EUSTON ROAD, LONDON, N.W.1.

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VOL. CXXIX.—No. 4,302

JULY 17, 1925

THE SPIRIT OF CO-OPERATION

IN ancient times when any particularly favourable conjunctions of stars and planets occurred, such occasions were held to be notable days, when the influence of the unseen forces of nature might not be lightly disregarded but rather propitiated by sacrifices and offerings to the high gods in whose hands, it was believed, lay the future destiny of the nation, and its good fortune in the arts of war and peace.

So at this time, when in the architectural world the signs and portents are so evidently favourable, it is appropriate that the first session of the Royal Institute of British Architects after the unification of the profession should have as its prelude a conference of British Architects from all parts of the Empire. For the first time these representatives of the central body and its allied societies have met unfettered by internal differences and party politics, now happily relegated to the limbo of past errors. Thus a great opportunity presents itself, and we hope the result will be a clear call to greater things, and for a larger vision—a source of inspiration for the coming session.

Since the last conference at Oxford much has happened and (without going into detail which is here inappropriate and unnecessary), we can say that the chief event has been the unification of the profession and the amalgamation of the various groups of architects into one powerful body, now really a Royal Institute of British Architects. At Oxford this was a probability; at Newcastle it was an accomplished fact, thanks to the skill and ability of the retiring President, Mr. Gotch, the unremitting efforts of Mr. Arthur Keen as Honorary Secretary, and the excellent team work of the whole Council of the R.I.B.A., to whom the profession owes a real debt of gratitude and the Society of Architects.

We cannot of course forecast the course of events during the coming session, but it would at least appear probable that as internal dissensions have now given place to substantial agreement, adequate attention will now be given to the advancement of architecture in all its various ramifications. The programme for the Conference gave little clue to its real importance for, as is always the case at such gatherings, the value of such meetings is to be found not in the formal proceedings, but in the informal exchange of ideas which almost unconsciously influence the views and opinions of those members who have been elected by their fellows to direct the policy and affairs of the Institute for the ensuing year.

Among these subjects we hope that the question of advertisements may be considered, not only the vulgar and badly designed atrocities which permanently disfigure many sober and restrained examples of architectural composition in the main streets of London and the larger provincial cities, but also those equally obnoxious evidences of tasteless publicity which are scattered over the whole countryside on land adjoining our railways and main roads.

Surely with a well directed appeal to public opinion it would be possible to demonstrate that firms or individuals who can spend large sums in a way which imposes a legitimate grievance on many thousands of educated and inoffensive men and women, could (without undue hardship) contribute a certain amount to the National Exchequer for the public good. In other words, such advertising might be subjected to a graduated scale of *ad valorem* taxation, though even then there would appear to be need for some restriction as to the character of such advertisements, and we believe that any action initiated by the R.I.B.A. with regard to the preservation of the reasonable amenities of our streets, country roads and railways would be well supported by public opinion throughout the country.

Another matter which would seem to call for action, in association with such bodies as the Town Planning Institute, is the urgent question of instituting some form of public control over the design of buildings erected in the streets of our towns and along the new arterial roads now coming into existence. Many of these, considered as individual buildings, are satisfactory, but there is abundant evidence that inadequate con-

sideration is given to the effect of such building or rebuilding considered as parts of a whole composition.

We feel confident that the majority of architects would welcome such control if fairly and properly exercised, and not allowed to degenerate into mere captious criticism as it would undoubtedly strengthen their hands in putting this probably unconsidered aspect of building or rebuilding before an unimaginative client or board of directors. "What is required," writes a correspondent, "is a non-official, non-party and reasonably broad-minded advisory committee (such as, in fact, actually exists in the recently constituted Fine Arts Commission), whose advice could be obtained without additional expense to clients, and whose approval of all schemes for building in important streets, squares, and roads should be obligatory. In fact, I would suggest that it might be advisable to insist that the necessary approval of any such proposals by the local authority should only be given after the approval of the scheme by the advisory committee had been obtained. Probably it would also be found desirable that such a committee should not be permanently constituted, but that its members should be elected for a definite period and should comprise an equal number of architects, town planners, representatives of the local authorities, and members representing the ordinary ratepayers. Such an arrangement would have two manifest advantages: Firstly, it would stimulate public interest in the committee itself and thus in its activities, and secondly it would provide a reasonable safeguard against a too academic and detached point of view in the decisions of the committee which is one of the main objections to any such body."

What is lacking is the corporate spirit; we have lost that invaluable architectural advantage of the eighteenth century, the great landlord of taste and discernment. Thus, although we are agreed as to the enormous advantage to the community of such examples of civic and essentially English architecture as the squares and crescents of quiet, refined and dignified appearance which exist in Bath and many parts of London, yet by a curious paradox we have recently seen this orderly conception of civic beauty replaced in at least one notable London street by a series of buildings many of which are not unworthy examples of architectural design, but which fail completely when judged by the higher standard of civic amenity.

It is not sufficiently realised by those chiefly affected—our clients—that there is value in repose and harmony and that a street which has a definite architectural character is more attractive than one which contains a series of discordant architectural masterpieces. In fact, the need for propaganda and education in this direction might, we think, usefully engage the attention of the Institute during the coming session, as it is difficult to conceive of anything which would be of greater benefit to the advancement of civic architecture; until we have a demand for such unity in design it is useless to bewail the disappearance of it.

Another matter which is of importance is the rapidly diminishing number of skilled craftsmen in such essentially English trades as that of wrought metal work, and here, again, an inquiry by the R.I.B.A. might, we feel, give valuable results before it is too late to provide whatever remedy is appropriate. In fact, the whole question of the interdependence of artists and craftsmen is one which requires to be reviewed in the light of modern conditions, but as is the case with all the questions which we have mentioned here the basic or fundamental principle which underlies all of them is the need of co-operation, the desire of each performer in the orchestra of artistic achievement to contribute of his best towards the whole composition.

And as in our opening paragraph we referred to the belief of the ancients that sacrifice and offerings were desirable to propitiate those unseen powers which could bring human efforts to success or failure, we feel that success in our own endeavours of to-day can only be achieved if all are willing to co-operate for the common good, making such sacrifices as may be necessary for the advancement of architecture and the uplifting of national life.

NOTES.

The Manchester Art Gallery Competition. THE widespread approval of our remarks on the Manchester Art Gallery competition result does not influence us in any desire to depart from an impartial view in the matter. We much regret that anything should have arisen to cast any doubt on the wisdom of the assessors, as to the true intent and meaning of conditions, but we do consider that this competition has shown how needful are the safeguards which should be set up to ensure a perfectly clear and fair issue. This is by no means the first occasion on which a competitor has been able to cast doubt on the wisdom of apparently emphatic conditions. Even if the assessors can satisfy everybody that they were fair and right in their judgment, there is still left an object-lesson for future competition committees to take to heart. A correspondent, whose letter we are glad to print in this issue, says he entirely disagrees with our article on the competition, which judged the winning design as the best. We do not misunderstand the purport of his letter, but we hold to the opinion that such competitions as these should be freely and fairly criticised. May we not say, Let justice be done though the heavens fall!

Town Planning and Building Enterprise. In the administration of the Town Planning Act the decisions of the London County Council sometimes operate to the discouragement of building enterprise. Recently, we are informed, a speculating builder, having acquired an

acre of land, divided it into plots whereon he erected good middle-class dwellings, which were sold as soon as built. When he had completed six of these he was informed by the Council that they had resolved not to allow more than six houses to the acre upon that estate. He had some vacant land remaining and was, and still is, in doubt what use to make of it.

The Sizes of Building Plots.

EVERYONE acquainted with the subject knows that a building plot rarely exceeds 100 ft. in depth, so that a limit of six houses to the acre would necessitate plots about 72 ft. wide—an absurdly extravagant width for an ordinary house of about 20 ft. frontage. It is now rumoured that the Council intend imposing a limit of eight houses to the acre. Under this rule a 100 ft. plot would be over 50 ft. wide, and such a sized plot would usually be beyond the resources of a speculating builder.

Spoiling the Country-side.

LIKE almost every beneficial development, the modern growth of transport facilities has its attendant disadvantages. The democratisation of the motor car, for instance, though an excellent thing in many ways, seems likely to end in the spoiling of the country-side. In all parts of the Home Counties, and even beyond, new houses are springing up like mushrooms every day. Some of these houses are of an excellent architectural character, showing a careful regard for scenic environment and the building traditions of the neighbourhood. Others, alas! ignore every consideration

of amenity. In design they follow the worst manner of suburban speculative building; in material, they are entirely unsympathetic; while, as to arrangement in conformity with any sort of layout, such a thing is frankly not attempted, for there is no plan to conform to. The effect upon the general view is disastrous. The countryside is gradually being dotted over with ugly, unrelated cottages, that ought never to have been allowed to come into existence, and unless prompt official action is taken, the spread of the blight will not be arrested until too late. Within ten miles of the Royal Exchange there are still great tracts of beautiful country, virtually unspoiled; yet on every hand, one finds those threatening notice-boards advertising "desirable building sites," or areas "ripe for development."

SURELY some effort should be made to prevent all this!

Regulated Expansion. Regulated expansion should take the place of fortuitous growth, or, before long, rural England will be rural no more. One solution of the general problem is the creation of community centres with, wherever possible, sufficient local industries to keep their populations employed in the home area, and so avoid the great waste of time, energy, and material resources involved in the daily conveyance of great armies of workers to and from their work. The week-end cottage and country home we shall have with us always, no doubt, but there is no reason why well-to-do people should be allowed to spread themselves over the countryside with entire disregard for rural amenities. They should be encouraged to group themselves together, either in relation to existing communities, or in new garden villages, and so preserve the open country for the essential agricultural and other pursuits and for the enjoyment of all.

The National Playing Fields Association. THE inauguration of this new body on July 8, with the Duke of York as its President, registers a distinct step forward. There will from now on be a central body pledged to devote its attention to the provision of playing fields, and the scandal of acres of streets in which the only wicket is a lamp-post and the only football ground a pavement will not be repeated. The town-planning movement has, of course, helped enormously towards the provision of adequate recreation grounds and praiseworthy efforts have been made by many local authorities, but the need for some co-ordinating and advisory body has long been felt, and we wish the new Association every possible success.

ONE of the most serious **Recreation in Cities.** problems is what is to be done about those centres where playgrounds have long since been crowded out. If we take Moorgate Station as a centre, we find that



The Old Assembly Rooms, Newcastle-on-Tyne: Reception Room.
The Headquarters of the British Architects' Conference.

Designed in 1776 by J. NEWTON; Restored by MESSRS. CACKETT & BURNS DICK, F.F.R.I.B.A.



The Old Assembly Rooms, Newcastle-on-Tyne : Entrance Hall.

pensive necessities of life. We want to be a little treasure island in the midst of the great ocean called London, where passers-by can freely come in and gaze round, where purchasers will find treasures worth more than good money, where the artist and craftworker is always welcomed." At the Rowley Gallery just now there is also an exhibition of some charming water-colour drawings, in addition to the many examples of wood inlay and other decorative adornments for which the Rowley Gallery is well known.

The R.I.B.A. Conference.

THE conference of the Royal Institute of British Architects which was held last week in Newcastle and Durham was an unqualified success, not only because the weather was all that could be desired, but because a most interesting programme had been arranged by a body of good organisers appointed by the Northern Architectural Association from their ranks, and any visitor unfamiliar with the qualifications of architects, must have realised that their calling includes not only a knowledge of the art and science of building construction, but a very good business capacity as well. To Mr. R. Norman MacKellar, the Hon. Secretary of the Conference Committee, the chief credit for this success undoubtedly belongs, but there were many willing helpers to all of whom the thanks of the visitors are due. The Conference next year will be held in London, we understand, and if so, it will surely be necessary to devote a week to it, unless a very exclusive programme is arranged.

It means a journey of a mile and three-quarters in any direction to find space for a public football ground, and the land in that area, at Hoxton, Islington, and Bethnal Green, is now so expensive that anything adequate is out of the question. We have to snatch at what opportunities we can to palliate the evils of these great oceans of unlovely brick; but let us see that these follies are not repeated in our own day.

The New Waterworks at Purley.

It is seldom that public services produce buildings of architectural character, and it is the more gratifying to notice the new concrete building that has recently been completed by the East Surrey Water Company at Purley. The sure mode of progression favoured by the Southern Railway allows one to examine this building in some detail in passing, and possibly the railway itself and public services generally may begin to realise that it is more profitable to build something architecturally suitable than to continue in the rut of standardised mediocrity that has long ago been worn smooth. A great deal depends upon the vision of the engineer in charge of works of a purely practical nature, for it is always in his power, if he but knows how to use it, to ensure that touch of proportion and character that convert an uninteresting structure into a valuable, if simple, example of architecture.

In Church Street, Kensington. THE reputation of Church-street, Kensington, as a location for quaint and interesting things, is well known, and amongst the best agencies for various artistic objects

is the nicely-treated home of the Merchant Adventurers, Ltd., in which delightful examples of glass and pottery are to be found, with other interesting things. The aim of Madame Boissevan in her little home may well be described in her own words: "Many entering our little green shop want to know all about us. Our aim is to have our share, no matter how humble a one, in bringing beauty into the market place and in encouraging the production of beautiful and inex-



The Old Assembly Rooms, Newcastle-on-Tyne : First-floor Landing.

GENERAL NEWS

Professional Announcements.

Mr. Gerald R. Clayton, A.R.I.B.A., has removed his office to 18, Richmond-terrace, Blackburn.

Mr. R. S. Dixon, B.Arch. (Liverpool), and Mr. N. D. Quick, A.R.I.B.A., have opened an office at 25, High-street, Guildford, where they will practise under the style of Messrs. Dixon & Quick, architects.

Appointment.

The Council of the Incorporated Society of Auctioneers and Landed Property Agents has confirmed the appointment of Captain John Stevenson, barrister-at-law, as general secretary, vice Mr. Methuen A. Fluder, appointed registrar.

Bath's Roman Relics.

The Earl of Crawford and Balcarres has opened to the public the latest Roman discoveries at Bath, which include two bathing pools.

Music Pavilion, Deal.

Designs for a music pavilion on the shore end of the pier, prepared by Mr. T. Brammall Daniel, F.R.I.B.A., of 36, Victoria-street, Westminster, have been adopted by Deal Town Council. The cost is estimated at between £20,000 and £25,000.

City of London School War Memorial Pavilion.

The site of the City of London School war memorial pavilion and athletic ground, at Grove Park, comprises nearly thirty-six acres. Mr. Ralph Knott, F.R.I.B.A., and Mr. E. S. Collins, F.R.I.B.A., old boys of the school, are the hon. architects of the building.

Kelvin Hall, Glasgow.

Glasgow Corporation have instructed the City Engineer to prepare plans and secure estimate for the rebuilding of Kelvin Hall, recently destroyed by fire. It is proposed that the main portion shall be of steel, with asbestos inner walls, and an asbestos and glass roof.

Fate of a City Church.

The site of the church of St. Katherine Coleman, in Fenchurch-street, has been acquired by Lloyd's Register of Shipping. The church, we understand, is to be pulled down. The benefice has been united with that of St. Olave's, Hart-street, which is close by.

Glasgow Architect Honoured.

On the occasion of his retirement from the staff of the Glasgow School of Art, Mr. Alexander McGibbon, A.R.I.B.A., was recently presented with an illuminated address, recording the high esteem and respect in which he has been held by all with whom he has been associated during his long period of service.

Manchester University New Prize.

The Council of the University of Manchester have accepted the offer made by Messrs. John Tiranti & Co. for a prize to be awarded by the Senate. The award will be known as the Tiranti Book Prize, and will consist of the current issue of the works of the Ecole des Beaux Arts.

National Theatre Plans.

The Shakespeare Memorial Committee has again met to discuss the question of a site in London on which to erect a national theatre as a memorial to Shakespeare. So far the Government has not been able to place a site at the disposal of the committee, but hopes are entertained of greater success in the near future.

Waterloo Bridge.

In reply to a question on Waterloo Bridge at a meeting of the L.C.C., Mr. Meinertzhagen said that the Bridges Sub-Committee were giving careful consideration to the report of the Conference of Societies urging the preservation of the bridge. In view of the complexity of the question he thought it unlikely that the committee would be in a position to report before the recess.

"Childish Archaism" of Epstein.

At the annual conference of the Museums Association, held last week at Exeter, Mr. E. Rimbault Dibdin (late director of the Walker Art Gallery, Liverpool), criticised the Hudson Memorial. Those (he said) who were more or less orthodox were left confounded, wondering whether this sort of return to childish archaism was not a symptom of mortal disease preceding the total dissolution of pictorial art.

R.I.B.A.

The following are notes from the Minutes of the last Council meeting:—

Sir George Oatley.—The Secretary was directed to convey the congratulations of the Council to Sir George Oatley (F.) on the occasion of his Knighthood.

Housing in Holland.—A report was received from Mr. T. Alwyn Lloyd, the R.I.B.A. delegate who accompanied the official visit of the National Housing and Town Planning Council to Holland during Easter, 1925, and was ordered to be published in the Journal.

Waterloo Bridge Broadcast Appeal.

Mr. A. R. Powys, Secretary of the Society for the Protection of Ancient Buildings, recently gave a talk from the London station on Waterloo Bridge. After the London County Council decided that Waterloo Bridge was beyond repair, he said, the Society for the Protection of Ancient Buildings addressed a letter to the Council, stating that this was not the case. If the public and the London County Council realised how important a building Waterloo Bridge was, and how much it was admired throughout the world, both from the engineering and architectural point of view, there would never have been any proposal to demolish it.

Obituary.

We regret to record the death of Mr. William Morton Cowdell, F.R.I.B.A., of Messrs. Cowdell & Bryan, architects and surveyors, of Leicester, on Wednesday, July 8, after some weeks' illness, in his seventieth year. Mr. Cowdell was articled to the late W. Jackson, F.R.I.B.A., of Leicester. He held the appointment of architect to the Small Holdings Committee of the Leicestershire County Council, and the Housing Committee of the Blaby Rural District Council. He was a Past-President of the Leicester and Leicestershire Society of Architects, and served for a period on the Council of the R.I.B.A. His principal works include a number which were carried out in conjunction with his partner, Mr. A. F. Bryan, A.R.I.B.A.

Michelangelo's Models.

With regard to the recent discovery of models of statues for the dome of St. Peter's, Rome, attributed to Michelangelo, although eight were made only seven have been found. They are 2 ft. high, but the marble statues would, of course, have been of gigantic size. No doubt appears to have been suggested in Rome as to the authenticity of the models, and it is not perhaps fanciful to see in them strong resemblances to the great figures of the Sistine.

Central School of Arts and Crafts: A Record Lecture Year.

At the twenty-four lectures on Mediæval Architecture, given for the London University Extension Board by Sir Banister Fletcher, F.R.I.B.A., at the Central School of Arts and Crafts, the attendances exceeded all previous records, totalling 5,574 for the session, as against 3,613 the year before, and against 3,261 the last time the same subject was treated (1921-2). This latest total gives an average attendance of 232 per lecture, as compared with not many more than 100 a few years ago. A course by Sir Banister on Renaissance architecture commences next September.

Hendon Housing Estate.

The London County Council's new housing estate at Hendon covers an area of 530 acres, of which 75 acres are situated on the west side of Edgware-road. It is proposed that its development be entrusted to one master contractor,

"with wide experience, adequate powers of organisation, and substantial resources at his command," the contract to provide for the construction of 3,000 houses and other buildings, with the necessary roads and sewers, with provision for the completion of the contract at the Council's option to about 6,000 houses, for which orders may be given within three years.

University of Manchester School of Architecture.

The Sessional Examination results in the above School are as follows:—B.A., 2nd Class Honours: Frank Whiteley; 3rd Year B.A. Degree, Part I B: Ellen B. Alexander, G. A. Goldstraw, W. H. McNicol; 2nd Year B.A. Degree, Part I A: Arch. McLean, L. S. Jacobson; Intermediate R.I.B.A., Exemption: Irene Florey.

Scholarships and Prizes: Institute of Builders' Travelling Scholarship, Ellen B. Alexander, £60; G. A. Goldstraw, £60; W. H. McNicol, £60.

Royal Manchester Institution: Heywood Prize, £10, Arch. McLean.

Miss Elsie Rogers, who graduated in 1924, has been awarded an "American Commonwealth Fund Fellowship." The Fellowship is of the annual value of £600, and is tenable for two years, during which she will pursue her studies in the School of Architecture of the Columbia University. She will also acquire experience in the offices of American architects, and will be required to visit some of the great cities of the States. Holders of the Fellowship must also acquaint themselves with the Industrial, University and home sides of American life, and will be given opportunities of meeting the leaders in financial, commercial, artistic and other circles.

COMPETITION NEWS

Elementary School, Oldbury.

Oldbury U.D.C. propose to invite designs for a new elementary school for 1,000 scholars, to be erected on a site in Bristnall Hall-lane. The Town Clerk is Mr. Arthur Culwick.

Bolton Infirmary Extension.

The Bolton Infirmary Extension Committee are inviting architects in practice in the Bolton Union area, and architects in practice elsewhere but resident in this area, to submit designs for extension buildings adjoining the Bolton Infirmary and Dispensary. Premiums: £200, £100 and £50. The Committee have appointed Mr. Chas. T. Adshead, A.R.I.B.A., of 14, St. Ann's-square, Manchester, assessor. A plan of the site, &c., together with conditions may be obtained by competitors from the secretary of the Extensions Committee at the Infirmary.

Valetta Town Planning.

In the competition for the lay-out of the area immediately outside Valetta, the capital of Malta, the first prize of £1,000 has been won by Mr. James Burford, the former chief lecturer on Architecture at the University of London, and Mr. Rowland Pierce, in association. The second prize of £500 has been awarded to M. René Danger. The assessors were Professor L. P. Abercrombie, Professor of Civic Design, Liverpool University, and Mr. E. P. Warren, of London.

Other Competitions.

Coventry Hospital.*

Sevenoaks U.D.C. Housing.*

Gower R.D.C. Housing.*

Other competitions still open include the following (the dates given are, first the sending-in date, and second the issue of *The Builder* in which full particulars were given):—Argentine Institute (Dec. 31; April 24). Copenhagen Bridge (Sept. 1; April 24). Newcastle Fire and Police Station (Oct. 8; June 12). Drammen Bridge (Oct. 1; May 29).

* Competitions when "warned" or vetoed by the R.I.B.A. are Starred.



THE ENTRANCE FRONT.



THE BALLROOM—UPPER FLOOR.

The Old Assembly Rooms, Newcastle-on-Tyne.

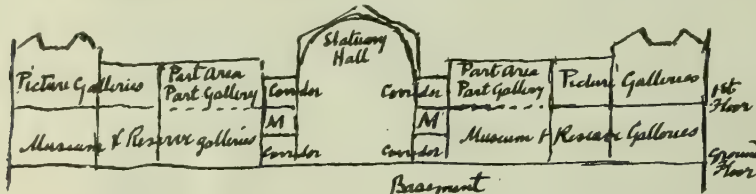
J. NEWTON, Architect (1776). Restored by MESSRS. CACKETT & BURNS DICK, F.F.R.I.B.A.

CORRESPONDENCE

Manchester Art Gallery Competition.

SIR.—The correspondence on the above subject would lead non-competing architects to conclude that the conditions of competition were impossible of fulfilment consistently with the production of a first-class design. This is not so. Moreover, before we completed our design we deduced solely from the said conditions, the plan, convenient and compact, on which these conditions were—or at any rate, might have been—based. Below is the section from Piccadilly to Parker-street of this preliminary plan.

Note.—MM. are mezzanines for small statuary.



POINTS.

- (1) The Museum is one circulation—always progressive. It is continued all along the Portland-street front.
- (2) But the "through" corridors flanking the Statuary Hall solve the problem (mostly unsolved) of progressive circulation when any particular gallery is closed.
- (3) The Hall of Memory is near the east end, separated from Portland-street by the Museum and flanked by areas roofed in about the level of Museum ceilings.
- (4) Small sculpture or statuary is in a mezzanine surrounding the large Hall of Statuary. It has the defect of being far from the light—a defect common to most of the designs.
- (5) The division of picture galleries (from one progressive circulation) into eight or nine such is provided by corridors flanking the Statuary Hall placed above the mezzanine statuary galleries.
- (6) The administrative offices are on the first floor in the central portion of the garden front.
- (7) Second floor picture galleries are placed over the offices.
- (8) No porte cochère.
- (9) Probably the basement would cover only half the area owing to considerations of cost, the level being 4 ft. below the average of the surrounding streets.
- (10) The goods entrance is in Parker-street.
- (11) The Lecture Theatre is probably at or near the Portland—Parker-street corner.
- (12) The Print Room is on the ground floor.

STOTT & SONS.

(A. Henthorn Stott).

SIR,—For many years I have studied in silence the criticisms of unsuccessful competitors which your journal has had the courtesy to publish. I cannot remember a competition in which one or more of the unsuccessful have not rushed into print with some point which appeared to be most important to themselves, but about which the assessor or assessors possessed an entirely different view-point. I do not object to Mr. Glover writing to say that he approves of your criticism, on which, however, there are many other views than those of your critic; but I think (perhaps incorrectly) that it is hardly the right thing to use your columns for the formation of a society for dissatisfied competitors, more especially as he is a member of the Royal Institute of British Architects, to whom, in my opinion, he should have appealed before dragging this matter into both the technical and lay press. The whole point seems to me to become one of professional etiquette, and does not centre on the reading or mis-reading of an isolated condition quoted without reference to the context, and used in much the same way that a barrister uses an abstruse or minor point when he knows that he has a very weak case. Doubtless some of the unsuccessful competitors are aware that

the game of cricket has been played in England for many generations, and a study of the rules of that noble game might induce them to abide by the umpires' decisions. Even if they are unacquainted with cricket, they may have played football, in which game the teams play to the whistle of the referee, even if he occasionally misses a minor point in the game.

I suggest with all humility that our profession would be more likely to gain the confidence and respect of all public bodies and the general public if all its members really played the game. I would like to add that this is the only letter I have ever written to the press; that I was not a competitor for the Manchester Art Gallery;

and am not intimately acquainted with any of the assessors.

Before writing this letter I have carefully read the conditions and answers to questions of the competition, the assessors' report, the correspondence in your columns, and your critic's review of the designs in your issue of June 26, with which latter I entirely disagree.

WILLIAM T. BENSLYN.

SIR,—Since the war, there seems to be a tendency among architects unplaced in public competitions, to make unsportsmanlike charges as to the fairness of the assessors' awards.

In one case, the competitors making these complaints were compelled by the Institute to make a public apology and to withdraw their unfounded charges.

I venture to think that the same thing would happen if the protests made by a small minority of the Manchester Gallery competitors were similarly investigated.

Meanwhile, as much harm may be caused, both to the successful competitor and to architects generally, by the clamour of these members of the profession if no one troubles to take up the cudgels on the other side, I shall be obliged if you will publish the enclosed copy of a letter written to the Corporation by

ANOTHER COMPETITOR.

July 2, 1925.

[GENTLEMEN,—A disgruntled competitor signing himself "Critic," has chosen to air his imaginary grievances in the technical press. He has so little title to the pseudonym, and is so filled with spleen, as to be unable to recognise the outstanding greatness of the winning design.

In the ordinary course anonymous letters of this description do not call for a reply, but this letter deliberately suggests that:—

- (1) The award is an illegal one;
- (2) The Corporation ought to reconsider the competition;
- (3) The award is so unfair that the Royal Institute ought to be consulted about it.

It therefore appears to be the duty of someone thoroughly acquainted with the competition conditions, replies to questions, and the designs submitted, to express abhorrence of such a letter in the strongest possible terms. As one of the unsuccessful competitors who has carefully examined the whole of the designs I have all these qualifications.

Let such a letter should cause the Corporation to hesitate in seizing the opportunity of erecting a building which gives every promise of being the finest Art Gallery and Museum in the provinces, I write respectfully to congratulate the Corporation on their good fortune in obtaining so splendid a result from this important competition, and trust other competitors will do so.

As in all really great architecture, the plan, at first sight, appears so simple and direct a

solution of the problem that one might wonder that no other competitor thought of it, did a detailed examination reveal the masterly way in which the multifarious requirements have been met, everything being planned to come to its right place.

Although strictly complying with the spirit of the complicated directions of the assessors Mr. Webber has been inspired to produce a greater solution of the problem than even the assessors themselves could have thought of possible, while the manner in which the special requirements of the Manchester climate is provided for shows unusual planning skill.

While the design so aptly meets every practical requirement, its purely architectural beauty bid fair to rival St. George's Hall, Liverpool both for its dignified and monumental exterior and for its nobly designed interior, while the Hall of Memory with its fine enclosing area and its magnificent approach through the great Sculpture Hall, will be judged to be one of the worthiest memorials erected by any empire within the Empire to her fallen sons.

If any enquiry in connection with the competition is needed, I would suggest that "Critic" be asked to disclose his identity and the Institute should then enquire from him why its Council should not publicly reprimand him for unsportsmanlike and unprofessional conduct in raising doubts in the lay mind as to the propriety of carrying out a great design. The offence is aggravated by the fact that the design is the work of a young architect who one had never heard of until he sprang into prominence so brilliantly in this competition.

One can only hope that his work will be translated into splendid architecture without a dreary wait to dim his inspiration.

The Lord Mayor and Corporation, City of Manchester.

[The above letter is signed by the writer, but as his covering letter is anonymous we have deleted his name.—Ed.]

London Master Builders' Association Wage-Default Circulars.

SIR,—With reference to certain wage-default circulars and other communications referring to Bovis, Ltd., recently circulated by the London Master Builders' Association, should esteem it a great favour if you would permit us, as solicitors for Bovis, Ltd., to inform the recipients of such communications through the medium of your paper, that a writ for libel has been issued by us on behalf of Bovis, Ltd., against certain officers and members of the Council of the London Master Builders' Association in respect of the communications above referred to.

BARTLETT & GLUCKSTEIN.

SIR,—We think it may be of interest to your readers to know that we have to-day issued a writ on behalf of our clients, Messrs. Higginson Hill, Ltd., against certain officials and members of the London Master Builders' Association. This writ institutes an action whereby our clients seek to recover damages from the defendants for libel in respect of matter contained in certain circulars, letters and the like, published by or on behalf of the London Master Builders' Association in connection with the question of the payment of standard rate of wages.

BULL & BULL.

[We have called the attention of the London Master Builders' Association to these letters and are informed that the Association intend to defend these actions and has already given instructions to this end.—Ed.]

Mr. T. Raffles Davison's Work.

SIR,—I was very glad to read under the heading of your Notes, June 5, the proposal to publish a selection of Mr. T. Raffles Davison's sketches and drawings, and I should like to see my name amongst the subscribers. As I said in my speech at the annual general meeting of the R.I.B.A. on May 4 last, Mr. Raffles Davison has in drawing perspectives of our building strengthened our weaknesses and given dignity and proportion to the designs of busy architects who had the privilege of his assistance.

WM. WOODWARD.

(Correspondence continued on p. 99.)



THE FALSTAFF ROOM.



THE MAIN STAIRCASE.

The Old Assembly Rooms, Newcastle-on-Tyne.
J. NEWTON, Architect (1776). Restored by MESSRS. CACKETT & BURNS DICK, F.F.R.I.B.A.

PHILIP WEBB AND HIS WORK—VII

By W. R. LETHABY.

THEORY OF ARCHITECTURE

'Beauty lives with kindness.'

—Two Gentlemen of Verona.

Gradation.—At the same time, modern civilised work must be done with careful balancing of considerations. A letter written to Mr. F. A. White (in the 'eighties), following a conversation on the statues of London and the Wellington monument at Hyde Park Corner, puts on record, in regard to a particular case, some of his constant thoughts—the need for *Gradation of Parts*, contrast, and of "shading" different materials together.

"As the statue is necessarily small (comparatively) the thing to be done is to give it scale by contrast. There should be some foil to the size of the main object. Scale might be got in some such way as this: First, to give parts to the pedestal itself and then to give a broad enough base on the ground, and on it to set up the foils. You will probably have noticed that in the statues of horsemen, the pedestal when seen end-on looks very thin, unless made very wide and out of proportion to the horse. To get over this there should be lateral pilasters, as at A A [wide projections in the centre of the sides]. As the bronze of the statue would be darker than the stone, some bronze should be put into the pedestal. The cornice-frieze to the pedestal of Verrocchio's Colleoni at Venice has this frieze of bronze, and I noted the effect. I would make the Cornice C and the panels D [occupying the lateral breaks on the pedestal] of bronze; I would put four shafts at the corners of the plateau [on which the pedestal stands], making the shafts of granite and the capitals and finials of bronze. The finials themselves might represent England, Scotland, Ireland and Wales—symbolising the ashes of the different peoples on which the fame of the great man was built—and to them the national shields might be hung. The arms of Wales are to be found, and the Prince of Wales might like to recognise that valiant people by this sign."

As for *Decoration*, he agreed with Morris: 'Why should we trouble to have a pattern of any sort? I for one am dead against it unless the pattern is really beautiful; it is worthless if it is not. . . . Everyone of them must have a distinct idea; some beautiful piece of nature must have pressed itself on our notice so forcibly that we are quite full of it, and can, by submitting ourselves to the rules of art, express our pleasure to others and give them some of the keen delight that we ourselves have felt.' This principle, of course, applied to the higher forms of decoration, and other than this some simple modifications of surface and colour might be allowed as pleasant. Webb, indeed, got much out of simple modes of workmanship, masonry forms rather than carving, frets, and the like. He would insist that flat ornament should usually be "a pattern which turns the white ground into a mosaic-like pattern effective at a distance"—the spaces as well as the forms must come right. His higher decoration was founded directly on fresh study of nature—flowers, foliage, and living creatures.

For himself, Webb could not take refuge in bareness and baldness. He felt that to do this might be calling attention and might seem affected posing and advertising. A building was not to be noticeable by reason of its bareness nor by its elaboration; it was to be just good. "I never begin to be satisfied until my work looks commonplace." Still, sound building is the first necessity, and restraint is entirely right if it does not pass over into affectation. "Evasionist art" and a "Negationist style" were not final aims, although they might be necessary steps. He would tease me on evasion and negation, and then

add: "After all, it's quite right." In no sense, however, did he mean that any named "style" should be imitated. I have heard him speak of his early time as "my Gothic days," and once, on his having to add a wing to a modern house, he remarked: "I'll take the Renaissance out of it." His mind was set on forming a natural mode of modern building. "Common sense is our only ware." Webb in building, like Browning in poetry and Madox Brown in painting, was first of all a realist; but then he sought for the romantic and the poetic in the real.

Invention.—Where work is sound, competent and natural there will necessarily be a leaven of Invention keeping it sweet. An architect is properly an experimenter, developer, adapter—an inventor in building, not a supplier by rote of tired and stale grandeurs in the styles. "Oh dear me," says Webb, in a letter given further on, "is there any hope for invention?" And in another place I find the word "design" crossed out and *invention* substituted.

Commonplace and Common Sense.—Mr. Jack writes: 'He frequently impressed upon me the value of the Commonplace, and I think this was a keynote of his own development. The first "Clouds" design was very much more individualistic than the second. I remember one design he did for a house that was never built, wonderfully elaborate and interesting. As the days went on I found he had been using his india-rubber very freely, and he made the remark to me: "Whatever you do, cut out, cut out!" When designing patterns or animal subjects he had not the passionate directness of Morris, but he had what reached as high—a sure visual notion of the thing he wanted and untiring patience in finding his way to it. With unrelenting self-criticism he knew well when he had not got it—and so, no matter how plausible the result might be, his india-rubber settled the dispute, and at it again he went—Patience without this quality is a curse to designers. . . . He said that the ability to make picturesque sketches was a fatal gift to an architect. We could sometimes not get him to design the mouldings and things for which he had prepared drawings. We hit on the plan of putting them in ourselves and asking him if they would do—of course they would not do, and he himself immediately set to work. We sometimes ranged bits of rubber along the top! He was particularly fond of designing carpenter's work—so was I—we often had discussions and often got very hot over it—as he said, "like a couple of Clyde gulls." I used to make for this purpose elaborate little sketches of joints and framings, and Webb sometimes giped me for making another "Academy drawing."'

In his retirement he went on thinking of and trying to hope for improvement in the art of building. In a letter to me, dated 13th April, 1911, he says: "I have thought considerably of the prospect of finding a lift to the good in our business, and have had nothing for the sole of my mind to rest on—save Hope, with the roundest of O's. Truth-teller you are about the best work being done by a negative, anti-scrape." That is, we must begin again with zero and sense in doing beneficial work like that of the Society for the Protection of Ancient Buildings which is by far the best modern school of building we have.

To W. R. L., July 3, 1904: "I have no doubt whatever as to there being no prospect for coming architecture save in putting all the brains into simple but excellent building, fitting for the climate and other characteristic qualities of this garden-like country. Direct importation of other than such fittingness would—I truly believe—be but a further hindrance to any possible living architecture from the root up. I hold tenaciously that, at all times in England, when there was any art

worth considering, by its characteristic qualities it acclimatised its gains from other countries and held its own in all reasonable equality. For instance, I know of no scholarly example of the monumental renaissance to equal St. Paul's of Wren—which tells what I mean by insularising any imported motives. To my seeing there came a sea-change almost instantly on landing, to any fresh fashion adopted from elsewhere. I would not have had here the grandeur of French wonders at the expense of our own imaginative simplicity, holding, as I do, that the mixed races which we call English had imagination of a refined quality in all the arts when they *lived* at all. Even in our modern make-believers, Professor Cockerell's gallery building in Oxford expresses what I mean by imagination with graceful simplicity. . . . I say Yes as to a book on 'Modern Building Aims on Universal Principles: Walls, Arches, Vaults, etc.' . . . From what I could see in London, while there the other day, of works just done or in the doing, I was beaten down with its hopelessness in the way of invention."

It must have been mainly for discussion's sake, but it appears that I had raised the question whether our crafts might be improved by our bringing in small groups of workers from India, Persia and China to demonstrate what human workmanship was. He answered: "Greek workmen with Greek fire in their heads set a light to such stuff as burned wonderfully well from the sixth century to the fifteenth century in the Western world. Commerce in Europe has set fire to its stinking bituminous train, which is certainly burning up the arts of the East. . . . My most hopeful feeling would be that at all events no harm could be done by introducing some workmen from the East. . . . Would it not be possible to get two or three young art students to go out, say, for a year, and mix with the native at their crafts in India, Persia and China, meanwhile finding out the promising fellows to import. . . . Certainly from the East. In a curious way Kipling's rubbing shoulders with the East did give a kind of lift to the English in the literary line."

To W. R. L., April 8, 1904: "One may fall back on the half paradox that all styles, at one time in their life, had the Gothic strain in them, and with a 'sort' of truth; but W. M. did not care for paradox, and I don't like it so much as Bernard Shaw! Still, both of us can agree as to the effectiveness, *without* the 'overlay,' of the strong-hearted Bentley's interior of the Westminster church; but can we in these days call for it to be white-washed and left as it is?—which I should rejoice in seeing. . . . The suggestion of going once more to the "East" for inspiration seems to me a perilous thing to set down in a book, *now*. Even Blunt's Arab horses here, which I fondle with pleasure, are fittingly used as a change of strain, but the breed in its purity is only fit for the desert. If we could adopt an eastern strain, as Handel did an English strain of music in his German form, well and good; but he was a genius and thiefed unblushingly. The Flemings imported here began to transform their work to a fitting mixture with English ways, as the Dutch did with their admirable pottery in giving it a Chinese strain. Of course, there was W. M., who used any 'strain' which came through his wide knowledge of many ways and manners; but he, too, was a genius. He nearly burst himself on seeing his work taken to as the right thing for crazy folk."

Webb was a careful student of current contemporary work in the streets (not in illustrations!), watching buildings go up from the ground; being especially interested in the ground itself and the structural problem. The modern building with which he had most sympathy was the Roman Cathedral at Westminster, in which he saw general ideas and constructive power behind the overlay. He went over the building in progress, and Bentley must have known of his sympathy, for some time before he broke down he called

CORRESPONDENCE.

(Continued from page 96.)

Proposed Tudor Street, Kingston-upon-Hull.

SIR,—I have read with much interest the outline scheme of the Lord Mayor for the new street from the station to Beverley-road, printed in the *Hull Evening News*, of Monday, June 22, 1925. I have examined the reproduction of an illustration by C. W. English of the scheme in the *Eastern Morning News* for June 24, 1925.

With various slight mis-statements in the report and the obvious disagreement between the verbal report (June 22) and the illustration (June 24), I do not propose to deal. The scheme is, in my opinion, a desirable one in that it seeks to obtain coherence and uniformity in a new street, and the Lord Mayor should be congratulated upon his foresight. Unfortunately, it is in these very necessary elements of architectural excellence (coherence and uniformity), vitiated by that portion of clause (1), reading, "And the architecture shall be of Tudor style."

I desire to protest against this section of the report for the following reasons:—

(1) The Lord Mayor invites discussion.

(2) The Lord Mayor is not wedded to any particular style. (Other people may be.)

(3) Historical. "Tudor architecture is the style prevalent during the reigns of Henry VII, Henry VIII, Edward VI, and Mary, in which the influence of the Renaissance movement is noticeable, for it is the work of those trained in Gothic art, but probably under the direction of a designer familiar with the new features of the Renaissance, and in some examples the designs for details and mouldings would seem to have been made by a foreign artist." (Prof. Sir Banister Fletcher's "A History of Architecture," p. 356.)

Parker, in his "Introduction to Gothic Architecture," says, "Indeed, at that time, we find Italian features introduced, though sparingly, among the true Gothic."

I will not burden your columns with further neutral evidence, to suggest that the Tudor style represents a period of confused thought. The Tudor manifests the interference with artists by ignorant patrons of anything but art. It represents a germ in the body of healthy art; it is foreign.

The way they wrote in those days was like this: "Edward VI. tercio. Johis Henrison maioris . . . florasmoe as m walter jopson nowe alderman of this towne & late shereff of the same dydde nott in the tyme of his sherwike accordyng to the Kynge maiesties charter & dyvers," &c.

This specimen is taken from "Bench Book," No. 3, at our own Guildhall, Kingston-upon-Hull. Their architecture resembled their writing.

(4) Local tradition. Hull is a brick town, now a city, and has been throughout its history.

It is on a bed of brick clay. If in any doubt, go and inspect the Church of Holy Trinity, the Old Grammar School. Examine the old maps or, more reliably, peruse the "Bench Books" or the accounts of the Brickfields since 1303, which are yet available. Further, the old Guildhall in Trinity Churchyard was entirely (save for the stone windows) of brick. The contract can be read by persons sufficiently interested.

Despite the introduction of stone work recently, the tradition continued as long as tradition lasted. Most of the Trinity House Estate, in Whitefriargate, is evidence of this. I am aware that the "White Hart" and the demolished "King's Head," with some slight further remains in High-street, may be quoted as instances of timber construction.

(5) Practical. The period is full of incongruities. If reproduced with any fidelity (and if not fidelity, why pretend?), it will be found to be inconvenient, dangerous and costly. Moreover, because of the state of mental and civil confusion in which it was born a bastard, nothing about it is rational. Everything was in a state of flux, from the windows, the doors, up to the chimney stacks.

(6) Theoretical. That if the initiators of the suggestion of a Tudor revival will take the trouble to read any of the books on architecture, so liberally provided by the Hull Corporation at the Central Free Library, Albion-street, they are welcome to all the quotations they can find in favour of their proposal.

The writing of Mr. Trystan Edwards ("Good and Bad Manners in Architecture," "Things Which are Seen"), Mr. Manning Robertson ("Everyday Architecture"), Mr. Clough Williams-Ellis ("The Pleasures of Architecture"), Mr. Charles Marriott ("Modern Architecture"), Professor C. H. Reilly ("Some Architectural Problems of To-day," "Some Manchester Streets and Their Buildings"), Mr. Geoffrey Scott ("The Architecture of Humanism"), Professor Lethaby ("Form in Civilisation"), Mr. Frank Rutter ("The Poetry of Architecture"), are books by gentlemen who have devoted their time and pens to the subject during the last few years. They one and all protest against the absurd fallacy—that art is imitation—contained in the proposal. If the professional advisers of the Lord Mayor can produce a single authority who has written in the last twenty years in support of their Tudor revival, I should like to have his address, and I promise them I will read his book.

(7) Psychological. Its realisation is impossible. The mind of man is differently oriented in these days. Never in all history has a suggestion of the character of the Lord Mayor (the revival of a long obsolete manner) been executed—from Pericles to the Prince Regent.

(8) Personal. The function of an architect is as a practical artist; I consider it is an injury to attempt to force me to work in a manner so long dead.

Hull.

DUDLEY HARBON.



JOLDWYNDS, SURREY. By PHILIP WEBB.

on Webb to know if he might recommend him to be his successor "if anything happened," but Webb would not consent.

To E. C. L., January 11, 1902: ". . . An able man's work on a great scale, which work has evidently sapped his strength, and no wonder, more's the pity. My own particular admiration of Bentley's great work rests mainly on the splendid rashness of design in the inter-buttressing of the domes [as seen] looking across the nave; this can hardly be spoiled by the future decorative work; as the coupled arcading which steadies these emphatic piers will always give remarkable quality to the broad area of the nave."

To W. R. L., August 28, 1905: ". . . When coming through London, on the way from Winchester, I looked in for an hour on Bentley's church. It touched me sharply, he being gone, that I could not tell him what came over me while looking at the outcome of this last living force of his life's efforts. Here, to speak as a hod-man in that way, Bentley's doubling of the spaces between his width of domed-bays was a triumph. As they stand—these long shanks under the main semi-circle—they are the making of the inside effect of the church. Even if the finishing work to be done on the surface be too inferior, it can hardly kill the effect of the great skeleton."

By comparing what I have observed of Webb's work with what I suppose was the drift of his teaching, his more technical aims in architecture, beyond the general bases already discussed, might be suggested, if not fully expressed, under such headings as: Order, Idea, Scheme, Structure; Effectiveness, Emphasis, and Contrast of Big and Small, 'Foils'; Change of Line, Diagonals and Curves; Some Variation of Colour; Purpose and Character in Mouldings—in which, as Mr. Jack says, he thought more of the stone than the section; Expression of Energy; Intellect and Intelligibility; Pleasure to the Worker.

It may, of course, be recognised that the modern city practice of an architect, with its complexities, necessarily tends towards the lawyer's model of dealing with documents and legal precedents, but some way of maintaining contact with the basis of building must be found. Whenever, if ever, the art of building becomes real again it will be refounded on delight in structure, knowledge of materials, practice of craftsmanship, and the impulse towards experiment and invention. There are two ways in building—sound work based on craft power or "style design"—the Webb way; or the Win-competition-quick way. If any young student should feel confused at the war of voices, I would say—Learn what is taught in the schools while there are schools and you have to go to them; but, as much as you can outside, learn about building and craftsmanship. The building architect must pound his designing first of all on a practical knowledge of a craft; to this he should add mechanics and planning and sanitation, and he rest; but he must begin with some contact with solid materials and actual work. He should direct his mind to structure rather than to style.

Secondly, he must design work suitable for our modern heartless ways of "execution" where he cannot call in special craftsmen and give them their liberty. Thirdly, so far as possible, he must aim at putting all decorative work into the hands of free artists: 'ornament' which is not the work of free masters what Webb called "slavery."

Mesopotamian Travelling Studentship.

To assist the archaeological work which has been undertaken by Mr. Leonard Woolley at Ur in Mesopotamia, the R.I.B.A. has opened a fund to provide the sum of £400 for an R.I.B.A. Travelling Studentship, to enable a young architect to accompany Mr. Woolley on his excavations. The sum of 40 guineas has already been received by the Institute from Mr. F. Halstead Best, and the secretary will be glad to receive any further contributions.

LEADING CONTENTS. PAGE

THE SPIRIT OF CO-OPERATION	91
NOTES	92
GENERAL NEWS	94
COMPETITION NEWS	94
CORRESPONDENCE	96
PHILIP WEBB AND HIS WORK—VII	98
THE ROYAL INSTITUTE OF BRITISH ARCHITECTS' CONFERENCE AT NEWCASTLE-UPON-TYNE AND DURHAM	107
THE BUILDING TRADE	114
ARCHITECTS' AND BUILDERS' INQUIRY BUREAU	115
NEW BUILDINGS IN LONDON	116
BOOK REVIEWS	117
CONTRACTS, COMPETITIONS, &C.	118
PROPOSED NEW BUILDINGS AND OTHER WORKS	121
PATENTS	124
NEW BUILDINGS IN SCOTLAND	124
TENDERS	124

ILLUSTRATIONS

The British Medical Association Building.

We illustrate this week the new headquarters of the British Medical Association in Tavistock-square, London, recently acquired by the Association as an unfinished building, intended for the Theosophical Society, and designed by Sir Edwin Lutyens, R.A. Built of red brick and Portland stone, the building in its present form surrounds three sides of a quadrangle, or "Court of Honour," measuring 100 ft. by 90 ft., with a 54 ft. circular grass plot, with a stone kerbing, in the middle. This court is separated from the Tavistock-square approach by a wrought-iron screen, with three gates. Over the central gate is the badge of the Association, the twined serpents of Æsculapius, gilded, with below it shields bearing the dedication to medical officers who fell in the war. At present the ends of the two wings of the building are temporarily finished with hanging tiles, but they will ultimately be extended to enclose an outer court, with, probably, an arched entrance from Tavistock-square.

The three elevations fronting the quadrangle have stone basement storeys, each pierced with five round-arched openings, the superstructure being brick, the windows on the first floor having alternately round and triangular pediments. The central portion is broken by a pediment, supported by three-quarter Corinthian columns in four pairs, the line of its architrave being continued round the wings by a shallow stone cornice, binding the composition together, with an attic storey above. From the quad-

rangle there is a vaulted passage, opening right and left into the members' lounge and the library of the Association, to Burton-street.

The principal features of the interior are the Great Hall, 120 ft. by 60 ft., occupying the whole upper part of the central portion, and the Council Room and Hastings Hall—named after the founder of the Association—in the south and north wings respectively. The two ends of the Great Hall are barrel vaulted, over the dais or platform and listening gallery, but the middle portion of five bays has an open timber roof, coloured a dark, atmospheric, blue-green, so that the eye continues the vaulting treatment by resting upon the gilt-steel arches which spring from Corinthian columns of lapis-lazuli blue. On each side of the hall there is a passage gallery with an open balustrade. Under the galleries are hung the banners of the provincial branches of the Association, and in the "nave" are the flags of the Colonies. At the top of the white panelling surrounding the hall there is a line of 69 circular black panels, which will in time bear portraits of eminent members. By means of a crane arrangement the floor of the hall can be quickly cleared of chairs by lifting them into the galleries, thus leaving the space available for dancing.

The Council Room and Hastings Hall, in the wings, are semi-basement rooms; that is to say, half of them lies below the sills of the round-arched windows opening into the quadrangle. The Council Room is lined with wooden panelling adapted from the old building in Agar-street, Strand, as is the woodwork in the library, but the walls of the Hastings Hall—as are most of the walls of the building—are plaster panelled finished in stippled paint of a vellum tint. In the Committee Room, which is above the Council Room, and is entered from the Great Hall, the finish is green, with incised borders to the panels with a white inlay. Outside this wing and overlooked by the Committee Room, there is a garden with a semi-circular terrace and an oval pool, on the site of a house formerly occupied by Charles Dickens, the corresponding space outside the north wing being taken up by garages.

The general contractors were Messrs. Ford & Walton, Ltd., and Messrs. Hampton & Sons. The following were sub-contractors:—Stone work, Nine Elms Stone Co.; electrical, Higgins & Griffiths, Ltd.; hot water and gas, Richard Crittall & Co., Ltd.; memorial gates, Birmingham Guild; sanitary fittings, John Bolding & Sons, Ltd.; slating, Roberts, Adlard & Co.; rubber floors, Leyland and Birmingham Co., Ltd.; parquet floors, Stevens & Adams, Ltd.; copper glazing, G. Barrett; lifts, Waygood-Otis, Ltd.; steelwork, Redpath, Brown & Co., Ltd.; general ironwork, Thomas Elsley, Ltd.; bronze

metal, Morris & Co.; flag staffs, Dyne & Evans; door springs, Jas. Adams & Son, Ltd.; locks, &c., J. Kaye & Sons, Ltd.; bronze handrails, Carter & Aynsley, Ltd.; tar macadam, Constable Hart & Co., Ltd.; collapsible gates, Bostwick Gate and Shutter Co., Ltd.; strong rooms, Chatwood Safe Co., Ltd. Mr. G. E. Staples was general foreman, and Mr. P. J. Patmore clerk of works.

The Henry Jarvis Studentship.

We illustrate this week the successful design for the Henry Jarvis Studentship, 1925, by Mr. C. A. Minoprio, a fifth-year student of Liverpool University. The Rome Scholarship design, by Mr. G. A. Butling, was given last week.

Recent Commercial Architecture in Newcastle.

We publish in connection with our report of last week's Conference of British Architects, an example of recent commercial architecture in Newcastle which was unavoidably held over from our last issue. Messrs. Marshall & Tweedy, F.F.R.I.B.A., are the architects.

Newcastle Development Scheme.

We publish this week the plan of a series of street improvements for Newcastle-upon-Tyne, suggested by Mr. R. Burns Dick, F.R.I.B.A. These improvements relate to the lay-out of the centre of the city and are considered necessary to meet existing and future traffic problems. The plan embodies suggestions by Mr. W. T. Jones, F.S.A., Past President of the Northern Architectural Assoc., Major W. J. Steele, and others, and has been submitted to the members of the Town Improvement Committee as a possible basis for the preparation of a definite and considered plan to which all future development should conform. The plan is of special interest at this moment, in view of the fact that Newcastle City Council on Tuesday last approved the new street marked No. 3 (running from City-road to Barras Bridge).

This road (it is stated in Mr. Burns Dick's report) is considered essential to the efficiency of the Bridge-square. It would run north parallel to Pilgrim-street, would still further relieve Pilgrim-street from part of the traffic from the Quay and City-road, and, above all, from the through traffic that will become a feature on the great North and South-road. By fulfilling this very important function the chief adverse criticism that has been levelled at the adopted position of the bridge would become invalid. It would also obviate the immediate necessity for widening Pilgrim-street, a very costly undertaking. The road would fulfil another highly essential function, inasmuch as it would make possible the proper development of a large area which has long been crying out for treatment because of its natural position for city expansion. The road should be at least eighty feet wide, and should be conceived in the spirit that actuated the great master builder Grainger. It is laid out so as to skirt the west side of the Public Library, where it crosses New Bridge-street and also to the west of the site of the new concert hall and baths. Northumberland-road, emerging into Barras Bridge, so that the vista will be closed by the facade of the Museum. About half-way up that is, between Market-street and New Bridge-street—an increase of width is shown to provide for a centre for the handling of tram or bus traffic in substitution for that at the foot of Northumberland-street. The slight bends at the rising gradient would make possible a street rivaling Grey-street in impressiveness, but with incomparable advantages over Grainger's masterpiece at both its extremities.

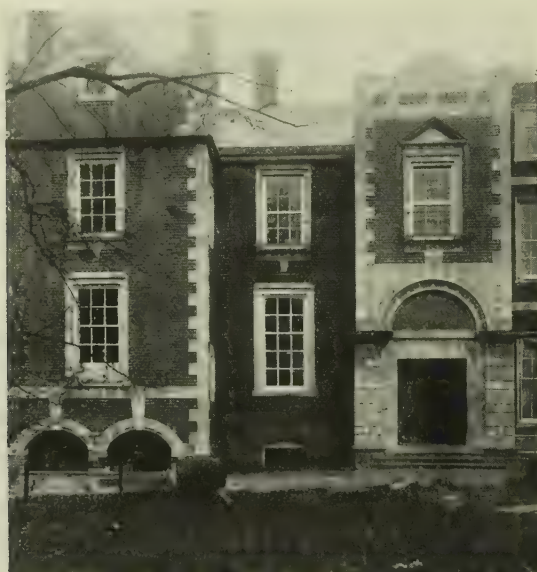
MEETINGS

MONDAY-SATURDAY, July 20-25.

Royal Sanitary Institute.—Annual Congress. At Edinburgh.

TUESDAY-WEDNESDAY, July 21-29.

Royal Archaeological Institute.—Summer Meeting. At Newcastle-upon-Tyne.



EXNING, NEAR NEWMARKET. By PHILIP WEBB.



LOUNGE AND TEA ROOM.



THE COMMITTEE ROOM.

The New Headquarters of the British Medical Association, Tavistock-square, London.

SIR EDWIN LUTYENS, R.A., Architect.



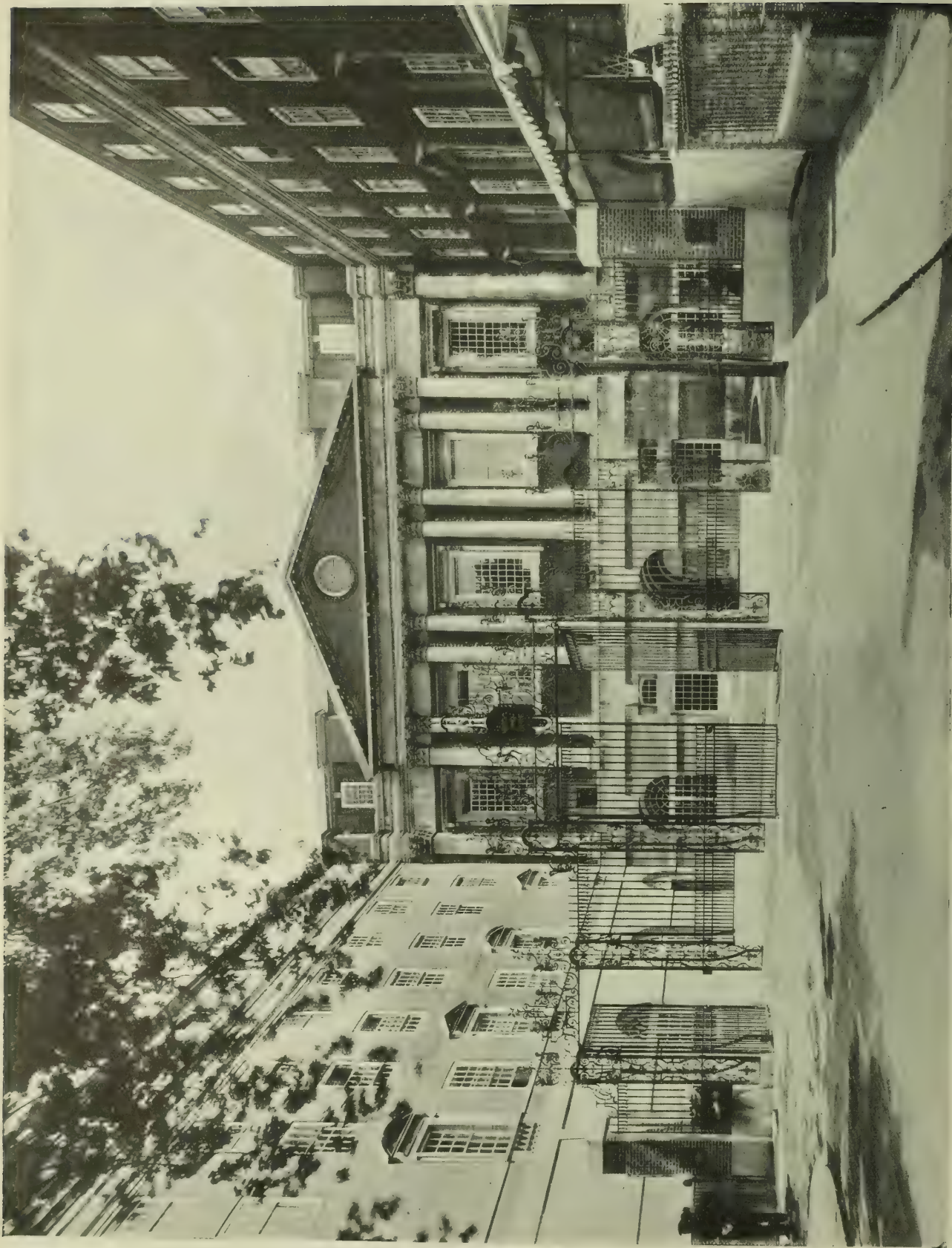
The New Headquarters of the British Medical Association, Tavistock-square, London.

SIR EDWIN LUTYENS, R.A., Architect.



The New Headquarters of the British Medical Association, Tavistock-square, London: The Conference Hall,

SIR EDWIN LUTYENS, R.A., Architect,



The New Headquarters of the British Medical Association, Tavistock-square, London : The Main Front.

SIR EDWIN LUTYENS, R.A., Architect.



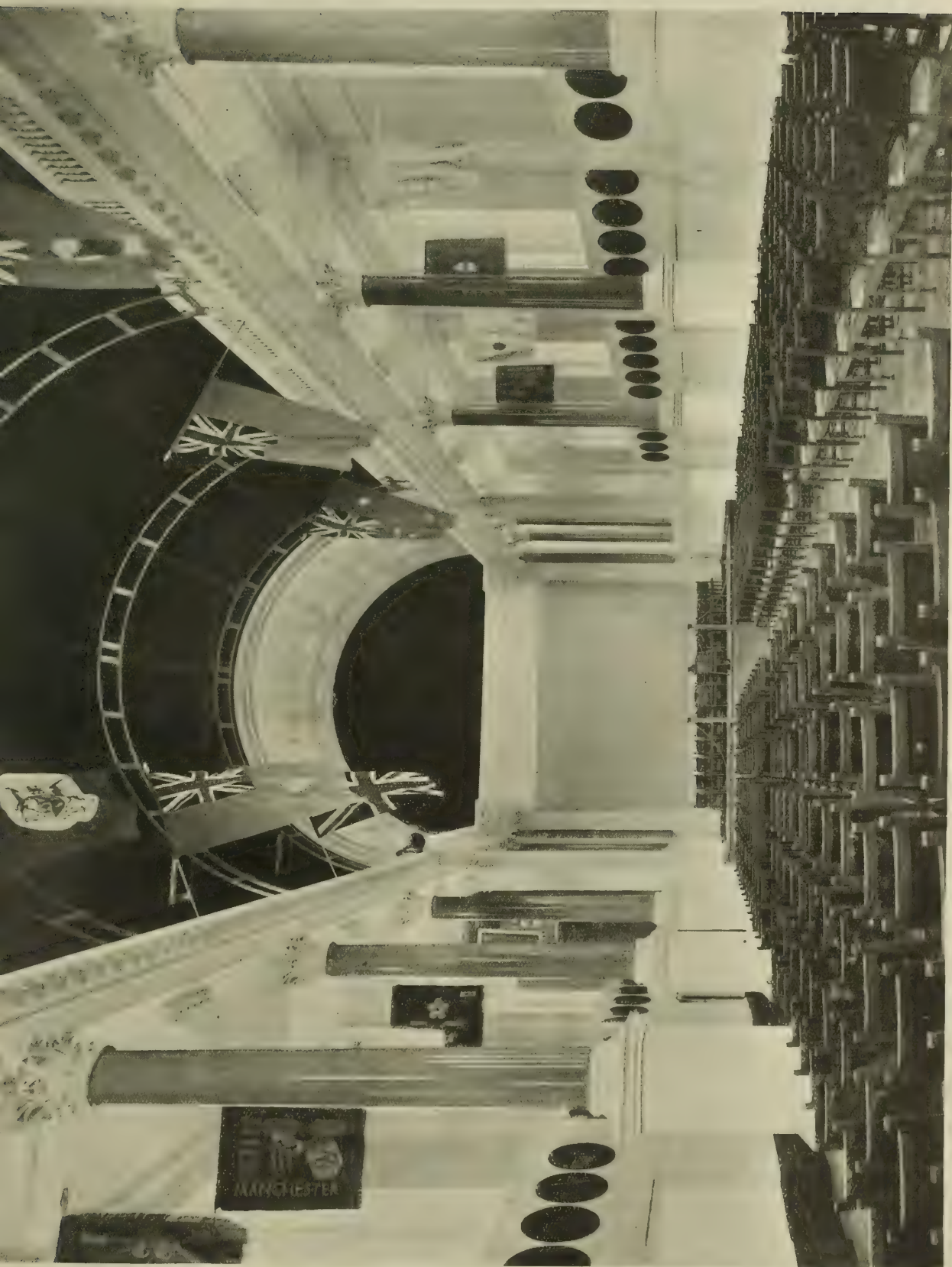
THE R.I.B.A. CONFERENCE AT NEWCASTLE-ON-TYNE

[NOTE.—Owing to the great width of the photograph it is divided, for the purpose of publication, into two parts.]



PHOTOGRAPH TAKEN IN DURHAM CASTLE COURTYARD.

parts, the right-hand side of the upper section "reading on" to the left-hand side of the lower.]



The New Headquarters of the British Medical Association, Tavistock-square, London : The Great Hall.

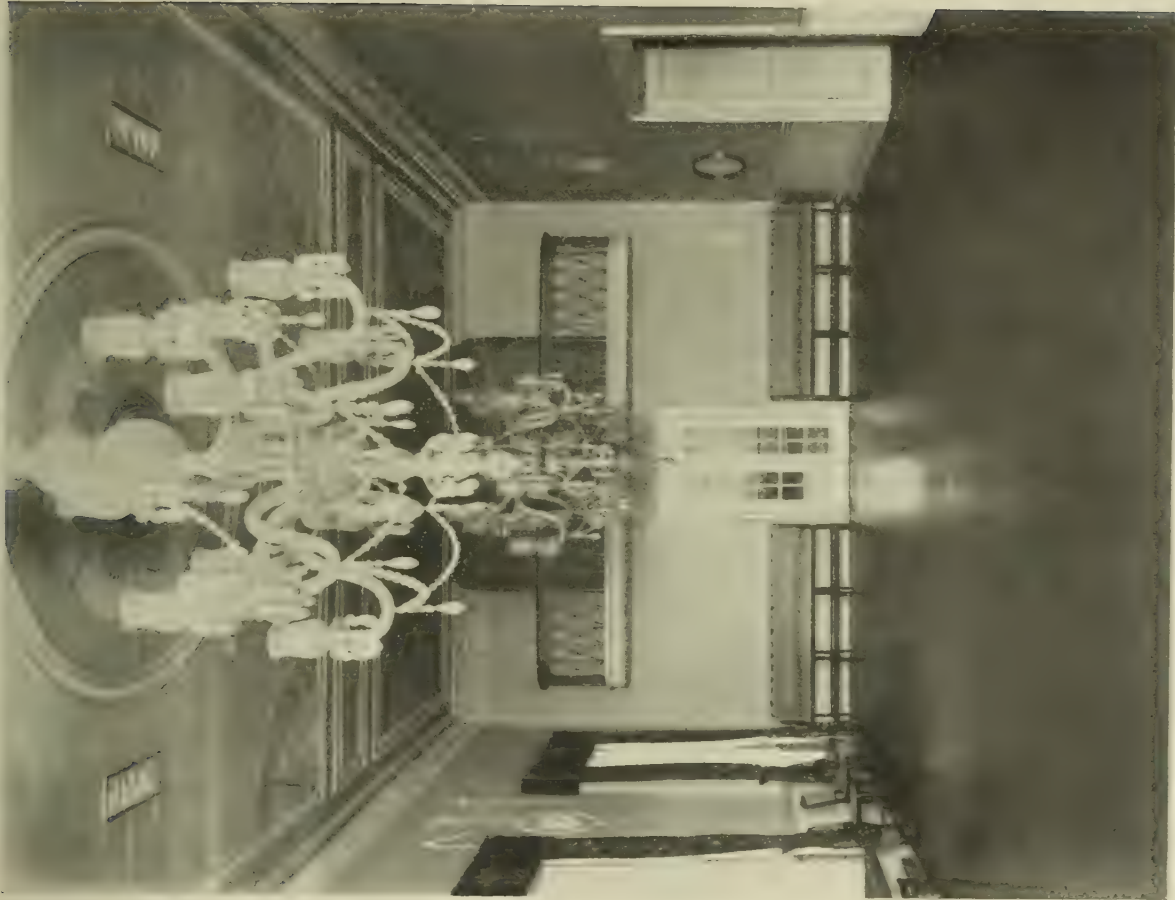
SIR EDWIN LUTYENS, R.A., Architect.



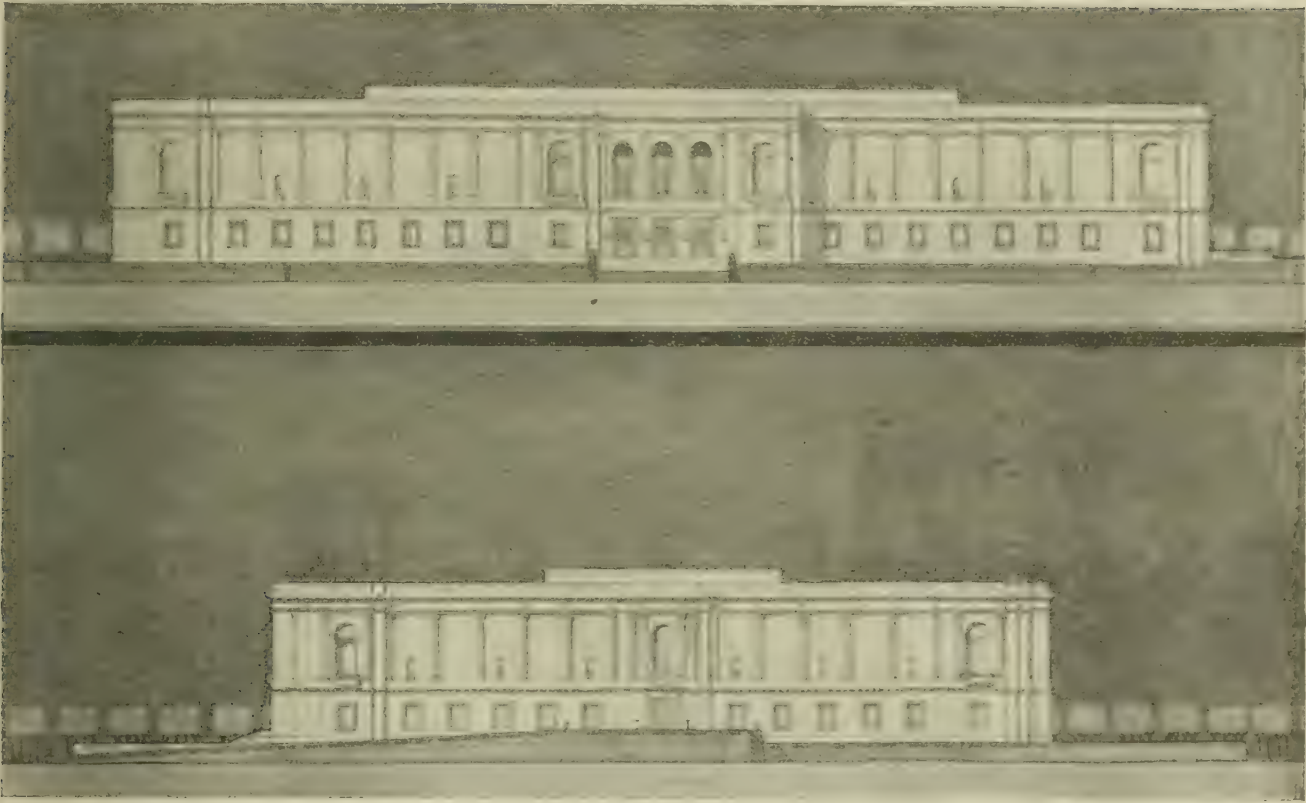
THE BALLROOM—UPPER FLOOR.

The Old Assembly Rooms, Newcastle-on-Tyne.

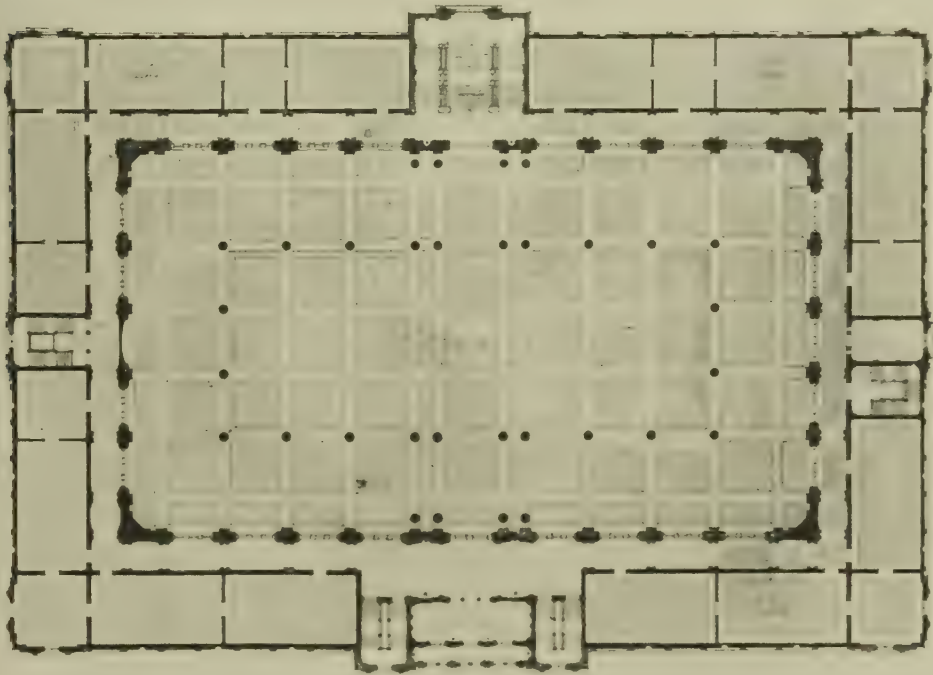
J. NEWTON, Architect (1776). Restored by Messrs. CACKETT & BURNS DICK, F.F.R.I.B.A.



THE LESSEE BALLROOM.



FRONT AND SIDE ELEVATIONS.

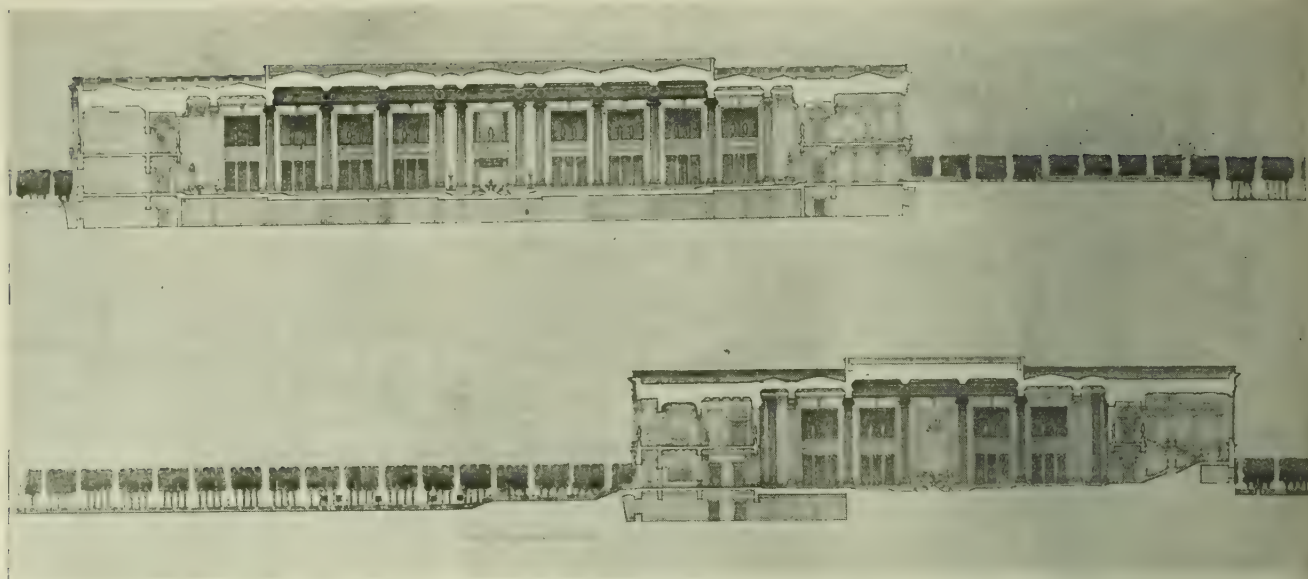


FIRST-FLOOR PLAN.

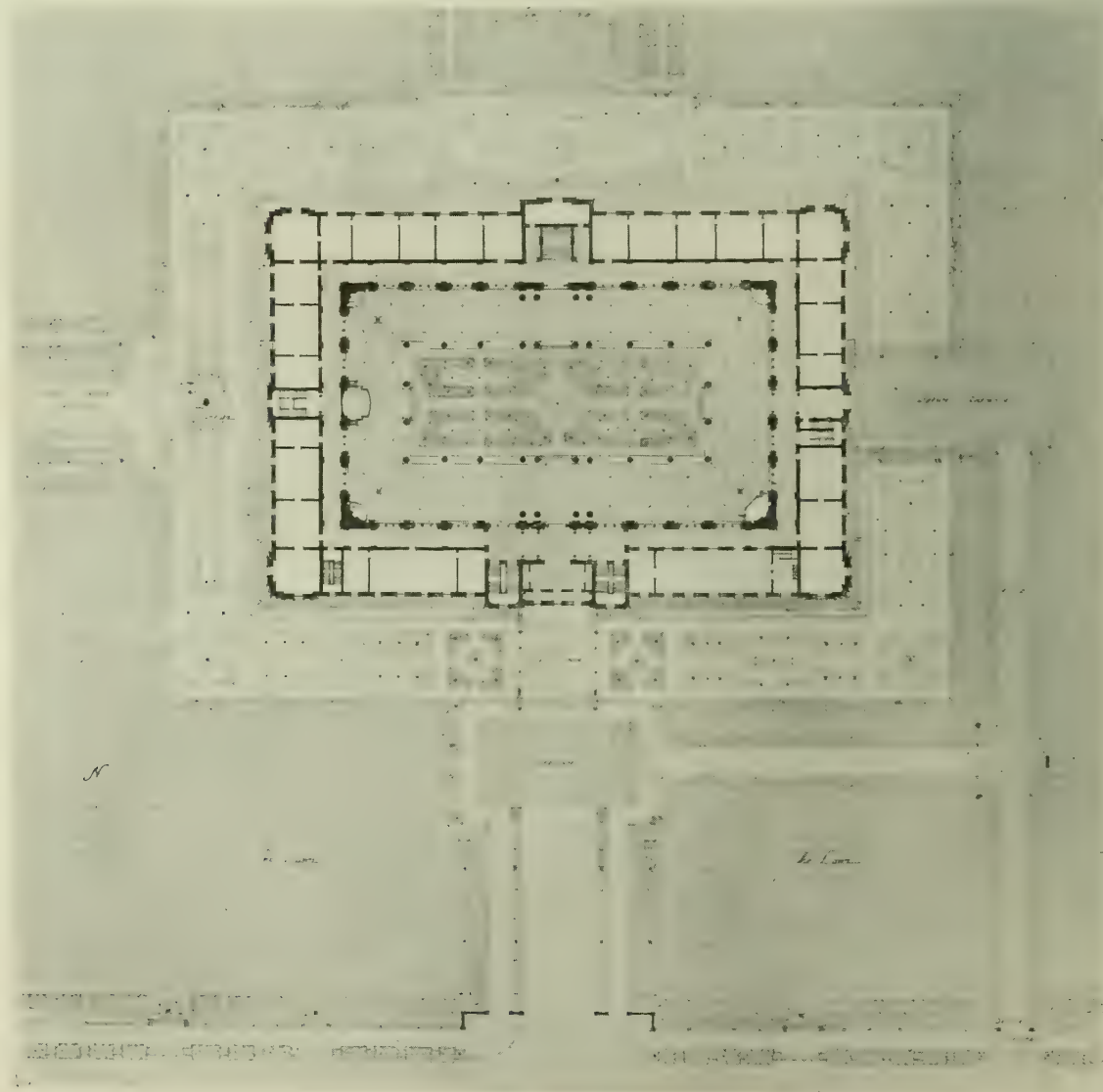
The Henry Jarvis Studentship, 1925. A British Pavilion of Arts. Winning Design.

By MR. C. A. MINOPRIO (Liverpool School of Architecture).

[The Winning Design for the Rome Scholarship was given in our last issue.]



LONGITUDINAL AND CROSS SECTIONS.



GENERAL LAY-OUT PLAN.

The Henry Jarvis Studentship, 1925. A British Pavilion of Arts. Winning Design.

By MR. C. A. MINOPRIO (Liverpool School of Architecture).

[The Winning Design for the Rome Scholarship was given in our last issue.]



New Business Premises, Newcastle-on-Tyne.
MESSRS. MARSHALL & TWEEDY, F.F.R.I.B.A., Architects.

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS' CONFERENCE AT NEWCASTLE-UPON-TYNE

THE unity of the architectural profession, which has at last been achieved by the amalgamation of the Society of Architects with the Royal Institute of British Architects, has given added importance to the deliberations of British architects, and a sense of the influence which the R.I.B.A. should now exercise upon public opinion no doubt had much to do with the arrangements which were made for the annual Conference which has just been so successfully concluded at Newcastle-upon-Tyne. Never, surely, was a conference better organised, and never were arrangements more efficiently carried out; and with ideal weather and a full programme for the instruction and pleasure of the members, the meeting will be long remembered by those who were fortunate enough to take part in it. This, we believe, would be the unanimous opinion of the members, and the many vocal expressions of thanks to Mr. R. Norman MacKellar, the energetic and courteous Conference Hon. Secretary, Mr. W. T. Jones, Colonel G. Reavell, O.B.E., President of the Northern A.A., Mr. T. R. Milburn, V.P.R.I.B.A., Mr. C. S. Errington, Mr. L. W. Taylor, and a very able committee, afforded some indication of the success of the meeting and the sense of obligation to this enthusiastic body of workers under which the Conference was placed. The fact that the Institute now represents over 10,000 British architects must have had something to do with the generous hospitality and kindness of the civic authorities and, perhaps, the beflagged headquarters at the Old Assembly Rooms in Westgate-road, with the inscribed banner indicating in no uncertain way that a Conference of the Royal Institute of British Architects was being held in the city. And we wonder whether any President of the Institute has ever before been received with such welcome by a provincial gathering as was accorded Mr. Guy Dawber at the smoking concert given by the Northern Architectural Association in the charming rooms at headquarters; and we doubt whether any President could have more worthily upheld the dignity of his position. It is true Mrs. Dawber was by his side—as she was at all the many functions of the Conference—but unusual courage is needed to face the loud hurrahs of a crowded and upstanding gathering who set the seal upon their good will with an enthusiasm which was to be the note all through the Conference. But architects are accustomed by their calling to face all emergencies, as we saw at the banquet on Friday, when Mr. Harvey W. Corbett, of New York, responded to a spontaneous call for an impromptu speech and showed his appreciation of the whole-hearted good will indicated by the incident. This good will was contagious, and for once in a way everyone appeared to be in agreement with everyone else. At all events, no one had any doubt about the wonderful sword dancers at the smoking concert, or the excellence of the local character songs, or the music of Mr. Fenwick's orchestra, and last, but not least, the very pleasing nature of the presentation to Mr. MacAlister, the Secretary of the R.I.B.A., and his appropriate little speech in thanks; and the only regret—and it was surely quite right that there should be this regret—was that some members of the Institute had not known of the presentation and were not associated with it from the beginning.

What may be called the business part of the Conference took place the following morning, when Sir Theodore Morison delivered an address on "Architects and the Public," which raised some important issues, the discussion on which did not end with the sitting. Many opportunities were afforded not only of discussing with friends of long standing and the new friends who are found on these occa-

sions the many questions concerning the profession, but of city problems, such as the proposed new street which it is hoped will be constructed in Newcastle, and it was not difficult to realise that there is a growing civic spirit in the city.

The proceedings of the Conference are reported in the following pages, from which it will be realised how varied was the programme and how many opportunities there were for enjoyment and the acquisition of knowledge. No one who took part in the trip down the river to Tynemouth Priory and Seaton Delaval Hall, to the beautiful grounds at Jesmond Dene, to Durham Cathedral and Castle, to Alnwick Castle, Craggside and Rothbury, and to the Roman Wall and Hexham Abbey, could have failed to find time passing all too quickly and to regret the end of the Conference when it came.

The inaugural proceedings of the 1925 Conference of the British Architects at Newcastle-upon-Tyne took the form of a smoking concert at the Old Assembly Rooms on Wednesday evening, July 8, as a preliminary to the more serious business which brought members from all parts of the country to the famous northern city. It also afforded the members the opportunity of renewing old acquaintanceships and of establishing new friendships.

Thanks to the efforts of the Northern Architectural Association, the welcome accorded the visitors was characteristically hearty, as one might expect in the northern province.

The President of the Northern Architectural Association, Colonel G. Reavell, O.B.E., was there to give the members of the Conference and their ladies the most cordial welcome. With him were the members of the Local Conference Committee, with Mr. R. Norman MacKellar as the ubiquitous and courteous honorary secretary. A concert was then given under the direction of Mr. Lee Dixon, arranged by the Conference Entertainments Committee.

The arrival of the President of the Royal Institute of British Architects, Mr. E. Guy Dawber, F.S.A., and his wife, was greeted with musical honours.

During a pause in the musical programme the opportunity was taken to present to Mr. Ian MacAlister, the Secretary of the Institute, a gold watch, accompanied by a substantial cheque, in recognition of the eminent services he has rendered both to the profession and the Institute as Secretary. In making the presentation, Mr. T. R. Milburn, V.P.R.I.B.A., having referred to the fact that Mr. Buckland had done a great deal of the work in connection with the testimonial, said he had been connected so long with the Royal Institute that he could remember no fewer than three secretaries—Mr. W. H. White, Mr. W. J. Locke, and lastly, Mr. MacAlister. The work of the Royal Institute had increased enormously during the last few years, and no one who was not a member of the London Council could possibly have any conception of the enormous amount of work which fell upon the shoulders of the Secretary. The meetings of the Council were fortnightly, and this involved constant work, and in addition there were the elections, and, above all, the great question which had been agitating their minds for so many years, the question of Registration. All these matters meant a tremendous amount of work for a secretary. Apart altogether from that, there was the question of Mr. MacAlister's geniality. Mr. MacAlister was very popular, and deservedly so; a man might have all the necessary and admirable attributes of a business life, and be what was termed quite a good man—but there was something beyond that, and that was affection. Apart from the work which Mr. MacAlister

had done and was doing, all the members had an affection for him, and it was no exaggeration to say that Mr. MacAlister was loved by all the members of the Royal Institute. In addition to all the work thrown upon him, Mr. MacAlister had, during the past few years, devoted himself to the problem of the unification of the Allied Societies with the Royal Institute. Some years ago, when the Allied Societies went to London, they were not in as strong favour as they were now; the London men now welcomed them and were ever ready to help them in every possible way, and a great deal of that bringing together into closer association had been due to the work of Mr. MacAlister. All these things combined had culminated in the recognition which they were making that night of the services which Mr. MacAlister had so splendidly and unselfishly rendered to the Royal Institute in particular and to the profession in general.

"It is my great pleasure and privilege," concluded Mr. Milburn, "to ask your acceptance, Mr. MacAlister, of this gold watch and accompanying cheque as a mark of the esteem and affection which we all have for you personally, and of our appreciation of the eminent services which you have rendered to the Royal Institute. The cheque does not in any way represent all your worthiness. Ten thousand pounds would not be sufficient to recognise all you have done, but I know that you will regard this testimonial as the heartfelt expression of our affection for you and as a symbol that we are not unmindful of all you have done for us."

The watch bore the following inscription: "To Ian MacAlister, from the Societies allied to the R.I.B.A., in grateful recognition of his unflinching courtesy and devotion to their interests. July, 1925."

Mr. Herbert T. Buckland, as one who had taken a little part, as he described it, in getting together the subscriptions for the testimonial, said the inception of the idea was not his but that of Mr. Thomas, that the services of Mr. MacAlister should be recognised in some tangible form, and when the suggestion was made there was not a man in the room at which the decision was come to who did not feel like kicking himself because he had not been the first to make the suggestion. Mr. Buckland added that the collection of the subscriptions was a matter of the utmost ease; in fact, when the members were written to, cheques literally tumbled in, and that was the best possible evidence they could have of the popularity of the recipient of the testimonial.

Amidst loud applause and the singing of "For he's a jolly good fellow," Mr. Milburn handed the dual testimonial to Mr. MacAlister.

Mr. MacAlister, in reply, said it was exceedingly difficult for him to express adequately his thanks for their most generous present, which was far more than he deserved. He felt that he was but a symbol of a great many other men. The work which Mr. Milburn had described so clearly had been going on for some years, and the credit of it was due to certainly not less than a hundred members, Past Presidents, Vice-Presidents, Honorary Secretaries, and others. It happened to be his fortunate lot to be there on the spot at the psychological moment, but they must realise that the result which had been achieved could not have been obtained without the devoted self-sacrifice and the united efforts of others. The work had required and obtained a great deal of unselfish labour, and for himself he was lucky enough to be there at the fruition of all that labour. He rather thought his friends had taken an exaggerated view of what he had been able to accomplish. All through, it had been an intense pleasure to him to do

that which he had been able to do, more particularly because the result which had been achieved would be of permanent value, and it was a great pleasure to see the matter clinched in the past year. For himself, he might say that as the result of this coming together there was not a town in the country into which he might go without finding friends there. In conclusion, Mr. MacAlister reiterated his heartfelt thanks to all who had so generously recognised any services he had been able to perform.

Mr. E. Guy Dawber said that as President of the Royal Institute of British Architects he would like to add his heartiest congratulations to Mr. MacAlister on the recognition which had been made of his invaluable services. "Every word that has been said about him," proceeded the President, "is true. His geniality and kindness and readiness to help any one of us in difficulty without exception is known to us all, and it is a very great pleasure to those members of the Institute who know him and what he has done to see this generous recognition of his work and ability."

Finally the President voiced the cordial and grateful thanks of the guests of the evening to the President and Members of the Council of the Northern Architectural Association, not only for the most delightful entertainment they had given them, but for their cordial welcome. He could assure them, said Mr. Dawber, that they very greatly appreciated it, and they wanted to thank particularly the Members of the Executive Council for having arranged such a delightful programme. He found, he continued, on looking at their Calendar, that with the exception of Liverpool the Northern Architectural Association was the oldest in the country, and though old in years it was in no way senile, and it had given the profession some of the best men from the provinces who had done most delightful work in all parts of the country. He was glad to see, also, that the Northern Association had lately enlarged its sphere of action and had established branches so as to enable members who lived in distant parts of the county, and were unable thereby to join the parent centre, to keep in touch with them just the same as their Allied Societies were with them, and if they could only establish these branches in various parts of the country it would all help to encourage and foster the position of the profession in those particular districts.

Mr. Herbert T. Buckland formally seconded the vote of thanks.

Colonel Reavell, on behalf of his Association and Council, acknowledged the vote of thanks, pointing out that they had with them visitors from all parts of the country, one from the United States of America, Mr. Corbett, and visitors from Australia and South Africa.

The Inaugural Meeting.

The inaugural meeting of the Conference on Thursday was held in the Old Assembly Rooms. After the President, Mr. E. Guy Dawber, P.R.I.B.A., F.S.A., had officially welcomed the Members of the Conference, Sir Theodore Morison, K.C.S.I., K.C.I.E., C.B.E., M.A., Vice-Chancellor of the University of Durham, delivered an address on "Architects and the Public." They were, he said, in a neighbourhood which has a long architectural history. From Newcastle they might visit the remains of the Great Wall which marked the farthest confines of the Roman Empire; they might inspect the site of the rude cell in which St. Cuthbert kept alight the lamp of Christianity on the Farne Islands, still a sanctuary indeed, but consecrated now to the puffen and the gillmot, and other nesting sea birds. Near to the south was that noble Cathedral which Professor Prentout, who filled the Chair of Norman History at the University of Caen, presented to his pupils as the finest specimen of Norman architecture. By the railway station they had already noticed the historic Keep from which the town took its name, and in their streets and upon the quays they would find here and there other

traces of the Middle Ages: a Friary sadly fallen from its original splendour and houses of the Guilds which once controlled the commerce and industry of the Tyne. But these they would have to hunt for, because the flood of modern industrialism has partially submerged these landmarks of history.

A modern industrial city presented to architects some difficult problems. They must all acknowledge that the cities which they owed to the Industrial Revolution were sadly lacking in beauty. The age which gave man unexampled control over the forces of nature, which supplied architects with an embarrassing wealth of building material and possibilities of construction hitherto unimagined, contributed nothing to the charm of their cities. On the contrary, it has made most of them little better than grimy workshops from which the wealthier inhabitants hastened to get away. Why this lack of charm in modern towns? Was modern industry incompatible with beauty? These were the questions which he thought architects and the public might discuss together with advantage. He was not going to lure them into a discussion on town planning. Let it be agreed that we were suffering in part from remediable evils; that our towns might be laid out much more wisely, that smoke need not pollute our atmosphere; let them assume that a wiser generation than theirs would act instead of grumbling and build clean and spacious towns. Nor was he going to ask them to consider how they could improve the humbler quarters of the town—those "drab, unlovely streets" in which the working classes were doomed to live. He wanted to concentrate attention upon a socially less important problem which concerned architects more nearly. The ugliness of which he complained was that in our principal thoroughfares, in the pretentious quarter of the city which paid high rates, and in which land was bought by the foot. Here should be the buildings which they showed to their visitors with pride as the ornament of the city, yet this was the very quarter in which their failure was most apparent. He spoke as a representative of the public, and would begin by admitting frankly that for the want of beauty in their main thoroughfares the public, their clients, must bear the greater part of the blame. To his mind the main fault of our modern streets was the want of harmonious design; taken separately, many of the buildings were well enough, but each of them, in too many towns, was of a different height and in a different style, and the effect of all together was nothing but discord. The street, not the single house, should be the unit of urban building, and the street should be planned as an architectural whole; each building in it should be in harmony with the general design and should contribute to its realisation. Our streets were a riot of individualism; each owner had indulged his particular taste or fancy; very often his object had apparently been to be as bizarre and unlike his neighbours as possible. In one of the busiest thoroughfares of Newcastle he had counted in one block as many as eight different heights from the pavement to the parapet; it was not a street at all, but a jumble of oddly assorted houses. In the past the prevalence of a great tradition, or possibly the authority of the architect, was strong enough to curb the exuberant fancy of the private owner, and an architectural policy was followed in the construction of our streets. To this we owed the quiet dignity of Bath and the stateliness of the New Town of Edinburgh, and to his mind the merit of the Rue Castiglione and the Place Vendôme, to take only one example from this quarter of Paris, was due more to the design of the street than to the excellence of the individual buildings.

How could we get back to that better tradition? How do we persuade the individual to subordinate his fancy to a general design? To educate the whole public would be a long business, and might well fill one with despair. But their task was not really so serious as that. The people we wanted to influence were

neither very numerous nor very hard to convince. They were the owners of house property in the shopping quarter; in most cases they belonged to that part of the commercial community which was engaged in retail trade. They were keenly alive to the importance of making their property attractive, and they were not likely to be indifferent to argument. For, in brief, what we had to say was this: "The shopping quarter ought to be the most delightful part of the town; it should be so pleasant that people would wander there for the mere pleasure of beholding it even when they did not propose to make purchases. And if you, the shop owners, will adopt our architectural policy we will make it a joy to go shopping." And, indeed, it was not fantastical to say that a beautiful aspect was a necessity for a shopping quarter. It was the incomparable view of Edinburgh Castle which had turned Princes-street into an uninterrupted line of shops; the Rue de Rivoli possessed not only architectural dignity but the view of the Louvre and the Tuilleries Gardens. Shops were beginning to invade the Place Vendôme as well as St. James's-square. He thought we did not need to insist that good architecture paid the shopkeeper; he (the shopkeeper) knew it already. What he failed to grasp, however, was that he could not get full value for his expenditure unless he submitted to a general design. A special effort would, the speaker believed, be needed to bring this point of view before the commercial community; we might assume, he supposed, that they do not read the architectural magazines with any regularity. An occasional article in the R.I.B.A. journal would not, therefore, effect much. He suggested that the proper course was that some distinguished architect, who was filled with zeal for the improvement of his city, should approach one or other of the professional societies into which the commercial community was organised, that they were in the habit of meeting in such societies to discuss their common interests and he did not believe they would be indifferent to a well-considered appeal to adopt a common policy with regard to building.

But if they were prepared to make an appeal to the commercial public, might he venture to suggest that they themselves must be prepared to make some concessions to the necessities of this commercial age? In the modern world advertising was a necessity, and they would not make much impression upon men of business unless they frankly recognised that fact. In the past a too fastidious taste had prevented them from taking account of advertising. They had allowed advertising to fall into other less skilful hands. For their neglect they had paid a heavy penalty, for their noblest buildings had been defaced by monstrous gold letters which outraged the symmetry on which they spent so much thought. He hoped he would not offend the high-browed if he said that in the elevation of a commercial building they must take account of the need for publicity and make the inevitable lettering a part of their design. There was no reason why lettering should not be brought into harmony with architectural form and at the same time arrest the attention of the passer-by. In the East lettering was the most conspicuous and most beautiful decoration at the disposal of the Islamic architect. What could be more decorative than the verses of the Koran sculptured on a mosque? The majestic gateway of the Taj at Agra was covered with noble Arabic characters, and the chief ornament upon the tomb itself was to be found in the sacred texts inlaid in black marble; so highly did the Muhammadans prize this form of ornamentation that famous calligraphists were brought all the way from Shiraz to design the inscription upon the Taj.

He was convinced that lettering could not only be brought into harmony with an architectural design, but could add to its beauty. No doubt they were all painfully familiar with the harm done to noble buildings by the unskilful advertiser. If you were not, a wa-

down one of the chief shopping streets of Newcastle would show how completely his tasteless signs could ruin a good thoroughfare. But this was not the end of the tale of woe. The disfigurement of our streets by day was bad enough, but what invective could adequately stigmatise the advertisements of flashing light which made the night hideous? And for this he ventured to take the architectural profession seriously to task. Was ever so great an opportunity missed! Had architects taken charge of this new method of publicity they might have made even our modern cities beautiful at night. The illumination of a building could very easily produce a charming effect. Of that also he could vouch from Indian experience. In all the world there was no prettier festival than the Diwali, the feast of lamps. As soon as the sun had set little lights began to glow on the parapet and along all the cornices of every Hindu house; every architectural feature was lit up so that the whole building was outlined in light. This fairy decoration, which he never saw without delight, was produced by the crudest means, merely a wick stuck into a rough clay saucer of oil, but the charm of it was beyond description. Why should we not produce the same effect? Our resources were immeasurably greater than those of Indian villagers, and there was a strong economic motive for making a shop, a restaurant, or a cinema palace so beautiful that people would flock to see it. One attempt to make use of light as part of the normal decoration of a building at night he had seen recently in London—in the large Lyons restaurant at the top of the Haymarket. He thought the effect very attractive, but had had no opportunity of examining it closely. He saw enough, however, to convince him that the illumination was part of the architect's design, and to make him hope that other architects would make similar experiments.

The two points that he wished to make were these: we must, firstly, persuade the owners of property in our shopping quarters that harmony of design was essential to the beauty of a street and that they must, therefore, agree, jointly and severally, to pursue one architectural policy. Secondly, the architects who designed the elevations of mercantile buildings must make provision for publicity both by day and by night. If we could have our way on these two points he believed that we could make the opulent quarters of our industrial towns pleasant and beautiful. He was sure that our architects in modern England were capable of designing streets which it would be a pleasure to walk in and a joy to behold. He thought the modern shop contained a great many elements of artistic pleasure which well deserved a noble setting. An unhealthy lite-

rary romanticism had made us believe that modern things were always vulgar and ugly. This was absurdly untrue; if we would only trust the evidence of our senses and not call to mind what we had read about art we should see that a shop window containing, say, a lady's hat and parasol might be a very pretty thing, and that the ties, socks, and fancy shirts of a modern hosiery present a feast of colour quite as rich as the carpets and shawls of an Oriental bazaar.

He believed if we could once show the public how beauty could be achieved in certain streets they would quickly adapt the principle in other areas. How to make the dwellings of working men more cheerful and more healthy was a larger and more serious problem, with which he did not venture to deal; that was not primarily a problem for architects, but for local authorities and the Ministry of Health; to deal with it would require consideration of national finance and economic policy.

MR. HARVEY CORBETT, proposing a vote of thanks, said he felt that if Sir Theodore Morison found the need of such modifications and changes as he had found in Newcastle, he was glad that he (Sir Theodore) had not visited New York. He (the speaker) came to London and to Newcastle with a great feeling of relief because of the uniform height of the buildings. London, for example, which he happened to know better than Newcastle, was like a beautiful rug, in which there are a variety of colours, but which all seemed to blend in a harmonious whole. If they went to New York they would see buildings of from four to forty stories alongside one another; and if Sir Theodore saw that he would feel that they needed his advice over the other side more than we did here.

MR. ARTHUR KEEN, in seconding the motion, said they all had the feeling that if the general public were all like-minded as Sir Theodore their task as architects would be made very easy. The question of control and freedom of any of our acts seemed to him to be extraordinarily interesting. They all recognised that whilst freedom must be exercised with moderation in these days, the control to which they had to agree was rather more than they cared for. That control was not always exercised with that judgment which they might expect, and therefore it was not an unmixed blessing in that respect. They had had an example in London in Kingsway and Aldwych and Regent-street, in which the architects had had to submit to a very considerable amount of control, and one could not conscientiously say that the result had been all that one might have wished. If the control in regard to Regent-street had been exercised as it might have, it would have been a distinguished

success, but now he was very much afraid it was a failure. He felt that our problem was to find out how that control could be exercised in the most useful way, and that was a matter in which those engaged in town planning were particularly interested, and it might be that when the proper control in regard to buildings came to be exercised in a proper manner it would result in the general advantage of the public.

MR. WILLIAM WOODWARD said he was peculiarly struck by the advertisements on the domestic and business premises of Newcastle. He was accustomed to London, and had in his mind one or two streets in London which showed signs of vulgar advertisement; but Newcastle was worse. Not only were the advertisements horizontal and vertical, they were diagonal as well. He agreed with the lecturer when he said that it is within the province of architects so to design their buildings having regard to the fact that their clients must have advertisements, and he was sure that they could so design their buildings that there should be none of the vulgarity to which he referred. With regard to uniformity, Baron Haussmann in the days of the third Napoleon in Paris secured uniformity, and that was because the French designers as a whole, unlike English men and women, had a particular taste for colour. The Strand was by no means an example of architectural uniformity, but it was a pleasure to look at, and he confessed that he preferred the divergence in style in the Strand to that of some of the thoroughfares where a decided uniformity on lines of horizontal cornices obtained. To his mind Newcastle was cleaner than some parts of London even. They could not help Newcastle being black, but if they cleaned it tomorrow it would be black again. All the same, Newcastle was a city worthy of their greatest admiration. The room they were then in and the surrounding rooms formed one of the architectural beauties of the country.

PROFESSOR S. D. ADSHEAD said he must say a few words with regard to a subject which had been touched upon by Sir Theodore, and that was town planning. He had attended two addresses by eminent speakers that week, and they set out to discuss the question relating to architecture, and both of them seemed to have resolved themselves into considering the question of the decoration of a city. It just showed how very important the question of the architecture was becoming, and he thought it would ultimately lead to a solution of some of the greatest difficulties in the sphere of the architect. There was the general question of traffic control, a question which we should not solve to-day, though we should in a few years. We had, of course, great examples of traffic



Group Photograph taken outside the Old Assembly Rooms, Newcastle.

control. Kingsway to his mind was well controlled, and in all cases control by the local authority, elected by the people, should be responsible, and in that way he thought a very helpful result could be achieved. We had yet to work out our own salvation, not by wrestling with impossibilities, but with a new sort of control which would support the local authorities in their efforts to regulate matters in regard to town planning. We had real power to-day; it was, perhaps, not generally known that under the Town Planning Act we had absolute control over the height of the building, and, most important of all, the character of the building, but there was no definition as to what character was. They could have control over the elevation, and if necessary under the Act this matter of elevation could be submitted to the local authority, and it could also be referred to the President of the Royal Institute of British Architects, if necessary. He thought the Royal Institute had been a little remiss in not seeing that certain clauses were incorporated in the Act. This question of control and character should be developed, and their great care should be that it was exercised with the care and responsibility which it involved.

A DELEGATE from India said Sir Theodore Morison had made what they would probably find was a very valuable suggestion with regard to the lettering upon buildings, and he referred especially to the lettering on the Taj in

India. With the greatest possible diffidence he would enter a caveat here, and issue a word of warning in this way; all this lettering on Mohammedan buildings like the Taj, or nearly all of it, was taken from the Koran, or something of that sort, and was put there, he might say, to the glory of God. When they considered the lettering put on buildings to the glory of Mammon by devotees who from time to time offered at that shrine from different points of view, the control of this might be accompanied by difficulties greater than at first appeared. Sir Theodore referred to the illumination of the houses in India at night, and he was speaking now more particularly of Calcutta, where the house architecture was not architecture at all. The houses were merely boxes of square design, and the effectiveness of the illumination was brought out by the square building. The outlines formed by these lights were extremely beautiful, and in that case the illumination hid the architectural defects.

MAJOR HARRY BARNES said there was always before them the controversy between uniformity and variety, and between the imposition by some superior person or body upon their artistic conception of a scheme spread over a very considerable area of land and buildings, and the treatment of all the separate parts by individuals who were designers, and built according to their particular taste. In this country we had always had difficulties in

imposing upon the citizens of this country any sort of a cut and dried plan for building. The failure in Kingsway and Regent-street in London might be laid down to the same cause. As long as we in this country went on selling parcels of land to separate individuals, and as long as we lay upon them the burden of their own buildings, they wanted to have their say in the kind of building put up and the design of it, so as to fit in with their own particular fads. It was an extraordinarily difficult thing to control plans. As long as they had architects at all, he did not know that they would not have this individualism in their buildings. After all, if an architect got a commission, and said, "Here is a piece of land, and I will put up a building on it," he looked upon it as something on which he wanted to express himself and to carry out in it the ideas that were in his mind, and he (the speaker) thought there ought to be a very considerable body of resistance on the part of architects to being controlled to any great extent by a general plan. In London they came across places where streets were designed from end to end by one man, and if it was well done it was quite all right. They might go to some other place and come across a meandering, winding mediæval street, and at every turn they would get a view which they never expected to see, and would say: "How beautiful! Cannot we have more of this?" He was not very hopeful that we were going to see any great advance in the direction of uniformity for a very long time. He was wondering whether it was necessary, because in one case in some old town or village which has not been spoiled by industrialism they would find streets and series of buildings in which the mediæval architects just let themselves go according to their particular fancy, and the whole effect was perfectly delightful and charming. It was chaos, perhaps, but if they took them together they would not alter a single stone of them. With regard to the question of advertising on buildings, the difficulty there was not only as regards new buildings, but as regards old buildings—buildings which had been designed without any thought of advertisement. If one was dealing with a new building one could see that one got a good building with a natural advertising space on it, and it would not be a bad idea if the Institute were to see for some lines of that sort. It would lead to the obliteration of windows perhaps, and of architectural features. One could see that some very artistic results might possibly come out of it. So far as the buildings were concerned, the trouble was not with new buildings going up but with old buildings changing hands—some going into the possession of multiple firms and people who wanted to advertise, and they were going to get their advertisements up regardless of any architectural features at all. They did not care which way it was done as long as they got their ideas before the public. Protection would have to be obtained from the authorities, and perhaps some action of a joint nature might be brought to bear in order to prevent properties being spoiled in this way. If they were to take an efficient control over it, it would require fresh legislation, and now that Parliament was turning its attention to the control of advertisements it would be a good time to bring their attention to the control of buildings in the way of uniformity and otherwise. All must be for all time dependent to a large extent upon the taste of the community.

MR. T. R. MILBURN said with regard to the question of advertising, he thought it was a good suggestion that our new buildings should be designed so as to provide space for advertisements without disfiguring their architectural features.

MR. HARVEY CORBETT said he would like to give one or two experiences or facts in connection with advertising in New York. On Fifth-avenue the local Association of Merchants and Property Owners had agreed among themselves not to deface their buildings by electric signs. It seemed to him that



St. Nicholas' Church, Newcastle.

From a Sketch by PROFESSOR A. E. RICHARDSON.

was a method by which the problem should be solved. On Broadway, however, the merchants had all agreed that they would go the limit in electrical illumination, and in this connection he would call particular attention to a Londoner who had been shown one of these tremendous electrical signs on Broadway covering the whole of the building and, of course, involving a large expenditure of money every minute of its operation. The American was bragging about his signs and pointing out what a wonderful thing it was, how much it cost, how many lights it contained, and finally, when he paused for breath, the Englishman said: "I see, but is it not horribly conspicuous?" A good many of their successful buildings had been made possible because the architect had persuaded the owner that good architecture pays. Something good to look at was the best advertisement in the world, and he believed that if architects would take that point of view a great deal could be done towards improving the standard of our street architecture.

Mr. W. I. McWilliams (South Africa, said he was struck at once by the dreadful monotony of the largest cities of England because of the smuts and the smoke and the terrible blackness. He was told that the Midland people were proud of the blackness of their city; if that was so, he did not see any hope of remedying the things which Sir Theodore complained about. If something could be done to persuade the authorities to electrify the railways and to lay out the cities with the smoky parts at some distance, and to introduce central heating into the larger houses, there might be a possibility of cleaner towns and better health conditions. In the Strand they had in one place a red-brick building, next door to it a terra-cotta building, and then beyond that a white terra-cotta building, and still something else of a different colour; then there was possibly a building erected in stone. In a few years' time the terra-cotta building would retain some of its colour, but a stone building would be jet black. Could not something be done to keep towns and cities a little cleaner? There was one thing which had appalled him in going through the lovely villages of Kent and Surrey and in the North, and that was the character of their shops and their shop windows. He noticed that in some of the villages there seemed to be a fashion created of painting the spaces between the half-timbering with a ghastly sky-blue in some instances, and in other instances a horrible sort of magenta-pink, and if that sort of thing was going to spread he did not know what was to become of the charm of the English villages, and he suggested that something should be done by the Institute to try to stop it.

THE PRESIDENT, in putting the vote of thanks, said he always understood that the Town-Planning Act was not obligatory, and that it was left to localities whether they adopted it or not, and that was one of the main reasons why all over England to-day we saw houses which were not uniform in construction or appearance, but were left to the individual taste of the owners. Going through the country, one of the saddest sights he saw was the vision of a village shop-window dressed in a more or less modern style, displaying a bewildering array of miscellaneous articles instead of showing, as they used to do, just a few. In the olden days one was attracted by the village shop and its modest display, whereas now one abhorred it. With regard to advertisements in our cities, he thought that was a matter on which the Institute might endeavour to do something. It was really deplorable that a nicely designed building should be used simply as a background for advertisement. There was really no need for this class of advertisement at all, and if they all agreed not to have them, just as much business would be done. With regard to the question of the lights at night, could anything possibly be worse than Piccadilly by night? It was the most hideous and vulgar place it was possible to imagine.

The vote of thanks was carried with loud and continued applause.

SIR THEODORE MORISON, in reply, said he was glad to hear Mr. Corbett make that extremely important point, that the success which had been attained in certain parts of America, in Fifth-avenue, New York, was due to the co-operation of the different shop owners there. It was to the common action on the part of owners of property in our shopping quarters that he looked to rather more than to municipal or national control. They all felt that a great opportunity had been given to architects in America by the princely munificence with which various private citizens of America had dispensed their wealth. They were endowing universities, public buildings and libraries, so that the American architects had the opportunity of making experiments in that country which they in England sighed for in vain. American architects were making a really magnificent use of that opportunity.

Civic Reception.

On Thursday evening there was a civic reception by the Lord Mayor and Corporation at the Banqueting Hall, Jesmond Dene. The guests were received by the Lord Mayor and Lady Mayoress of Newcastle (Alderman and Mrs. Walter Lee), with the Sheriff and Mrs. John Grantham. The LORD MAYOR, welcoming the visitors, said they all realised the part that the architectural profession took in beautifying cities, and they looked to them to help those who were responsible for the municipal life of the city to help to provide a city beautiful. They had men with vision in the past, like Dobson and Armstrong. Dobson was the architect for about the only street that they could justly be proud of in Newcastle, which was Grey-street, and it was a great pleasure to remember that in the building of that street a man of vision took the risk himself. It was not a municipal scheme, and now the estate was being adequately rewarded for the enterprise shown. However, municipal bodies had changed now, and some thought that big enterprises of this description should only be undertaken by municipalities.

Mr. E. GUY DAWBER replied.

A Day in Durham.

The greater part of Friday was devoted to a visit to Durham. Members journeyed from Newcastle by special train, and on their arrival immediately proceeded to the Town Hall, in Market-square, where they were received by the Mayor of Durham, Councillor T. W. Holiday, who was accompanied by Alderman Robert McLean and Alderman R. T. Herring.

THE MAYOR, having welcomed the visitors, Mr. E. GUY DAWBER, President of the R.I.B.A., returned thanks, and said that though it was true that he had never previously visited the city—a fact of which he was truly ashamed—he had seen it several times in passing through the railway station, from which point one got a most beautiful view of the city, a view which he had never seen equalled in England or in Europe. He would like to take that opportunity of congratulating the Mayor on the very beautiful Hall in which they were then sitting. He understood that it was built fifty or sixty years ago, and it was a delightful and most dignified room; the use they had made of heraldry in its scheme of decoration added to its dignity and interest.

Members of the Conference then made their way to the Palace Green, where they were taken charge of by various guides for the purpose of viewing the Cathedral, a lecture on which was given by Professor Hamilton Thompson.

Subsequently a luncheon was provided for the visitors who were the guests of the President and Council of the Durham Colleges, in the Lecture Hall, Palace Green. The President, Canon Ellershaw, was in the chair, and he was immediately supported by the President of the Royal Institute of British Architects, the High Sheriff of the County of

Durham (Colonel Stobart), and other members of the Institute.

Before separating for the purpose of visiting the Castle, Mr. E. GUY DAWBER returned thanks to the President of the Durham Colleges for their most generous hospitality.

COLONEL G. REAVELL seconded the vote of thanks.

CANON ELLERSHAW, replying, said that in a moment or two they would be seeing the Castle Hall, which, though not the largest by any means, was one of the most impressive buildings which exist in this country. It always pleased him to reflect that when Chaucer was going on his Canterbury pilgrimage the Hall of Durham Castle was there, not quite as it existed now to the outward view, but at all events for the same purpose, and that one building took them back to about the year 1320; the building had been used for its original purpose from that day to this.

After the luncheon, the visitors were photographed in the courtyard of the Castle, after which they made a thorough tour of inspection of the Castle under the expert conductorship of Mr. W. T. Jones, F.S.A., who gave an interesting account of the building and referred to the work of repair now taking place. Later in the afternoon tea was provided, and afterwards members returned to Newcastle.



The Dinner Card of the Conference Banquet.

The Conference Banquet.

The Conference banquet took place at the Old Assembly Rooms, Newcastle-on-Tyne, on Friday evening, under the Presidency of Mr. E. Guy Dawber.

The following is a list of some of those present:—

Prof. and Mrs. S. D. and Miss Adshead, Mr. T. C. Agutter, Mr. and Mrs. Rodney H. Alsop, Mr. James A. Arnott, Mr. Sidney Ash, Mr. F. G. Baker, Mr. C. Barman, Mr. J. A. Bean, Mr. S. F. Bestow, Mr. J. J. Blackett, Mr. R. C. Bosanquet, Mr. and Mrs. John W. Boyd, Mr. and Mrs. Stanley Brinton, Mr. Percy L. Browne, Mr. T. Lindsay Browne, Mr. Geo. T. Brown, Mr. C. F. Burton, Mr. W. S. Burton, Mr. and Mrs. James T. Cackett, Mr. James F. H. Checkley, Mr. and Mrs. F. Austin Child, Mr. Joshua Clayton, Mr. and Mrs. F. E. Coates, Mr. Cecil A. Cochrane, Mr. and Mrs. Harvey W. Corbett, Dr. Percy Corder, Mr. J. W. Corking, Mr. Gibson Cowe, Mr. Philip H. Cundall, Mr. and Mrs. E. Guy Dawber, Mr. and Mrs. R. Burns Dick, Mr. D. Ditchburn, Mr. R. F. Dodd, Captain F. E. Dotchin, Mr. W. Leonard Dowton, Mr. and Mrs. F. M. and Miss Dryden, Mr. Stephen Easton, Mr. T. E. Eccles, Canon H. Ellershaw, Mr. and Mrs. Charles S. Errington, Mr. Percy J. Fay, Mr. W. Ellison Fenwick, Mr. Henry M. Fletcher, Mayor of Gateshead, Mr. H. B. S. Gibbs,

Mr. M. K. Glass, Mr. Kenneth Glover, Mr. J. T. Graham, Mr. and Mrs. John P. Grant, Mr. and Mrs. Geo. H. Gray, Mr. C. Hastwell Grayson, Mr. and Mrs. C. W. Hall, Mr. E. Stanley Hall, Mr. Wilfred Hall, Mr. F. Hammond, Mr. R. G. Hammond, Mr. C. A. Harding, Mr. Arthur Harrison, Mr. and Mrs. Thomas Harrison, Mr. and Mrs. J. Wilson Hays, Mr. A. G. Henderson, Miss G. M. Hindley, Councillor T. W. Holiday, Mr. Herbert L. Honeyman, Mr. S. W. B. Jack, Mayor of Jarrow, Mr. A. M. Jenkins, Mr. A. W. Johnston, Mr. and Mrs. Ivor P. Jones, Mr. P. L. Jones, Mr. and Mrs. W. T. Jones, Miss V. T. Jones, Mr. H. W. Kaye, Mr. and Mrs. Arthur Keen, Mr. John Keppie, Mr. H. J. Kerr, Dr. Harold Kerr, Mr. Edwin M. Lawson, Mr. P. H. Lawson, Mr. Alderman Walter Lee, Mr. T. Alwyn Lloyd, Mr. A. E. Loithouse, Mr. J. A. E. Loithouse, Mr. T. Ashton Loithouse, Mr. and Mrs. Ian MacAlister, Mr. and Mrs. R. Norman MacKellar, Mr. C. Stanbury Madeley, Mr. W. J. McWilliams, Mr. and Mrs. A. Marshall, Mr. and Mrs. Chas. T. Marshall, Mr. and Mrs. R. Mauchlen, Mr. and Mrs. J. C. Maxwell, Mr. and Mrs. A. Milburn, Dr. K. V. Milburn, Mr. and Mrs. S. W. Milburn, Mr. and Mrs. Thomas R. and Miss Milburn, Mr. William Milburn, Mr. W. Milburn, Junr., Lt.-Col. Douglas Mitchell, Mr. T. Morison, Mr. and Mrs. J. Inch Morrison, Mr. H. S. Mundahl, Mr. E. R. Newbigin, The Lord Mayor and Lady Mayoress of Newcastle, Mr. C. F. Newcombe, Mr. P. Clive Newcombe, Mr. and Mrs. J. Landell Nicholson, Mr. E. Nixon, Sir Wm. J. Noble, Mr. G. Dale Oliver, Mr. W. T. Plume, Mr. A. N. Prentice, Mr. and Mrs. R. G. Purdy, Mr. Walter Raine, Mr. Norman Ramsay, Lt.-Col. Geo. Reavell, Professor C. H. Reilly, Sir George Renwick, Professor and Mrs. A. E. Richardson, Mr. T. W. T. Richardson, Professor A. Robinson, Mr. and Mrs. Ernest Robson, Mr. Harold S. Rogers, Mr. John Sanderson, Mr. G. V. Scott, Mr. Jas. Scott, Mr. and Mrs. James and Miss Shaw, Mr. and Mrs. A. Dunbar Smith, Mr. Joseph Spain, Mr. J. Stafford, Mr. W. J. Steele, Mr. and Mrs. P. J. Stienlet, Mr. E. Hardy Syms, Mr. and Mrs. Thos. S. Tait, Mr. A. K. Tasker, Mr. Laurence W. Taylor, Mr. and Mrs. Harry and Miss Teather, Mr. R. Temperley, Mr. Percy Thomas, Mr. O. M. Thorp, Mr. and Mrs. Chas. F. Ward, Mr. F. N. Weightman, Mr. A. E. Wigfield, Mr. J. A. Williamson, Miss Jean Williamson, Mr. and Mrs. H. W. Wills, Mr. Wm. Woodward, Mr. John Woollett, Mr. Thomas C. Yates.

At the conclusion of the banquet, the loyal and patriotic toasts having been honoured, the LORD MAYOR OF NEWCASTLE-UPON-TYNE (Mr. Walter Lee, J.P.) proposed the toast of "The Royal Institute of British Architects and its Allied Societies." Having referred briefly to the history of the Institute, he observed that it was the representative body of architects in this country and the parent body of the architectural societies of the whole Empire. The societies affiliated to the Institute in these islands numbered, with their several branches, not less than thirty-seven; whilst the Allied Societies overseas, in Africa, Australasia, Canada, India, and elsewhere, numbered twenty-two. This great confederation of architectural societies embraced more than 10,000 professional men, and exercised a powerful influence on the development of architecture throughout the whole Empire. It controlled or guided the whole system of architectural education, and its services in an advisory capacity were at the disposal of the Government, the great municipal authorities and the public generally, in all matters concerning the art of architecture.

One of the oldest, strongest and most energetic of the Allied Societies was the Northern Architectural Association, which so kindly undertook the organisation of the British Architects' Conference this year. The Northern Architectural Association was founded in the year 1858 and became an Allied Society of the Royal Institute of British Architects in the year 1889. It contained about 250 members, divided into Tyneside, Tees-side and Cumberland branches. It was playing an ever-increasingly important part in the work of the R.I.B.A. Among local gentlemen who had held the position of President of the Northern Architectural Association were Colonel Reavell, of Alnwick; Mr. W. T. Jones, of Durham; Mr. T. R. Milburn, of Sunderland; Mr. R. Burns Dick, of Newcastle; Mr. C. S. Errington, and Mr. J. T. Cackett, who had also for many years filled the office of Honorary Treasurer. Mr. T. R. Milburn had just been elected a Vice-President of the Royal Institute of British Architects, after years of valuable services on its Council. He might be permitted to make a passing reference to the Newcastle-upon-Tyne Society, which was a body of energetic and enterprising local gentlemen who, as a labour of love, were making a close study of a possible Newcastle beautiful, and in this connection he would say

that they, as a City Council, were always prepared to receive their friendly criticism and suggestions. There were big schemes for street improvements under the consideration of the City Council, and it was just possible that such opportunities might shortly be forthcoming for the display of architectural genius; that there would yet arise another Dobson and another Grainger who would add lustre to the history of the architectural profession of that city.

THE PRESIDENT (Mr. E. Guy Dawber), replying, said the Conference had been one of the most successful they had had. It gave them an opportunity of meeting old friends and making new ones; of visiting, under the most favourable auspices, buildings of the deepest historical interest, and also of talking over with their fellow-architects the problems that they had to deal with every day. Though the Lord Mayor had told them a lot about the Institute, there were one or two things he had not mentioned. One was that during the last twenty-five or thirty years they had established and co-ordinated a system of education such as in his young days was absolutely unheard of. All through the country now they had a series of schools of architecture. They were training their young men in design, in construction, and in the practice of architecture. It was a record to be proud of, and it had been through the help and enthusiasm of the Allied Societies that the parent body had been able to help with these schemes of education of architects throughout the country. When he first came to London thirty or forty years ago, the Royal Institute of British Architects consisted entirely of London men, allied with some country members, but in those days they had little voice in the control and management of the affairs of the Institute. How different it was to-day! They had nearly sixty Allied Societies connected with the Institute. They were one great federation of architects all over the Kingdom, and wherever the British flag flew; and their one object was, in the words of their Charter, "the encouragement of Civic Architecture." The Lord Mayor had a very great responsibility put upon his shoulders. To control the amenities of a great city like Newcastle-upon-Tyne was no light matter, with his many other spheres of work, but it was to him and the other heads of the great Corporations all over this country that architects looked to help with the future planning, laying-out wide spaces and beautifying of streets, which they hoped was going to make an entire alteration in the future of our towns and cities throughout the country.

MR. JOHN KEPPIE, replying for the Incorporation of Architects of Scotland, said he did not know that there were many towns in Britain that had such a fine record, principally on account of the distinction of the men, and the women, as Newcastle. He found that they had among the citizens, and those who were born in the immediate neighbourhood, Lord Eldon, the great politician, and Lord Collingwood, one of the most distinguished naval officers that ever entered the Navy. Then they had Mark Akenside, the poet. They had two Stephensons, and both of them were very distinguished; first of all, Stephenson who invented the engine, and who made railways. He has brought great distinction to Britain and great advantage to the world. Then they had his son, who was a great bridge builder and, he thought, a great architect. There was not a finer architectural erection in Britain than the Border Bridge. Then they had scientific people. There was that great naturalist, Thomas Belt. Then there was Grace Darling, Bewicke the engraver, and Joseph Crawhall. Crawhall's father was an engraver. He was one of the men who supplied King, of *Punch*, with the engravings of his best jokes. But the greatest production of Crawhall was his son, Joseph, and he was perhaps one of the best artists they ever had in this country. He was getting very nearly to the end of his list, but there was one further name to mention, that of Mr.

Percy Thomas, an architect very distinguished in Cardiff. The other day, when they were going round Tyneside, he was greatly amazed when, in a burst of confidence, Thomas said: "Well, you know, I was born in South Shields, and I am a Tynesider." The only other man he would like to mention was Mr. Norman MacKellar. He was proud to mention him, because he was a Glasgow boy, and he was an organiser. He was now a partner with one of the best firms in Newcastle. They all greatly appreciated his work in connection with that Conference.

LIEUT.-COLONEL G. T. REAVELL, replying for the Northern Architectural Association, said it would be invidious to mention any names where all had done so splendidly, but he must say that they all owed a very great debt of gratitude to Mr. MacKellar. Architects, he continued, practised an art which had great responsibilities and great anxieties, but at the same time great opportunities which brought great rewards. Times had changed since the days when men like Da Vinci could be architect, builder, sculptor, engineer and painter all in one, and buildings had become so complex that their versatility must in another way be as diverse as ever, and they did well if by skilful handling of a team they accomplished what the great masters achieved single-handed. No art can flourish except in a genial air, and they hoped for the day in this democratic country when every citizen would take the same interest in the Mistress Art as did the noblemen of the seventeenth and eighteenth centuries. The Institute had found, he continued, as the British race found, that freely yet firmly knit by the bonds of love rather than by those of red tape the genius of our people best worked out its destinies, and not only from Land's End to Cape Wrath but through the colonies and dependencies of the British Crown the daughters and the parent Institute exchanged counsel and help. Newcastle had been the first, following the example of their American friends, to invite architects to co-operate in the improvement of their great city. Resulting from this co-operation a scheme was evolved which provided a new thoroughfare, obviating in the most economical way the congestion which was certain otherwise to ensue, and it would eventually add to the material resources and the aesthetic value of the city in a striking and far-sighted manner. Although that scheme had suffered a check, it was a check arising not from a divided opinion on its merits, but from an honest difference of opinion on a matter of policy, and he felt confident that it would be carried to a worthy conclusion.

MR. T. R. MILBURN proposed the toast of "Our Guests" in felicitous terms, and said that Mr. John Keppie had mentioned some well-known names, but he could not excuse him from leaving out the names of Dobson and Grainger in connection with architecture, and the moderns, such as Parsons and Armstrong. He coupled with the toast the names of Major Temperley and of Mr. Bosanquet.

MAJOR ROBERT TEMPERLEY, replying, thanked the local architects, on behalf of the Newcastle Society, for the cordial welcome they had given them and for the help they had shown them. The Society started with the object of trying to foster wider interests in that locality. They were concerned for the beauty of the place, for its historical interests, its general amenities and architecture, and its sound investments. It was rather a big programme, and it might have been regarded perhaps by architects with suspicion and by the Lord Mayor and Corporation with some misgiving. From the architects they had a most cordial welcome, and he thought the Lord Mayor really hit on the best reason of all when he referred to the spirit in which they had embarked on their task as being a spirit not of fussy interference and the driving of a fad to extremes, but by suggestions which would be helpful. Two or three of the Northern Architectural Association's members had given

very excellent help. He understood there was a scheme for a great street in Newcastle which would tend to the further development of the city, and though that scheme was checked for the moment, he did not believe for one moment that this present check was anything more than a temporary one. On behalf of the Newcastle Society he expressed the hope and belief that that scheme would eventually be carried through.

Mr. R. C. BOSANQUET said they were grateful to the men of architectural calling for all they had done for the human race since it began to seek a better shelter than a cave in the face of this somewhat uncomfortable earth. He was lately in Oxford, and his host at luncheon was also entertaining an American architect; and it so happened that they drew from this architect that, interesting as were the colleges of Oxford, what he would like to see was the small English house. He said: "My work is domestic work." They visited one of those old-world villages, and their American friend was filled with delight and admiration at its exceeding charm and beauty, and he said to one old inhabitant who was tottering down the village street: "What a beautiful place this is you have to live in." It was Sunday, and he (the speaker) did not know whether the old man thought that a place should not look beautiful on a Sunday, but he looked shocked and said: "Beautiful? I do not know about beautiful, but it is very old." That remark gave some indication of the lingering British prejudice which regarded beauty as something immoral. Antiquity was quite all right, and that was why the archaeologist, in spite of all his sins, moved about the country in comparative safety; but the lot of the man who denounced the ugliness or vulgarity of modern aberrations trod a dangerous and thorny path. He rejoiced very much that they had spoken so warmly of the provincial schools of architecture. They knew there were great and flourishing schools of architecture in London; he had the good fortune for some years to see the work which Professor Reilly and Professor Adshead and Professor Abercrombie were doing in Liverpool, and similar work was being done in many other great cities. Newcastle, with its University School of Art, was working on similar lines.

Responding to persistent calls from all parts of the hall for a speech, Mr. HARVEY CORBETT said it was a tremendous pleasure to him to be there. He had been greatly interested in the discussions which they had listened to at that Conference. The general questions which were interesting them so much were town planning and the general improvement of their cities. He would like to point out one or two developments which had occurred in the United States. The first thing that suggested itself to him was that the working architect was more recognised as a professional man than he used to be. In the United States the architect was rapidly becoming a professional man of exactly the same legal standing as a doctor or a lawyer. In New York State it was required that each man should qualify by means of a very rigid examination before he was permitted to use the word "architect." The result was that the profession had advanced to a remarkable degree. Then they had recently created in many of their cities and in some of their States a Fine Arts Commission which had certain powers and jurisdiction over everything on which a State or city spent money. That meant that they did not reate from State or city funds some of the nonumtural monstrosities that they had created in the past, because the Commission had the power of a veto and thus helped the designer to do better things. He was pointing out these things simply to show that there was a spirit of quite hearty co-operation between the profession and the public at large, and a growing interest on the part of the public in architectural matters and in the beautification of their cities.

This concluded the toast list, and the banquet ended with the singing of "Auld Lang Syne" and the "National Anthem."

The large panoramic Conference group was taken at Durham by Messrs. Philipson & Son, Ltd., 20, Oxford-street, Newcastle-on-Tyne, who will supply prints, price 6s. 6d. each

LIVERPOOL SCHOOL OF ARCHITECTURE: ANNUAL EXHIBITION OF STUDENTS' WORK

By HAROLD A. DOD, M.A., A.R.I.B.A.

As reported in the last issue, the annual exhibition of the work of the students of the Liverpool University School of Architecture was formally opened by Mr. Ramsay MacDonald, the ex-Prime Minister, at the Walker Art Gallery. This year the large gallery set apart for the exhibition is well filled with representative examples of the work of each year of the school's curriculum. One would say, at the outset, that the drawings have been particularly well hung, a feature which naturally adds a great deal to their attractiveness. As the exhibition is open to the public this question of attraction is important, the exhibition being primarily designed to interest and instruct, amongst others, that "section of democracy which hungers and thirsts after spiritual peace and beauty," which Mr. MacDonald claimed, in his opening address, to represent. In this connection it is gratifying to record that there were more visitors this year in the gallery than on previous occasions.

In view of past successes, it is natural to look for a high standard of work from the Liverpool School, but it is obvious that the students have experienced little difficulty in rivaling, and in some cases surpassing, their predecessors. In this exhibition there is a large percentage of first-year work on view, from a study of which it is clear that the system of training adopted in the early stages goes a long way to give the student a thorough grasp of the essential elements of his art. At the same time, let us add, there is no evidence of any attempt to force the individual into a common mould; on the contrary, an independence of outlook is fostered in the belief that in this manner, with careful training, the best results are obtainable. It is held that individuals working along more or less parallel lines will make the finest school of architecture. It would indeed be regrettable if there appeared any trace of the mechanical in the students' work. The fact is, however, that all through the course up to the final year one finds the most divergent views are taken of the same problem, surely a most refreshing result and an ample reply to those who still claim that a school is not a proper place in which to train the individual to become an architect.

Prominent amongst the First-Year work is a composition by Mr. H. G. Ellis, carefully rendered in sepia, and many of the other drawings of Renaissance subjects also display considerable skill in the application of flat washes of colour. Judging by the work submitted, the Second Year contains many good students. Mr. G. A. V. Hall is distinguished by a delicately drawn design for a Golf Club House. His scheme is suggestive of a Chinese pagoda, modified, of course, to suit western requirements, but the spirit has been well caught with red lacquered columns and green tiled roof. A second design in the Georgian manner for the same subject, by Mr. T. C. Haynes, is set forth in a series of very pleasantly coloured drawings.

In setting a programme for a small aquarium, it seems clear that a rather baroque type of building was called for, a subject which would have delighted French architects of the Louis XV. period. The actual schemes submitted, however, are somewhat disappointing, although in one interior an attempt is made to give one the impression of being in a rock

cavern under water—surely the proper setting in which to view fish and other aquatic animals.

Amongst the Third-Year work appears the successful design for the Lever Prize, the subject being an entrance to the Mersey Tunnel. Here again, one must confess to a certain feeling of disappointment, though perhaps the programme and not the student is to blame. It would seem to us that the entrance to a tunnel 40ft. in diameter, designed to take four lines of traffic is of sufficient importance to be treated as a subject in itself. Here, however, we find two blocks of office buildings tacked on, with the inevitable result that, owing to difference in scale of the parts, one or the other inevitably suffers. In the winning design, the tunnel entrance has the unfortunate appearance of being sunk into the ground, overwhelmed by the annexed buildings.

The project, a Summer School for a Political Party, has produced some good work in the fourth and fifth years. Miss Thelma Silcock has designed a charming group, the influence of which would surely be for the good of any political party so fortunate as to occupy the delightful buildings. Mr. F. N. Astbury presents a more robust conception of the requirements of politicians, and his perspective drawing of the group, with a panoramic background of rugged Scottish mountain scenery, was, we trust, not wholly lost upon Mr. Ramsay MacDonald as he made his tour of inspection. Mr. F. H. Crossley and Mr. A. W. R. Cowley have submitted good designs for a Church and Parish Hall, though the latter's church tower is, we venture to think, too heavy.

It is most interesting to observe that many of the students who excel in design and rendering prove themselves most capable in the production of working drawings. Mr. H. Thearle and Miss Thelma Silcock respectively carried off the first and second prizes offered by Messrs. Holland, Hannen & Cubitt for practical work. The Archibald Dawney Scholarship was awarded to Mr. A. C. Todd for an excellent piece of work, and Mr. C. C. Shaw submits a competent set of working drawings for a General Post Office. It should be pointed out here that these working drawings are decidedly of a practical order, the students by this time (fourth and fifth years) having spent considerable periods in architects' offices engaged on actual work.

The preliminary drawings submitted for the Rome prize are always an interesting feature of the exhibition, and this year is no exception. The subject set, a Gateway to a Town, was capable of many different interpretations. The schemes submitted embrace many divergent points of view, from a simple pile of Gothic outline to a solid San Michele gateway, and all display that strong individual character which, as we stated above, we must regard as clear evidence that the school is conducted on wise lines throughout.

It is to be regretted that the exhibition does not contain the winning schemes for this year's Rome prize and Jarvis Studentship won by Mr. G. A. Butling and Mr. C. A. Minoprio respectively, as these would have formed a fine culminating point to a review of the five years of work.

In the fifth year, perhaps, the most interesting work is the design for a convict prison, in the report of which we observe that the student visited three of H.M. prisons. Judging by the set of drawings produced, the impressions received on these visits must have been most pleasant. Mr. Theo. Will's design for a Cathedral of Humanity is a finely conceived pile in brick and concrete. Mr. F. H. Crossley's design of a Railway Terminal displays a great deal of careful thought and good draughtsmanship.

The School of Town Planning has achieved much good, solid work, but it is impossible without a very great deal of close study of the programmes to attempt any detailed criticism. In conclusion, we feel that Professor Reilly and the staff of the school, as well as the students, are again to be congratulated on a thoroughly successful year's work.

THE BUILDING TRADE.

SOME OBSERVATIONS ON THE RIGHT TO LIGHT AND THE LAW RELATING THERETO.—XI

IN our last article we cited certain dicta of Lords Macnaghten and Lindley in *Colls v. Home and Colonial Stores* (1904 A.C. 179), as to the principles on which the courts should act in granting injunctions or giving damages where the right to light has been infringed. "It must be remembered that, as Lord Macnaghten said, it is a matter for judicial discretion, and therefore no hard and fast rules can be laid down, but such a discretion is exercised on definite lines and thus previous decisions are material."

As we have shown, Lord Macnaghten expressed the opinion that if there really was a question as to whether the obstruction was legal or not, and if the defendant had acted reasonably and fairly, only damages should be awarded; and Lord Lindley took the view that, even if the plaintiffs in that case (*Colls' case*) could show any cause of action, the damages would be small and certainly a mandatory injunction should not be granted; but in addition to the above opinions, we propose to mention one or two cases in which the circumstances have been such as to incline the Court to withhold an injunction and only to award damages.

In *National Provincial Plate Glass Insurance Company v. The Prudential Assurance Co.* (1877, 6 Ch. Div. 757), a case referred to by Lord Lindley, the obstruction complained of was a parapet, and the damage was assessed at £100 to £200, but the injury was caused in connection with an important building scheme, and the alteration in the building gave the plaintiffs in other places more light than they had previously enjoyed. An injunction was refused and the Court awarded £200 damages, but allowed no costs, on the ground that the litigation might have been avoided had the plaintiffs been more reasonable in their demands. This is one of the cases in which, since the decision in *Colls' case*, it is doubtful whether the plaintiffs could have shown any actionable interference with their right to light, and on this point, *Davis v. Marrable* (1913, 2 Ch. 421), seems to confirm such doubts, as in that case, where the offending building caused some obstruction, but in other places increased the former access of light, the light as a whole was regarded, and the plaintiffs failed in their action, but, as regards the decision as to the injunction, this point does not affect the decision given in *National Provincial Plate Glass Co.*

In *Shelfer v. City of London Electric Lighting Company* (1895, 1 Ch. 287), a case also referred to by Lord Lindley in *Colls' case*, the Court of Appeal laid it down that, in the case of a continuing actionable nuisance, the jurisdiction of the Court to award damages instead of an injunction ought to be exercised only under very exceptional circumstances, and Lord Justice A. L. Smith said that damages instead of an injunction may be given when all the following requirements are found in conjunction, that is, where the injury to the plaintiffs' rights are (1) small; (2) capable of being estimated in money; (3) capable of being adequately compensated in a small sum; and (4) where an injunction would be oppressive. In addition to these requirements, as we have shown above, and as was again asserted in this case, there is the conduct of the parties to be considered—if, for instance, the defendant has hurried on his building operations, or acted unreasonably, he may have disentitled himself from asking that damages shall be substituted for an injunction.

We now come to a point which has only very recently been decided as to the jurisdiction of the Courts to award damages where the obstruction is only threatened, the building not having yet reached a height where it obscures the light. Such actions are known as *quia timet* actions.

In *Litchfield-Speer v. Queen Anne's Gate Syndicate, No. 2, Ltd.* (1919, 1 Ch. 407; *The Builder*, February 28, 1919), it was held that the decision in *Colls v. Home and Colonial Stores* (1904, A.C. 179) had not abrogated the jurisdiction of the Courts to grant an injunction in such cases if the evidence shows that the new building will create a nuisance when completed, or the Court may make an order declaratory of the plaintiff's right, with liberty to apply for an injunction should it become necessary; but doubts were expressed whether in such cases the Court had power to award damages, even where it appeared that the threatened injury could be adequately compensated by a small money payment.

In *Slack v. Leeds Industrial Co-operative Society* (1923, 1 Ch. 431; *The Builder*, May 25, 1923), the Court of first instance found that the circumstances were such that applying the principles suggested by Lord Justice A. L. Smith in *Shelfer v. City of London Electric Lighting Company* (*ubi sup.*), the injury could adequately be compensated by damages, but that such a course was not open to the Court by reason of the decision in *Dreyfus v. Peruvian Guano Company* (43 Ch. Div. 316). The Court of Appeal also felt bound by *Dreyfus's case* (that being a decision of the Court of Appeal), and affirmed the decision of the Court below, but the point has now been definitely decided to the contrary by the House of Lords in the same case *sub nomine*, *Leeds Industrial Co-operative Society v. Slack* (1924, A.C. 851; *The Builder*, January 2, 1925). The case really turned upon 21 & 22 Vic. C. 27, section 2, Lord Cairns Act, 1858, which we referred to in our tenth article. In the first place, there has been much doubt whether that Act is still operative, as it was repealed by the Statute Law Revision Act, 1883, with, however, a saving clause in section 5 that the repeal should not affect any jurisdiction, or principle, or rule of law, or equity, established or confirmed by any enactment so repealed. The Statute Law Revision Act, 1898, in its turn, repealed parts of the Act of 1883, including section 5, but section 1 contained a proviso that the Act should not affect any principle or rule of law or established jurisdiction, notwithstanding that the same might have been affirmed by, or derived from, any of the repealed enactments. The House of Lords has now, by a majority, authoritatively held that, notwithstanding the repeal of section 2 of Lord Cairns' Act, the effect of section 16 of the Judicature Act, 1873, and section 1 of the Statute Law Revision Act, 1898, is to maintain in force the jurisdiction which it conferred.

We set out the material parts of section 2 in our tenth article, but for convenience we do so again here. Section 2 provides: "In all cases in which the Court of Chancery has jurisdiction to entertain an application for an injunction against . . . the commission or continuance of any wrongful act . . . it shall be lawful for the same Court, if it shall think fit, to award damages to the party injured either in addition to, or in substitution for, an injunction." The Courts below had held, following *Dreyfus v. Peruvian Guano Company* (*ubi sup.*) that the section only applied where the damages had already been occasioned, and that it did not apply where the damage was only threatened, but the House of Lords have now held by a majority that it applies also where the damage is threatened and in a *quia timet* action such as was the case before them. The following passage from the judgment of Lord Finlay seems to explain the position: "The power is given to award damages to the party injured either in addition to or in substitution for an injunction. If the

damages are given in addition to the injunction they are to compensate for the injury which has been done, and the injunction will prevent its continuance or repetition. But if damages are given in substitution for an injunction they must necessarily cover not only injury already sustained, but also injury which would be inflicted in the future by the commission of the act threatened. If no injury has yet been sustained, the damages will be solely in respect of the damage to be sustained in the future by injuries which the injunction if granted would have prevented."

And again: "In the present case the building has not proceeded far enough to constitute an actionable wrong in respect of the plaintiff's lights, and an injunction would prevent the commission of that wrong in the future. On what principle can it be said that until there has been some interference with the plaintiff's windows, the Court cannot give damages in lieu of an injunction against obstruction? Such a construction would impose a purely arbitrary and meaningless restriction on the relief to be given under the Act."

This decision has set aside doubts that have been experienced for some time past (as in *Martin v. Price*, 1894, 1 Ch. 276), and adopts a course pursued in *Holland v. Worley* (1881, L.R. 26 Ch. Div. 578), but the House of Lords pointed out that the jurisdiction must not be so exercised as in any sense to legalise the commission of torts by any defendant who was able and willing to pay damages, and two passages were quoted from judgments delivered in *Shelfer v. City of London Electric Company* (1895, 1 Ch. 287) and *Cowper v. Laidler* (1902 Ch. 337).

In the first of the above cases Lord Justice Lindley (as he then was) said: "The jurisdiction to give damages instead of an injunction is in words given in all cases; but the use of the word 'damages' has led to a doubt whether the Act applies to cases where no injury at all has yet been inflicted but where injury is threatened only. Subject, however, to that doubt there appears to be no limit to the jurisdiction, but in exercising the jurisdiction thus given, attention ought to be paid to well settled principles; and ever since Lord Cairns' Act was passed, the Court of Chancery has repudiated the notion that the Legislature intended to turn that Court into a tribunal for legalising wrongful acts; or, in other words, the Court has always protested against the notion that it ought to allow a wrong to continue simply because the wrongdoer is able and willing to pay for the injury he may inflict. The doubt then expressed has now been set at rest by the decision in *Stocks case*. The passage quoted from *Cowper v. Laidler* was from the judgment of then Mr. Justice Buckley: "The Court has affirmed over and over again that the jurisdiction to give damages where it exists is not to be used as in fact to enable the defendant to purchase from the plaintiff against his will his legal right to the easement."

Lords Sumner and Carson dissented from the judgment delivered by the majority of the House of Lords in *Slack's case*.

It may be useful to give the form of the order made in this case. "Order of the Court of Appeal reversed and cause remitted back to the Court of Appeal with a direction that there is jurisdiction to award damages and a direction to do therein as shall be just and consistent with this judgment. The respondents to pay the costs of the Court of Appeal and also the costs of the appeal to this House."

Contractors' New Office.

Messrs. William Shepherd & Sons, Ltd., road, contractors and asphaltic slag manufacturers, Milkstone, Rochdale, have opened a Birmingham office at 104, Colmore-row, Telephone, Central 194.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting?—ED.

Pre-Cast Concrete.

[REPLY TO "ACCELERATE," JULY 3.]

SIR,—Your correspondent will find that the work described can be considerably speeded up if the blocks are cast on a levelled floor and the boxes made to consist simply of four sides without a bottom. When the concrete has been in a day the sides can be lifted off leaving the block to mature undisturbed, and the box can then be placed in a new position and a fresh block cast at once. In the other method the blocks have to be mature before they can stand being tipped out, and greater delay follows.

"PRACTICE."

Cracking Asphalt.

[REPLY TO "PUZZLED," JULY 3.]

SIR,—One good $\frac{3}{4}$ in. coat of asphalt is better than two $\frac{1}{2}$ in. coats if it is to be laid on boarding. Such a coat being homogeneous and elastic will suffer the inevitable slight movement of the timber substructure, where the heavier coat would crack under the strain. Your correspondent will do well in future to specify similar work as above, and will further find first cost considerably lower and results far better.

"SPECIFIC."

SIR,—This should have been laid on boarding felted and then covered with expanded metal. I have laid a number in the last fifteen years, and not one has given. But with board and felt only one must expect a bad result.

E. B.

Blistered Paint.

[REPLY TO "AMATEUR," JULY 3.]

SIR,—For a thoroughly sound job, paint that is badly blistered should be removed either by burning off right to the bare wood, or by the use of a paint remover, and the work entirely re-primed and repainted. The next best thing is to cut out the blisters and coat them over with a priming of water paint, and then rub down the whole before painting.

"DECORATOR."

SIR,—Burn off all blistered paint. In the treatment following use turpentine only as thinners, when the pigment happens to be ground in raw oil.

JOHN M. FIFE.

SIR,—The best cure for blistered paint that I know is to burn off the old paint or strip it with a spirituous paint-remover, and then prime the work with one coat of a good water-paint or washable distemper. Proceed to paint in the usual manner, but take care to mix the oil paint "sharp," i.e., use little oil, and sufficient turpentine with a little gold size for a binder. Finish with a good outside copal varnish. X.

Removing Old Varnished Paper.

[REPLY TO "REPAIRS," JULY 3.]

SIR,—Varnished paper can best be removed by mixing 2 oz. of borax with one pint of hot water, and applied to the surface, brushing same down with a stiff wire brush, the surface being kept damp during the process to prevent dust which would be harmful to the workman engaged.

"P. C."

SIR,—Old varnished paper may be removed by one of the many paint solvents. Such surfaces, however, if in good condition, form an excellent ground for any after treatment, if properly cleaned and prepared, and need not necessarily be otherwise interfered with.

JOHN M. FIFE.

SIR,—If stiff wire brushes are used, the old varnish can be removed sufficiently to permit

of the paper being scored down, and then a thorough soaking with hot water will soften the paper sufficiently to permit of its removal. Paint and varnish solvent is sometimes used to remove the varnish, but this of course is a more expensive method. Still another and quicker way is to remove the varnish by means of a hard wire brush, but in this case it is necessary for the operative to protect his mouth and nostrils so as not to inhale the dry varnish as it comes off.

ARTHUR S. JENKINGS.

Rolling Margin.

[REPLY TO "STUDENT," JULY 3.]

SIR,—The rolling margin on plates, sections, and bars is $2\frac{1}{2}$ per cent. over or under the specified weights. Where a minimum weight of section steel is specified the margin is 5 per cent. or under. Where exact, or "dead" lengths are specified the margin is $\frac{1}{8}$ in. over or under.

"TRADE."

SIR,—The "Rolling Margin" in structural steel is $2\frac{1}{2}$ per cent. under or over the calculated weights, as given in the British Standard Specification, and the maximum variation allowed in cutting so-called "dead" lengths is $\frac{1}{8}$ in. under or over.

See B.S.S., No. 15, 1912.

W. G. W.

Subsidy House.

[REPLY TO MR. R. J. SLATER, JULY 3.]

SIR,—No building can be undertaken without the consent of the local authority, and as this is withheld there is no redress in the matter. The vendor should have enumerated the restrictions under which the property suffered in the conveyance of same, and there may be a case for an action for damages against him for misrepresentation of the property sold, and

your correspondent should obtain legal advice upon the matter.

"SUBSIDY."

SIR,—I had an experience exactly similar to that described by Mr. Reginald J. Slater in your issue for July 3, viz., the building of a garage in an open space between two gables, one house being a subsidy house. The clause ruling the point states: "Contributions will not be payable in respect of any house which contains (among other things) a garage." In my case, the garage was built after the subsidy, and my contention is that the clause refers to a house which contains a garage for business purposes, similar to that of an undertaker or for hiring. There is nothing to prevent a sale of the land and the purchaser building on it subject to by-laws, and I think that the authority would find some difficulty in getting a verdict in their favour if the work were proceeded with.

WM. UNSWORTH.

Rights of Light.

SIR,—A lean-to slate roof over a 6 ft. 6 in. by 3 ft. 6 in. wash-up-pantry, has in it two skylights, one above the other, the pitch of the roof being about 30 degrees. The pantry is a projection from the main building at first-floor level, and the roof does not lean from the main wall, but parallel to it. It is proposed to build up to the existing building, leaving the pantry with an area about 6 ft. 9 in. square at its eaves, and carried up another 24 ft. What angle from the sill of either skylight should be left clear of obstruction to ensure them their right of light?

"CROWN GLASS."

Veneers.

SIR,—Would you kindly inform me where I could obtain selected veneers of different woods for graining copies, or coloured plates of graining and marbling?

J. EVETTS.

COMPARISON OF PRICES OF BUILDING MATERIALS IN JANUARY, 1925, WITH CURRENT PRICES.

Material.	Jan, 1925. £ s. d.	July, 1925 £ s. d.	Rise. %	Fall. %
Bricks—				
Best Stocks	4 3 6	4 3 6	—	—
Flettons	2 13 3	2 13 3	—	—
Glazed	23 0 0	22 0 0	—	4.35
Thames Ballast	0 10 6	0 10 6	—	—
Thames Sand	0 14 6	0 14 6	—	—
Shingle ($\frac{3}{4}$ in.)	0 12 9	0 12 9	—	—
Portland Cement	2 18 0	2 18 0	—	—
Ground Blue Lias Lime	2 4 6	2 4 6	—	—
Grey Stone Lime	2 11 9	2 11 9	—	—
Bath Stone	0 2 9 $\frac{1}{2}$	0 2 9 $\frac{1}{2}$	—	—
Portland Stone	0 4 4	0 4 4	—	—
Good Sound Building Timber—				
4 in. x 11 in.	32 0 0	32 0 0	—	—
3 in. x 11 in.	28 0 0	28 0 0	—	—
2 in. x 11 in.	28 0 0	28 0 0	—	—
3 in. x 9 in.	25 0 0	25 0 0	—	—
3 in. x 7 in.	23 0 0	23 0 0	—	—
3 in. x 4 in.	24 0 0	23 0 0	—	4.16
Slates—				
24 in. x 12 in.	37 12 6	37 12 6	—	—
22 in. x 12 in.	34 0 0	34 0 0	—	—
20 in. x 10 in.	25 12 6	25 12 6	—	—
18 in. x 10 in.	17 12 6	17 12 6	—	—
16 in. x 8 in.	13 15 0	13 15 0	—	—
R.S. Joists	13 10 0	13 10 0	—	—
Iron—				
Common Bars	13 10 0	13 10 0	—	—
Mild Steel Bars	12 0 0	12 0 0	—	—
Steel Bars	12 10 0	11 0 0	—	12.00
Cut Nails	20 10 0	20 0 0	—	2.44
Sheet Lead	54 0 0	44 10 0	—	17.59
Glass—				
15 oz. Sheet	0 0 3 $\frac{3}{8}$	0 0 3 $\frac{1}{8}$	—	7.4
21 oz. Sheet	0 0 5	0 0 4 $\frac{3}{8}$	—	7.50
26 oz. Sheet	0 0 6	0 0 5 $\frac{3}{8}$	—	4.17
Raw Linseed Oil	0 4 5	0 4 4	—	1.88
Turpentine	0 5 4	0 6 0	12.50	—
Ground English White Lead	62 10 0	55 15 0	—	10.80
White Lead Paint	84 15 0	76 15 0	—	9.44
Red Lead	57 0 0	53 0 0	—	7.02

NEW BUILDINGS IN LONDON.

Battersea.—The Gaslight & Coke Co., Ltd., propose to build important extensions at the gasworks. Plans are being prepared under the direction of Mr. T. Hardie, M.I.C.E., chief engineer to the company.

Carlton House-terrace.—Extensions are to be made to the German Embassy at No. 9, Carlton House-terrace. No. 8 of the terrace has been purchased, and is to be incorporated. Plans are being prepared by an architect on the staff of the Legation.

Chelsea.—Work is shortly to be put in hand on the large extensions at the St. Mark's Training College at King's-road, S.W.3. Messrs. Rice & Son, 15, Stockwell-road, S.W.7, builders. Messrs. Beazley & Burrows, 17, Victoria-street, S.W.1, architects.

Croydon.—It is proposed to build a new Palais de Danse to plans prepared by Mr. H. Victor Kerr, 22, Old-square, Lincoln's Inn, W.C.2.

Deptford.—No. 20, High-street, S.E., is to be rebuilt for Messrs. Mitchell & Son, of High-street, Deptford. The contractors are Messrs. W. Figg, George-row, S.E.6. The architects are Messrs. Purvis & Purvis, New Cross-road, S.E.14.

Edgware.—The Bridge Farm Estate is being developed for housing purposes. Mr. William Pitt, 11, Bolton-street, W.1, architect.

Edmonton.—Messrs. Waite & Waite, auctioneers and estate agents, of 15, Great Castle-street, W.1, has sold the freehold site occupied by Nos. 157, 159, & 161, Fore-street, N., on which a block of shops and flats is to be erected.

Great Ormond-street.—The Great Ormond-street Hospital for Sick Children, W.C.1, is to be extended at a cost of £40,000. Mr. Charles E. Barry, A.R.I.B.A., Parliament-mansions, Victoria-street, S.W.1, architect.

Greenwich.—A men's receiving ward, offices, board-room, etc., are to be erected and sundry alterations executed at the Greenwich Union Infirmary, S.E.10, to the plans of Messrs. William A. Pite, Son & Fairweather, 12, Carteret-street, Queen Anne's Gate, S.W.1. Mr. Louis Jacob, F.S.I., 39, Bloomsbury-square, W.C.1, quantity surveyor.

Hanwell.—The Great Western Land Co., Ltd., has placed a contract for the erection of 90 houses in Studland-road, W.7, with Mr. P. Brown, 36, Magnolia-road, Chiswick, W. The architect is Mr. R. A. C. Churchward, 92, Victoria-street, S.W.1.

Kensington.—Plans for a new bank for the Midland Bank, Ltd., at 15-16, Leonard's-place, Kensington, W.8, have been prepared by Messrs. Whinney, Son & Austen Hall, 8, Old Jewry, E.C.2.

Leadenhall-street.—It is proposed next year to commence the rebuilding of the office premises at No. 147, Leadenhall-street, E.C.3. Mr. James O'Connor, architect, New York City.

Leighton-road.—Messrs. Watney, Combe, Reid & Co., Ltd., brewers, have decided to rebuild the "Gloucester Arms" public-house at 61, Leighton-road, N.W., at a cost of about £10,000. Plans by the company's chief architect, Mr. Malcolm T. Saunders.

Maidstone-street.—The "Britannia" public house at Britannia-street, E.1, owned by Messrs. West's Brewery Co., Ltd., Hackney-road, E.2, is to be pulled down and reconstructed. Mr. Samuel A. S. Yeo, A.R.I.B.A., Bank Chambers, St. John-street, E.C.1, architect.

Marylebone-road.—It is proposed to rebuild the Queen Charlotte Hospital at Marylebone-road, N.W.1. Messrs. Jarvis & Richards, 60, Tufton-street, S.W.1, architects.

New Cross.—The site of 32, New Cross-road, S.E., has been taken over for a billiard hall for 16 tables. The contract has been placed with Messrs. Telling Bros., Ltd., Eastcote Station, Esher. Plans by Mr. Charles Caney, surveyor, 8, Camberwell Green, S.E.5.

Norfolk-street.—The Howard Hotel, in Norfolk-street, Strand, W.C.2, is to be completed, modernised and extended. Messrs. William & Edward Hunt, F.R.I.B.A., 30, Norfolk-street, W.C.2, architects.

Pall Mall.—Extensions to the premises of the Army and Navy Club in Pall Mall, S.W.1, are to be carried out. The contractors are Messrs. Higgs & Hill, Ltd., Crown Works, South Lambeth-road, S.W.8. Mr. Claude W. Ferrier, F.R.I.B.A., 11, Waterloo-place, S.W.1, architect.

Peckham.—A new billiard hall and a block of six shops are to be built at the corner of Peckham Rye and Nunhead-crescent, S.E.15. Messrs. Dowton & Co., architects, 165, Ryelane, Peckham, S.E.

Piccadilly.—The site has now been cleared for the important block of shops and flats which are to be erected at No. 81, Piccadilly, W.1, for Messrs. R. M. Phillips, Ltd., of Conduit-street, W.1. The contractors are Messrs. Griggs & Sons, 100, Victoria-street, S.W.1. Messrs. Trehearne & Norman, of Windsor House, Kingsway, W.C., architects.

Plaistow.—The rebuilding of the old portion of the out-patients' department, including the casualty department, etc., to the plans of Messrs. A. Saxon Snell & Phillips, 9, Bentinck-street, Manchester-square, W.1, is projected by the Board of Governors of the St. Mary's Hospital for Women and Children.

Regent-street.—The rebuilding of the block of premises at Nos. 60 and 62, Regent-street, W.1, including the well-known Imperial Restaurant of M. Oddenino, is to be put in hand towards the end of this year. Mr. T. H. Smith, of 17, Basinghall-street, E.C.2, architect.

Rotherhithe.—New office premises are to be built on the site of Nos. 464-470, Rotherhithe-street, S.E.16, for Messrs. H. J. Enthoven & Sons, Ltd., 54, New Broad-street, E.C.2. The contract has been placed with Messrs. Galbraith Bros., 63, Waterloo-street, S.E.6. The architects are Messrs. J. Moir, Kennard & Sons, 13, Railway Approach, London Bridge, S.E.1.

Shoreditch.—Messrs. R. & J. Hill, Ltd., of 178, Shoreditch High-street, E.1, propose to build an extension to their factory and warehouse. Mr. William Pitt, 11, Bolton-street, W., architect.

Southfields.—A new mosque for the Ahmadiya Movement in Islam is to be built in Melrose-road, S.W.18. Mr. Chas. H. Rosher, 17, Dane-street, Holborn, W.C., architect.

Streatham.—A permanent vicarage is to be erected at St. Margaret's Church S.W.16, for the Rev. A. P. Gritch. Plans by Mr. W. H. Forsyth (Messrs. Forsyth & Maule), 12, Stratford-place, W.1.

Surbiton.—The Regent House estate at Surbiton, extending over 75 acres, has been bought by Messrs. H. C. Jones & Co., builders, 496, Streatham High-road, S.W.16. It is intended to construct several miles of roads and sewers and to build about 500 houses.

Sydenham.—A new parish hall for All Saints' Church, Sydenham, S.E., is to be built, at a cost of £5,000. Mr. Herbert Passmore (Messrs. Caröe & Passmore), 3, Great College-street, S.W.1, is the architect.

Tooting.—The erection of a new church, dedicated to St. Augustine, on a site in Garrett-

lane, S.W.17, is proposed. Mr. H. Burk Downing, F.R.I.B.A., 12, Little College-street, S.W.1, architect.

Vincent-square.—New quarters for the nursing staff at the Grosvenor Hospital for Women at Vincent-square, S.W.1, are to be erected. Messrs. Fox, Jones & Penfold, 11, John-street, Bedford-row, W.C., architects.

Woolwich.—It is expected that the cinema at Beresford-square, S.E., will be closed shortly in order that a complete reconstruction scheme may be carried out. Mr. Bertie Crew, 75, Shaftesbury-avenue, W.1, architect.

Woolwich.—It is proposed to complete the administrative quarters of the British Hospital for Mothers and Babies, at Woolwich, S.E., at a cost of £40,000. Plans have been prepared by Messrs. Young & Hall, 17, Southampton-street, W.C.1.

SHOPKEEPER'S LIABILITY

£25 Damages for a Shop Blind that Fell from Unknown Cause.

A jury gave a verdict for £25 damages, in a most unusual claim, which exemplifies the risk run by shopkeepers, in the Shoreditch County Court before Judge Cluer recently. The plaintiff in the action was Ellen Amy Williams, of 11, Somerford-grove, Stoke Newington, and she sued Mrs. Bacon, a stationery and toy dealer, of 113, Evering-road, Stoke Newington, to recover £50 for personal injuries. It was alleged that, owing to the carelessness or negligence of the defendant or of her servant, a shop blind fell on the plaintiff whilst she was passing under it. She was severely injured, besides suffering great shock to the system. The defence was that it was no fault of the defendant, whose blind was in a perfect condition, and that the cause of it falling was a tremendous gale of wind which they had had during the night, which might have weakened it, and therefore it was an Act of God.

Mr. O'Connor appeared as counsel for the plaintiff; and Mr. Cluer, son of the judge, for the respondent.

The plaintiff gave evidence as to the blind falling completely upon her, the blind and the roller box as well. No evidence was called to show that the blind was in a bad condition, so Judge Cluer ruled out negligence, and plaintiff's counsel said it should really have been nuisance, it being the duty of shopkeepers to have a blind which was in perfect condition.

For the defence it was argued that nothing had been found wrong with this blind, not a single screw loose, nor anything the matter with it, and that, therefore, it was clear that the violent gale during the night had caused the damage by weakening it, and that could be ascribed as an Act of God.

Judge Cluer, in summing up, said that a blind over a public highway outside a shop had to be kept safe, and there was an imperative duty upon the shopkeeper to see that this was done. It was for the jury to decide whether they considered the plaintiff was at fault, or whether it was an Act of God, owing to the gale.

The jury retired, and on returning into Court gave a verdict for the plaintiff for £25 damages and costs.

Obituary.

The death has occurred, at his residence, 116, Tosson-terrace, Heaton, Newcastle, of Mr. Thos. White, aged 74, formerly a prominent Tyneside builder and contractor.

The death has occurred, at Streatham, of Mr. Wm. Raine, aged 66, of the firm of Messrs. W. Raine & Son, plumbers, of Coniscliffe-road, Darlington.

The death has occurred, at his residence, Charlton House, Mannamead, Plymouth, of Mr. Sydenham James Heal, a well-known building contractor.

BOOK REVIEWS

RATES OF WAGES IN THE BUILDING TRADE

Building Practice. By L. ALLEN GERRARD, F.I.O.B. (London: Blackie & Son, Ltd., 50, Old Bailey.) Price 3s. 6d. net.

This book has been prepared for the guidance of the senior student who wishes to study the question of actual building management, and for the foreman desiring more knowledge of the methods at headquarters; while the builder in practice may be able to learn something about modern ideas which are in general use among large firms. The whole of the contents are devoted to the clerical sections and the question of organisation on the site of operations has not been included, as this was considered outside the scope of this elementary book.

The author has commenced at the very beginning of the subject, and he wisely deals with the most simple items at the outset, in order to enable the reader to grasp readily the principles of the office system. The subjects covered by the book include contracts, finance, accounts, progress records, costing, and other items, which are essential in the contracting business, and each chapter is presented in an interesting manner with due regard to the class of reader catered for.

The most valuable asset in the building trade is undoubtedly that of experience, but that can only be obtained by the devotion of many years of hard work to the industry itself, and in order to profit from the experience gained in the early days it is essential to study every aspect of the work from well-written books which present the results and the experience of other persons. We consider this little volume an excellent one, which will give the reader a real groundwork in office organisation as applied in the successful contractor's business.

Building Construction Plates. Parts I & II. By A. BUCHANAN and W. H. HUDSON. (London: B. T. Batsford, Ltd., 94, High Holborn.) Part I, price 5s.; Part II, price 5s. 6d.

These plates are primarily intended for use in classes, and the two volumes cover one hundred and twelve plates—the first section dealing with the elementary course, and the second being devoted to more advanced subjects. The drawings generally are well presented, and a blank page is provided opposite each plate for the student's class notes, which should prove very useful. It would have been helpful in many cases if more dimensions had been given, although this would probably have necessitated additional space for some subjects, as the diagrams are too crowded on many plates to permit of other figures or particulars. The absence of detailed descriptive notes for the guidance of the student will prevent the extensive use of these plates outside the class-rooms, and the value of the volumes would have been considerably increased if the blank pages had been devoted to explanatory notes on each subject, with sufficient sizes and general information to allow the student to work intelligently at home, while these notes would also have been very useful for reference.

Books Received.

A CENTURY OF GAS IN SOUTH LONDON. (London: South Metropolitan Gas Co.)

THE STRENGTH OF MATERIALS. By Ewart S. Andrews. (London: Chapman & Hall.) Price 13s. 6d. net.

DEAR AULD REEKIE. By Francis Caird Inglis. (London: The Homeland Association, Ltd.) Price 1s. net.

ELECTRICITY FOR EVERYBODY. By R. Borlase Matthews. (London: The Electrical Press, Ltd.) Price 7s. 6d.

MASTERS OF ARCHITECTURE: SIR JOHN SOANE. By H. J. Birstingl. (London: Ernest Benn, Ltd.) Price 10s. 6d.

LONDON CHAMBER OF COMMERCE: Forty-third Annual Report, 1924. London: The London Chamber of Commerce (Inc.).

THE TENDENCY IN PRESENT-DAY DRAWING. By S. C. Kanes Smith. (London: P. & D. Colnaghi.) Price 2s.

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	C'p'ters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Barry	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Bedford	1/9	1/9	1/8	1/9	1/9	1/9	1/8	1/2
Birkenhead	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bolton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Bournemouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bradford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Brentwood	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Bridgwater	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Brighton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Burnley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Burton-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Cambridge	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Cardiff	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Chelmsford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Cheltenham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Chesterfield	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Colchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Coveytry	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Crewe	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
E. Glam.(Mon. Val.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Eastbourne	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/1
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Grays	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Grimsbey	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Great Yarmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Hallifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hartlepool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/1
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Ipswich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Lancaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Liverpool	1/9	1/9	1/8	1/9	1/9	1/9	1/8	1/4
Llanelly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
London { 12 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
London { 12-15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Maldstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Newport Mon.	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Northampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Norwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Nottingham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Oakham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
St. Albans	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Southend-on-Sea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stoke-on-Trent	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Stroud	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Swansea	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Swindon	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Taunton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Walsail	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Wigan	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
Windsor	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3

(For rates of wages in the Building Trade in Scotland, see page 124.)

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

JULY 20.—Birmingham.—FLOORING.—Hacking and plastering of walls and relaying of floors with terrazzo flooring in the main corridors of the Dudley-road Hospital, for the B.G. Martin & Martin and W. H. Ward, architects, 106, Colmore-row, Birmingham. Deposit £5 5s.

JULY 20.—Blackpool.—SCHOOL.—New junior Council school in Lynwood-avenue, Layton, for the C.B. F. Wood, Borough Engineer and Surveyor. Deposit £2 2s.

JULY 20.—Blackpool.—SCHOOL.—In Claremont-road, North Shore, for the C.B. F. Wood, Borough Engineer and Surveyor. Deposit £2 2s.

JULY 20.—Bournemouth.—Jarrah decking, timber shelters, stage, tea rooms, etc., in connection with the reconstruction of Boscombe Pier Head, Contract No. 2, for the Borough Council, Borough Engineer and Surveyor, Town Hall, Bournemouth. Deposit £1 1s.

JULY 20.—Bradford.—HOUSES.—For 150 houses, Class "A," 6 houses, Class "A2," 10 houses, Class "B," on the Lower Grange estate, for the T.C. City Architect.

JULY 20.—Chelmsford.—ENGINE-HOUSE.—Engine-house and other building work at the Admirals Park waterworks, Rainsford-road, for the T.C. E. J. Miles, Borough Engineer and Surveyor. Deposit £2 2s.

JULY 20.—Chepping Wycombe.—HOUSES.—Ninety houses on the Bowerdean housing site, for the T.C. T. J. Rushbrooke, Borough Surveyor, Borough Surveyor's Office, High Wycombe. Deposit £2 2s.

JULY 20.—Chester.—SCHOOL.—Elementary school at Moreton for 400 scholars, with Special Subjects Centre, for the C.C. H. Beswick, F.R.I.B.A., County Architect, Newgate-street, Chester. Deposit £1 1s.

JULY 20.—Edinburgh.—SHED.—Motor tractor and trailer shed at Tollcross, for the T.C. E. J. MacRae, A.R.I.B.A., City Architect.

JULY 20.—Hartismere.—WORKSHOP.—In the grounds of the New Infirmary, Victoria-road, Eye, Suffolk, for the B.G. H. Barnes, Clerk to the Guardians, Union Office, Victoria-road, Eye, Suffolk.

JULY 20.—Heckmondwike.—HOUSES.—Forty-six scullery type houses at Stubby Farm housing site, for the U.D.C. F. W. Littlewood, Surveyor.

JULY 20.—Huddersfield.—DECORATING.—Fartown Trinity Wesleyan Church, Minister, 130, Halifax Old-road.

JULY 20.—London, E.C.4.—PAINTING AND DECORATIONS.—Painting and decorating certain chambers and other buildings in the Middle Temple, Treasury Office, 2, Plowden Buildings, Middle Temple-lane, E.C.4.

JULY 20.—Maidenhead.—DWELLING-HOUSES.—Erection of 50 and two with shops attached, for the T.C. Borough Surveyor, Guildhall, Maidenhead. Deposit £3 3s.

JULY 20.—Maidstone, Kent.—Erection of Court House at Dartford, for the Kent C.C. County Architect, 86, Week-street, Maidstone. Deposit £2 2s.

JULY 20.—Mirfield.—PAINTING.—Of Hopton Bridge, for the U.D.C. Surveyor.

JULY 20.—Newport.—PAINTING.—For (1) St. Mary's schools, internal; (2) Liswerry schools, external; (3) St. Woolos schools, external; (4) Alexandra schools, internal and external, for the E.C. Borough Architect, Municipal Chambers, Corn-street.

JULY 20.—Nottingham.—PAINTING.—External painting at Dame Agnes-street Reading Room and Lending Library, for the T.C. T. Wallis Gordon, City Engineer. Deposit £1.

JULY 20.—Rochdale.—POINTING.—Pointing and repairing the Trinity Wesleyan Church and Schools, for the Committee, J. Butterworth, 21, Muriel-street.

JULY 20.—Sevenoaks.—HEATING.—Installation of central heating at the Isolation Hospital, Oak-lane, for the U.D.C. W. Sothorn, Sanitary Inspector.

JULY 20.—Southampton.—BUILDING.—Engine-house, workshop, fuel economiser house, and extensions to boiler and filter-houses, at the Otterbourne Pumping Station, for the C.B. Waterworks Engineer, 21, Shirley-road, Southampton. Deposit £5 5s.

JULY 20.—Stoke and Woistanton.—ALTERATIONS.—To the engine room at the Turnhurst-road Institution, for the B.G. T. Wood, Clerk to the Guardians, Union Offices, Stoke-on-Trent.

JULY 20.—Wakefield.—CHURCH.—At Portobello, W. H. Herbert Marten, L.R.I.B.A., 50, Cookridge-street, Leeds.

JULY 20.—Wallasey.—HOUSES.—Thirty-two houses on the Belvidere-road site, for the C.B. Borough Engineer and Surveyor. Deposit £1 1s.

JULY 20.—Winchester.—Erection of certain additions to the Electricity Works, Gordon-road, Winchester. Town Clerk, The Guildhall, Winchester. Deposit £2 2s.

JULY 20.—Windsor.—HOUSES.—Twenty parlour-type houses, fences, paths, &c., on the building site at Bedford-lane, Sunningdale, Berks, for the R.D.C. W. Menzies, architect, Englefield Green, Surrey. Deposit £1 1s.

***JULY 21.—Ashford (Kent).**—OFFICES, SHOWROOMS AND GARAGE.—New offices, showrooms and garage, for Messrs. Stanhays, Ltd. Edwin A. Jackson, L.R.I.B.A., Ashford, Kent. Deposit £1 1s.

JULY 21.—Barnsley.—DECORATIONS.—Internal decorations at the High School for Girls, for the Governors, Evan Davies, Clerk to the Governors, Education Office.

JULY 21.—Belfast.—VARIOUS.—Pavilion at the bowling green, Musgrave Park, sanitary accommodation at Balmoral Industrial School, and painting work Templemore-avenue Baths, for the C.B. City Surveyor.

JULY 21.—Brighton.—Erection of Telephone Exchange at Rottingdean, for the Commissioners H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

JULY 21.—Bristol.—SUB-STATION.—At Filton-road, Filton, for the T.C. H. Faraday Proctor, Chief Engineer and General Manager Colston-avenue. Deposit £2 2s.

JULY 21.—Exeter.—HOUSES.—Erection of 54 in various blocks, for the City Council. City Architect, 2, Southernhay West, Exeter. Deposit £2 per set.

JULY 21.—Great Ouseburn.—ADDITIONS.—Alterations and additions to the low pressure hot water installation at the Council school, for the West Riding E.C. Education Department, County Hall, Wakefield.

JULY 21.—Greetland.—PRESSURE.—Low pressure hot water boiler at the Council school, for the West Riding E.C. Education Department, County Hall, Wakefield.

JULY 21.—Kilburn, N.W.6.—CLEANING AND PAINTING WORKS.—(1) Exterior of 259 houses, (2) exterior and interior of the Lodge, Roundwood Park, for the Willesden District Council. Engineer to the Council, Town Hall, Dyne-road, Kilburn, N.W.6.

***JULY 21.—London, E.2.**—TEMPORARY STRUCTURE.—Erection of a temporary structure for use as a chapel at the Hospital in Cambridge-road, Bethnal Green. Clerk to the Guardians, Guardians' Administrative Offices, 79A, Bishop's-road, Bethnal Green, E.2.

JULY 21.—Nottingham.—PAINTING.—External cleaning and painting 27 to 37 (inclusive), Huntingdon-street, and 1 to 25 (inclusive), Howard-street, and cottages at rear, and Victoria Buildings, Bath-street, for the T.C. Estates Surveyor. Deposit £1 each.

JULY 21.—Plymouth.—HOUSES.—Houses at Mount Gould-terrace, Lower Mount Gould estate, for the C.B. J. Wibberley, Borough Engineer and Surveyor. Deposit £2 2s.

JULY 21.—Preston, Lancs.—Alterations to the Post Office and Telephone Exchange. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s, payable to the Commissioners.

JULY 21.—Richmond (Surrey).—WALL.—Raising the existing concrete wall (about 500 yds. in length) to protect Petersham Meadow from the flood waters of the River Thames, for the T.C. Hugh P. Williamson, engineer, Riverside, Richmond, Surrey. Deposit £1 1s.

JULY 21.—Swadlincote.—HOUSES.—Erection of 50, fencing and drainage, for the U.D.C. Baines & Provis, architects, 22, Friar-lane, Leicester. Deposit £2.

JULY 21.—Swansea.—REPAINTING.—Cleaning and repainting cranes, bridges, buildings, &c., at Swansea Docks, for the G.W.R. A. E. Bolter, Secretary, Paddington Station, London, W.2.

JULY 21.—West Riding.—BUILDING.—For (1) brick wall and iron fencing to the additional land at Royston Council School, and (2) additional conveniences at South Kirby Council School, for the E.C. Education Department, County Hall, Wakefield.

JULY 22.—Acton, W.3.—HOUSES.—Fifty, on the extension of Noel-road, Acton, for the Great Western (London) Garden Village Society, Ltd. T. Alwyn Lloyd, F.R.I.B.A., 6, Cathedral-road, Cardiff. Deposit £3 3s.

JULY 22.—Bentley-with-Arkesey.—BUILDING.—Two shelters, pavilion, dancing floor and one sandpit in the Welfare Park, for the U.D.C. P. C. Woodhall, Architect and Surveyor, Council Offices, Bentley. Deposit £1 1s.

JULY 22.—Hammersmith, W.6.—SANITARY WORK.—Work and materials required in the erection of a timber framed and corrugated iron structure, and the provision and fixing of sanitary fittings, adjoining the Town Hall Annex, Brook Green-road, W.6, for the Metropolitan Borough Council, Borough Engineer and Surveyor, Town Hall. Deposit £2 2s.

JULY 22.—London.—REPAIRS.—External repairs and painting works to 525 houses on the Wormholt housing estate and to 14, Coverdale-road, for the Hammersmith B.C. R. Hampton Lucas, Borough Engineer and Surveyor.

JULY 22.—Newport.—REPAIRS.—For (1) adaptation of Spring-gardens School to form Belle Vue Central School, and (2) conversion of hut at Somerton for a temporary school, for the E.C. Borough Architect, Municipal Chambers, Corn-street.

JULY 22.—Norfolk.—BUILDING.—School at Walpole St. Andrew Cross Keys, alterations and additions to Walpole St. Andrew School, and alterations and additions to Buxton Mixed School, for the E.C. J. S. Davis, Secretary, Shirehall, Norwich. Deposit £2 2s. each.

JULY 22.—Primrose Hill.—Erection of temporary Telephone Exchange, for the Commissioners H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

JULY 22.—Walthamstow, E.17.—Erection of 192 houses at Higham Hill site, for the U.D.C. The Surveyor, Town Hall Annex, Oxford-road, E.17.

JULY 23.—Doncaster.—CONVENIENCES.—In Elmfield Park, for the T.C. R. E. Ford, Borough Estates Surveyor, 3, Priory-place.

JULY 23.—Dover.—PAINTING.—Painting and decorating works and building alterations at the Elementary Schools, for the T.C. Wm. Boulton Smith, Borough Engineer.

***JULY 23.—London.**—REPAIRS.—For (a) Alterations in married couples' quarters, and (b) provision of lantern light in needle room, at Ladywell Institution, Ladywell-road, S.E.13, for the Bermondsey B.G. Newman & Newman, architects. Deposit £5.

JULY 23.—Lowestoft.—Erection of Employment Exchange for the Commissioners of H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

JULY 23.—Manchester.—EXCAVATING.—Excavating and concreting for purifier house and purifier foundations, on the site of the proposed new gasworks at Partington, for the T.C. J. H. Sillitoe, Secretary, Gas Department.

JULY 23.—Newcastle-upon-Tyne (West).—Erection of Telephone Exchange, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, S.W.1. Deposit £1 1s. (payable to the Commissioners.)

***JULY 23.—Uxbridge.**—HOSPITAL BUILDINGS.—Erection of a Ward Block and connecting corridors, and for the reconstruction of the existing Nurses' Home, and a large addition thereto containing 36 rooms, at the Union Institution at Hillingdon, for the Guardians. A. Saxon Snell & Phillips, architects, 9, Bentinck-street, Manchester-square, W.1. Deposit £5.

JULY 24.—Belfast.—PAINTING.—For (1) Painting at Falls-road Public Library, and (2) French polishing at Falls-road Public Library, for the C.B. City Surveyor.

JULY 24.—Brighton.—HOUSE.—Caretaker's house on the site of the new secondary school for girls, Ditchling-road, for the C.B. T. Simpson & Son, surveyors, 16, Ship-street. Deposit £2.

JULY 24.—Dover.—Fifty houses on the Astor-avenue estate, for the Corporation. Mr. A. H. Steele, architect, 22, Park-street, Dover.

JULY 24.—Glasgow.—ELECTRIC LIGHT.—Electric lighting installation on the Belvidere housing site, for the T.C. R. B. Mitchell, 75, Waterloo-street.

JULY 24.—Letchworth, Herts.—Extension of Post Office, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

JULY 24.—Near Grimsby.—SCHOOL.—At Peake-lane, Waltham, near Grimsby, for the Lindsey C.C. Scorer & Gamble, architects, Bank-street Chambers, Lincoln. Deposit £2 2s.

***JULY 24.—Northampton.**—HOUSES.—(1) 162 houses of concrete block construction, and (2) 162 houses of brick construction on the Abington Lodge Farm Estate. Mr. Alfred Fidler, M.Inst.C.E., Borough Engineer, Guildhall, Northampton. Deposit £5.

JULY 24.—Preston.—Adaptations and extensions to No. 38, Westcliffe, Preston, for the Commissioners H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

JULY 24.—Yorkshire.—PAINTING.—Painting and cleaning various schools and teachers' houses, for the East Riding E.C. County Architect, County Hall, Beverley.

JULY 25.—Athenry.—DRAINAGE WORK.—New domestic drainage work at the Presentation Convent. A. MacDonald, architect, Francis-street, Galway.

JULY 25.—Cardiganshire.—REPAIRS.—General repairs to the undermentioned buildings.—Ystrad Caron, Tregaron; Llwyn, Llanddewi Brefi; Garnfach, Llannrhystyd; Gelmast, Devil's Bridge, for the C.C. D. Evans, County Land Agent, Agricultural Office, Lampeter.

JULY 25.—Carlisle.—BUILDING.—Electricity generating station, at Willow Holme, for the T.C. Henry C. Marks, City Engineer and Surveyor, 18, Fisher-street. Deposit £2 2s.

***JULY 25.—Deal.**—HOUSES.—Erection of part or whole of 20 houses on the Mill-road site, for the Corporation. T. C. Golder, Surveyor and Architect, 18, Queen-street, Deal.

JULY 25.—London.—PAINTING.—Sundry repairs, painting, and cleansing work at (1) St. Marylebone Home, Northumberland-street, W.1; (2) St. Marylebone Hospital, Rackham-street, W.10, for the St. Marylebone B.G. Constantine & Vernon, architects, 82, Mortimer-street, W.1. Deposit £1.

***JULY 25.—Maidstone, Kent.**—ENLARGEMENT OF SCHOOL.—Enlargement of the Council school at Cudham, Biggin Hill, in the county of Kent, for the Education Committee. County Education Architect, Room 69, Sessions House, Maidstone, between 10 a.m. and 4 p.m. (Saturdays and Sundays excepted). Deposit £2 2s., in the form of a cheque payable to the Kent Education Committee, and crossed "National Provincial Bank, Ltd."

JULY 25.—Pontypriid.—HOUSES.—Fifty houses on the (Lower site) Dufray, Rhydfelen, for the U.D.C. W. E. Lowe, Engineer and Surveyor. Deposit £2 2s.

JULY 25.—Selby.—SCHOOL.—Elementary school for 346 children on a site at the south end of James-street, for the Ellis Trust. J. Bilson, architect, 23, Parliament-street, Hull. Deposit £2.

JULY 25.—Smithy Bridge.—PAINTING.—Outside painting of hospital buildings, &c., Milnrow-road, for the Littleborough, Milnrow and Wardle Hospital Committee. G. H. Wild, Clerk to the Committee, Council Offices, Littleborough.

JULY 25.—Sowerby Bridge.—PAINTING.—External painting of the following properties:—(1) Council Offices, Public Library, Fire Station, &c.; (2) buildings at the sewage works, for the U.D.C. J. Eastwood, Architect and Surveyor.

JULY 25.—Tonbridge.—HOUSES.—Forty (and alteratively, an additional 46) living-room type houses, in pairs, on the Hectorage Estate, Tonbridge, for the U.D.C. Engineer and Surveyor, The Castle, Tonbridge. Deposit £2 2s.

JULY 25.—Wayland.—HOUSES.—Four houses at Old Buckenham, near Almsouses, for the R.D.C. A. A. Gumpertz, Clerk to the Council, Wetton.

JULY 27.—CARLOW.—REPAIRS.—To cottages in Carlow R.D., Scheme No. 266, in accordance with the plan and specification prepared by the Engineer, Irish Sailors' and Soldiers' Land Trust, 30, Lower Fitzwilliam-street, Dublin. Deposit £1 ls.

JULY 27.—CORK.—REPAIRS.—To cottages in Cork R.D., Scheme No. 7, in accordance with plan and specification prepared by the Engineer, Irish Sailors' and Soldiers' Land Trust, 30, Lower Fitzwilliam-street, Dublin. Deposit £1 ls.

JULY 27.—DUBLIN.—PAINTING.—Painting work, &c., at Crookling Sanatorium, for the T.C. J. J. Murphy, Town Clerk.

JULY 27.—DUBLIN.—HOUSES.—218 houses at Keogh Barracks, Inchicore, for the C.B. City Architect, Exchange Buildings, Lord Edward-street. Deposit £2.

JULY 27.—HULL.—ALTERATIONS.—Alterations and additions to the Norfolk-street Branch police station, for the T.C. City Architect.

JULY 27.—Salford.—NEW DOCK.—Erection and completion of new dock offices, on a site in Trafford-road, Salford, for the Directors of the Manchester Ship Canal. Harry S. Fairhurst, A.R.I.B.A., 14, Chancery-lane, Spring-gardens, Manchester. Deposit £2 2s.

JULY 28.—BARBY.—SCHOOL.—School and classrooms at Barby, near Selby. Rev. H. H. Minchin, Wesley House, Brook-street.

JULY 28.—BASINGSTOKE.—HOUSES, &c.—(1) Erection of 74 houses; (2) the drainage; (3) fencing; (4) paths, for the B.C. Wallis & Smith, architects, Cross-street, Basingstoke. Deposit £2 2s.

JULY 28.—CHELMSFORD.—EXTENSIONS.—Of existing building and other builders' work, at Mildmay-road, for the T.C. E. J. Miles, Borough Engineer and Surveyor. Deposit £1 ls.

JULY 28.—CHESHAM.—HOUSES.—Complete erection of six living room type of houses in one block on the site in Severalls-avenue, Chesham. Captain D. Hinchcliffe, R.E., Council's Architect and Surveyor, Council Offices, Chesham.

JULY 28.—HOLYWOOD.—ALTERATIONS.—Alterations and repairs at the New Post Office premises, Holywood, Co. Down, for the Government of Northern Ireland. Secretary, Ministry of Finance, 15, Donegal-square West.

JULY 28.—LONDON, W.C.2.—PAINTING AND CLEANING.—Internal painting, cleaning, &c., at the Royal Courts of Justice, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners.)

JULY 28.—Salford.—SWIMMING BATH, &c.—Erection and completion of a public swimming bath, wash-house and slipper baths in Hodge-lane, Salford, for the County Borough Council, Charles Swain, 12, Exchange-street, Manchester.

JULY 29.—ASHFORD (Kent).—LABORATORY.—At Victoria Park, for the U.D.C. William Terrill, surveyor, 5, North-street, Ashford, Kent.

JULY 29.—Epping, Essex.—Alterations and additions to Company Headquarters of Anti-Aircraft Searchlight Company, and 4th Battalion Essex Regiment, Hemmell's House, Epping, for the Territorial Army Association, County of Essex. The Secretary, Essex Territorial Army Association, Market-road, Chelmsford. Deposit £2 2s.

JULY 29.—HERFORD.—PUMP AND COMPRESSOR HOUSE.—Pump and compressor house to be erected at the Sewage Works, Mead-lane, for the Corporation. The Engineer, The Castle, Hertford. Deposit £5 (cheque only).

JULY 29.—Manchester.—SCHOOL.—Municipal school in Ravensbury-street, Clayton, for the E.C. P. M. Heath, Town Clerk. Deposit £1 ls.

JULY 29.—Preston, Lancs.—SORTING OFFICE.—Erection of a station sorting office, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners.)

JULY 29.—Woolwich, S.E.18.—PAINTING WORKS.—Painting works, &c., to the Infirmary Plumstead High-street, Plumstead, S.E.18, for the Guardians of the Woolwich Union. Whincoop & Channer, 47, Thomas-street, Woolwich.

JULY 30.—DEWSBURY.—HOUSES.—Sixty-five parlour houses and 114 scullery houses on the Ravens Lodge housing site, for the C.B. Borough Surveyor. Deposit £1 ls.

JULY 30.—GLoucester.—ADDITIONS.—Additions and alterations to Bellefield Sanatorium, for the T.C. J. Lindsay, Town Clerk. Deposit £2 2s.

JULY 30.—West Riding.—ALTERATIONS.—Alterations and repairs to 19 properties on the Whitley estate, for the C.C. County Land Agent, County Hall, Wakefield. Deposit £1.

JULY 31.—Chepstow (Mon.).—PAINTING.—External painting at Bulwark and Hardwick Housing Estates, Chepstow, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners.)

JULY 31.—Grangegorman.—BUILDING.—For (a) alterations to cattle sheds at farmyard, Portrane, new cemetery for Portrane Mental Hospital, two consumptive sanatoria, one each at the male and female divisions, Portrane Mental Hospital, and (b) conversion of disused coastguard station at Portrane into dwelling-houses for five married attendants, for the Mental Hospital. J. J. Doyle, chief clerk and accountant, Grangegorman Mental Hospital, Dublin.

JULY 31.—Walsoken.—REPAIRS.—Repairs and improvements to the Popenhoe farmhouse, premises and cottages, &c., for the Norfolk C.C. T. G. Ellis, County Land Agent, The Shirehouse, Norwich.

AUGUST 1.—Hagworthingto.—REPAIRS.—To the Church at Spilsby. W. G. Watkins, St. Edmunds Chambers, Silver-street, Lincoln.

AUGUST 1.—Lozand.—HOUSES.—Thirty houses, for the T.C. Geo. B. Deas, architect, Central Chambers, Kirkcaldy. Deposit £1.

AUGUST 5.—Brentwood.—BUNGALOWS.—Sixteen bungalows in pairs, near King's-road, for the U.D.C. A. J. Meeson, Surveyor. Deposit £1.

AUGUST 5.—Dorset.—COTTAGES.—Two cottages at Bovington Camp, near Lulworth, Wareham, Dorset, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners.)

AUGUST 5.—London, E.—EXTENSION.—Extension of Canning Town Employment Exchange, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners.)

AUGUST 6.—Clacton-on-Sea.—EXTENSION.—Extension of Post Office, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W.1. Deposit, £1 ls. (cheques payable to the Commissioners.)

AUGUST 6.—Grimsby.—ALTERATIONS.—Alterations to Grimsby Head Post Office, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners.)

AUGUST 6.—London, W.—PAINTING.—External painting at the Ministry of Pensions, Acton, W.3, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners.)

AUGUST 7.—Exeter.—SHOWYARD.—Erection of the showyard, including offices, grand stand, cattle, implement, and other sheds, &c., for the 1926 Exhibition at Crediton, and for two succeeding shows. The Secretary, 20, Queen-street, Exeter.

AUGUST 7.—London, E.C.—PAINTING.—Internal and external painting at the G.P.O., King Edward Building, E.C., for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners.)

AUGUST 7.—Middlesex.—EXTENSION.—Extension of the sub-station, National Physical Laboratory, Teddington, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners.)

AUGUST 10.—Clutton.—HOUSES.—Ten houses at Farrington Gurney, for the R.D.C. W. T. Hawker, Architect, Council House, Temple Cloud, near Bristol.

AUGUST 12.—Eas Grinstead.—COTTAGES.—Erection of 38 cottages of various types on two sites, for the R.D.C. Ernest A. Chilton, Architect, Town Hall Chambers, Uckfield, Sussex. Deposit £2 2s.

AUGUST 15.—Milton.—LIGHTING.—Public lighting of the parish of Milton, for the P.C. R. Bentham, Clerk.

AUGUST 17.—Swindon.—HOUSES.—Erection of 96 houses on Hurst Horsing Estate, for the Corporation. Borough Surveyor, 34, Regent-circus, Swindon.

AUGUST 25.—Wigan.—SCHOOL.—To accommodate 768 scholars, at Whalley, for the C.B. R. B. Donald, Borough and Water Engineer. Deposit £2 2s.

NO DATE.—Knaresborough.—HOUSES.—Twenty-eight houses in blocks of four pairs and five blocks of four, on the Stockwell-road housing site, for the U.D.C. Messrs. Gibson & Hill, 5, Prospect-crescent, Harrogate.

NO DATE.—Leeds.—LIBRARY.—For patent glazing, ceiling lights, roof asphalt, wood block flooring, heating, electric lighting, library fittings, including shelving, movable furniture, wall panelling, &c., for the Public Library in Cardigan-road, Burley, for the T.C. Mr. G. B. Howcroft, architect, Uppermill, near Oldham.

NO DATE.—Mynachdy.—EXTENSIONS.—New school room at Mynachdy, for the Presbyterian Forward Movement. Henry Budgen & Co., 95, St. Mary-street, Cardiff. Deposit £2 2s.

NO DATE.—Letchworth.—OFFICES.—Erection of a block of offices in Works-road, Letchworth. Messrs. Bennett & Bidwell, Leys-avenue, Letchworth. Deposit £2 2s.

MATERIALS. etc.

JULY 24.—Merton and Morden.—FENCING.—Supply and erection of about 1,480 yards of iron railing and gates on the Morden Lodge estate, near Central-road, Morden, for the U.D.C. G. Jerram, Surveyor, Council Offices, Kingston-road, Merton.

JULY 25.—Haysham.—PIPES.—6 in., 4 in., and 3 in. diameter cast-iron S. and S. water pipes, with special castings, for the U.D.C. H. Miller, Surveyor.

JULY 29.—Santiago.—PRING.—Cast-iron piping, for the Empresa de Agua Potable, Department of Overseas Trade, 35, Old Queen-street, London, S.W.1.

AUGUST 10.—South Africa.—TRUSSES.—Sixty-three steel roof trusses, 53 ft. 9 in. clear span, 68 verandah brackets, 5 ft. 9 in. projection, steel angle and steel tee purlins, for the Port Elizabeth T.C. Department of Overseas Trade, 35, Old Queen-street, London, S.W.1.

AUGUST 24.—Catherington (Hants.).—WATER MAINS, &c.—About 4,100 yds. lineal of 6 in. cast-iron water mains; also 4,850 yds. 4 in., and 2,700 yds. 3 in. ditto; with hydrants, &c.; also for construction of two concrete reservoirs and a pumping station. Mr. G. C. Vernon-Inkpen, F.S.I., engineer, 40, Commercial-road, Portsmouth.

NO DATE.—Boston.—MATERIALS.—250 tons shingle, for the T.C. G. E. Clarke, Borough Engineer and Surveyor.

ENGINEERING. IRON AND STEEL.

JULY 20.—Bristol.—RECONSTRUCTION.—Of Sheds "E" and "F," situated on the Grove, Bristol, for the Port Authority. Thomas A. Peace, Chief Engineer, Port of Bristol, Chief Engineer's Office, Avonmouth Dock. Deposit £5.

JULY 20.—Caherciveen.—BRIDGE.—Reconstruction in reinforced concrete of Caherciveen Bridge, for the Kerry C.C. County Surveyor, Courthouse, Tralee.

JULY 20.—Lincoln.—WIDENING.—Of the bridge over the Upper Witham River at Newark-road, for the T.C. S. C. Baggett, City Engineer and Surveyor. Deposit £1 ls.

JULY 21.—Sedgley.—TANKS.—Laying and jointing of stoneware and cast-iron pipe drains, also the construction of Detritus tanks, sedimentation tanks, storm-water tanks, straining tanks, bacteria beds, humus tanks, sludge beds, inspection chambers, the erection of office, stores and engine house, together with all other incidental and auxiliary works, for the U.D.C. Wilcox & Raikes, engineers, 63, Temple-row, Birmingham. Deposit £10 10s.

JULY 22.—Blackburn.—BRIDGE.—Ferro-concrete bridge over L.M. & S. Rly., for the C.B. A. T. Gooseman, Borough and Water Engineer. Deposit £3 3s.

JULY 23.—Manchester.—HOUSE.—Steel-farmed purifier house, on the site of the proposed new gasworks at Partington, for the T.C. J. H. Sillitoe, Secretary, Gas Department.

JULY 23.—Manchester.—VIADUCT.—Over the River Gole, at the Abergele Sanatorium, North Wales, for the T.C. City Engineer. Deposit £3 3s.

JULY 27.—Sunbury-on-Thames.—FOOTBRIDGE.—Permanent footbridge over the backwater at Sunbury, for the U.D.C. H. F. Coales, surveyor. Deposit £2 2s.

JULY 27.—Upavon.—RECONSTRUCTION.—Of the bridge, for the Wiltshire C.C. J. George Powell, County Surveyor, Trowbridge.

JULY 28.—Belfast.—BRIDGE.—Bridge over the Great Northern Railway at Tate's-avenue, for the C.B. McCarthy & Liburn, quantity surveyors, 123, Scottish Provident Buildings. Deposit £3 3s.

JULY 30.—Stirling.—BRIDGE.—Bridge over the Elver Forth between Stirling and Cambuskenneth, for the T.C. A. H. Goudie, Burgh Engineer.

JULY 31.—Amphill.—TANKS.—Construction of new sedimentation tanks, percolating filters, channels, humus tanks, drains and pipe lines, and rearrangement of existing plant for storm water, and all other works in connection at the Sewage Disposal Works, for the U.D.C. A. T. Trethewy, Clerk to the Council, 88, Dunstable-street. Deposit £5.

AUGUST 5.—Biggleswade.—TANK.—Providing and laying about 4,000 yds. of 3 in. main, erection of engine house, together with the necessary pumping plant, and providing and erecting a cast-iron storage tank on a 40 ft. tower of steel structure, for the R.D.C. H. Chandler, Clerk to the Council, 2, London-road. Deposit £2 2s.

AUGUST 11.—South Africa.—SLUICE GATES.—Two sluice gates gearing superstructure, &c., for the Bulawayo T.C. Department of Overseas Trade 35, Old Queen-street, S.W.1.

ROAD, SEWERAGE, AND WATER WORKS

JULY 10.—Aberdeen.—EXTENSIONS.—Of the sewage mains, also the construction of reinforced concrete reservoir and the laying and jointing of cast-iron pipes and relative works, at Newmachar Special District, for the D.C. of the C.C. Walker & Duncan, C.E., 3, Golden-square.

JULY 20.—Beddington and Wallington.—SEWERS.—600 lin. yds. of 6 in. diameter stoneware pipe sewers with the works appurtenant thereto, on the Bute-road site, for the U.D.C. S. F. R. Carter, Engineer and Surveyor, Council Offices, Wallington. Deposit £1 ls.

JULY 20.—Carlisle.—SEWERING.—Sewering and street works required in the formation of a new street connecting Fisher-street and Castle-street, for the C.B. H. C. Marks, City Engineer and Surveyor. Deposit 10s.

JULY 20.—Chester.—RECONSTRUCTION.—Concrete foundations, surfaced with g. anted mastic asphalt:—(1) Frodsham-street; (2) Victoria-road; (3) Castle Esplanade; and (4) Nuns-road, for the T.C. C. Greenwood, City Engineer and Surveyor. Deposit £2 2s.

JULY 20.—Christchurch.—SEWER.—For (1) 455 yards 8 in. stoneware pipe sewer, Clarendon-road; (2) 1,230 yards 9 in. 8 in. and 6 in. stoneware pipe sewer, Fairmile, Junipers, and Portland-roads; (3) 990 yards 8 in. stoneware pipe sewer, Fairmile-road; and (4) 1,000 yards 8 in. c.i. sewer, Bure-lane, Mudeford, for the T.C. H. J. Farmer, Borough Engineer and Surveyor. Deposit £2 2s.

JULY 20.—Lempitlaw.—WATER SUPPLY.—Water supply to Lempitlaw public school, for the Roxburgh E.C. J. Morrison, Executive Officer, Education Office, Newtown ct. Boswells.

JULY 20.—Lymington.—SEWER.—Five rock concrete Aquatic manholes, lamp-hole, approximately 220 yards of 9 in. stoneware sewers, 27 yards run of 9 in. cast-iron pipe through the railway culvert, and 60 yards of 9 in. cast-iron pipe beyond the culvert, at Milton sewerage, for the R.D.C. A. E. Hayter, surveyor, St. Cyres, Whitehead-road, New Milton. Deposit £1 ls.

JULY 20.—Manchester.—PAVING.

—Sewering, draining, paving, &c., passages behind 126-154, 156-192, and 198-204, Abbey Hay-lane, &c., Gorton, and passage behind 2-30, Winifred-road, 16-22, St. Mary's-road, alongside the Municipal School, St. Mary's-road, and adjoining 2, Winifred-road, Newton Heath, for the T.C. P. M. Heath, Town Clerk. Deposit £1 ls.

JULY 20.—Romford.—SEWERS.—2,215 yds. of 9 in. stoneware pipe sewer, together with 25 manholes and other works, in Hardley Green-road, for the R.D.C. W. Fairley, consulting engineer, Parliament Mansions, Victoria-street, S.W.1.

JULY 20.—West Riding.—PAVING.—Paving with granite sets on reinforced concrete as follows:—(1) Elland Main road at Moorbottom, Cleckheaton, approximate areas 3,600 sq. yds.; (2) Wakefield and Halifax main road, Liversedge, approximate area 5,400 sq. yds.; (3) Wakefield and Austerlands main road, approximate area 2,300 sq. yds., for the C.C. West Riding Surveyor, County Hall, Wakefield. Deposit £1 each.

JULY 21.—Bollington.—PAVING.—On a concrete foundation of about 1,300 square yards of the carriage-way in Grimsshaw-lane, for the U.D.C. S. Knight, Clerk to the Council.

JULY 21.—London, S.W.1.—Beverley Brook Relief culvert, construction of concrete culvert from Beverley Brook, near Priests Bridge, Upper Richmond-road, and various works in connection therewith for the L.C.C. Chief Engineer of the Council, Old County Hall, Spring Gardens, S.W.1. Deposit £10.

JULY 22.—Bournemouth.—MAKING-UP.—Of Chessell-avenue, for the C.B. F. P. Dolamore, Borough Engineer. Deposit £1 ls.

JULY 22.—London.—MAKING-UP.—South side of Stevenston-road between Sundew-avenue and Wormholt-road, for the Hammersmith B.C. R. Hampton Clucas, Borough Engineer and Surveyor.

JULY 22.—Tredegar.—IMPROVEMENTS.—To the Tredegar and Argoed main road at Tredegar, for the Monmouthshire C.C. S. A. Bennett, County Surveyor, County Hall, Newport, Mon. Deposit £1 ls.

JULY 23.—Cannock.—SEWERS.—Provision, laying and jointing 460 lin. yds. of 6 in. stoneware pipe sewers at Great Wyrley, the construction of nine manholes and other incidental works, for the R.D.C. H. M. Whitehead, engineer.

JULY 23.—Rugby.—SEWERS.—Roadmaking, sewers and surface water drains in connection with the development of the Hillmorton estate, for the Rugby Benefit Building Society. C. J. Newman, L.R.I.B.A., 7, Albert-street. Deposit £2 2s.

JULY 24.—Altrincham.—SEWERS.—300 yards 21 in. sewer, 268 yards 15 in. sewer, 626 yards 12 in. sewer, and 740 yards 9 in. sewer, together with all the necessary manholes, and other appurtenant works, and also 667 lineal yards of street works in varying widths, on the Oldfield Brow housing site, for the U.D.C. H. E. Brown, Surveyor. Deposit £2.

JULY 24.—Claypole.—MAINS.—Supply, laying and jointing about 1½ miles of 4 in. diameter and 2 miles of 3 in. diameter cast-iron mains, irregulars, valves and other works of water supply, for the R.D.C. T. W. Mawer, Engineer and Surveyor to the Council, Foston, Grantham.

JULY 24.—East Suffolk.—WIDENING.—Forming new by-pass roads, widening, re-aligning carriage-way, kerbing, surface water drainage, forming footpath, fencing and general improvement of the existing road, on the Stratford St. Mary by-pass road, for the C.C. W. Jervis, County Surveyor, County Hall, Ipswich. Deposit £10.

JULY 24.—Merton and Morden.—MAKING-UP.—Of (a) Langley-road, Merton, 107 yards approximately, and (b) Milner-road, Morden, 230 yards approximately, for the U.D.C. G. Jerram, Surveyor, Council Offices, Merton, S.W.19. Deposit £2.

JULY 24.—Merton and Morden.—SEWER.—250 yards run of stoneware pipe sewer, 9 in. and 6 in. in diameter, at the eastern end of Coombe-lane, Merton, for the U.D.C. G. Jerram, Surveyor, Council Offices, Merton, S.W.19. Deposit £2.

JULY 25.—Aberdeen.—MAINS.—Extension of water and sewage mains at Culter, for the D.C. of the C.C. Henderson & Nicol, chartered civil engineers, 21 Bridge-street.

JULY 25.—Harrowgate.—STREETS.—Carrying out of private street improvement works in the following streets: (1) Norfolk-road, (2) Carlton-road, (3) Kenilworth-avenue, (4) Vernon-road, (5) Wedderburn-road, (6) Woodlands-avenue, (7) back road at side of 2, Woodlands-avenue, (8) Woodlands-drive, (9) back road south side of Willow-grove, (10) back road at rear of King Edward's-drive between Poplar-grove and Willow-grove, (11) Church-avenue, for the T.C. C. E. Rivers, Borough Engineer.

JULY 25.—Sowerby Bridge.—STREETS.—For carrying out of private street works in Milton-avenue, back Cleveleys-avenue, and back Cleveleys-gardens, and (2) supply of 6 in. setts required for the back streets, for the U.D.C. J. Eastwood, Surveyor.

JULY 26.—Shoreham-by-Sea.—KERBING.—Making-up, sewerage, paving, kerbing and lighting Old Fort-road and Beach-road, for the U.D.C. A. W. Nye, Town Surveyor. Deposit £1 ls.

JULY 27.—Edinburgh.—ROAD.—Construction of Section F.G. (Dechmont to Broxburn), Contract No. 5 East, of a new road from Glasgow to Edinburgh, for the T.C. D. A. Donald, engineer, 271, Alexandra-parade, Glasgow. Deposit £3 3s.

JULY 27.—Greenford.—MAINS.—Extension of the main drainage system, for the U.D.C. Howard Humphreys & Sons, engineers, 28, Victoria-street, Westminster. Deposit £2 2s.

JULY 28.—Barking Town.—STREETS.—Private street works at Hurstbourne-gardens and Surrey-road, for the U.D.C. Engineer and Surveyor.

JULY 28.—Chelmsford.—MAINS.—Laying 2½ miles of 12 in. cast-iron rising main, and the supply and laying of electric cable, from Sandford Mill to the Reservoir at Longstamps, for the T.C. E. J. Miles, Borough Engineer. Deposit £1 ls.

JULY 29.—Cardiff.—STREETS.—Private street improvement works in parts of Caegwyn-road, Westfield-road, and Greenclose-road, also surface water sewers in the parish of Whitchurch, for the R.D.C. W. Farrow, Surveyor, Park House, 20, Park-place, Cardiff.

AUGUST 5.—Cookstown.—DRAINAGE.—Drainage works required for 18 ex-Servicemen's cottages in the Townland of Tullagh, for the Government of Northern Ireland. Secretary, Ministry of Finance, 15, Donegall-square West.

AUGUST 8.—Wigan.—SEWERS.—Streets and sewers on the Bottling Wood housing site, for the C.B. R. B. Donald, Borough and Water Engineer. Deposit £2 2s.

Auction Sales, Tenders, etc.

***JULY 20.—Bethnal Green, E.2.—**Veryard & Yates, by order of the Exors. of the late A. Summerfield, without reserve, at 20, Old Bethnal Green-road, E.2, stock-in-trade of an old-established mahogany and timber merchant. Auctioneers, 365, Norwood-road, S.E.27.

JULY 21.—London, S.W.1.—Hampton & Sons, at the St. James's Estate Rooms, 20, St. James's-square, freehold house, Burnham Beeches, Bucks, known as the "Greenlanes." Auctioneers, 20, St. James's-square, S.W.1.

JULY 21.—London, W.1.—Knight, Frank & Rutley, freehold building estate overlooking Kingsbury Green. Auctioneers, 20, Hanover-square, W.1.

JULY 21.—Surrey.—Hampton & Sons, at the St. James's Estate Rooms, 20, St. James's-square, S.W.1 (unless previously sold), in one or four lots, freehold residence, "Woodhurst," Upper Warlingham, with excellent building sites; vacant possession. Auctioneers, as above.

JULY 21 AND 22.—Warwick.—Messrs. James Styles & Whitlock will sell, by direction of the trustee of Mr. S. L. Lloyd, demolition sale of the ancient manor house, "The Priory," comprising about 550 lots. Auctioneers, Albert-street, Rugby.

JULY 21, 22 AND 23.—London, E.—Joseph Hibbard & Sons will sell, without reserve, by order of Mr. G. Lewis, on the premises, Norway Yard, No. 636A, Commercial-road, E., stock of English timber, ash and beech wrest planks, deals, battens and boards, office furniture and rolling stock. The extensive leasehold wharf premises are to be sold. Auctioneers, 15, Newington Green, Islington, N.16.

JULY 22.—Halifax.—James Styles & Whitlock have received instructions from the executors of the late Major A. H. Edwards to sell, in convenient lots, at the Old Cook Hotel, the valuable freehold property known as the Pye Nest Estate, comprising the well-known mansion house, &c., comprising about 82 acres. Auctioneers, The Estate Offices, Rugby; also at 44, St. James's-place, London, S.W.1.

JULY 22.—London, E.C.—Densham & Lambert, at the London Auction Mart, 155, Queen Victoria-street, E.C., freehold building estate, as a whole or in lots, known as the Effingham Estate, Surrey, of about 350 acres; also freehold building estate known as "The Firs," Cranford, Hounslow, of about 24 acres. Auctioneers, 23A, Savile-row, London, W.1.

***JULY 23.—London, S.E.—J. T. Skelding & Co.,** without reserve, by order of the Receiver for Debenture Holder, re Norfolk Contractors, Ltd., at Albert Works, Glasshouse-street, S.E., builders' and decorators' stock and plant. Auctioneers, 48, Gresham-street, Guildhall, E.C.2.—Re P. & W. Anderson, Ltd. (in liquidation), by order of the Receiver for the Debenture Holders, without reserve, removed from Kensington contract, will include in the above sale builder's and contractor's plant, including a powerful electrically-driven hoisting winch, with Crompton motor, &c.

JULY 23 AND 24.—Whitchurch (Salop).—Perry & Phillips, at Cloverley Hall, Whitchurch, interior and exterior fixtures and fittings previous to demolition of part of the mansion. The fabric of the mansion will also be sold for demolition after the above sale. The Agent, Estate Office, Cloverley, Whitchurch. Auctioneers, 59, High-street, Bridgnorth.

***JULY 24.—London, S.W.1.—J. T. Skelding & Co.,** by order of Messrs. Barnards, who have disposed of the lease of the premises, the remaining builders' and contractors' plant, woodworking machinery and effects. Auctioneers, 48, Gresham-street, Guildhall, E.C.2.

***JULY 25.—Ningwood, Isle of Wight.—Henry J. Way & Son,** at the Wheatshaf Hotel, Newport (unless previously sold by private treaty), Ningwood, in the parish of Shalfleet, with a private siding, the lease of the Ningwood Brick and Tile Works, with options of purchasing the freehold. Auctioneers, Newport, I.W.

***JULY 27.—Woolwich.—Veryard & Yates,** by order of the National Council of the Y.M.C.A., without reserve, at High-street, Woolwich, timber and building material. Auctioneers, 365, Norwood-road, S.E.27.

***JULY 28.—London, S.W.—Veryard & Yates,** without reserve, at 255, Clapham-road, stock of timber, fittings, and building materials. Auctioneers, 365, Norwood-road, S.E.27.

JULY 29.—Ickenham.—Knight, Frank & Rutley, in conjunction with Joshua Baker, Cooke & Standen, at the Auction Mart, 155, Queen Victoria-street, E.C.4. Portion of Swakeley's Estate, comprising freehold building land extending to 190 acres. Auctioneers, J. B. C. & S. 62, High-street, Uxbridge; Knight, Frank & Rutley, 20, Hanover-square, W.1.

JULY 30.—London.—Knight, Frank & Rutley will sell, in the Hanover Estate Rooms, freehold building estate overlooking Kingsbury Green. Auctioneers, 20, Hanover-square, W.1.

***JULY 30.—Middlesex.—P. Chase Gardener & Co.,** at the Public Library, Treaty-road, Hounslow, freehold building lands at Heston-road and Sutton-road, Hounslow. Auctioneers, 269, High-street, Hounslow.

JULY 31.—Sevenoaks.—Knight, Frank & Rutley will sell, by direction of Mr. Robert Mond, J.P., at the "Royal Crown" Hotel, valuable freehold properties forming the remaining portions of the Combe Bank Estate, including Combe Bank Farm, also valuable building sites. Auctioneers, 20, Hanover-square, London W.1.

Public Appointments.

JULY 20.—London, S.W.2.—Third Engineering Assistant in the Borough Engineer's Department required by the Lambeth Borough Council. Town Clerk, Lambeth Town Hall, Brixton Hill, S.W.2.

JULY 21.—Tottenham, N.15.—(a) Architect; (b) Quantity Surveyor, required by the District Council in connection with the development of the remainder of their housing estate at White Hart-lane. The Engineer, Town Hall, Tottenham, N.15.

JULY 22.—Amersham, Bucks.—Highways Surveyor required by the R.D.C. The Clerk, High-street Amersham, Bucks.

JULY 25.—Southampton.—Assistant Quantity Surveyor required in the County Architect's Department by the County Council. County Architect, The Castle, Winchester.

***JULY 27.—Romford.—Third Building Inspector** in the Surveyor's Department, required by the R.D.C. The Clerk, 16A, South-street, Romford, upon receipt of a stamped addressed foolscap envelope.

AUGUST 1.—Ilford.—BUILDING AND DRAINAGE INSPECTOR.—Wanted by the U.D.C. Mr. H. Shaw M.Inst.C.E., Engineer and Surveyor, Town Hall, Ilford.

***AUGUST 1.—Southampton.—DRAUGHTSMEN** Two draughtsmen required in the County Architect's Department. Mr. A. L. Roberts, County Architect, The Castle, Winchester.

AUGUST 22.—Croydon.—Architect required superintend the erection of an elementary school with the borough to accommodate 800 scholars. Clerk to the Education Committee, Katherine-street, Croydon.

***NO DATE.—Tanganyika.—Inspector of Works** required by the Government of Tanganyika for Railways Department; age 25–35; must have had experience upon railway construction. Apply at once, the Crown Agents for the Colonies, 4, Millbank, Westminster, London, S.W.1.

Plymouth Improvement Scheme.

Plymouth Corporation has decided to prepare an improvement scheme relating to three congested areas in the Barbican district, one of the oldest quarters in the town. In all it is proposed to demolish 233 houses, thoroughly clearing the sites and re-erecting others so far as the provision of broader streets and open space will permit.

Westminster Bank.

The directors of Westminster Bank, Ltd. have declared an interim dividend of 10 per cent. for the half-year ended June 30, on the £20 shares, and the maximum dividend 6½ per cent. on the £1 shares for the same period. The dividends, 10s. per share and 1s. 3d. per share, respectively (both less Income Tax), will be payable on August 1.

Royal Sanitary Institute Congress.

The thirty-sixth Congress of the Royal Sanitary Institute is to be held at Edinburgh from July 20 to July 25, inclusive, under the presidency of Sir John Gilmour, Bart., D.S.O., M.H.S. Secretary for Scotland. Among the subjects for discussion are: Perpendicular Housing; The Modern Plumber and His Work; Reinforced Concrete; Sewerage of Towns on Tidal Waters; Working-class Dwellings; Sanitary Engineering; House Drainage; Economic Homes; Slum Areas, &c.

Town Planning Progress.

The following local authorities (who are under statutory obligation to prepare town-planning schemes in respect of their areas) have reported to the Minister during the quarter ended June 30, 1925, that they have passed resolutions deciding to prepare town-planning schemes: Derby: Glossop T.C.; Devon: Torquay T.C. (second scheme); Staffs.: Stafford T.C., West Bromwich T.C.; Worcester: Worcester T.C., Wals, Flintshire: Flint T.C.; Glamorgan: Port Talbot T.C.; Monmouth: Newport T.C. (fourth scheme).

The following local authorities (not being authorities under statutory obligation to prepare town-planning schemes, who have voluntarily taken effective steps in the preparation of scheme) have reported to the Minister during the quarter ended June 30, 1925, that they have passed resolutions deciding to prepare town-planning schemes:—Berkshire: Newbury T.C.; Cheshire: Knutsford U.D.C., Lymm U.D.C., Macclesfield R.D.C.; Essex: Chelmsford R.D.C.; Herts: Hitchin R.D.C.; Lancs.: Barton-upon-Irwell R.D.C. (fourth scheme), Littleborough U.D.C., Little Lever U.D.C., Middlesex: Staines R.D.C.; Surrey: Walton-upon-Thames U.D.C. (second scheme); Yorks: West Riding: Birkenshaw U.D.C.

The following preliminary statements were approved by the Minister of Health for the quarter ended June 30, 1925:—Acton T.C., Preston T.C., Sunderland T.C., Wallsend T.C., Woodford U.D.C.

Competitions.

(See Competition News, page 94.)

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; R.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ABERDARE.—A new national school is to be erected for the parish, at an estimated cost of £5,000.

ALFRETON.—The U.D.C. propose to erect eight houses at Alfreton four at Swanwick, and sixteen at Somercotes.

ASHTON-UNDER-LYNE.—The Housing Committee of the T.C. propose to acquire the remainder of the land comprising the Heys estate.

BANGOR (IRELAND).—The Council has received formal sanction to the borrowing of £32,000 for the building of 64 houses on the Claudeboye-road site.

BATH.—The City Engineer reported that in connection with the road works it was found necessary to lay a new foundation at an estimated cost of £500, which the sub-committee recommended, at the Lower Borough Walls.—Plans passed: Amended plan, 17 houses, Second-avenue and Canterbury-road; 10 houses, Chaucer-road.

BECONTREE.—The L.C.C. recommend that the supplemental estimate of expenditure on capital account of £450,000, submitted by the Finance Committee in respect of the development of a section of Becontree, near Gale-street, to cover the cost of the erection of about 725 additional houses, including the construction of the necessary roads and sewers, be approved.

BEDFORD.—The Elstow-road school site is to be fenced at a cost of £730. East Lodge is to be purchased for £2,250 and converted, at a cost of £500, into a special school for defectives.

BIRKENHEAD.—The Corporation propose the erection of 33 houses on the Derby Park estate, at a cost of £16,343. The Corporation have now allocated a site forming part of the old water-works at the junction of Balls-road and Slaty-road for the erection of the proposed art gallery. The Borough Surveyor has prepared plans for a fire station to be erected. A committee are considering the provision of alternative accommodation for people who will be displaced by clearances. The M.H. have sanctioned further housing developments on the Dell estate. A scheme for the provision of a model yacht lake to cost £4,220, has been prepared as a relief work. The provision of a garage at the central depot is recommended at a cost of £11,500.

BIRMINGHAM.—An operating room block is to be provided at the Rubery Hospital, at a cost of £3,000. The Corporation has now completed the purchase of the Colleshall Hall estate of 180 acres and tenders are to be invited for adapting the hall to accommodate 80 patients and erecting villas to accommodate 210 patients. The Ministry of Health has sanctioned a loan of £100,000 for housing schemes.

BLYTH.—The Borough Engineer submitted a report, with details, plans and estimates, for the construction of a bathing pool, at an estimated cost of £7,000, on the site west of the new promenade, which the T.C. approved. The Town Clerk is to apply to the M.H. for approval of the scheme and for sanction to borrow the necessary monies.—The Council recommend that application be made for £7,500 for housing grants.—The Borough Engineer submitted plans lay-out and report in connection with the erection of 50 houses on the housing estate, and estimated the cost including cost of land, road-making, sewerage, drainage, paths and fences to be £25,000, which was approved. The C.B. recommend that 30 of the houses be erected by direct labour and that tenders be invited for the erection of the balance.—The Town Clerk is to apply to the M.H. for sanctions to borrow the monies for the several purposes referred to in the estimate of the Borough Engineer.—Application is to be made to the M.H. for subsidy in respect of the 50 houses.—The Borough Engineer reported that of the land acquired by the Council, 3.32 acres would be required for the erection of the 50 houses. The C.B. recommend that the site comprising the Albion Brick Yard and other land of an area of approximately 4.95 acres, be purchased at a cost of not exceeding £1,000 per acre for the purposes of a town depot and destructor.

BLACKPOOL.—The C.B. instructed the Borough Surveyor to prepare a scheme for a tram shelter, with clock tower, proposed to be constructed at the Gynn-square.—Plans passed: School, Marlborough-avenue, for the Governors of Baines' Charity; 12 houses, Kenwood-avenue and Langfield-avenue, for Abson Bros.; 10 houses, Fairfield-road, for J. R. Fielding; 33 houses, off Granby-avenue, for J. Fielding & Son; eight houses, Bedford-avenue, and seven houses, Holmfied-road, for T. Bannister & Sons.

BOLTON.—The congregation of the Tong Moor Wesleyan Church have a scheme in hand for the erection of new school premises.

BOSTON.—The T.C. propose to erect a new reservoir, at a cost of £20,000.—The Public Works Loan Commissioners have sanctioned for housing purposes the sum of £14,000.—The Boston Waterworks Co. propose to construct a new reservoir at Revesby.

BRADFORD.—The M.H. has sanctioned a loan of £57,755 for the purpose of erecting 130 houses on the Low Grange Estate. A site at Gain-lane, Thornbury, is to be purchased by the Corporation, and the City Architect is to prepare plans for the proposed erection of 74 houses on this estate. The Corporation also contemplates acquiring a site comprising 60 acres near the Eccleshill Station for housing purposes.

BRIDGEND.—The U.D.C. is to erect twenty-four houses on the Pendre site.

BRISTOL.—A site in Broad-walk, Knowle, has been sold by the Corporation to the Congregational Union for the erection of a chapel in accordance with plans which have already been prepared. The Housing Committee propose to proceed with the erection of 80 houses on the Knowle and Bedminster estates, at a cost of £46,000.

BURNLEY.—A parochial hall is to be built by the trustees of St. John's church, Holme, near Burnley.

BUSBY.—The Housing Committee of the Upper Renfrewshire Council have instructed their Housing Architect (Mr. J. M. Dow) to prepare plans for the erection of 36 houses.

BUXTON.—The C.B. passed plans including 20 houses in Dale-road, for J. Boon.

CARLISLE.—The Health Committee are considering a site at Mossbank for the erection of a fever hospital. A site at Rome-street is to be purchased for £2,700 for the erection of a gasholder.

CHESTER.—The Cheshire E.C. are proposing the extension of Sale Central School to plans prepared by the County Architect, subject to the approval of the B.E. Plans have been approved by the Secondary Schools Sub-Committee for alterations and extensions to the Chester City and County Schools.

CHURCH (LANCS.).—The Lancashire E.C. has approved a scheme for a new school with accommodation for 720 children.

COVENTRY.—The T.C. has recommended the City Engineer to report upon the possibilities of the Leicester street area for a re-housing scheme.

CUCKFIELD.—The M.H. has approved of the R.D.C.'s scheme to erect 10 houses at Hurst and 14 at Lindfield.

DONCASTER.—There is a probability of the old skating rink, an extensive building on the South Parade, being converted into a subsidiary hospital to relieve the serious overcrowding at the Infirmary.

DOUGLAS (ISLE OF MAN).—Mr. J. E. Teare, architect, has prepared plans for an additional nineteen houses, for the erection of which tenders are to be invited. Land on the Hague estate is being purchased for the tramways department at a cost of £465.

DOVER.—Revised plans are to be prepared for improvements at the St. James' Church of England Schools. The E.C. are considering the provision of a handicrafts centre.

DUBLIN.—The T.C. are to make application to the M.H. for sanction to the borrowing of £25,894 12s., for the erection of fifty-two houses.—Plans passed: Additions to Grammar School, St. James's-road, for the Governors; six houses, Stourbridge-road, Scotts Green, for D. Jakeman; twelve houses, Watson's Green-road, for A. J. Crump & Sons, Ltd.

DUNGANNON.—The U.D.C. received the sanction from the Ministry of Home Affairs to the purchase of Gortmerron House and grounds, at a total of £3,000, and the erection of eight houses at £4,040.

DURHAM.—The B.G. have decided to seek permission from the M.H. to erect two blocks of cottage homes at Red Hills, and also sanction to borrow £11,500 to cover the scheme.

EARLESTOWN.—The U.D.C. are proposing to erect public baths on a site on Victoria-road. The architect, Mr. C. Cowles Voysey, has been instructed to prepare plans for submission to the M.H. The estimated cost is £16,660.

EARSDON.—The U.D.C. is making preparations to erect 300 houses on the Park estate, Shiremoor.

ENFIELD.—The U.D.C. are negotiating for the purchase of land for the erection of 1,400 houses.

EPSOM.—The B.E. has approved the detailed plans for the new secondary school for girls.

ESSEX.—Two miles of the main London road between Chelmsford and Shenfield are to be resurfaced at a cost of £44,000.

ESTON.—The U.D.C. is making application for permission to erect another 150 houses by direct labour.

FELLING-ON-TYNE.—The B.E. has approved of a proposal by the Felling Catholic school managers to erect an elementary school for 300 children at Pelaw.

FOLKESTONE.—The T.C. resolved that application be made to the M.H. for sanction to borrow the sum of £35,200 for the construction of a cemetery as soon as the necessary sanction for a loan has been received, tenders be invited for the erection of the cottages and entrance lodge, &c., and the Borough Engineer be instructed to proceed with the remainder of the work.—Application is to be made to the M.H. for sanction to borrow the sum of £23,850 for alterations and additions to the existing Harvey Grammar School in Cheriton-road.—Plans have been passed for a chapel, for which the sub-committee approved the general design of the ground plan and instructed the Borough Engineer to prepare fresh elevations.

GATESHEAD.—The T.C. has decided to carry out a scheme for providing additional office accommodation by conversion of the public library building into offices at an estimated cost of £14,299. Structural alterations are also to be carried out at the Town Hall, at an estimated cost of £2,487. Application for sanction to borrow is being made to the M.H.

GOSFORTH.—The U.D.C. has approved plans for the erection of an additional 22 houses by the L. & N.E. Rly. (Gosforth) Garden Village, Ltd.

GOTROCK.—Plans have been approved for the rebuilding of the Ashton U.F. Church, at an estimated total cost of £11,000.

GRAVESEND.—The T.C. propose to erect a dance floor around the promenade bandstand.

GUILDFORD.—The M.H. has sanctioned the proposal for the purchase of 96 acres of land at Aldershot-road for a housing scheme.

HARWICH.—The T.C. are proposing to erect a bandstand.

HASTINGS.—The E.C. are to carry out repairs at the education offices and schools at a cost of £2,000.—Plans have been prepared for the lay-out of land at Bromsgrove for housing purposes. The conveniences at the fish market are to be enlarged at a cost of £1,300.

HAVANT.—The U.D.C. are to invite tenders for alterations and repairs to the Town Hall.

HEXHAM.—The U.D.C. has prepared a town improvement scheme, embracing the demolition of numerous buildings and the erection, as alternative accommodation, of 72 houses of the non-parlour type, at a cost of £35,900.

HOLBEACH (Lincs.).—The U.D.C. are to erect 60 houses.

HOMESTALL.—Heating apparatus is to be installed at Graveney Church, at an estimated cost of £200.

HOUGHTON-LE-SPRING.—The U.D.C. is making application to the M.H. for sanction to borrow £1,220 for the purchase of a site to the north of Houghton Rectory for housing purposes.

HUDDESFIELD.—The B.G. has decided to erect five children's homes, each with accommodation for 20 children, at The Leas, Scholes.

HULL.—Revised plans have been prepared for extensions to the Grammar School. The City Architect is to get tenders for the erection of a new pavilion at the infectious diseases hospital. Additional accommodation is to be provided at the maternity home. The Child Welfare Committee are considering the provision of a central clinic. Plans passed: 26 houses, Savery-street, for H. Spruit; 19 houses, Summergangs-road, for C. T. Simmonite; 14 houses, West Parade, for R. W. Trigg; 16 houses, Lee-street, for J. E. Wray; 10 houses, Desmond-avenue, for E. Batty; 12 houses, Savery-street, for C. H. Smith; 26 houses, New-street, for G. T. Spruit; 18 houses, Perth-street, for A. Lison; 18 houses, Southcoates-lane, for R. Ashton.—The T.C. approved subsidy for the following:—H. Spruit, 26 parlour type houses, Savery-street; W. H. Loveridge, nine parlour type houses, Etherington-road; R. W. Trigg, 14 parlour type houses, West Parade, Anlaby-road; C. T. Simmonite, 13 parlour type houses, Summergangs-road; E. Batty, 10 parlour type houses, Desmond-avenue; C. H. Smith, 12 parlour type houses, Savery-street; G. T. Spruit, 26 parlour type houses, new street, Holderness-road; A. Lison, 18 parlour type houses, Perth-street.—A £275,000 scheme for a North Bridge has been prepared for Hull T.C.'s consideration.

HUNSLLET.—The Y.W.C.A. authorities have acquired the Hunsllet Mechanics Institute at the junction of Joseph-street with Hunsllet-lane, and it is proposed to carry out a scheme of structural alterations at an estimated cost of £3,500.

LEAFORD.—The U.D.C. passed plans: F. Fortescue, 48 houses, St. John's-road; Millbourne & Spiers, 12 houses, Mayville-road; D. J. Barwell, 25 houses, Cavenham-gardens and Gordon-road; C. J. Kemp, 23 houses, Saxon-road; J. W. Davies, 43 houses, Henley-road and Hampton-road; R. Stroud, 43 houses, Mordon-road; Suburban Developments (London), Ltd., 197 houses in Quebec-road, Cranley-road, Cranley-drive and Westernville-gardens.—The U.D.C. has asked the surveyor to prepare plans for a convenience at the junction of Cranbrook-road and Eastern-avenue.

KEIGHLEY.—The B.G. has approved of plans for extensions to the Nurses' Homes at the St. John's Hospital, at an estimated cost of £10,000.

KINGS LYNN.—The T.C. recommend that application be made for permission for 25 additional houses.

KINGSTON.—The Surrey E.C. has approved a proposal to spend £438 on adapting "Holmbury" stables for the central library store and office for the county librarian.—The Kingston Grammar School is to be extended at a cost of £14,000; and plans have been submitted for a new Tiffin Boys' School.

KNOTSFORD.—Plans have been submitted to the U.D.C. for the erection of a proposed new R.C. church and presbytery in George-street, for the Rev. Father Ryan.

LEATHERHEAD.—The U.D.C. has adopted a sewerage disposal scheme to cost about £15,000 or £16,000.

LEEDS.—The Corporation are asking Mr. J. H. Morton, F.R.I.B.A., to prepare plans and estimates of a scheme for extending the accommodation at Meanwood Park Colony. Plans have now been prepared for baths and washhouses at Stocks Hill, Holbeck, and tenders are to be invited. The Corporation are urging for the improvement of the railway station accommodation in the city. The Hay Committee recommend the purchase of 6½ acres of land from the East End Park Estate Co., at the price of £6,000, subject to the company undertaking to erect 78 houses. Mr. C. A. Bishop has a scheme for building shops and flats at Gipton Beck. The M.H. has sanctioned a loan of £23,558 for the erection of a golf pavilion and the conversion of stables into refreshment rooms at Temple Newsam.—Mr. A. Braithwaite proposes to erect 361 type B houses on the Hollin Park estate, comprising 38 acres. The houses are estimated to cost £538 each.

The East End Park Estate Co. propose to erect 78 type A 3 houses for the Corporation on the East End Park Estate, comprising 6½ acres, at an estimated cost of £535.—A new church, dedicated to St. Wilfred, is to be erected in the parish of St. Aidan, at Harehills, at a cost of £11,700, accommodating 600 persons. The plans have been prepared by Messrs. Kitson Parish & Leggard, Lloyds Bank Chambers, Vicar-lane, Leeds.—The Watch Committee have agreed to alterations of a portion of the Leeds College of Music, Cookridge-street, into a theatre, balcony, dressing rooms, &c., for Mr. Edgar Haddock. Mr. W. Longley has prepared plans for converting the first floor of Crown Buildings, Vicar-lane, into a dance hall.

* See also our List of Contracts, Competitions, etc.

LIVERPOOL.—A new church of St. Mark's is to be erected on a site on Edge-lane, Mr. F. Rimmington, architect, 26, North John-street. A scheme has been approved for the erection of a new cinema, billiard hall, and 12 shops on a site fronting Berkeley-street and Upper Parliament-street, for Mr. F. Hiscocks. The cost is estimated at £35,000.

LONDON (BERMONDSEY).—The B.C. passed plans: New relief offices in Lower-road, for the Guardians of the Parish of Bermondsey. Messrs. Newman & Newman, architects, 24, Railway-approach, S.E.

LONDON (CITY).—The girders under Smithfield are to be repaired at an estimated cost of £45,000.

LONDON (GREENWICH).—The B.C. are to enlarge their maternity home.

LONDON (HENDON).—The L.C.C. recommend the development of the housing sites, including the erection of houses and the construction of roads and sewers.

LONDON (LEWISHAM).—The B.C. recommend that in the interests of the inhabitants of the borough powers be sought by the L.C.C. for enabling the B.C. to appropriate hold and use the site known as the Old Fire Station, Rushey Green, and the depot or yard immediately adjoining or part thereof, for the purpose of the erection of buildings comprising a public hall, offices, shops and other premises.—Plans passed: J. G. Stephenson (for the L.C.C.), 100 houses on the Downham Estate; and Prestige & Co., Ltd., Nurses' Home at South-Eastern Hospital for Children.

LONDON (ST. JOHN'S WOOD).—The Central London Building Co., Ltd., are to erect large blocks of flats on a site abutting upon St. John's Wood-road, Maida Vale, Aberdeen-place and Northwick-terrace.

LONDON (WOOLWICH).—The B.C. recommend that application be made to the Electricity Commissioners for an Order to compulsorily acquire the piece of land situate at the north-east corner of Knee Hill and Woolwich-road, Erith, for the purpose of the erection of an electricity sub-station.—Application is to be made to the Public Works Loan Board for a loan of £7,780 for erection of slipper baths at North Woolwich.—Application is also to be made to the L.C.C. to advance the sum of £36,700 for water circulating system at the Council's electricity station at Woolwich.—Plans passed: J. H. Sutch & Sons, 12 houses, Westmount-road.

LURGAN.—The Government of Northern Ireland has sanctioned the borrowing by the R.D.C. of £10,200 for the erection of labourers' cottages.

MANCHESTER.—The Education Committee are purchasing property required for the site of the new technical school at Openshaw. Queen-street school is to be reorganised at a cost of £3,000. Plans for the new Levenshulme secondary school have been forwarded to the Board of Education. Negotiations are taking place with the M.H. regarding the proposed extensions at Abergelge sanatorium. A scheme has been prepared for utilising Platt Hall for tuberculosis offices and dispensary. Improvements are to be undertaken at various baths. Conveniences are to be constructed at the Bradford and Harpurhey recreation grounds at a cost of £1,500. A loan of £8,663 has been sanctioned for the widening of the bridge in Crescent-road. Sanction has been given to a loan of £1,900 for the acquisition of a site at Newton Heath for the erection of a technical school. The school in Jackson-street is to be improved at a cost of £2,400. Property in North-road, Clayton, is being purchased for a maternity and child welfare centre.

MERTHAY TYFIL.—The B.C. is to convert into temporary dwellings the old Plough school.

MONMOUTHSHIRE.—The County E.C. has decided to erect centres of mining instruction at Abersychan, Abertillery, Pontllanfraith, and Pengam.

MORECAMBE.—The Borough Surveyor has been instructed to prepare a scheme for a paddling pool at the West End.

NEWARK.—The plans of Mr. W. G. Watkins, architect, St. Edmund's Chambers, Silver-street, Lincoln, have been approved and accepted by the management of the General Hospital, for the erection of a nurses' home.

NEWMARKET.—The U.D.C. instructed the Surveyor to prepare plans for another ten parlour houses, to be built at Laureate Paddocks.—The Council decided to apply to the Public Works Loan Board for the housing loan of £10,970.

NEWSTEAD.—The Committee of the Miners' Welfare are proposing to erect a miners' institute. Plans are being prepared by Messrs. Warner & Bowcock, architects, Mansfield-road, Sutton-in-Ashfield, Notts.

NEWTON ABBOTT.—The U.D.C. are to apply to the M.H. for the erection of 100 houses. The Council further propose to build 200 houses during the next two years.

NOTTINGHAM.—The T.C. propose erecting 128 houses on the Highbury-road estate, at an estimated cost of £60,000.

OLHAM.—A plot of land has been presented to the Boy Scouts, where it is proposed to erect new headquarters, estimated to cost £3,000. The plans are being prepared by Mr. E. S. England, A.R.I.B.A., architect, Clegg-street.

OSSETT.—The Corporation are to borrow £12,000 for housing purposes. The M.T. has promised a grant of one-half of the total cost of £33,662 of the proposed new road from Market-place to Leeds.

OXFORD.—The T.C. has recommended that application be made to the M.H. for sanction to a loan of £3,200 for the purchase of the Whitehouse Ground, Abingdon-road.—The M.H. has given formal sanction to the borrowing of the sum of £113,631 for the erection of working class dwellings on the Meadow-lane site.—The Council resolved that the Public Health Committee be asked to expedite the erection of the convenience in Woodstock-road, for which a site was reserved.—The T.C. recommended that Mr. A. Pearson be offered a building lease of a site in George-street adjoining the premises of the Co-operative Society, for new buildings at a cost of not less than £3,000.

PENARTH.—The U.D.C. is to put in hand the work of widening the esplanade, at an estimated cost of £15,000.

PILSWORTH.—The Committee of the Pilsworth and Unsworth Garden Village, Ltd., propose to erect 20 additional houses on their estate. Plans are by Mr. J. D. Moul, F.R.I.B.A., architect, of Bury.

QUORN.—The U.D.C. passed plans for the erection of a men's institute.

READING.—Plans passed: 38 houses proposed to be erected by Messrs. Sheppard, Ryder & Taylor in Buxton-road.

REPAIR.—The M.H. has intimated to the T.C. its agreement with the proposal to utilise the recently-purchased Crescent estate as free sites for houses in lieu of subsidies. The Clerk explained that there was room for over 300 houses.

REIGATE.—The M.H. has given formal sanction to the T.C. for borrowing £8,500 for the erection of 16 houses at South Park.—The Housing Committee has recommended the Borough Surveyor to prepare plans for a town-planning scheme.

RHONDDA.—The Pontypridd and Rhondda Joint Water Board's proposals for a new reservoir and laying of mains, at a total estimated cost of £430,000, have been sanctioned.

RHYL.—A London syndicate has acquired a large expanse of land on the Denbighshire side of the Torfy Harbour adjacent to Rhyll, upon which it is proposed to erect 600 new houses.

ROTHERHAM.—The architect to the Corporation has been instructed to prepare plans for the erection of 27 houses on the Doncaster-road site. The scheme for the erection of 500 houses at East Dene has been sanctioned for a loan of £254,000 by the M.H. A new elementary school is to be erected on the housing estate at Thorpe Hesley to accommodate 500 children.

RUNCORN.—Large additions are to be made to the power house in Percival-lane, of the Mersey Power Co., Ltd. A sum of £200,000 is to be expended under the direction of Messrs. Merz & McLellan, consulting engineers, 32, Victoria-street, S.W.1.

SALFORD.—The C.B. recommend that application be made to the M.H. for approval to the erection of 126 houses on the Littleton-road housing estate, and sanction to borrow the sum of £74,740 to cover the expenditure.—The E.C. propose to borrow £1,215 to cover the cost of the erection of a temporary building in the yard at the rear of the Royal Technical College, including the cost of equipment, lighting and heating, to provide additional accommodation for the Building Trades Department.

SALFORDS.—The Dean of Guild Court passed plans by the Ayrshire E.C. for erection of a school to accommodate 60 pupils, staff-rooms, kitchen and clinic for dental and ophthalmic work. The estimated cost is £4,000.

SHEFFIELD.—Seven conveniences are to be provided in various localities, at a cost of £4,000, by the T.C.—The T.C. passed various plans, including 184 houses, Manor estate, for Estates Committee.

SHOREHAM.—The U.D.C. has instructed the Surveyor to prepare plans for the erection of houses.

SOUTHPORT.—The B.C. propose to erect 42 houses on Shaftesbury-avenue, Birkdale, and eight houses on Hart-street, Bowick.

STAFFORD.—The T.C. has decided to construct extra storage accommodation at the Milford Reservoir, near Stafford. The estimated cost is £10,500.

STIRLING.—A new bridge is to be constructed over the Forth in place of the present Drip Bridge, which is a boundary bridge between Stirlingshire and Perthshire, and is two miles from the town of Stirling.

STOCKPORT.—The Pre-War Building Co., of Buxton-road, Furness Vale, are to erect 24 houses on the main Buxton-road.

STOCKTON.—The M.H. has approved the erection of 116 houses on the Grangefield Farm estate. Messrs. Hays & Gray, architects and surveyors, Wingate, have been appointed architects to the Housing Committee. The open-air school will cost between £9,000 and £10,000, and will provide accommodation for about 120 children.

STRETFORD.—The U.D.C. has received sanctions from the M.H. to the borrowing of 1966 for the erection of two houses on the Moss-road housing site, £10,054 for the purchase of land at King's-road extension; £90,602 for the erection of 194 houses on the King's-road extension site; £8,494 for the purchase of land at Derbyshire-lane West, and £89,275 for the erection of 186 houses on the Derbyshire-lane West site.—Application is to be made to the M.H. for sanction to the borrowing of £20,000 for housing purposes.—Plans passed: 10 houses, Plumley-drive, for the Artistic Housing Co., Ltd.—The plans have been approved for the erection of a boys' secondary school, to provide accommodation for 380 scholars.

SUNDERLAND.—The R.D.C. has obtained sanction from the M.H. to borrow £47,000 for the erection of 100 new houses.

SURREY.—The E.C. are approaching the authorities of East and West Sussex and Kent to see if they will co-operate in the provision of a residential special school for mentally defective children.

UXBRIDGE.—The R.D.C. has received sanction from the M.H. for the erection of 186 houses during next year. Proposed sites for the houses are as follows: Harefield, 75; Cowley, 30; West Drayton, 30; Northolt, 20; Hillingdon, 25.—The Middlesex C.C. are proceeding with the scheme for the reconstruction of Dolphin Bridge, Windsor-road. Plans are to be prepared for the construction of a convenience in Bell-yard. The Surveyor is to report on the cost of providing further dressing accommodation at the bathing station.

WAKEFIELD.—The E.C. propose to secure a site as soon as possible for a school for 750 at or near the Lupset estate. Sketch plans have been approved of a new school at Portobello. Sketch designs and estimates are to be obtained for the construction of reinforced concrete bridges for river, canal and railway crossings in connection with the Ryburn pipe-line. The Corporation are considering the acquisition of the

site of the Crown Brewery, in conjunction with the present baths and invalids' kitchen, as a site for a new bath and public hall combined, a committee having come to the conclusion that the combined sites are eminently suitable. Another 100 houses are to be subsidised.

WALLSEND.—The T.C. has secured sanction from the M.H. to erect 86 houses in flats, and the Council has decided to apply for further permission to build 24 semi-detached houses of three bedrooms and 18 houses of two bedrooms.

WALTHAMSTOW.—The U.D.C. passed plans: Eight houses, Hale End-road, for A. G. Tufton; 12 flats, Thorpe-crescent, Warner Estate; 10 houses, Barrett-road, for E. J. Good; 21 lock-up garages, rear 157, Markhouse-road, Presland's Stores.—The Essex E.C. recommend the spending of £230 for repairs to the Commercial Secondary School.

WANDSWORTH.—The Council recommend that tenders be invited for the erection of 14 self-contained flats on Blackshaw housing site in accordance with the approved plans and specification.—The Council have considered the report of the Borough Engineer with regard to the proposed reconstruction and extension of the Town Hall, and have given instructions for tenders to be invited for carrying out the work.—The B.C. has received sanction from the L.C.C. for the borrowing of the loan of £49,500 for the erection of 80 houses on the Southfields and Furzedown Housing Estates.—Plans passed: Chapple & Utting, 18 houses, Gracefields-gardens, Streatham; Waters, Ltd., 14 houses, Sherwood Park-road, 18 in Helmsdale-road, 24 in Bridgewood-road, 25 in Grayscroft-road, 17 in Streatham Vale-road, and 110 in Glenister Park-road, Streatham; Chapple & Fulford, four houses, Abercain-road, Streatham, eight in Bencroft-road, 26 in Cranmore-gardens, 46 in Donnybrook-road, and 22 in Streatham-vale; J. Jarvis & Sons, Ltd., electric sub-station, shops, &c., at 214 to 216, Balham High-road; A. Watson, tennis pavilion, path leading from Kingsmead-road to Hillside-road, Streatham; Holloway Bros. (London), Ltd., 10 houses, Ellerton-road, Springfield; G. S. Cook, 20 houses, Crowborough-road, Streatham; 18 houses, Greyhound-lane, Streatham; 49 houses and 15 houses, Walrond-street and Ribblesdale-road, respectively.

WESTCLIFF-ON-SEA.—A new church and school is to be erected in Westborough-road, to seat 400 persons. Plans have been prepared by Mr. H. Kelsall Armitage, Haverstock-hill, Belsize-park, N.W.3. The quantity surveyor is Mr. T. Sumner Smith, F.S.I., 25, Cross-street, Manchester.

WEST HARTLEPOOL.—The T.C. has decided to proceed with a scheme for the erection of a shelter at the south end of Seaton Carew, at a cost of £2,500.

WEYMOUTH.—The Corporation have decided to consider a scheme for the provision of public baths.

WHITEHAVEN.—Steps are to be taken to acquire the old Infirmary, Howgill-street, for conversion into a central school. Plans are to be prepared for converting the part of the basement of the baths, formerly used as Turkish baths, into a public convenience. Alterations are proposed at the Christ Church parish rooms.

WHITWOOD (YORKS.).—The Architects to the U.D.C. have been instructed to prepare plans and estimates for the erection of an ejector chamber and pump house at Cutsyke.

WILKLEY (YORKSHIRE).—The trustees are to enlarge the Whitley parish school at a cost of £500.

WIMBLEDON.—Mr. G. E. Scutt has prepared plans for a mission hall in Russell-street.—The Surrey C.C. are being asked to provide further facilities for secondary education in the district.—It is suggested that part of the Haydon's Recreation Ground should be allocated for the erection of a day nursery.—The Borough Engineer has prepared plans for the extension of the motor ambulance garage at the central fire station.—Mr. H. I. Merriman, F.R.I.B.A., has prepared revised plans for a building to be erected at the junction of the Ridgway and the Downs.

WORKSOP.—The U.D.C. decided to build 76 more houses at Manton, and to build any further houses nearer the centre of the town.

WORTHING.—The C.B. passed plans: Sixty-two houses, Reigate-road, for E. H. Barton; 11 houses, Pavilion-road, for J. Sandell & Sons.

YORK.—The question is under consideration of proceeding with the proposed roadway from Ousegate to Fossegate, and meanwhile the City Engineer is to prepare estimates as to the cost of the scheme. The Markets Committee has a scheme for covering in a portion of vacant land in Coppergate for use as a Corn Market.—The T.C. passed plans: Rowntree & Co., Ltd., tennis pavilion, Wigington-road; J. Terry & Sons, transformer house, Bishopthorpe-road; The Corporation, public library, Museum-street.

Fires.

HALIFAX.—Damage estimated at about £30,000 was caused by fire at Prospect Mills, Ovenden, Halifax. Messrs. The Prospect Mills Co. (Ovenden), Ltd., worsted spinners, were the owners.

Transport House, Smith-square, Westminster.

With regard to this new building, to which we referred in a recent issue, Messrs. Culpin & Bowers write to point out that the first contract (excavation) has been carried out by Messrs. W. F. Blay, Ltd.; the second contract (reinforced concrete piling and foundations) is in the hands of Mr. A. E. Frost; the third contract (steel frame) has been let to Messrs. David Colville, Ltd., and that for the super-structure has not yet been settled.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.			£ s. d.		
Best Stocks			4	3	6
Second Hard Stocks			3	18	6
Per 1,000, Delivered at London Goods Stations.					
Flettons, at	£ s. d.		£ s. d.		
King's Cross	2 13 3	Best Blue			
Do. grooved for		Pressed Stairs	9	5	0
plaster	2 15 3	Do. Bullnose	9	15	0
Do. Bullnose	3 8 3	Blue Wire Cuts	7	5	0
Best Stourbridge Fire brick—					
2½ in.	8 11 0	3 in.	10	3	0
GLAZED BRICKS—					
Best White		D'ble Strich's	30	10	0
Ivory, and		D'ble Headers	27	10	0
Salt Glazed		One Side and			
Stretchers	22 0 0	two Ends	31	10	0
Headers	21 10 0	Two Sides and			
Quoins, Bull-		one End	32	10	0
nose and 4½ in.		Splays and			
Flats	23 10 0	Squints	30	0	0
Second Quality, £1 per 1,000 less than best. Cream					
and buff, £2 extra over white. Other colours, Hard					
Glaze, £5 10s. extra over white.					

BREEZE CONCRETE SLABS.

Delivered London			£ s. d.		
2 in. per yd. super	2 11	3 in. per yd. super	2	9	
2½ in.	2 4	4 in.	3	6	
Thames Ballast	10	6 per yd.			
Pit Sand	13				
Thames Sand	14				
Best Washed Sand	14				
½ in. Shingle for Ferro-		2 miles			
Concrete	12	radius			
½ in. Broken Brick	11	Padding-			
Pan Breeze	7	ton.			
Per ton delivered in London area in full van loads.					
Standard Specification. Test £2 18 0 to £3 3 6					
61s. alongside at Vauxhall in 80-ton lots.					
Ferrocete per ton extra on above.			0	10	0
Super Cement (Waterproof)			4	8	0
Roman Cement			8	15	0
Parian Cement			5	15	0
Keene's Cement, Pink			5	10	0
Plaster, Coarse, Pink			3	0	0
" Fine White			3	12	6
" Fine			5	12	0
Sirapite, Coarse			3	9	0
" Finish			3	17	0
Grey Stone Lime			2	11	9
Chalk Lime			2	11	9
Best Ground Blue Lias Lime			2	4	6
Hair			17	0	0
Granite Chippings			1	12	0
NOTE.—Sacks are charged 1s. 9d. each and credited					
1s. 6d. if returned in good condition within three					
months, carr. pd.					
Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.					

STONE.

BATH STONE—delivered in railway trucks at	£ s. d.
Westbourne Park, Paddington, G.W.R., or	
South Lambeth, G.W.R., per ft. cube.	2 9½
Do. do. delivered in railway trucks at Nine	
Elms, L. & S.W.R., per ft. cube.	2 11½
PORLAND STONE—	
Brown Whitbed, in random blocks of 20 ft.	
average, delivered in railway trucks at	
Nine Elms, L. & S.W.R., South Lambeth	
Station, G.W.R., and Westbourne Park,	
Paddington, G.W.R., per ft. cube.	4 4
Do. do. delivered on road wagons at above	
stations, per ft. cube.	4 5
White basebed, 3d. per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every foot over	
20 ft. average, and ½d. beyond 30 ft.	
HOPTON-WOOD STONE—	
Delivered at any Goods Station, London.	
Small random blocks, up to 10 ft. cube, P. ft. cb.	7 0
Random blocks from 10 ft. and over	17 0
Sawn two sides	27 0
Sawn three or four sides	32 0
YORK STONE, BLUE—Robin Hood Quality.	
Delivered at any Goods Station, London.	
6 in. sawn two sides landings to sizes (under	
30 ft. super.)	5 6
6 in. rubbed two sides ditto	6 0
3 in. sawn two sides slabs (random sizes)	2 3½
2 in. to 2½ in. sawn one side slabs (random	
sizes)	1 6½
1½ in. to 2 in. ditto ditto	1 4
HARD YORK—	
Delivered at any Goods Station, London.	
Scrapped random blocks	6 3
6 in. sawn two sides landing to sizes (under	
40 ft. super.)	5 1½
6 in. rubbed two sides ditto	6 1½
4 in. sawn two sides slabs (random sizes)	2 1½
3 in. ditto ditto	2 0
2 in. self-faced random flags	9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	232 0	3 × 6	223 0
4 × 9	228 0	3 × 11	228 0
4 × 8	226 0	3 × 9	225 0
4 × 7	225 0	2½ × 9	225 0
3 × 8	224 0	3 × 4½	223 0
3 × 7	223 0	3 × 4	223 0
2½ × 7	222 0	3 × 4	223 0

PLANED BOARDS.

1 × 11	232 0	1 × 9	30 0
--------	-------	-------	------

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	21/-	1½	32/6
1	25/-	1½	37/6
1	25/-		

TONGUED AND MATCHINGS (BEST).

Inches.	per sq.	Inches.	per sq.
1	25/-	1½	16/6
1½	32/6	1½	20/-
1½	37/6	1½	25/-

BATTENS.

¾ × 2	2 6 per 100 ft.
-------	-----------------

SAWN LATHS.

Per bundle	0 2 4
------------	-------

1" AND UP THICK.

Dry Austrian Wainscoat, per	0 16 0 to 0 18 0
ft. cube	
Dry American and/or Jap-	
anese Figured Oak, ft.	0 15 0
cube	
Dry American and/or Jap-	
anese Plain Oak, ft. cube	0 11 0 to 0 13 0
Dry sq. edged Honduras	
Mahogany, ft. cube	0 16 0 to 0 18 0
Dry Log cut Honduras	
Mahogany, ft. cube	0 18 0 to 1 1 0
Dry Cuba Mahogany, ft. cube	1 4 0 to 1 10 0
Dry Teak, ft. cube	0 13 0 to 0 15 0
Dry American Whitewood,	
ft. cube	0 11 0 to 0 14 0
Best Scotch glue, per cwt.	4 10 0 to
Liquid Glue, per cwt.	4 7 0 to 5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

£ s. d.	£ s. d.
24 by 12	37 12 6
22 by 12	34 0 0
22 by 11	31 5 0
20 by 12	29 15 0
20 by 10	25 12 6
18 by 10	21 2 6
18 by 9	18 12 6
16 by 10	17 12 6
16 by 8	13 15 0

TILES.

Best machine-made tiles from Brosley or	£ s. d.
Staffordshire district	5 12 6
Ditto hand-made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles	0 9 6
(per dozen)	Machine-made 0 9 0

METALS.

JOISTS, GIRDERS, &c. TO LONDON STATION PER TON—			£ s. d.
R.S. Joists, cut and fitted			13 10 0
Plain Compound Girders			15 10 0
Stanchions			17 10 0
In "Roof Work"			20 10 0

MILD STEEL ROUNDS.

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	16 10 0	½ in. to 1 in.	13 10 0
¾ in.	14 10 0	1 in. to 2½ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

Tubes.			Fittings.			Flanges.		
Sizes.	1" to 6"	Over 6"	1" to 6"	Over 6"	1" to 6"	1" to 6"	Over 6"	Over 6"
Black Gas	55%	47½%	50%	57½%	50%	57½%	50%	57½%
Blue Water	50%	42½%	45%	52½%	45%	52½%	45%	52½%
Red Steam	45%	37½%	40%	47½%	40%	47½%	40%	47½%
Galv'd Gas	40%	32½%	35%	42½%	35%	42½%	35%	42½%
" Water	33½%	27½%	30%	37½%	30%	37½%	30%	37½%
" Steam	27½%	22½%	25%	32½%	25%	32½%	25%	32½%
C.I. HALF-ROUND GUTTERS—London Prices, ex Works.								
Per yd. in 6 ft.								
lengths.								
3 in.	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½	1/2½
3½ in.	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
4 in.	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
4½ in.	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½
5 in.	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½
O.G. GUTTERS.								
3 in.	1/7	1/3½	1/7	1/3½	1/7	1/3½	1/7	1/3½
3½ in.	1/7	1/3½	1/7	1/3½	1/7	1/3½	1/7	1/3½
4 in.	1/8½	1/4	1/8½	1/4	1/8½	1/4	1/8½	1/4
4½ in.	1/10½	1/6½	1/10½	1/6½	1/10½	1/6½	1/10½	1/6½
5 in.	2/3	1/9½	2/3	1/9½	2/3	1/9½	2/3	1/9½
RAIN-WATER PIPES, &c.								
Per yd. in 6 ft.								
Pipe.								
2 in. plain	1/9½	1/2½	1/9½	1/2½	1/9½	1/2½	1/9½	1/2½
2½ in.	1/11½	1/4	1/11½	1/4	1/11½	1/4	1/11½	1/4
3 in.	2/4½	1/8	2/4½	1/8	2/4½	1/8	2/4½	1/8
3½ in.	2/10	2/10	2/10	2/10	2/10	2/10	2/10	2/10
4 in.	3/3	2/4½	3/3	2/4½	3/3	2/4½	3/3	2/4½
L.C.C. COATED SOIL PIPES—London Prices, ex Works.								
Per yd. in 6 ft.								
plain	2 11	2 3	2 11	2 3	2 11	2 3	2 11	2 3
2½ in.	3 5	2 6	3 5	2 6	3 5	2 6	3 5	2 6
3 in.	4 1	2 9	4 1	2 9	4 1	2 9	4 1	2 9
3½ in.	4 5½	3 5	4 5½	3 5	4 5½	3 5	4 5½	3 5
4 in.	4 11½	3 9½	4 11½	3 9½	4 11½	3 9½	4 11½	3 9½
L.C.C. COATED DRAIN PIPES—London Prices, ex Works.								
Per yd. in 6 ft.								
plain	2 11	2 3	2 11	2 3	2 11	2 3	2 11	2 3
2½ in.	3 5	2 6	3 5	2 6	3 5	2 6	3 5	2 6
3 in.	4 1	2 9	4 1	2 9	4 1	2 9	4 1	2 9
3½ in.	4 5½	3 5	4 5½	3 5	4 5½	3 5	4 5½	3 5
4 in.	4 11½	3 9½	4 11½	3 9½	4 11½	3 9½	4 11½	3 9½

Bends, stock Branches, angles, stock angles.			£ s. d.
3 in. per yd. in 9 ft. lengths	4 3	5 9	7 8
4 in.	6 3	6 11	9 8
5 in.	7 10	12 0	18 3
6 in.	9 6	15 0	20 9
Gasken for jointing, 38/6 per cwt.			
Per ton in London.			£ s. d.
Iron—			
Common Bars	13 10 0	to 14 10 0	
Staffordshire Crown Bars			
good merchant quality	14 5 0	.. 15 5 0	

Staffordshire "Marked"		£ s. d.	£ s. d.
Bars	.....	16 10 0	18 10 0
Mild Steel Bars	.....	11 0 0	12 0 0
Steel Bars, Ferro-Concrete	.....		
quality, basis price	.....	11 0 0	12 0 0
Hoop iron, basis price	.....	16 0 0	17 0 0
Galvanised	.....	31 0 0	32 0 0
Soft Steel Sheets, Black—			
Ordinary sizes to 20 g.	.....	14 10 0	15 10 0
" " " 24 g.	.....	15 10 0	16 10 0
" " " 26 g.	.....	17 10 0	18 10 0
Sheets Flat Best Soft Steel, C.R. & C.A. quality—			
Ordinary sizes, 6 ft. by	.....		
2 ft. to 3 ft. to 20 g.	.....	19 10 0	21 10 0
Ordinary sizes, 6 ft. by	.....		
2 ft. to 3 ft. to 22 g.	.....		
and 24 g.	.....	21 10 0	22 10 0
Ordinary sizes, 6 ft. by	.....		
2 ft. to 3 ft. to 26 g.	.....	23 10 0	25 10 0
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to	.....		
9 ft. to 20 g.	.....	19 0 0	20 0 0
Ordinary sizes, 6 ft. to	.....		
9 ft. to 22 g. and 24 g.	.....	19 10 0	20 10 0
Ordinary sizes, 6 ft. to	.....		
9 ft. to 26 g.	.....	22 10 0	23 10 0
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets,			
6 ft. by 2 ft. to 3 ft. to	.....		
20 g. and thicker	.....	22 10 0	23 10 0
Best Soft Steel Sheets,	.....		
22 g. and 24 g.	.....	24 10 0	26 10 0
Best Soft Steel Sheets,	.....		
26 g.	.....	26 0 0	27 0 0
Cut Nails, 3 in. to 6 in.	.....	20 0 0	21 10 0
(under 3 in. in usual trade extras.)			
METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about			
1s. 4d. to 1s. 7d. per foot super.			

PRICES CURRENT OF MATERIALS (contd.)**GLASS.****ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.**

	Per Ft.		Per Ft.
15 oz. fourths .. 3 1/2 d.	32 oz. fourths .. 8 1/2 d.		
15 " thirds ... 4 1/2 d.	32 " thirds ... 10 1/2 d.		
21 " fourths ... 4 1/2 d.	Obscured Sh. et. 15 oz. 1 1/2 d.		
21 " thirds ... 5 1/2 d.	21 " 5 1/2 d.		
26 " fourths ... 6 1/2 d.	Fluted 15oz. 6 1/2 d., 21oz. 9 1/2 d.		
26 " thirds ... 7 1/2 d.	En'ched 15oz. 5 1/2 d., 21oz. 7 1/2 d.		

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
1/2 Rolled plate	4 1/2 d.
1/16 Rough rolled	5 1/2 d.
1/16 Rough rolled	5 1/2 d.
Figured Rolled, Baltic, Oceanic, Arctic, Stip-polyte, and small and large Flemish white ..	6 1/2 d.
Ditto, tinted	9 d.
Rolled Sheet	6 d.
White Rolled Cathedral	5 1/2 d.
Tinted do.	7 1/2 d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

	Per gallon	£ s. d.
Oak Varnish	Outside	0 14 0
Fine ditto	ditto	0 16 0
Fine Copal	ditto	0 18 0
Pale Copal	ditto	1 0 0
Pale Copal Carriage	ditto	1 4 0
Best Ditto	ditto	1 12 0
Floor Varnish	Inside	0 18 0
Fine Pale Paper	ditto	0 15 0
Fine Copal Cabinet	ditto	1 2 6
Fine Copal Flattening	ditto	1 0 6
Hard Drying Oak	ditto	0 18 0
Fine Hard Drying Oak	ditto	0 19 0
Fine Copal Varnish	ditto	1 2 0
Pale ditto	ditto	1 12 0
Best ditto	ditto	0 12 6
Best Japan Gold Size		0 10 6
Best Black Japan		0 12 0
Oak and Mahogany Stain (water)		0 7 6
Brunswick Black		0 14 6
Berlin Black		1 5 0
Knottling (patent)		0 17 0
French and Brush Polish		0 9 0
Liquid Dryers in Terebintine		0 7 0

PATENTS.**APPLICATIONS PUBLISHED.***

- 234,535.—H. Bohlander: Heat insulation.
 234,536.—C. Freakes: Combined or convertible furniture.
 234,538.—H. V. Allen: Brick for use in building furnaces.

* All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.

BUILDING TRADE WAGES IN SCOTLAND.*

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters. Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Brick-Plas-terers' Labourers.
Aberdeen	1/8	1/8 1/2	1/8	1/8	1/8	1/8	1/7	1/0 1/2
Airdrie	1/8	1/8	1/8	1/8	1/8	1/8	1/8 1/2	1/8
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/2 1/2 to 1/3 1/2
Arbroath	1/7	1/7	1/7	1/7 1/2	1/7	1/7	1/5 1/2	1/1 1/2
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bathgate	1/8	1/8	1/8	1/8 1/2	1/8	1/8	1/8	1/2 to 1/3
Blairstown	1/7	1/7	1/7	1/7 1/2	1/7	1/7	1/7	10d. to 1/-
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Canterbury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 to 1/3 1/2
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Dumfries	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8	1/8	1/8	1/3
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Edinburgh	1/7 1/2	1/7 1/2	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Falkirk	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Fort William	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Greenock	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hamilton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hawick	1/7	1/7	1/7	1/7 1/2	1/7	1/7	1/7	1/2 1/2
Helensburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Inverness	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/- to 1/2
Kilmarnock	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Kirkwall	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/-
Leamington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/- to 1/3
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Motherwell	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Perth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stirling	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3 1/2
Stirlingshire (Eastern District)	1/8-1/10	1/8-1/10	1/8	1/8	1/7	1/8	1/8	1/3 1/2
Wishaw	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 117.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes accepted. † Denotes provisionally accepted. ‡ Denotes recommended for acceptance. § Denotes accepted subject to modifications.

ABERDEEN.—Construction of a single line railway, from the Market-street to the Electricity Works, Wellington-road, for the T.C. Mr. J. Gordon, Burgh Surveyor:—

*J. Leith, Aberdeen £5,874 2

ALDERLEY EDGE.—House in Whitebarn-road, for Dr. Donald. Plans by Mr. H. Boddington, Junr. A.R.I.B.A., architect, 26, Old Burlington-street, London, W.1:—

*I. Massey & Sons, Ltd., Alderley Edge.

ARNOLD.—Twelve non-parlour type houses, for the U.D.C.:—

*J. Herring & Sons, Arnold... £443 10 each

BARNESLEY.—Houses, for the T.C.:—

†Fairhurst Bros, 40, Ardsley site, £420 per house.

†Baumont & Marshall, 43, at £420 each.

†C. D. Potter & Son, 40, £420.

BARNSTAPLE.—Thirteen parlour type houses in Corporation-street, for the T.C.:—

†Carter & Son.

(Subject to M.H. approval.)

BASFORD.—Alterations and additions to existing cottage, and to stabling, cart-shed, at the scavenging depot, Lower Mexboro', Selston, for the R.D.C. Mr. S. Maylen, Engineer and Surveyor:—

Goulding & Son, Nottingham... £560 14 0

F. Sisson, Langley Mill... 490 0 0

J. Minkley, Brinsley... 467 0 0

L. Buxton, Ilkeston... 458 10 0

Allcock & Sisson, Eastwood... 442 0 0

H. Schofield, Notts... 405 16 6

G. Wallis, Selston... 395 10 0

*G. T. Suter & Son, Nottingham 380 0 0

BASINGSTOKE.—Bridging four fords, Mortimer West End, Pamber, and Silchester, for the R.D.C. Mr. H. Wills Chandler, Clerk:—

Moss & Son, Aldermaston (one ford) £425 0

D. Love & Son, Mortimer (two fords) 1,538 13

1,148 4

*Mussellwhite & Son, Basingstoke

(three fords) 2,700 0

(One ford will not be done.)

BATHGATE.—Cutting tracks and laying an jointing about 7 1/2 miles of 24 in. cast-iron pipes, from Slipperfield, West Linton, to the Edinburgh-Lanark road, for the D.C. Messrs. J. & A. Leslie & Reid, Civil Engineers, 72A, George-street, Edinburgh:—

*Murdoch Mackenzie, Ltd.,

Motherwell £14,642 1 5

BATLEY.—Elementary school at Healey, near Batley, for the E.C. Mr. W. Hanstock, architect, Branch-avenue:—

*Masons—Herman Booth & Son.

*Joiners—S. Armitage & Son.

*Plumbers—Walshaw & Wood.

*Plasterer—W. Lockwood.

*Slater—J. Kellett.

*Painters—G. Tomlinson & Son.

*Heating Engineers—W. T. Exley & Co., Ltd.

(Subject to B.E. approval.)

BEDFORD.—Erection of brick wall at generating station, for T.C.:—

†R. Jeakings £241 10

BEDFORD.—New branch shop and garage, Queen's Park, for the Bedford Co-operative Society, Ltd. Mr. W. E. G. Hull, architect, 12, Ashburnham-road, Bedford:—

C.W.S. Building Dept. London £2,406

Y. J. Lovell & Son, Bedford 1,925

H. Bowler, Bedford 1,790

*C. Negus, Ltd. Bedford 1,764

S. Foster, Ltd., Bedford 1,739

BICKBY.—Pair of semi-detached houses in Storth-road. Mr. J. Ainley, architect and surveyor, 55, New street, Huddersfield:—

Builders' work.—

*Huddersfield Building Guild... £659 8 6

Carpenters and Joiners.—

*Wood Bros., Huddersfield 390 0 0

Plumbing and Glazing.—

*J. Lockwood, Huddersfield... 173 10 0

Plasterer.—

*J. W. Oldfield, Huddersfield... 100 0 0

BLACKPOOL.—Painting at the Infectious Disease Hospital, house, laundry, and cottage, Public Health Offices, the Public Abattoirs, and the Meteorological Observatory, for the C.B.:—

*J. Ratcliffe.

BLACKPOOL.—Reinforced concrete approaches and bridge, and a reinforced concrete water tank at the public park, for the C.B.:—

*W. Tarr & Co., Warrington.

BRADFORD.—130 houses on the Lower Grand estate, for the T.C.:—

*J. H. Wood & Co., Leeds.

BRAINTREE.—Twenty houses, for the U.D. Mr. D. G. Armstrong, Great-square:—

†Blade Wenden, Witham £7,948

BRAINTREE.—Eight "A" type houses on the Great-square site, for the U.D.C. Mr. D. G. Armstrong:—

†A. G. Wicks, Braintree £3,840

CURRENT PRICES FOR BUILDING WORK IN LONDON

EXCAVATOR.

Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	s. d.
Add if in clay	" "	11 0
Add for every additional depth of 6 ft.	" "	1 0
Planking and strutting to trenches	per foot super	0 5
Do to sides of excavation, including shoring ..	" "	1 0

CONCRETOR.

Portland cement concrete in foundation 1 to 6 ..	per yard cube	32 0
Add if in underpinning in short lengths	" "	7 0
Add if in floors 6 in. thick	" "	3 3
Add if in beams	" "	3 9
Add if aggregate 1; 2; 4	" "	10 0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2 6

BRICKLAYER.

Reduced brickwork in lime mortar and Fletton bricks	per rod	£ s. d.
Add if in stocks	" "	30 0 0
Add if in Staffordshire blues	" "	7 10 0
Add if in Portland cement and sand	" "	22 0 0
	" "	1 10 0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0 0 1½
--	---------------	--------

POINTING.

Neat flat struck or weathered joint	" "	0 0 3
---	-----	-------

ARCHES.

Extra only to the price of ordinary brickwork:—		
Fair external in half brick rings	" "	0 0 10
Axed in stocks	" "	0 1 9
Rubbed and gauged jointed in putty camber or segmental	" "	0 6 0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0 1 0
Setting ordinary register grates and stoves ..	each	1 0 0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	" "	4 15 0

ASPHALTER.

Half-inch horizontal damp course	per yard sup.	s. d.
Three-quarter-inch vertical damp course	" "	4 3
¾ inch on flats in two thicknesses	" "	8 6
Angle fillet	" "	6 3
Skirting and fillet 6 in. high	per foot run	0 3
	" "	1 2

MASON.

York stone templates fixed	per foot cube	13 0
York stone sills fixed	" "	22 0
Bath stone and all labour fixed	" "	10 6
Portland stone fixed	" "	20 0

SLATER.

Welsh 16 in. x 8 in. 3 in. lap, including nails ...	per square	72 9
Do. 20 in. x 10 in. Do. Do.	" "	80 9
Do. 24 in. x 12 in. Do. Do.	" "	90 0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5 0
Do. joists	" "	5 6
Do. roofs, floors and partitions	" "	6 0
Do. trusses	" "	8 6

Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-
Flat centering for concrete floor, including struts or hangers ..	" "				50 0
Do. to beams	per ft. sup.				1 0
Centres for arches	" "				1 6
Gutter boards and bearers	" "				1 0

FLOORING.

Deal-edges shot	per sq.		44/6	53/-	60/6
Do. tongued and grooved	"		49/-	57/6	65/-
Do. matchings	"	45/-	51/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

One-and-a-half moulded sashes or casements ..	per foot super	s. d.
Two Do. Do. Do.	" "	1 10
Add for fitting and fixing	" "	2 1
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights, average size	" "	0 3

DOORS.

Two-panel square framed	per ft. sup.	1½"	1½"	2"
Four-panel Do.	" "	2/1	2/4	2/6
Two-panel moulded both sides	" "	2/5	2/8	2/11
Four-panel Do. Do.	" "	2/8	2/11	3/2
	" "	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

Deal wrot moulded and rebated	per foot cube	14	0	
		1'	1½"	1½"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	"	1/4	1/6	1/9
Add if cross tongued	"	2d.	2d.	2d.

STAIRCASES.

Deal treads and risers in and including rough brackets	1"	1½"	1½"	2"	2½"
Deal strings wrot on both sides and framed	2/1	2/4	2/9	—	—
	1/8	2/	2/2	2/8	—

Housings for steps and risers	each	s. d.
Deal balusters, 1 in. x 1½ in.	per ft. run	0 11
Mahogany handrail; average 3 in. x 3 in.	" "	6 0
Add if ramped	" "	11 10
Add if wreathed	" "	23 9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting in to floor and Cupboard locks	1/5
	1/2	making good	19/-
	1/5		

FOUNDER AND SMITH.

Rolled steel joists	per cwt.	s. d.
Plain compound girders	" "	18 3
Do. stanchions	" "	19 0
In roof work	" "	21 9
	" "	27 6

RAIN-WATER GOODS.

Half-round plain rebated joints .. ft. run	3"	4"	5"	6"
Ogee Do. Do.	1/6	1/9	2/-	2/6
Do. Do.	" "	1/9	2/-	3/3
Rain-water pipes with ears	" "	1/9	2/7	
Extra for shoes and bends	each	4/4	5/11	
Do. stopped ends	" "	1/11	2/4½	3/7
Do. nozzles for inlets	" "	2/2	2/7	3/10

PLUMBER.

Milled lead and laying in flashings and gutters ..	per cwt.	s. d.
Do. Do. in flats	" "	60 0
Extra labour and solder in coated cesspools ..	each	59 0
Welt joint	per ft. run	6 9
Soldered seam	" "	0 6
Copper nailing	" "	1 6
	" "	0 6

Drawn lead waste per ft. run	1½"	1½"	1"	1½"	2"
Do. service ..	1/2	1/9	2/0	3/4	4/0
Do. soil ..	1/8	2/2	2/7	3/10	
Bends in lead pipe .. each					3/3
Soldered stop ends ..	1/2	1/8	2/1	2/10	3/6
Red lead joints ..	11d.	1/-	1/3	1/11	2/4
Wiped soldered joints ..	2/10	3/6	4/-	4/11	6/6
Lead traps and cleaning screws				14/7	19/6
Bib cocks and joints ..	6/4	9/7	15/4	41/-	
Stop cocks and joints ..	15/4	17/2	25/8	6½/-	

PLASTERER.

Render, float and set in lime and hair	per yard sup.	s. d.
Do. Do. Sirapite	" "	2 4
Do. Do. Keen's	" "	2 7
Add sawn lathing	" "	3 7
Add metal lathing	" "	1 7
Portland cement screed	" "	2 6
Do. plain face	" "	2 2
Mouldings in plaster	per 1 girth	8 3
One-and-a-half granolithic pavings	per yard sup.	0 1½
	" "	5 9

GLAZIER.

21 oz. sheet plain	per foot sup.	0 8½
26 oz. Do.	" "	1 0
Obscured sheet	" "	1
½ in. rolled plate	" "	0 9
½ in. rough rolled or cast plate	" "	0 10½
½ in. wired cast plate	" "	1 4

PAINTER.

Preparing and distempering, 2 coats	per yard sup.	0 9
Knotting and priming	" "	0 7
Plain painting 1 coat	" "	0 9
Do. 2 coats	" "	1 2
Do. 3 coats	" "	1 9
Do. 4 coats	" "	2 4
Graining	" "	2 3
Varnishing twice	" "	1 9
Sizing	" "	0 3
Flattening	" "	0 7
Enamel	" "	1 1
Wax polishing	per foot sup.	0 6
French polishing	" "	1 2
Preparing for and hanging paper	per piece 2/- to 4/-	

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

BRENTWOOD.—Verandah at mental hospital, for Essex C.C.:—

*A. J. Arnold, Chelmsford £900

BRISTOL.—The T.C. has arranged for the erection of the following houses at a total contract price of £36,000:—

*J. J. Cunningham, 6.
*Leonard & Thompson, 12.
*Rae & Gadd, 12.
*C. Ewart, 50.

BROMLEY (KENT).—Repairs to cottages on the housing estate, at Bromley Common, for the T.C. Stanley Hawkins, Surveyor, Municipal Offices, Bromley, Kent:—

*Woodhams & Tyler, Bromley.

BURNLEY.—New Roman Catholic Church in Princess-street. Messrs. Hill, Sandy & Norris, architects, Albert-square, Manchester:—

*W. & J. Woolf Cronshaw & Sons, Ltd., Blackburn.

BURTON-ON-TRENT.—Eight houses in Saxon-street, for the T.C.:—

*G. Hodges & Son, £545 per house.

CARDIFF.—Electric lighting at the City Lodge Institution, for the B.G. Messrs. A. Ellis & Partners, engineers, 9, Park-place:—

Fraser, Mares & Co., Cardiff	£3,621	9	3
R. Alger & Sons, Ltd., Cardiff	3,456	17	8½
Troup, Curtis & Co., Cardiff	3,270	4	6
J. B. Saunders (1923), Ltd., Cardiff	3,257	2	10
G. E. Taylor & Co., London	3,218	18	0
Booth & Bomford, Cardiff	3,155	3	2
*Page & Stibbs, Cardiff	3,121	19	0

(Subject to approval of the M.H.)

CARLISLE.—Steel window frames for new electricity works, for T.C.:—

*Williams & Williams, Ltd., Chester £641 6 3

CARNARVON.—Thirty-six houses at Cae Hampton, for the T.C.:—

*Owen Williams & Son, £522 per house.

CHAPEL-EN-LE-FRITH.—Alterations to the master's quarters at the Poor Law Institution, for the B.G. Mr. C. Flint architect, 5, The Quadrant, Buxton:—

*J. & G. Mellor, Chapel-en-le-Frith.

CHESTER.—Warehouse and offices in City-road, for Messrs. Bradleys (Chester), Ltd. Mr. E. B. Bailey, A.R.I.B.A., architect, 9, Cook-street, Liverpool:—

*General Contractors—W. Thornton, Ltd., Liverpool.
*Steelwork—Robinson & Kershaw, Manchester.

CHESTERTON.—Painting and decorating the Albert-road Council school, for the Wolstanton United U.D.C. Mr. A. Cotton, architect:—

A. Durber, Red-street	£465	0
W. James, Tunstall	440	0
S. Peake & Son, Stoke-on-Trent	421	0
F. Hales, Hartshill	420	0
S. Broadhurst, Fenton	375	0
I. Holding, Basford	359	19
P. J. Penson, Hartshill	290	0
G. Taylor & Sons, Newcastle-under-Lyme	284	0
*J. Lester, Chesterton	220	0

COWDENBEATH.—Fifty-two houses at Steven-sonbeath, adjoining Stenhouse-street, for the T.C. Mr. C. A. Alexander, Burgh Surveyor:—

Builder—
*Street & Co., Dunfermline £7,186 0 0
Joiner—
*John Reid, Crossgates 4,102 10 9½
Plumber—
*Sydney Binning, Cowdenbeath 2,527 9 5
Slater—
*J. Robertson & Co., Dunfermline 1,370 18 8
Plasterer—
*W. Kennedy, Cowdenbeath 1,586 14 4½
Painter—
*Wm. Russell, Dunfermline 375 10 7½

CULTS. Concrete pumping station buildings, for the Aberdeen Water Works. Mr. G. Mitchell, Water Engineer, 41½ Union-street, Aberdeen:—

*Wm. Tawse, Aberdeen £4,240

DONCASTER.—Forty-five loose boxes at the Glasgow Paddocks, for the Corporation Race Committee. Mr. R. E. Ford, Borough Architect:—

*Hemsworth Bros., Doncaster £2,678

DONCASTER.—New building for the erection of a new number board at the racecourse, for the Corporation Race Committee. Mr. R. E. Ford, Borough Architect:—

*Leadly, Frith and Whittington, Doncaster.

DONCASTER.—For demolition and rebuilding of "Maw Barker's" dram shop, in High-street:—

*T. Jenkinson & Sons (Doncaster), Ltd.

DONCASTER.—Alterations to the motor omnibus garage, for the Electricity and Tramways Committee of the T.C.:—

*Pearson & Blackwell £629 3 5

DONCASTER.—Concrete factory at Balby Carr, for Messrs. The Darlington Fencing Co., Ltd., of London:—

*W. Mullins & Co., Doncaster.

DOVER.—Repairs to the wall of the marine factory in Limekiln-street, for the T.C. Mr. W. Boulton Smith, Borough Engineer:—

*Hayward & Paramor, Dover £1,418

DOVER.—Six houses, for the T.C.:—

†F. Harvey: £419 10s. each.

DUBLIN.—230 houses on the Croydon Park extension of the Marino housing scheme, for the C.B. City Architect, Exchange Buildings, Lord Edward-street. Quantities by the Corporation Surveyor:—

J. Kenny & Sons, Dublin	£138,510	10
Collen Bros., Ltd., Dublin	126,206	0
J. & R. Thompson, Ltd., Dublin	124,975	0
H. & J. Martin, Ltd., Dublin	124,908	10
G. & T. Crampton, Ltd., Dublin	123,430	12
†Paul Kossel & Co., Bremen, Germany	119,140	0

DUDLEY.—Fifty-two houses on the Woodside site, for the T.C.:—

*A. J. Crump & Sons, Dudley £25,894 12

DUMBARTON.—For various trades, in connection with the erection of 104 houses at Silverton Hill, for the T.C. Burgh Engineer:—

Brick work—

*A. M. McDougall & Co., Glasgow £6,703 12 5

Joiner work—

*Dougall & Co., Dumbarton 5,073 12 0

Glazier work—

*Robert Chambers, Dumbarton 150 0 10

Slater work—

*A. C. Whyte & Co., Glasgow .. 1,457 19 0

Plumber work—

*Kilpatrick & Bremner, Dumbarton 3,147 13 11

Plaster work—

*Robert Devlin, Dumbarton 1,260 7 4

Painter work—

*William S. Macnicol, Dumbarton 414 6 11

Fence work—

*William Neil & Co., Helensburgh 137 10 7

EASTBOURNE.—Pavilion in Gildredge Park, for the T.C.:—

*Miller & Selmes £1,665 10

ERITH.—Extensions to the laundry at the Sanatorium, Little Heath, for the U.D.C. Mr. H. Hind, Engineer and Surveyor. Quantities by the Surveyor:—

*D. C. Bowyer, Belvedere £145 10

FLEETWOOD.—Roman Catholic church at Poulton-road. Messrs. Mercer & Duckworth, architects:—

T. Riley & Son, Ltd., Fleetwood.

FOLKESTONE.—Pavilion and shelter on the East Cliff, for the T.C.:—

*T. W. Cole £499

FORMBY.—Reconstruction of the convenience in Browns-lane, for the U.D.C.:—

†Meadow Bros.

FERRYHILL.—Concrete hall floor and alterations to the Tursdale and Metal Bridge Workmen's Club, for the Club Committee. Mr. H. S. Cowper, architect, Tursdale, near Ferryhill:—

T. Coates, Durham	£635	3	6
C. E. Hedley, Sunderland	623	5	9
W. Bell, Coxhoe	520	0	8
R. Telfer & Son, Spennymoor	497	10	0
*P. Bradley & Co., Broom, Ferryhill	440	0	0

GLASGOW.—Conveniences at Loch Lomond Park, for T.C.:—

†John A. Paton & Son, Alexandria £622 14 8

GLASGOW.—House, shelter and pavilion at Newlands Park, for T.C.:—

Brickwork—

†W. T. Aitkenhead £1,093 5 10

Joiner work—

†R. Cunningham & Co. 729 12 0

Slater work—

†John M'Laren 332 13 3

Plumber work—

†Kennedy, Robertson & Bain .. 347 6 0

GLYNCORRWG.—Painting 64 houses on the Graig site, Abergwynn, and 50 houses on the Sunny-side site, Cymmer, for the U.D.C. Mr. W. P. Jones, Engineer and Surveyor, Council Offices, Cymmer, near Port Talbot:—

J. Morgan & Pierce, Blaengwynfi	£600	0	0
J. Moyan, Neath	427	0	0
D. C. Davies, Caerlan	393	6	0
S. A. Keenan, Porth	392	0	0
Lloyd Bros., Cymmer	381	18	0
W. Collins, Dyffryn	356	5	0
J. R. Cornthwaite, Abergwynn	347	14	0
J. Rees, Ogmere Vale	296	17	6
F. Richards, Bridgend	279	0	0
E. Williams & Co., Cardiff	239	8	0

HANWELL.—Greenhouse at the Cemetery, for the Kensington B.C.:—

R. H. & J. Pearson	£189	15
G. N. Watts, Ltd.	188	5
A. Jamieson & Son	149	0
*A. Harris	115	10

(All of London.)

HARWICH.—Eight houses in Vansittart-street, for T.C.:—

†H. H. Bradford £4,453

HASLINGDEN.—Twelve houses at Ewood Bridge and two houses at Helmshore, for the D.C. Mr. A. Brocklehurst, M.S.A., architect, Waterfoot:—

*T. Brown, Ltd.

HASTINGS.—Baths, in Frederick-road, for the T.C.:—

*H. & J. Taylor, Hastings £4,590

HORSFORTH.—One hundred houses on the Cragg Hill site, for the U.D.C.:—

*J. Newsome Walker, Ltd., Horsforth.

KIRKCALDY.—Cutting tracks and laying a jointing 1½ miles of 8 in. cast-iron pipes, for D.C. Messrs. J. & A. Leslie & Reid, civil engineers, 72A George-street, Edinburgh:—

*James Ritchie, Dunfermline .. £2,516 9 6

LEGACURRY.—Public elementary school at Legacurry, Co. Down. Mr. A. Lindsey Smith, architect, 113, Royal-avenue, Belfast:—

James McNally & Son	£2,134
W. J. & C. Law	2,080
Hughes & Thompson	2,057
*John Jamison	2,032

(All of Lisburn.)

LINLITHGOW.—7,500 yds. of 6 in. cast-iron pipe in the Dalmeny and Kirkliston District, for the D.C. Messrs. J. & A. Leslie & Reid, civil engineers, 72A George-street, Edinburgh:—

*F. Flaherty, Falkirk £2,748 12

LONDON.—Extension to the St. Martin's School of Art, Westminster Abbey, for the L.C.C.:—

Harry Groves & Son	£8,412
H. H. Hollingsworth & Sons	8,367
F. & T. Thorne	8,308
W. Akers & Co., Ltd.	7,776
Patman & Fotheringham, Ltd.	7,617
Bovis, Ltd.	7,578
Griggs & Son	7,471
Prestige & Co.	7,402
W. S. Barton & Co., Ltd.	7,365
Lole & Co.	7,350
*L. H. & R. Roberts	6,874
The architect's estimate	7,347

All of London.

LONDON.—Wiring and fittings for electric lighting East-hill estate, Wandsworth, for the L.C.C.:—

W. E. Heath & Co., George-street, Plymouth	£4,174	0	0
G. A. Weston, Milton-street	3,731	0	0
The Belgravia Electrical Co., Ltd., Adams House	2,866	17	0
Griggs & Sons	2,739	15	0
T. H. Smerdon	2,600	0	0
Power Contracts, Ltd.	2,501	2	6
The Commercial Telephone and Electrical Co., Ltd.	2,309	15	0
H. J. Cash & Co., Ltd.	2,229	0	0
British Electrical Installations Co.	2,136	0	0
Tredegar (1923), Ltd.	2,127	8	0
A. Hawkins & Sons	2,090	0	0
Stegman & Co.	1,970	0	0
A. Meckhonik	1,896	4	1
The Alpha Manufacturing and Electrical Co., Ltd.	1,890	15	0
Smethurst & Co. (London), Ltd.	1,863	5	2
T. Clarke & Co., Ltd.	1,766	7	0
*Heath-Pritchard, Ltd.	1,656	3	0
Chief Engineer's estimate	1,898	0	0

All of London.

LONDON.—Painting and cleaning of schools, for the L.C.C.:—

"The Bousfield" (Kensington, S.)—

A. Roberts & Co.	£1,520	0	0
Lole & Co.	1,483	0	0
J. McManus, Ltd.	1,448	0	0
W. H. Cooper & Son	1,350	0	0
H. A. Murphy & Co.	1,305	0	0
Alden Bros. & Davies	1,180	0	0
*A. & F. Polden, Ltd.	1,180	0	0

The architect's comparable estimate is £1,301.

British-street (Poplar, S.)—

R. J. Truscott	£1,569	0	0
E. A. Roome & Co., Ltd.	1,337	0	0
Griggs & Son	1,281	0	0
S. Blow, Ltd.	1,178	0	0
Vigor & Co. (Poplar), Ltd.	1,175	0	0
Patman & Fotheringham, Ltd.	1,157	0	0
*R. Woollaston & Co.	1,049	0	0

The architect's comparable estimate is £1,168.

Brixton Central and Hackford-road (Kennington)—

T. Brown & Son	£3,420	0	0
Rice & Son	3,406	0	0
J. Garrett & Son	3,365	0	0
J. & C. Bowyer, Ltd.	3,123	0	0
Prestige & Co., Ltd.	2,994	0	0
Bridge & Co.	2,989	0	0
Mullen & Lumsden, Ltd.	2,932	0	0
Triggs & Co.	2,743	0	0
*C. H. Gibson, Ltd.	2,562	10	0

The architect's comparable estimate is £2,875.

Bromley Hall-road (Poplar, S.)—

Turnbull & Son	£1,887	0	0
H. C. Horswill	1,843	0	0
Stoney & Co.	1,697	19	0
R. Woollaston & Co.	1,464	0	0
Griggs & Son	1,438	0	0
A. E. Syme	1,393	0	0
*Vigor & Co. (Poplar), Ltd.	1,297	0	0

The architect's comparable estimate is £1,421.

Cormont-road and Akerman-road (Brixton)—

Sims & Russell	£1,512	0	0
F. Jones	1,427	0	0
J. Garrett & Sons	1,393	0	0
Snelling & Rayment	1,175	0	0
R. S. Ronald	1,107	0	0
*Triggs & Co.	1,026	0	0

The architect's comparable estimate is £1,179.

County Secondary, Clapton (Hackney, N.)—

E. A. Roome & Co., Ltd.	£2,478	0	0
Stevens & Sons	2,216	0	0
*W. M. Brand	2,198	0	0
A. Monk	1,798	0	0
Stapleton & Sons	1,619	0	0

The architect's comparable estimate is £1,733.

County Secondary, Peckham (Peckham)—

W. Akers	£1,550	0	0
A. Logan	1,345	0	0
W. Smith & Son	1,310	0	0
Price & Son	1,268	0	0
W. J. Dixon & Son	1,225	0	0
*J. Scott Fenn	1,078	17	0

The architect's comparable estimate is £1,228.

"Dreadnought," The (Greenwich)—

Lister & Co. (Builders), Ltd.	15 p. cent. on cost
F. R. Hipperson	£1,747 0 0
Cole, Loasby & Co., Ltd.	1,661 0 0
W. J. Dixon & Son	1,590 0 0
H. & J. Taylor	1,502 0 0
J. H. Sutch & Sons	1,429 0 0
W. Bickerton	1,299 10 0
D. C. Bowyer	1,266 5 6
A. G. Shorter	1,152 10 0
*J. Hocking & Co.	1,133 0 0
The architect's comparable estimate is £1,222.	

The architect's comparable estimate is £1,222.

Elm Court Residential Blind (Norwood)—

Chappell Bros.	£2,155	0	0
G. Hill & Son, Ltd.	1,929	0	0
*J. Garrett & Son	1,886	0	0
A. Soden	1,616	11	0

The architect's comparable estimate is £1,659.

Essex-street (Mile End)—

C. P. Kitchen & Co.	20 p. cent. on cost
W. Simms	£2,112 0 0
Turnbull & Son	2,021 0 0
A. E. Clark	1,789 0 0
*G. Barker	1,609 0 0

The architect's comparable estimate is £1,518.

The architect's comparable estimate is £1,518.

Globe-road (Bethnal Green, N.E.)—

Runham Brown Bros.	£2,591	0	0
Whitbys, Ltd.	2,259	0	0
N. Lidstone & Son	2,158	0	0
L. H. & R. Roberts	2,134	0	0
Turnbull & Son	2,121	0	0
*G. Butters	2,104	0	0
C. P. Roberts & Co., Ltd.	2,045	0	0

The architect's comparable estimate is £2,146.

Glyn-road (Hackney, S.)—

Barrett & Power	£1,701	10	0
Stoney & Co.	1,699	0	0
E. Pollard & Co., Ltd.	1,658	0	0
G. Butters	1,536	10	0
A. E. Symes	1,535	0	0
L. H. & R. Roberts	1,498	0	0
C. P. Roberts & Co., Ltd.	1,400	0	0
*H. C. Horswill	1,386	0	0

The architect's comparable estimate is £1,499.

Goodrich-road (Dulwich)—

G. Hill & Sons, Ltd.	£2,416	0	0
Chappell Bros.	2,210	0	0
Bridge & Co.	2,194	0	0
T. Brown & Son	2,096	0	0
*W. J. Dixon & Son	2,008	0	0

The architect's comparable estimate is £2,135.

Gopsall-street (Shoreditch)—

Barrett & Power	£2,034	0	0
W. M. Brand	1,972	0	0
Runham Brown Bros.	1,970	0	0
W. S. Barton & Co.	1,954	0	0
A. H. Inns, Ltd.	1,908	0	0
G. Keech	1,889	0	0
A. Monk	1,851	0	0

The architect's comparable estimate is £1,827.

John Evelyn " (Deptford)—

A. Logan	£1,227	0	0
W. Smith & Son	1,202	0	0
A. V. Goad	1,148	0	0
*W. J. Dixon & Son	1,095	0	0

The architect's comparable estimate is £1,127.

Lingsgate-road (Hampstead)—

F. Foxley & Co., Ltd.	£1,475	0	0
F. D. & H. Head, Ltd.	1,437	0	0
Harrison & Co.	1,258	0	0
L. Kazak	1,235	0	0
Nox, Ltd.	1,196	0	0
H. J. Edgar	1,170	0	0
C. Berger	1,088	10	0

The architect's comparable estimate is £1,206.

Lansford-street Central (Bethnal Green, N.E.)—

Lister & Co. (Builders) Ltd.	Prime cost		
	plus 15 per		
	cent.		
Griggs & Co.	£1,762	0	0
Barrett & Power	1,682	0	0
Vigor & Co. (Poplar), Ltd.	1,614	0	0
G. Keech	1,560	0	0
G. Barker	1,139	0	0
*H. C. Horswill	1,100	0	0
The architect's comparable estimate is £1,259.			

The architect's comparable estimate is £1,259.

Mantle-road (Deptford)—

*J. Marsland & Sons, Ltd.	£2,284	0	0
W. Bailey	2,095	0	0

The architect's comparable estimate is £2,111.

Monson-road (Deptford)—

J. Marsland & Sons	£2,293	0	0
*W. Bailey	2,086	0	0

The architect's comparable estimate is £2,163.

St. George's-in-the-East (Cable-street) Central (White-chapel and St. George's)—

W. S. Sharpin	£2,106	0	0
G. Barker	1,589	0	0
W. J. Clemens	1,538	0	0
A. H. Inns, Ltd.	1,468	0	0
Whitbys, Ltd.	1,467	0	0
G. Keech	1,436	0	0
S. Blow, Ltd.	1,434	0	0
R. Woolaston & Co.	1,244	0	0
*W. Simms	1,217	5	0

The architect's comparable estimate is £1,336.

Southampton-street (Camberwell N.W.)—

W. Bailey	£1,562	0	0
T. Carr	1,454	0	0
W. Smith & Son	1,449	0	0
*E. C. Sames & Co.	1,402	14	7

The architect's comparable estimate is £1,413.

South Lambeth-road (Kennington)—

A. Soden	£2,399	5	0
J. Garrett & Son	2,346	0	0
Higgs & Hill	2,330	0	0
Mullen & Lumsden	2,113	0	0
Triggs & Co.	1,997	0	0
T. Brown & Son	1,975	0	0
*Bridge & Co.	1,796	0	0

The architect's comparable estimate is £2,054.

Thornhill-road (Islington, S.)—

H. J. Goodman	£1,996	0	0
Patman & Fotheringham, Ltd.	1,933	0	0
F. Cottrell, Ltd.	1,902	0	0
W. T. Lawrence	1,883	0	0

The architect's comparable estimate is £1,870.

West Kensington Central and William-street (Fulham, E.)—

W. Lilly & Co.	£6,583	0	0
Markham & Markham	6,309	0	0
Aldin Bros. & Davies	4,588	0	0
J. McManus, Ltd.	4,516	0	0
White & Johnson	4,424	0	0
Lole & Co.	4,364	0	0
A. Roberts & Co., Ltd.	4,147	0	0
Bostels	3,212	0	0
B. Colley & Son, Ltd.	3,085	0	0
*W. H. Cooper & Son	2,705	0	0

The architect's comparable estimate is £2,735.

Yerbury-road (Islington, N.)—

H. J. Goodman	£2,953	0	0
The Pitcher Construction Co., Ltd.	2,738	0	0
Marchant, Hirst & Co.	2,725	0	0
F. Cousins	2,547	2	6
Hooper & Hooper	2,518	0	0
F. Cottrell, Ltd.	2,487	0	0
Nox, Ltd.	2,482	0	0
*Stevens & Sons	2,366	0	0

The architect's comparable estimate is £2,454.

LONDON.—Interior decorations of houses and flats, for the Lambeth B.C.—

*T. Singfield & Sons, London	£745	8
------------------------------	------	---

LONDON.—Re-pointing the superintendent's house and re-painting the railings, &c., at the City of London Cemetery, for the City Corporation:—

Vigor & Co. (Poplar), Ltd.	£704	0
*Falkus Bros., Ltd.	599	8

MALTON.—Hospital in Middlecave-road, for the Cottage Hospital Committee. Mr. J. E. Bladen, architect, 12, Preson's-row, Liverpool:—

*A. Lyon & Sons, Norton	£15,669
-------------------------	---------

MANCHESTER.—Branch library at Withington, for the T.C.:—

*C. H. Normanton & Sons, Ltd.	
-------------------------------	--

MANCHESTER.—Rebuilding wall at Higher Ormond-street school, for the E.C.:—

*Morton Brick & Building Co., Ltd.	
------------------------------------	--

MANCHESTER.—Reconstruction of school conveniences, for the E.C.:—

*Princess-road school—H. Clayton & Sons, Manchester.	
*St. Mary's-road school—Gatley & Higson, Manchester.	

MANCHESTER.—Wilbraham-road school, for the E.C.:—

*Teuker & Young, Ltd., Manchester.	
------------------------------------	--

MANCHESTER.—Permanent way special track, for the Corporation Tramways. H. Mattinson, General Manager and Chief Engineer:—

*Edgar Allen & Co., Ltd., Sheffield.	
*Titan Trackwork Co., Ltd., Sheffield.	
Hadfields, Ltd., Sheffield.	
United States Steel Products Co., London.	

(*Accepted each for a portion of the work.)

MARLBOROUGH.—For (a) four cottages at Ogbourne St. Andrew, (b) four at Mildenhall, and (c) two at Manton, for the R.D.C. Mr. J. W. Brooke, architect, 21, The Green:—

J. Franklin, Marlborough	£542	10
W. E. Piper & Sons, Marlborough	538	15
*Payne & Son, Wanborough	535	0

(A)

W. E. Piper & Sons, Marlborough	630	5
Payne & Son, Wanborough	570	0
*Minty & Swanton, Marlborough	478	6

(B)

Payne & Son, Wanborough	585	0
*W. E. Piper & Son, Marlborough	548	0

(C)

MILFORD HAVEN.—Manse, for the Trustees of the Tabernacle Congregational Chapel. Mr. D. F. Ingleton, Lic.R.I.B.A., architect and surveyor, Victoria-place, Haverfordwest:—

John Jones, Haverfordwest	£1,649	0
T. Harries & Sons, Neyland	1,521	0
Henry Adams & Sons, Milford Haven	1,477	12
R. Warlow, Milford Haven	1,415	0
*F. Lloyd & Co., Milford Haven	1,325	0

MOUNTNESSING.—Reconstruction of section of trunk road, for Essex C.C.:—

*W. & C. French, Buckhurst Hill	£43,808	4	11
---------------------------------	---------	---	----

NEWPORT (I. of W.).—Extensions to the Colbourne pumping station, for the R.D.C.:—

Westbrook & Son, Cowes	£405	0
H. & F. Damp, Newport	351	10
*J. R. Budsett, Brightstone	301	15

OXFORD.—Conveniences at the Corn Exchange and the Drill Hall, for the T.C.:—

*W. Rose, Oxford	£517
------------------	------

PEMBROKESHIRE.—Cutting embankments and the construction of two ferro-concrete bridges on the Haverfordwest-Fishguard road, for the C.C. Mr. Arthur H. Thomas, A.R.I.B.A., County Surveyor, Haverfordwest:—

George Palmer, Neath	£30,212	17	4
Reinforced Concrete Construction Co., Manchester	22,415	4	1
Nott, Brodie & Co., Bristol	22,263	15	9
Fothergill Bros., Ltd., Exeter	17,549	7	1
J. E. Jones & Co., Pontllanfraith, Mon.	17,495	7	0
A. E. Farr, London, S.W.1	16,983	0	0
L. J. Speight, Ltd., London	16,787	0	0
Glamorgan Quarries, Ltd., Cardiff	15,439	0	0
*The Yorkshire Hennebique Contracting Co., Ltd., Leeds	15,439	0	0

*George Wimpey & Co., Ltd., London, W.6

PONTEFRAC.—Thirty-four non-parlour type houses on the Love-lane estate, for the T.C. Mr. W. H. Newton, surveyor:—

*Builders—Barber & Heseltine	£7,645	13	1
*Joiner—C. L. Jackson	3,923	0	0
*Filers—Stewart Bros. & Sons	1,089	10	0
*Plasterer—J. Shaw	994	5	2
*Painters—T. Burton & Son	581	14	5
*Plumber—W. Pearson	1,844	11	0

PONTEFRAC.—Twenty-two parlour-type houses on the Love-lane estate, for the T.C. Mr. W. H. Newton, surveyor:—

*Builder—G. Ward	£5,717	14	2
*Joiner—Fox & Jackson	2,714	3	2
*Filers—G. Spurr & Sons	833	16	0
*Plasterers—T. W. Senior & Sons	654	10	0
*Painters—Braggins & Buckley	362	19	1
*Plumber—R. Long	1,214	13	6

PRESTON ROAD.—New sports pavilion, for the Selfridge Club. Messrs. Duke & Simpson, architects, 368, Strand, W.C.2:—

*R. Schooley & Son, London	£5,529	7
----------------------------	--------	---

READING.—School at Kendrick Girls' School, for the E.C. Messrs. C. Smith & Son, 164, Friar-street:—

S. E. Moss, Southend-on-Sea	£29,642	19
Collier & Catley, Ltd., Reading	25,929	10
G. S. Lewis & Bro., Reading	25,659	0
Walden & Co., Ltd., Swallowfield	25,439	0
J. Smallbone & Son, Streatham-on-Thames	25,091	0
W. T. Nicholls, Ltd., Gloucester	23,497	0
E. C. Hughes, Wokingham	23,112	0
*McCarthy E. Fitt, Reading	23,111	0

REDRUTH.—Bungalow at the West Cornwall Miners' and Women's Hospital, for the Committee. Mr. L. Winn, architect and surveyor, 27, Boscawen-street, Truro:—

*A. Gribble, Redruth	
----------------------	--

RETFORD.—Extensions to the King Edward VI Grammar School, for the Governors:—

*A. Richmond & Son, Retford	£8,300
-----------------------------	--------

ROMSEY.—Reconstruction of three bridges in reinforced concrete at Mottisfont, for the R.D.C. Mr. C. W. P. Dyson, District Surveyor:—

Henry Osman & Co

SELKIRK.—Concrete weir across the River Ettrick, for the Joint Dam Committee. Messrs. F. A. Macdonald & Partners, engineers, 135, Wellington-street, Glasgow. Quantities by the engineers:—

*Wm. Taylor & Son, Ltd., Glasgow.....£10,590 4 5

SHEFFIELD.—For (a) 14 houses; (b) 88 houses (c) 82 houses on the Manor estate, for the T.C.:—

(a)*G. M. Payling.....£6,312 0 0
(b)*H. Teanby.....40,559 0 0
(c)*Reeves Charlesworth, Ltd. 35,740 18 3

SHEFFIELD.—Twenty-two houses at Marion-road and Overton-road, Hillsborough, for the T.C. Mr. F. E. P. Edwards, F.R.I.B.A., City Architect:—

*J. H. S. Randall, Ltd., Sheffield....£10,920

PORTABLE PARQUET DANCE FLOORS

In OAK, or OAK and WALNUT.
For PUBLIC or PRIVATE DANCE ROOMS
As supplied to the leading Hotels, etc.

Write or Phone (Park 1885) for particulars to
TURPIN'S PARQUET FLOORING CO.
25 Notting Hill Gate, London, W.11

J. GLIKSTEN & SON

LIMITED

Specialities in
**SEASONED
HARDWOODS**

**MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.**

REGISTERED OFFICE AND WHARF

**CARPENTERS RD.
STRATFORD
LONDON E.15**

Telephone:
EAST 3771
(5 lines)

Telegrams
GLIKSTEN 'PHONE
LONDON

School & Hospital Stoves

MAKERS OF
WRIGHT'S IMPROVED and also SHORLAND PATENT
WARM AIR VENTILATING PATTERNS.

GEO. WRIGHT (LONDON) LIMITED
19, Newman St., Oxford St., London, W.1
Burton Weir Works, Rotherham.

SIDMOUTH.—Repairs to the sea wall and esplanade, for the U.D.C.:—

*C. Brand, Ltd., London£23,501 11 10

SOWERBY BRIDGE.—External painting of 32 houses on the Albert-road housing site, for the U.D.C. Mr. J. Eastwood, architect and surveyor:—

*Hitchen & Thomas, Sowerby Bridge.

SWANSEA.—Isolation hospital at The Hill, for the Corporation:—

†Humphreys, Ltd., Knightsbridge..£79,997

THORNE.—2,610 yds. of stoneware and iron pipe sewers, and storage tank and sewerage pumping station and other works, for the R.D.C. Messrs. W. H. Radford & Son, Chartered Civil Engineers, Albion Chambers, King-street, Nottingham:—

*A. Waddington & Son, Sheffield....£11,250

TORRINGTON.—Five houses on the Goose-green site, for the T.C.:—

Bowden£3,296 18 4
Darch & Son 3,111 13 5
*T. Piper & Son 2,720 10 0

TORQUAY.—Reservoir and ancillary works at Gaze Hill, Highweek, Newton Abbot, for the T.C. Mr. S. C. Chapman, Waterworks Engineer; quantities by Mr. S. C. Chapman:—

*Heath Bros., Sunbeam, Bovey Tracey£3,452 14 7

WINDLESHAM.—Three pairs of non-parlour type houses on the Avenue site, for the U.D.C.:—

*Church & Co., Lightwater ..£945 per pair

WINDLESHAM.—For (a) two pairs of non-parlour type houses, and (b) pair of cottages, for the U.D.C.:—

*J. Corbett, Bagshot£945 0 per pair
*A. J. Goodall, Bagshot 895 15 per pair

WOLVERHAMPTON.—Alterations and additions to Harborough-road Hospital, for the T.C.:—

†G. King.....£886

WORCESTER.—Twenty-four pairs of houses, for the T.C.:—

†J. & A. Brazier, Ltd. Broms-grove per pair £900

WORKSOP.—Extensions to the engine room at the electricity works, Canal-road, for the U.D.C. Mr. F. L. Pedley, engineer:—

*G. G. Middleton, Worksop.....£209

WORTHING.—Forty-four parlour and 58 non-parlour type houses on the Poor's Ten Acres site, for

J. J. ETRIDGE, J^r Ltd

SLATING AND TILING

SLATE MERCHANTS
CONTRACTORS.

Inspections and Reports made on
OLD OR FAULTY ROOFS
in any part of the country.

Telephone: Bishopsgate 1944/5, or write,

Bethnal Green Slate Works,
BETHNAL GREEN, LONDON, E

the Corporation. Borough Surveyor and Architect:—

John Knox, Bristol	£59,410	0	0
Sandell & Sons, Worthing	53,446	0	0
Structural Contractors, London	52,671	0	0
J. B. Edwards & Co., London	52,128	0	0
P. W. Gladstone & Co., Brighton	49,940	0	0
R. Chapman, Warrington	47,027	0	0
*W. H. Guest, Langport	46,524	18	2
Calway Construction Co., Henley	48,366	0	0
Laing & Son, London	47,846	0	0

(The last two tenders are for concrete houses.)

WRITTLE (Near).—Cutting a new watercourse and forming a new embankment by the side of the main road, near Writtle Mill, for the Essex C.C.:—

*W. & C. French, Buckhurst Hill.

YORK.—Chemical laboratory at Nunthorpe secondary school, for the E.C.:—

*Hy. Calman & Sons£252

HIGH-CLASS

FLOORINGS

of every description in

WOOD BLOCKS. PARQUETRY
SEASONED T. & G. WAINSCOT OAK
TEAK AND MAPLE.

FACTORY AND ROADWAY PAVING

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASANT

WANDSWORTH, S.W.18.
(Phone: Putney 1700 & 2457)

FITZPATRICK & SON

Masons and Paviors,

455, OLD FORD ROAD, BOW, E.3

Phone: EAST 4808.

Granite Setts and Kerb (redressed and second-hand), York Paving, Spur Stones, Granite Chippings, and Granolithic and Sett Paving.

Telegrams: 'Frolic, Liverpool' Phone 228 Bank

E. B. BURGESS & CO.

6, CASTLE ST., LIVERPOOL

**WOOD BLOCK FLOORING
AND PARQUETRY.**

Telephone OLIVER 1236.

Many years connected with the late Firm of W. H. LARCELL & Co. of Bunhill Row.

OGILVIE & CO.,

Mildmay Works, Mildmay Avenue, Islington, N.

EXPERTS IN HIGH-CLASS JOINERY.

ALTERATIONS AND DECORATIONS. APPROXIMATE PRICES



GRANITE WM EDWARDS & SON BERDEEN

Supply all classes of Polished and Axed Granite Work in variety of colours and from quarries in any part of the world

Specialists in Carvings and Statuary, War Memorials, Columns, Pilasters, Dadoes Facias, Shop and Bank Fronts.

Correspondence invited

HEAD OFFICE AND WORKS,
PITTOBRIE, ABERDEEN

HOWELL J. WILLIAMS Builders Ltd.

High-Class Building and Joinery Work

11/17, BERMONDSEY STREET,
Telephone: LONDON BRIDGE, S.E.1
HOP 202

Builders of very many well-known Banks, Office and Business premises. Our works especially convenient for City Building and Fittings.

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

OL. CXXIX.—No. 4,303

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

JULY 24, 1925

COMPETITIONS

THE criticism in our issue for June 26 of the designs submitted in the Manchester Art Gallery opens with a statement that the winning design has violated the conditions laid down by the assessors. This is an old complaint, and a complaint expected (but not answered) by those who attribute many things to tribal malevolence. The unsuccessful competitor always lays himself out to Lord Balfour's comment upon his critics during the war. "Possibly," he said, "we might have foreseen, had we been endowed with that wisdom after the event with which all honourable gentlemen have been in such large measure blessed by providence."

The architectural competition system seems to have rumbled through various stages with the slow certainty of a Juggernaut, but it still remains in much the same position, and it is not certain whether the end alone matters or whether the means signify as much as is pretended. There must be disappointments, and perhaps a tendency to expend too much inquisitorial subtlety detecting imaginary or trivial liberties with competition conditions. Allowances must, therefore, be made. There is a danger in taking too narrow a view of the duty of an assessor, in defining his attitude on a main issue. In a small competition, the result may hinge upon the positions of a staircase, or sanitary accommodation; but in the larger field there are, and must be, certain dominating factors which must be regarded and accepted in good faith both by the competitors and the assessors.

It is the plain duty of the critic to state his opinion, and if it coincides with the feeling of the majority of the competitors, every competitor, in fact, it is clearly worth further examination. It is obvious that, where awards are promised upon certain conditions, it is essential to evolve a definite form of procedure to be adopted where a competitor has broken the conditions, and broken them so handsomely that he has evolved the best solution—in fact, the "right" solution. This assumption may, or may not, apply in so definite a form to the Manchester Art Gallery competition; from the particular, the argument extends to the general. Our criticism admits that the winning design is a fine conception, and as this seems to be the general opinion, we may take it that "the disqualification of this brilliant design would have constituted a tragedy." So far as the end is concerned, if the work is proceeded with, the city of Manchester appears to be certain of a fine building, and it is only a domestic question for architects to work out amongst themselves whether the means signify only so far as they are effective.

From the assessors' point of view, there can only be two conclusions: (1) that the conditions have not been broken, and they have selected the best design; and (2) that they have broken, but they have selected the best design. If the assessors do not consider that important conditions have been broken, it is surely a simple matter to prove. The proof is a question of fact, and rests upon a true interpretation of the design's English. This is the general opinion amongst laymen, many of whom believe that architects are notoriously unbusinesslike, and that, when they have the chance of formulating conditions to produce the best architectural results, they fail to give satisfaction amongst themselves. If a practical question is allowed to remain as a matter of opinion, it leaves an ugly impression amongst laymen when the fact remains that a majority of competitors can interpret or misinterpret certain conditions.

After a number of inquiries on the subject, it appears that the impression conveyed to the layman is something like this: "I imagine that the requirements, areas, and so forth, have been drafted by the promoters and assessors. The solution may be somewhat in the nature of a puzzle, but obviously the solution cannot be impossible since the assessors must have worked out the requirements, and, if it is a puzzle, they hold the key. This is the nature of riddles that there should be a perfect answer to them if one had the wit to find it." The layman immediately comes to the conclusion that the assessors are the only ones who know what the promoters have in mind, and by giving

the award to a design which appears to break the conditions, they admit, it is thought, that their original ideas were faulty. There is something to be said for this rough generalisation. When and if conditions are flagrantly broken by a winning design, it proves this—if it proves anything—that the conditions imposed upon the competitors were ambiguous or unsound, and that the winner knew what the promoters and assessors wanted better than they did themselves. Unfortunately, a result of this nature does not prove that other competitors would not have produced even a better design than the winner had they broken the conditions too.

From the point of view of justice to the competitors, it is easy to say: "If I were the assessor I would without hesitation disqualify any design which violated the conditions," but it requires some courage to recommend a brilliant design which does not conform to conditions which you have helped to draft. It requires even greater courage to admit an error, if one has been made, and state the reasons why the end justifies the means. The solution which appears to many observers to be the fairest is for the assessor to award the premium to the designs which have produced the best results on the conditions laid down. "He should," a correspondent suggests, "inform the promoters that one of the competitors has submitted a design contrary to his (the assessor's) and the general interpretation of the conditions. He should state frankly that the general excellence of this design, whilst precluding it from securing a premium, clearly indicates that the ideal solution was not to be found in a literal interpretation of the conditions supplied to competitors. So far as the competition was concerned the breach could not be overlooked, but from the ultimate point of view neither could the architectural qualities of this particular design be overlooked. The procedure recommended would be to award the three premiums and invite the authors to compete again on amended conditions eliminating the restrictions which had been evaded by the one competitor who had produced the successful design. If this suggestion were adopted at least three of the competitors would receive justice, and if it be objected that the number is small it can be urged that they were the three best designs in the eliminating process. The promoters are certain of a fine building, since either the original brilliant design will again win or a better design will come from one of the three who have been chosen to compete on the same lines. By some such method as this there can be no question of unfairness or leniency, and a really great design is saved by the assessor and satisfaction is given all round."

Something may be said for the view that the competitor who has produced the finest design by avoiding the handicaps imposed by a rigid adherence to the assessor's conditions deserves his success from the fact he has had the courage of his convictions. But is courage the correct definition of this desire to stake everything on a hazard? Courage undoubtedly is required along with ability to detect the disturbing factors in the conditions, but the real risk is psychological, and is merely a question of how the assessor is likely to regard his duties and responsibilities. Competitors who are wise after the event may say that it was easy to detect the crucial points in the conditions, and that the real problem was to try to overcome them successfully. From any other point of view architectural competition work develops into the fine art of selecting and excusing little lapses from grace, on the plea that like Captain Marryat's baby, "It was only a little one." One advantage of the above suggestion lies in the fact that a competitor, in breaking the conditions to produce a brilliant design, does not suffer a hardship if he is fully aware that his design must eventually meet the competition of three others who have not taken the risks.

There are professions in which mobility of intelligence counts for a great deal, and to a certain extent, competitive work is one of them, but the architectural competition is least likely to give satisfaction to the competitors when fertility of design develops into evasion of what is troublesome in the rules.

NOTES.

The Fine Arts Commission.

WE shall be all agreed that a well-merited honour has been conferred on Mr. D. S. MacColl and Mr. Percy Scott Worthington by their appointment as members of the Royal Fine Arts Commission, to whose judgments they will add a real value which their personal attainments and worth guarantee.

"Architecture."

THE readers of *The Builder* and other papers are, we think, liable to forget that the quality of what they see in pictures and in print is a thing for which editors can only take a partial responsibility. As we have recently launched what is practically a new journal on the stream of architectural literature—which we are glad to see has been enthusiastically welcomed—we may perhaps be forgiven if, in our desire for the usefulness and well-being of our new offspring, we ask hypercritical readers, if there be any, to temper their judgments with mercy for the shortcomings of those who provide the matter and those who produce it. Seriously, we should like to point out that the public have not only interest, but actual property in a paper, for it is from them that the material comes. If anyone can encourage and help his fellows to a happier realisation of beauty and truth, whether in literary or artistic form, we can only say that it is our pleasant mission to place it before the public. In the last issue of *Architecture* the article on wormholes may suggest to us all a little more courage in trying to discover and improve development in modern craftsmanship. It is not a little disheartening that one so seldom sees anything in modern work and design so attractive and pleasing as the old pump, with its lead spout and panel, which we saw last week in the heart of Kent, or the carved wood spandrels in a wool merchant's house, with the daintily-

expressed symbols of his business. We are sure that the public is partly to blame for the apathy towards much excellent modern work which is being done because they have a hardened belief in the inherent beauty and merit of the wormhole. A short time since an architect we know, after trying in vain to meet with a Welsh dresser and a refectory table to furnish the dining-room of a new house he had built, for a client, came to the conclusion to try his own hand and produce something in character and scale to suit the room. The result was a saving of at least a hundred pounds, complete satisfaction of the client, and some very real, if somewhat shame-faced, satisfaction for the architect. Only last week we saw a charming little Chippendale card table which will easily fetch some seventy or eighty pounds, whereas there are people living, or trying to earn a living, amongst us who could produce an admirable piece of design and craftsmanship for half the money. There were no worm holes in the table, but it is the wormhole theory which creates its value.

The American Commonwealth Fund Fellowship.

THE inclusion of a student of architecture in the list of winners of American Commonwealth Fund Fellowships is an occasion, not only for congratulation to the winner (Miss Elsie Rogers, of Manchester University), but is also of importance to the cause of architectural education in general. It is to be hoped that, having established itself in this, the first award of these Fellowships, architecture will continue to hold its prominence amongst the studies which will receive sympathetic consideration when the annual awards are being made. To the student who, like Miss Rogers, has already had the benefit of travel study in Italy, a period of two years of the best academic tuition along with experience in the offices of the best practitioners in America, are opportunities such as few

have been lucky enough to enjoy. A substantial sum of £600 per annum intended to allow the holder to visit some of the great American cities where modern architectural problems may be studied. At the same time, facilities provided for personal introduction of many of the leaders in important phases of the industrial, commercial, academic and social activities of America. Following the far-seeing policy which inspired Mr. Cecil Rhodes to establish the scholarship which bears his name, this effort on the part of America adds a new advanced outlook upon the future educational values. Miss Rogers is heartily to be congratulated on being the first architect to be admitted to the precincts of such usefulness. We saw this week, on p. 150, a design by Miss Rogers.

Architecture and the Press.

ARCHITECTS have realised that until the Press interests itself at least as seriously with art as it does with

other arts—music, painting, literature and the drama—it will almost be impossible to stir the public apathy, naturally enough the public apathy encourages Press neglect, and hence in England, appear to move in a vicious circle. In this connection, it is gratifying to note that one of the leading papers in Ireland devotes two full columns about once a fortnight to problems of building and construction, and illustrates new buildings with excellent diagrams and photographs. Perhaps the public is awake to its architectural responsibilities, or perhaps the paper in question is determined to kindle public interest. In either case, it is of good augury that it is certain that, if architectural knowledge, criticism and news are provided, they will quickly create their own demand and begin almost at once to raise the standard of architecture.



Old Houses in Durham Cathedral Precincts.

From a Sketch by PROFESSOR A. E. RICHARDSON.



Ironmongers' Hall : Some Coats of Arms.
MR. REGINALD BELL, Glass Painter.

Selection
by the
Press.

THE illustration and description of current work treated as a normal feature in the lay Press could be a powerful agent in improving the standard of design, but to this end it would be necessary for the papers to exercise discrimination as to the buildings selected for illustration. Most people would be only too glad to see their new factory, shop, or housing scheme, illustrated and commented on, but such notice would be still more highly prized if it carried the implication that the building was regarded as a good piece of architecture.

Public
Safety
and the
L.C.C.

PERSONS who have watched London fires have doubtless observed on many occasions the efficient protection afforded by party parapets against the spread of flames from one roof to another. Happily in the case of iron and concrete roofs this danger is almost nullified. But the use of timber or roof construction in ordinary dwelling houses is still prevalent and in outlying localities the omission of the protective parapet is often the rule rather than the exception," says a correspondent. "The consent of the London County Council to this innovation has necessarily been granted; also the unbroken roof surface may be seen extending over rows of houses erected by the Council at the public expense. In view of the involved risk to life and property the wisdom of this procedure may well be doubted."

A Legal
Question.

THE carrying up of party walls above roofs is enjoined in Section 59 of the London Building Act, 1894. The words are: "Every party wall shall be

carried up," &c., and there is no such proviso as "except with the consent of the Council." The same correspondent asks us, seeing that the procedure relates to new buildings, whether the Council is not in these cases acting *ultra vires*? This is a question which we prefer leaving to be answered by legal experts.

St.
Katherine
Coleman.

EVERY time an old church with its adjacent graveyard disappears from the city we must be conscious of some loss of pictorial and historic interest. The dusky brick tower of St. Katherine Coleman, flanked by the plane trees in its little churchyard, makes a very pleasant picture in the summer sunshine, and we must regret that the pursuit of wealth inevitably steals from us such desirable possessions. Notwithstanding its uncompromisingly square tower, the verdict of our modern architectural judges would not agree with the quotation of an earlier criticism which stated that "no parish in the Metropolis would now allow such a piece of ugliness to be erected."



From a Sketch by MR. T. RAFFLES DAVISON.

GENERAL NEWS

Professional Announcement.

Mr. Stephen Wilkinson has been appointed consulting architect to the L.N.E.R. system. The appointment takes effect from January 1. Mr. Wilkinson proposes to start private practice with offices in York, London and Leeds.

Partnership and Change of Address.

Mr. H. D. Sugden, A.R.I.B.A., has moved his office to 10, Conduit-street, W.1, and has taken into partnership Mr. B. W. K. Goode. The practice will be carried on in the name of Sugden & Goode, Architects.

New Lambeth Bridge.

London County Council is to proceed with the construction of the new Lambeth Bridge, and the execution of the improvements at the Lambeth approach, for which powers have been obtained. The estimated cost of the works is £668,000.

Widening the Strand.

In connection with the widening of the Strand, a report of the Improvements Committee states that for the acquisition of property between George-court and Villiers-street £400,000 is required.

Scarborough's New Bridge.

Scarborough Corporation has received an official intimation from the Ministry of Transport that a Government grant of £111,000 will be made in respect of the new bridge over the valley at Scarborough, which is to cost £171,874.

Liverpool Cathedral.

A start has now been made with the next stage of the building operations at Liverpool Cathedral—the erection of the central space and the two western transepts. The central space is to be carried to a height of 167 ft. above floor level. It is estimated that the portion of the work now to be begun will occupy from six to seven years.



Arms of Philip and Mary in Founder's Window, Ironmongers' Hall.

MR. REGINALD BELL, Glass Painter.

Bristol University Entertains Workmen.

A number of the foremen and workmen engaged upon the erection of the new buildings of Bristol University were recently entertained to a supper. The Vice-Chancellor, Mr. T. Loveday, presided, and was supported, amongst others, by Sir George Oatley, the architect.

University Buildings, Aberdeen.

The Executive of the Carnegie Trust for the Universities of Scotland has made the following grant to Aberdeen for the next quinquennium, 1926-1930: for the new Examination Hall at King's College, £15,000; for a new Students' Union, £20,000.

Rome Scholarship in Engraving.

The Council of the British School at Rome, on the recommendation of the Faculty of Engraving, have awarded the Rome Scholarship in Engraving for 1925 to Mr. Geoffrey H. Wedgwood, a student of the Royal College of Art. Mr. Wedgwood, who is twenty-five years of age, was born at Leek, Staffordshire, and was formerly a student at the Liverpool City School of Art.

Changes at Lord's: £50,000 to be Expended.

The extensive changes recommended by the M.C.C. Committee for the provision of seats for the public and members at Lord's, have been approved. The alterations comprise an extension to Stand "G" westwards, to include a new grand stand in place of the present building, and the roofing of the northern end of the Mound Stand. These additions will provide about 3,000 additional seats. The cost is estimated at £50,000.

Waterloo Bridge.

The Franco-British Union of Architects, at its annual general meeting in Paris, passed a resolution to the effect that a letter should be addressed to the Royal Institute of British Architects, by which the union should express its profound regret at the proposed demolition of Waterloo Bridge, and expressing the opinion that it is desirable to take all possible measures to maintain and safeguard this historic monument, which is of great artistic value.

Obituary.

We regret to record the death of Mr. F. W. Tarring, Fellow of the Royal Institute of British Architects for 50 years. Although he did not practise himself to any great extent, his father had a very large practice and was the first architect, we believe, to persuade Congregationalists and Baptists to build their places of worship in the Gothic manner. He was the architect for the Farringdon Memorial Hall, and a great many dissenting places of worship around London and various parts of the country. Mr. Tarring and Mr. Stark Wilkinson (his partner) were the architects responsible for the original design of the "Three Nuns," Aldgate, and Messrs. Doulton's premises on the Albert Embankment.

Mr. Brangwyn's Offer to Wales.

Mr. Frank Brangwyn, R.A., has offered to the Welsh National Museum a number of his finest works. The offer, which has been conveyed to the Council of the Museum by Mr. Arthur Howell, director of St. George's Gallery, Hanover-square, is made on certain conditions, one of which is that the pictures shall have a room devoted to them to be known as the Brangwyn Room. The works offered are valued at about £20,000, and include a large cartoon, which is the original of a mosaic in one of the churches in Leeds.

MEETINGS

Friday, JULY 24.

Architectural Association.—Annual Prize-giving by the Rt. Hon. Lord Eustace Percy. At 34, Bedford-square, W.C.1. 3 p.m.

Saturday, JULY 25.

Edinburgh Architectural Association.—Visit to Edinburgh buildings in progress—Forsyth's, MacVittie's, and bank buildings, Hope-street.

COMPETITION NEWS

Stockbridge.

The following awards have been made in competition for proposed public hall and baths:—First prize, £25: Mr. G. Wishaw Swansea; second prize, £15: Mr. Horatio Slack, Gorton, Manchester; third prize, £10: Mr. H. C. Garland, Market Place, Manchester.

Newark New Nurses' Home.

The Board of Management of Newark Hospital have decided to accept the design submitted in the above competition by Mr. W. G. Watkins, F.R.I.B.A., of Lincoln. Other competitors were Mr. J. Saunders, L.R.I.B.A., Newark; Mr. W. Patterson, Lincoln; and Mr. L. C. Brewster, A.R.I.B.A., Nottingham. The assessor was Mr. Herbert T. Buckland, V.P.R.I.B.A., Birmingham.

Ottawa War Memorial.

The names of the seven successful architects in the first stage of the National Competition for the War Memorial to be erected at Ottawa, which Parliament has appropriated £20,000 to include four British, one American, and two Canadian firms. The British architects are Mr. Lodge, of Bedford-square, London (with Mr. Rosslyn, sculptor); Mr. Vernon March, of Farnborough, Kent; Mr. F. Brook Hitch, of Queen's Terrace, London; and Mr. Wm. J. Smith, of Croft Hill, Glasgow.

Town Hall, Johannesburg.

The British Trade Commissioner at Johannesburg has sent home a report from the clerk of the Municipal Council of Pretoria, concerning the erection of a new Town Hall in that city. It is stated in the minutes that competitive designs will be invited at a cost (first estimate) of about £200,000. Application to the Department of Overseas Trade, 5, Old Queen-street, London S.W. 1.

Other Competitions.

Other competitions still open include the following (the dates given are, first the sending date, and second the issue of *The Builder* in which full particulars were given):—Argentine Institute (Dec. 31; April 24). Copenhagen Bridge (Sept. 1; April 24). Newcastle Bridge and Police Station (Oct. 8; June 12). Dr. Men Bridge (Oct. 1; May 29).



Arms of George V.—Founder's Window, Ironmongers' Hall.

MR. REGINALD BELL, Glass Painter.



Photo: Frank Brown.

Leicester War Memorial.

SIR EDWIN LUTYENS, R.A., Architect.

SOME OF THE NATIONAL PAVILIONS AT THE PARIS EXHIBITION

By G. D. GORDON-HAKE.

A STUDY of the national pavilions at the Paris Exhibition of Modern Decorative and Industrial Arts affords an opportunity of gauging the newer movements in design in each country. The stipulation that these buildings should be modern in treatment, rather than traditional, presented a pretty problem to the architect. Unfortunately there are one or two examples of too strict an adherence to the past, which robs the pavilion of the special interest one hoped for.

Italy, for instance, is represented by probably the most costly pavilion, standing beside that of Great Britain, and almost dwarfing it by its monumental and solid classic mass. The building is decorated with an order and cornice, treated certainly with a breadth of freedom, and having all the appearance of a permanent edifice. In view of what Italy is doing in modern design, this is disappointing. The pavilion for that reason hardly falls into line for comparative criticism.

Our British Pavilion is causing a refreshing amount of controversy. With the exception of our national arms in colour, cleverly placed at the apex of the parabolic arch of the main entrance, the Union Jack on the flag mast and the sailing merchant vessel weather vane, it certainly has little if anything to suggest its national origin. It is probably prophetic more than anything. A certain Scandinavian influence shows itself in the Pavilion, but be that as it may, the building is a delightful essay, which fully interprets the spirit of the Exhibition.

The restaurant adjoining (now christened the Prince of Wales) should be viewed in conjunction with the Pavilion, as they are obviously designed as a group. This can best be appre-

ciated from the other side of the Seine, from which point the playful river front of the restaurant can be seen at its best. The tent-like roof of coloured canvas, the projecting balconies and the double staircase leading to the landing stage, form a most pleasing composition which responds well to the brilliant sunshine. The cylindrical lamps designed round



Entrance to Danish Exhibit in Grand Palais.



The British Pavilion.

MESSRS. EASTON & ROBERTSON, Architects.



the square supports to the roofs are typical of the many original motifs introduced.

Of the other national pavilions, those of Sweden, Denmark, Austria, Czecho-Slovakia and Poland stand out either by reason of the daring architectural massing and treatment of detail, or by the telling restraint and "spotting" of decoration. The Swedish Pavilion for the latter reason is perhaps the most brilliant design in the exhibition.

The Pavilion of Denmark, by Kay Fisker, arrests one by its texture and monumental massing effect, which is obtained by a clever use of a small square site. The central portion of each side is carried up to form a Greek cross, the square corner rooms being kept low and top lit. The pavilion is built of brick, used in the traditional manner; alternate courses of $4\frac{1}{2}$ in. brick-on-edge of a reddish brown and $3\frac{1}{2}$ in. stretchers of white bricks set back 1 in. The joints are roughly $\frac{1}{2}$ in. wide and are flush. The internal decoration represents Denmark in a formalised modern mural treatment. One of the small corner rooms is most effectively treated as a pictorial map of Denmark showing the various attractions open to the tourist. This is the work of an architect, Jacob E. Bang, in collaboration with Kay Fisker.

Perhaps the most typical pavilion is that of Soviet Russia. Two awkward flights of steps lead one to the upper floor where there is no justification for this quasi-monumental approach. The pavilion does not raise itself out of the category of building. Of the exhibits one can be less condemnatory. There are some beautiful textiles and ivory work, including chess sets with kings and knights replaced by peasants and artisans. A highly coloured wooden structure intended presumably for a tower will probably mislead many visitors as to the locality of the amusement park.

The architecture of the exhibition is, on the whole, refreshing; the setting and lay-out, as always in Paris, almost ideal. One comes away more than ever convinced of the inseparability of art and everyday life.

Wren Church Roof in Danger.

The Wren church of St. Peter-upon-Cornhill, E.C., has been attacked by the death watch beetle, and is to be closed throughout August for repairs.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

Manchester Art Gallery Competition.

SIR,—I was not a competitor, nor do I possess sufficient knowledge of the ground of complaint to be able to offer an opinion upon the assessors' award. I write merely to point out that several of your correspondents create the impression that they defend the decision simply because they think it is "not cricket" to question it. To reason thus seems to be unfair both to cricket and the architectural competition. Cricket has its rules, but the point is they are adhered to. I think it was the late Maurice Hewlett who wrote in one of his essays: "I will play with anybody at anything up and down the world, but I must know what game it is we are playing." Clearly those who upheld the award do not grumble at the result, but they are trying to convey that they neither knew the rules nor the game they were playing. This would seem to be the only fair interpretation of the adverse criticisms. The obvious thing to do with a misunderstanding is to clear it up: to dismiss the subject under some misconception of chivalry in sportsmanship is the certain way to lose the confidence and respect of the public.

"INTERESTED."

SIR,—It was not, in the least, my intention that my criticism of the unsportsmanlike behaviour of a small minority among the competitors should appear anonymously. The pseudonym in the covering note was inserted because one signature at the end of my communication seemed sufficient. I shall be obliged if you will publish this letter, so that there may be no doubt as to my identity.

Is it possible to hope that "Critic" will follow a similar course?

GILBERT H. JENKINS.

[Other letters are unavoidably held over until next week.]

Roman London.

SIR,—It is only too well known by those who try to piece together the story of London during the Romano-British period, that during the last hundred years or more much that has come to light through deep excavation for rebuilding within the City area has been lost through falling into the hands of those who have only the faintest idea of their importance to the archaeologist and historian. Not long ago, in conversation with a weather-beaten old specimen of a watchman on a street excavation, I heard of, and a few days later secured, a portion of a fine "Samian" bowl dug up in Queen Victoria-street. On another occasion a short chat resulted in half-a-dozen Roman coins, and I have seen a collection of Romano-British pottery on a mantel-piece of a contractor's office which ought at once to have gone to a museum, but has probably vanished into some curio cabinet unlabelled, and therefore already shorn of three-quarters of its value from the archaeological standpoint.

Foundations of houses of the Roman period have been turned up in the City of London on many occasions. Now and then short descriptions of such discoveries have crept into the newspapers and recently, a better watch being kept, a measured plan has sometimes been made and preserved in proper hands, but much has only been casually noted down and is still out of the reach of anyone who wishes to reconstruct the story of London's greatness between the third and fifth centuries.

I would therefore appeal to all who know of any such discoveries to communicate with me at 1, King's Bench-walk, Temple, E.C. The information which they send may seem of small importance, but, added to that which is known and recorded, it may help me in my efforts to make a more complete plan of Roman London which I am compiling for a book upon which I am now engaged. Information as to the whereabouts of Roman objects of any description which have been found in London will also be welcomed, for a potter's mark, a coin, or an inscription, if nothing more than a roughly-scratched graffito, may help to prove or disprove certain ideas at present held.

GORDON HOME (Major).



ENTRANCE.



INTERIOR: Mural Decoration by MOGENS LORENTZEN.

The Danish Pavilion at the Paris Exhibition. MR. KAY FISKER, Architect.

LEADING CONTENTS. PAGE

COMPETITIONS	129
NOTES	130
GENERAL NEWS	132
COMPETITION NEWS	132
SOME OF THE NATIONAL PAVILIONS AT THE PARIS EXHIBITION	134
CORRESPONDENCE	135
UNIVERSITY OF LIVERPOOL EXAMINATIONS..	151
THE IRONMONGERS' HALL.....	151
TOWN-PLANNING INSTITUTE.....	152
THE BUILDING TRADE	154
BUILDING CONTRACTS	155
ARCHITECTS' AND BUILDERS' INQUIRY BUREAU	155
NEW BUILDINGS IN LONDON	156
THE WEEK IN PARLIAMENT	156
THE RATING AND ASSESSMENT BILL.....	157
CONTRACTS, COMPETITIONS, &C.....	158
PROPOSED NEW BUILDINGS AND OTHER WORKS	161
TRADE NEWS	164
TENDERS	164

ILLUSTRATIONS

Devonshire House Flats.

We publish this week some elevational details of the new Devonshire House flats, Piccadilly, which are being erected from the designs of Mr. Thomas Hastings (Carere & Hastings), of New York, and Professor C. H. Reilly, of Liverpool, joint architects. Perspective drawings of the flats were included in our issue of January 2, when some descriptive notes were also given.

Manchester Art Gallery Competition.

We publish this week the third premiated design in this competition by Messrs. Alfred W. S. Cross and Kenneth M. B. Cross. The winning design was given in our issue for June 12 and 19, and the second premiated design in our issue for June 26. As stated in the criticism of the designs that appeared in *The Builder* of June 26, the authors of the design placed third rigidly adhered to the printed conditions of the competition. It was thought that the problem of the axis and alignment of the building in connection with the proposed treat-

ment of the general lay-out of the open space could best be met by placing the front of the main building at right angles to a central axial line traversing the open space from east to west, and a rectangular and symmetrical type of plan was selected as being the form most suitable to a dignified Classic treatment worthy of an important public building in the City of Manchester. The clock tower which forms a dominant feature in the lay-out of the gardens is placed on the axis of a central line drawn through Oldham-street, a bronze fountain terminates the vista from Lever-street, and the statue of Queen Victoria occupies a central position on the main axial line adjoining Mosley-street.

The principal public entrance is approached by spacious flights of steps leading from the formal garden and carriage-way to a large entrance hall, whence short flights of broad internal steps lead on one side to the chairman's room and to the reception room and on the other side to an inquiry clerk's office and the director's and deputy director's rooms. The principal staircases are approached through spacious vestibules, from which both front and back access is gained to the large central sculpture hall, traversing the building from front to back. The central and dominating position assigned to the sculpture hall was determined by a desire to obtain a fine unobstructed internal vista from the front to the back public staircases; and the screen forming the gallery to the sculpture hall and masking the top-lighted recessed subdivisions for groups of sculpture, constituting in itself a series of canopied niches for single figures or smaller groups, was the outcome of one of the requirements of the competition.

With the exception of the Hall of Memory and of two small museum galleries for the Old Manchester and metal work collections which, placed on the first floor, are accessible by departmental staircases from the galleries on the upper ground floor the whole floor space of the first floor of the building is devoted to the requirements of the picture galleries, and separate galleries for temporary and periodical exhibition are duly provided in addition to main and subsidiary circulation. Very careful consideration has been given to the top side-lighted picture galleries, the lighting surfaces being so arranged that a flood of light is thrown upon the walls at picture height, and reflections are avoided.

The Hall of Memory, centrally placed between two parts of the back staircases, is quietly situated as required by the conditions, off the main stream of traffic.

The lower front entrance hall, which is lighted by four large wells for light formed in the floor above gives access (a) to the committee room and cloak room, (b) to the general office provided in connection with the administration office accommodation, and (c) to the public cloak rooms. It is also in direct communication with the central carriage or cartway entrance from the inner covered roadways.

The lower floor of the corresponding back block, fronting Portland-street, has a central entrance from the internal covered roadways, and its public staircases and cloakrooms are arranged in a similar manner. The lecture theatre and refreshment room are also planned in this block, whilst the required additional exhibition space is provided on this floor by spacious galleries, which have the best possible side lighting from large windows placed in the external wing walls fronting Piccadilly and Parker-street respectively.

Ample provision has been made in a centrally-placed building for receiving, storing, packing and dispatching sculpture, furniture, pictures, &c., in addition to workshop accommodation for framing, repairs, &c., and there is every facility for delivery and dispatch under cover. The boiler-house, filtration chamber and the engineers' workshop, &c., are placed in a corresponding central block.

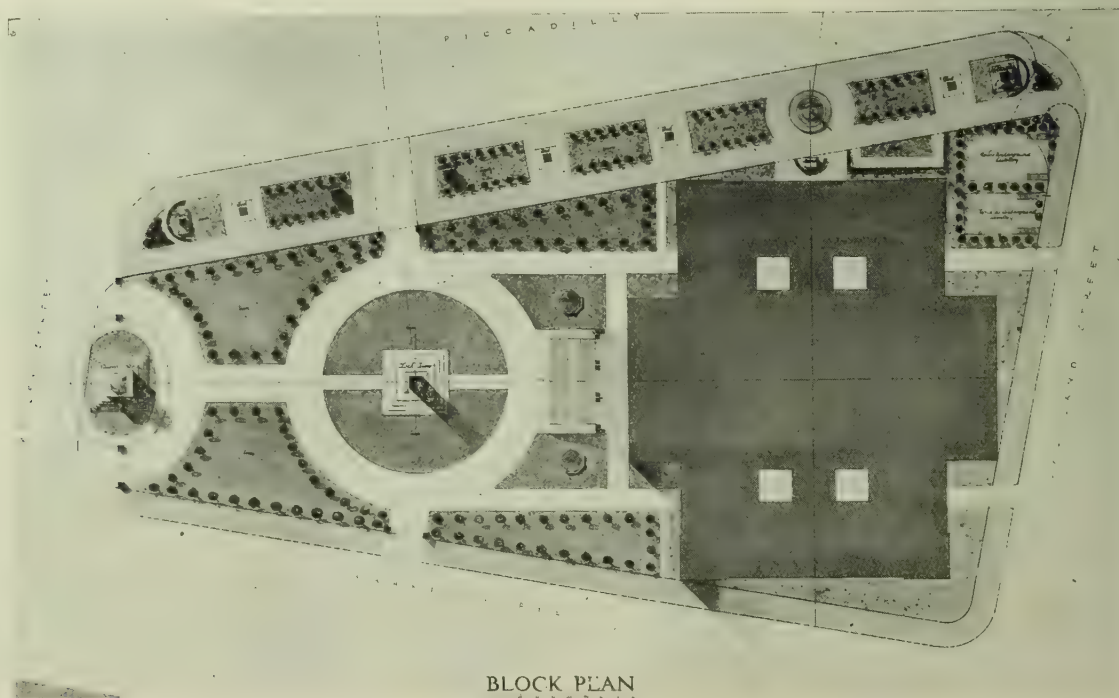
It was found necessary to provide basements for:—

- (1) Kitchen under the refreshment room.
- (2) Lecturers' room under the lecture theatre.
- (3) Porters' mess rooms, &c., under the committee room.
- (4) Staff room and typists' room under the general office.

As to the external architectural treatment, the authors of this design have endeavoured to impart a suggestion of dignity and restraint to the elevations.

Ironmongers' Hall.

A DESCRIPTION of the new Ironmongers' Hall in Shaftesbury-place, Aldersgate-street, London, is given on page 151. — Mr. Sydney Tatchell, F.R.I.B.A., is the architect.



BLOCK PLAN

Manchester Art Gallery Competition: Block Plan of Third Premiated Design.

By MESSRS. A. W. S. CROSS, F.R.I.B.A., and KENNETH M. B. CROSS.



Exhibition of Modern Decorative and Industrial Arts, Paris : The Swedish Pavilion,
MR. CARL BERGSTEN, Architect.

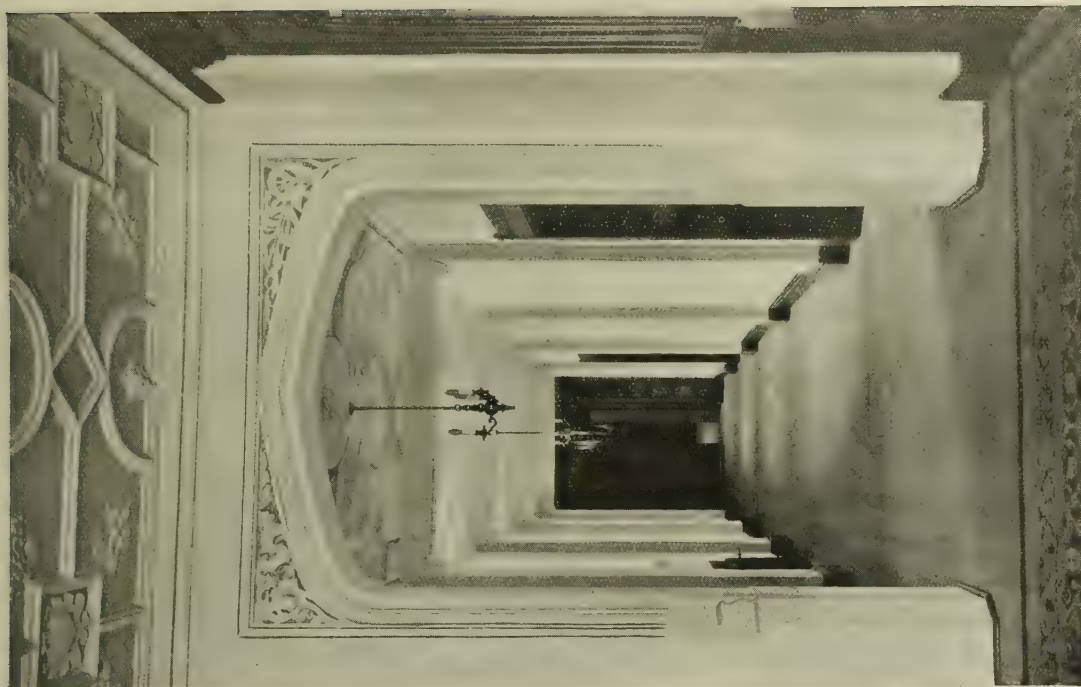


THE PRINCIPAL ENTRANCE.

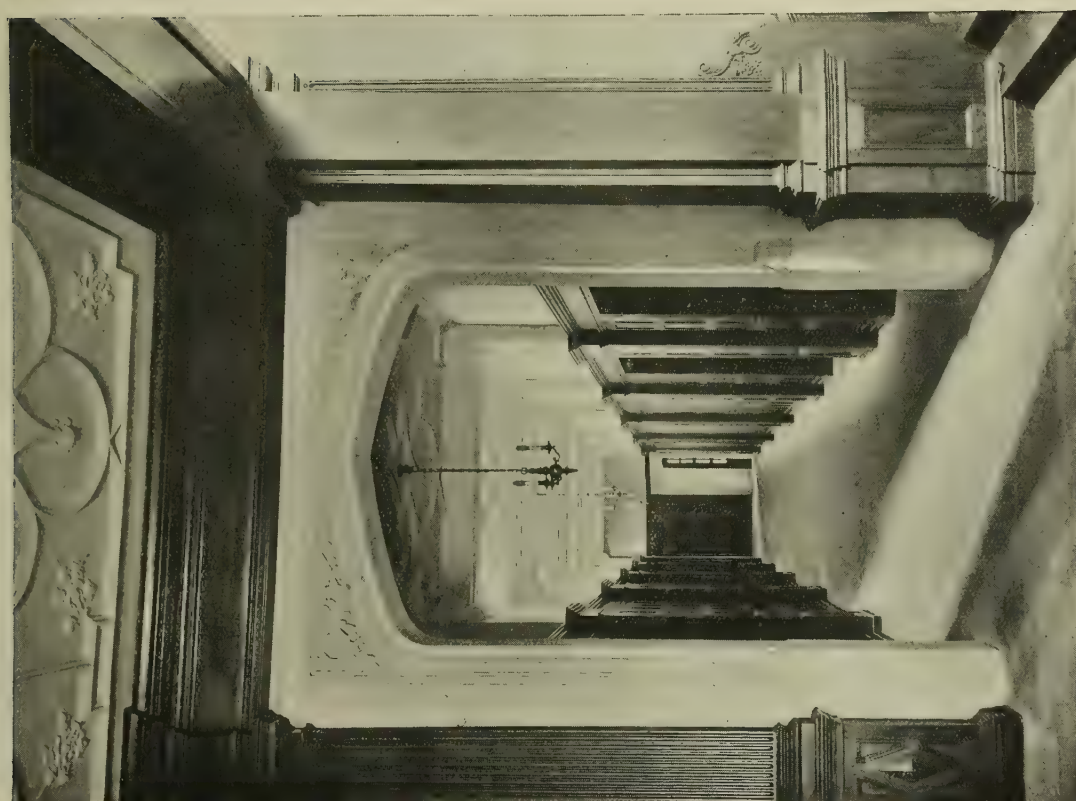


THE FOUNTAIN COURT.

Ironmongers' Hall, Shaftesbury-place, Aldersgate-street, London, E.C.
 MR. SYDNEY TATCHELL, F.R.I.B.A. Architect.



FIRST-FLOOR CORRIDOR.



GROUND-FLOOR CORRIDOR.

Ironmongers' Hall. Mr. SYDNEY TATCHELL, F.R.I.B.A., Architect.



Ironmongers' Hall : Banqueting Hall and Minstrels' Gallery.

Mr. SYDNEY TATCHELL, F.R.I.B.A., Architect.

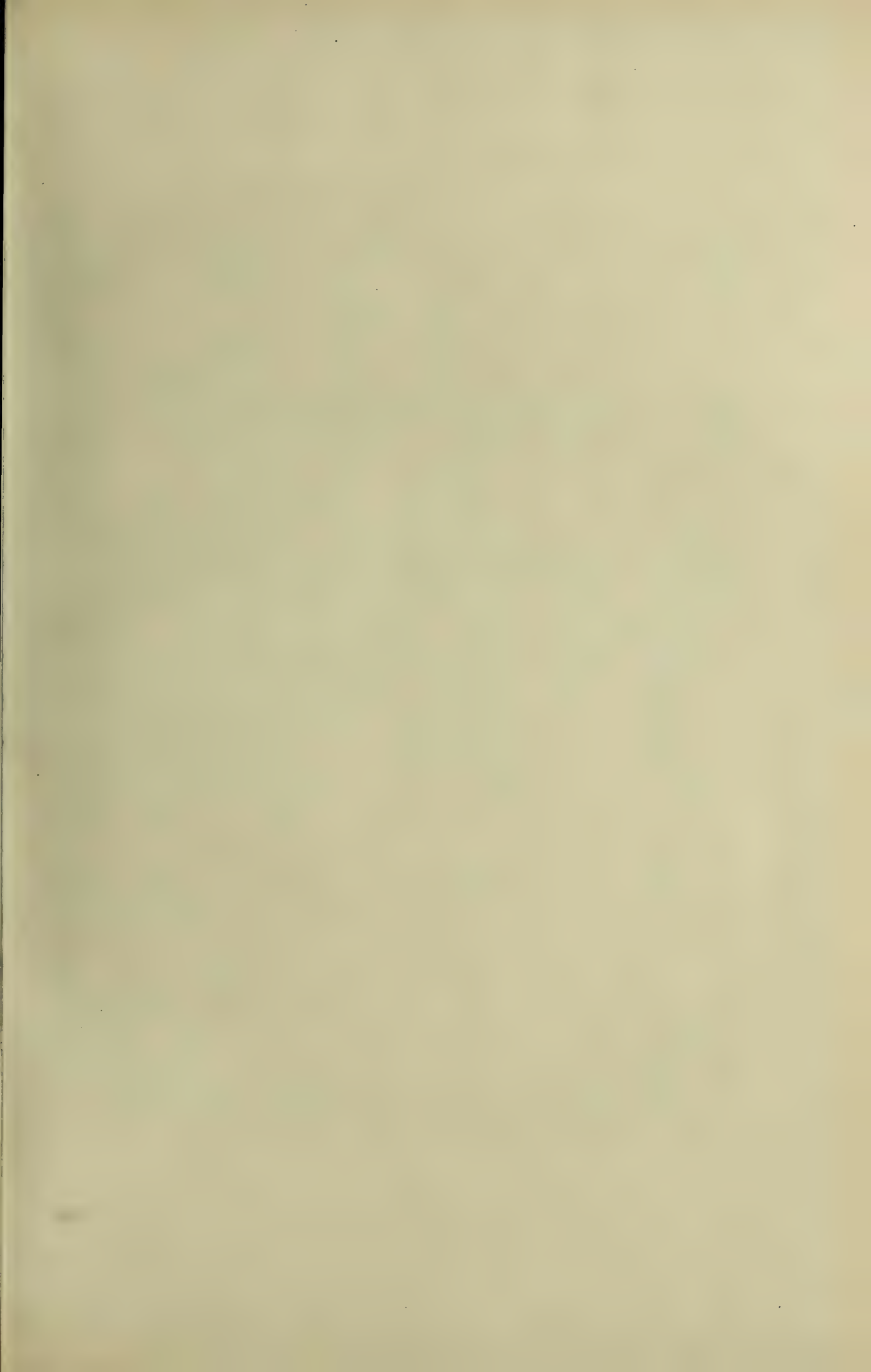


Ironsingers' Hall : Reception Landing. Mr. SYDNEY TAYCHILL, F.R.I.B.A., Architect

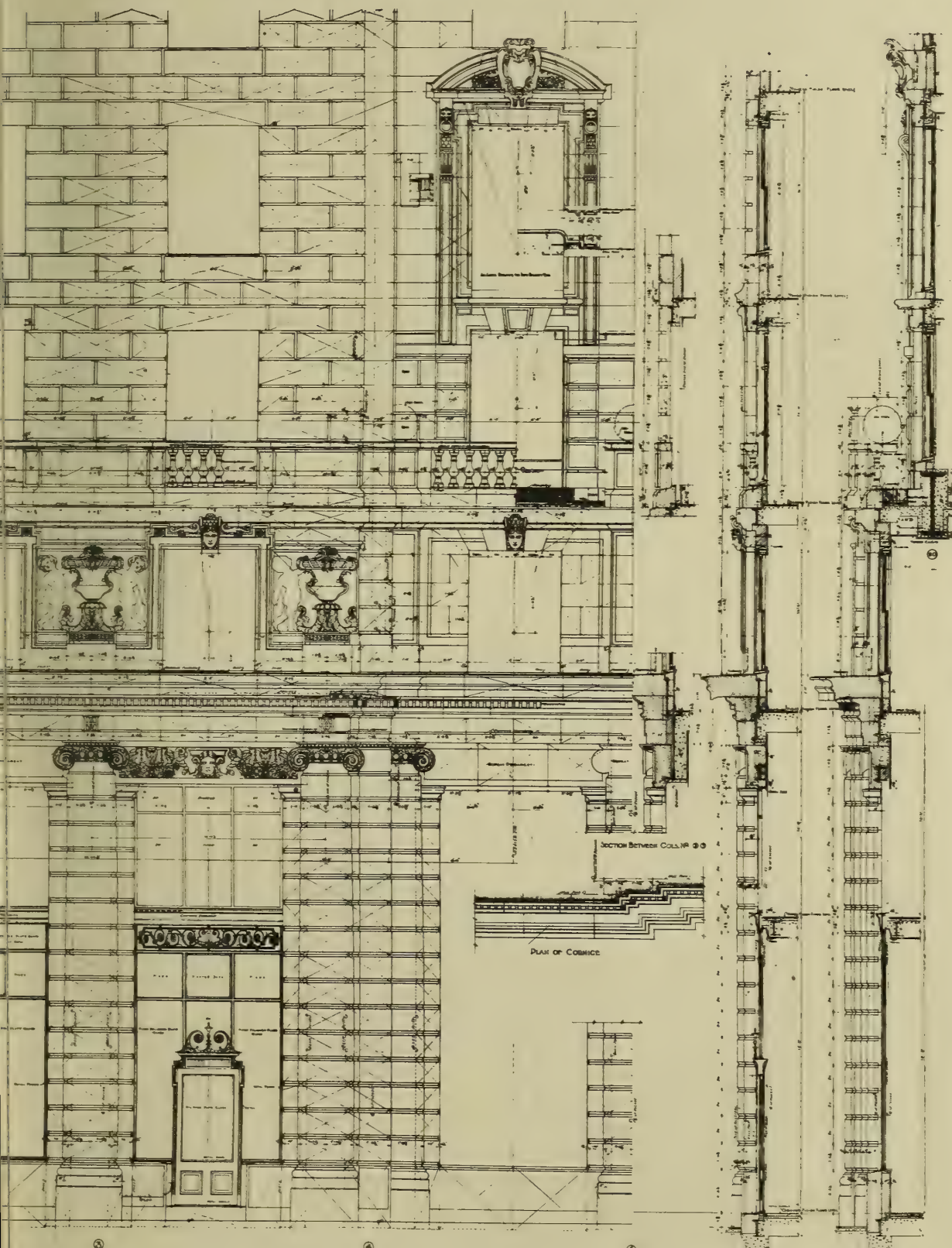


Ironmongers' Hall: Fireplace in Entrance Hall.

MR. SYDNEY TATCHELL, F.R.I.B.A., Architect.





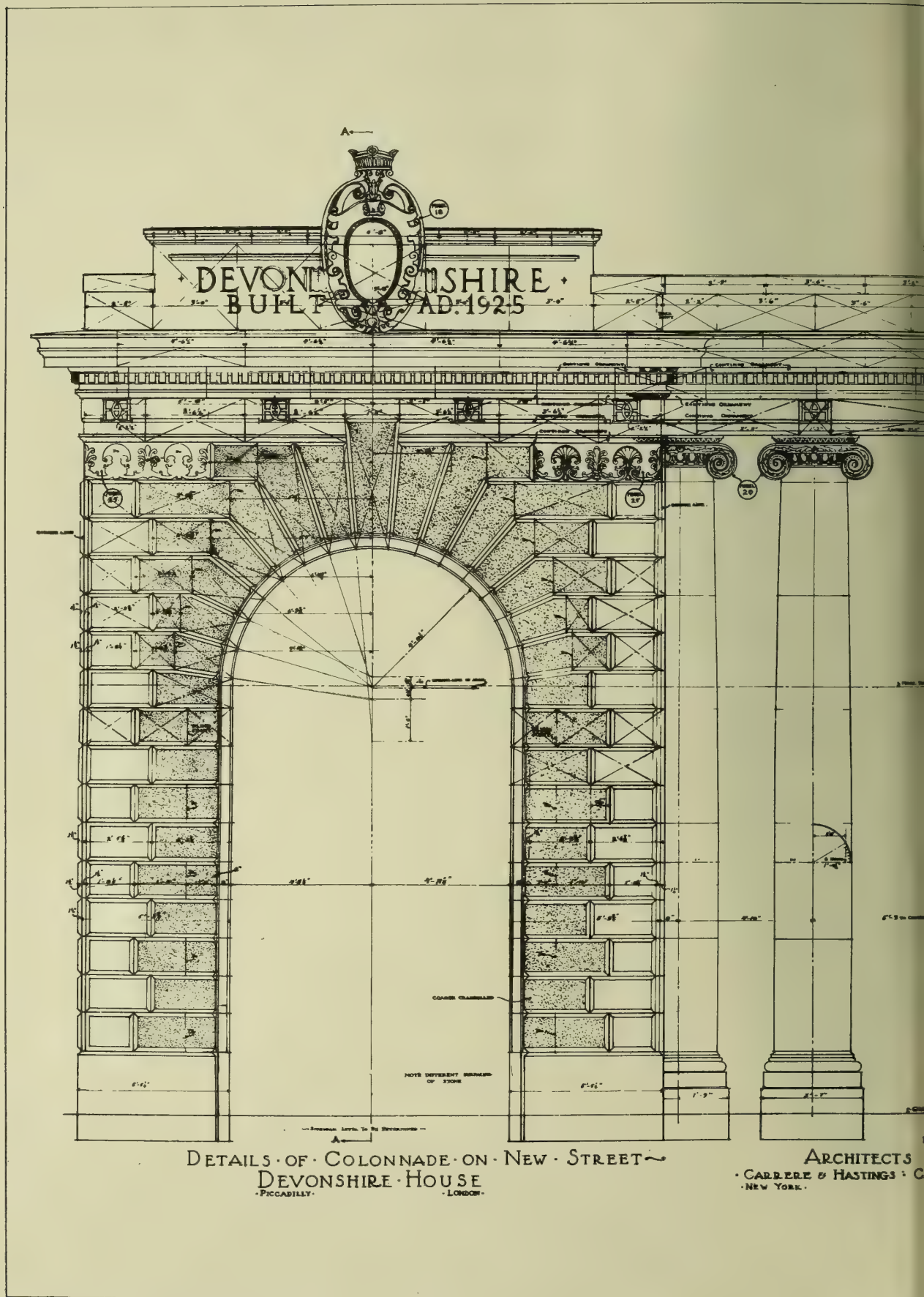


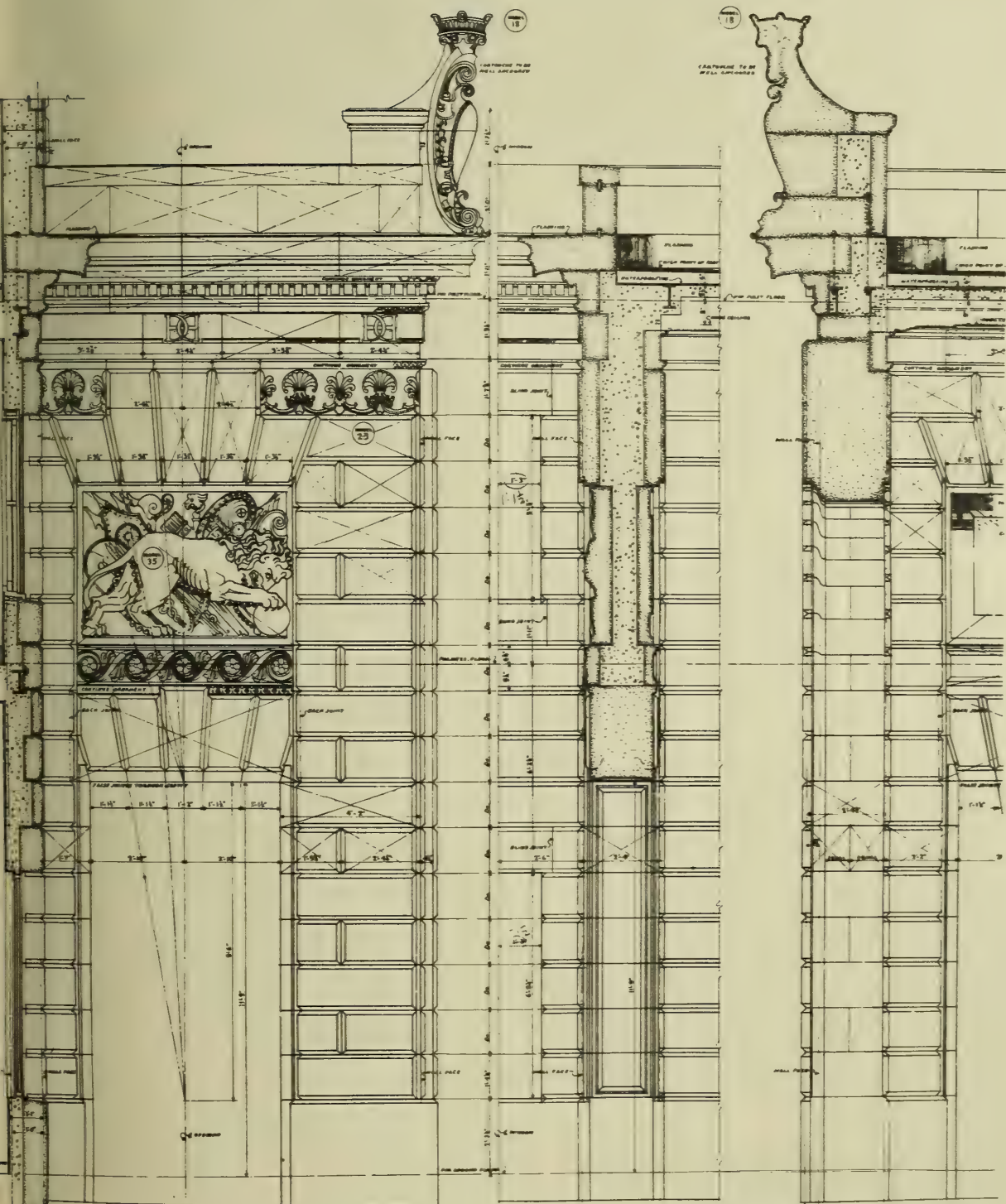
DETAILS OF PICCADILLY ELEVATION

DEVONSHIRE HOUSE
PICCADILLY LONDON

Section Between COLS. N° 3 & 4

Section Between COLS. N° 4 & 5







Ironmongers' Hall : The Grand Staircase.

MR. SYDNEY TACHELL, F.R.I.B.A., Architect.

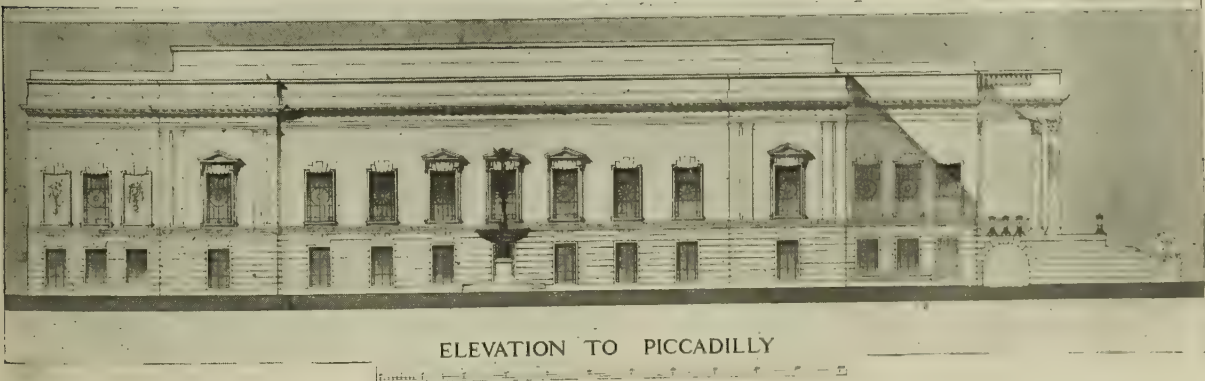
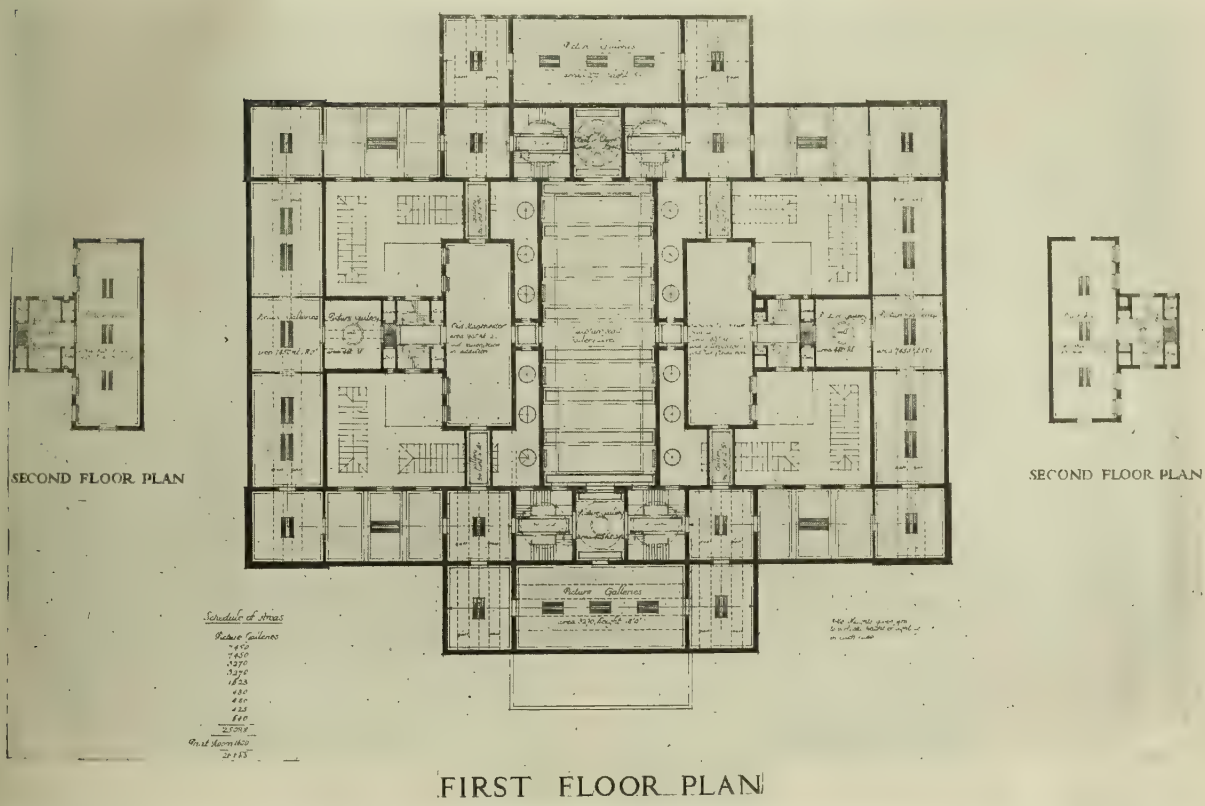


THE CLERK'S ROOM.



FIREPLACE IN LIBRARY AND DRAWING-ROOM.

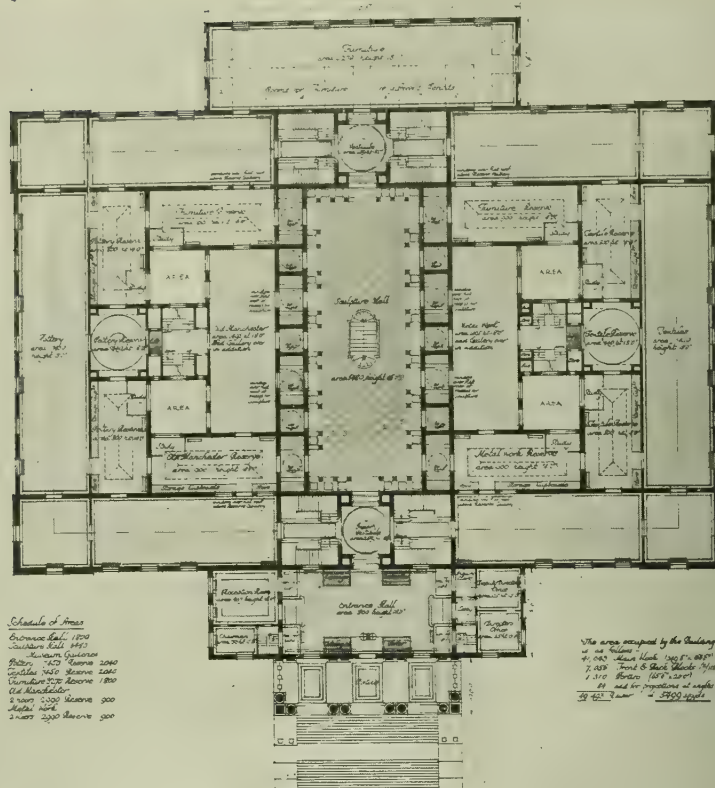
Ironmongers' Hall. MR. SYDNEY TACHELL, F.R.I.B.A., Architect.



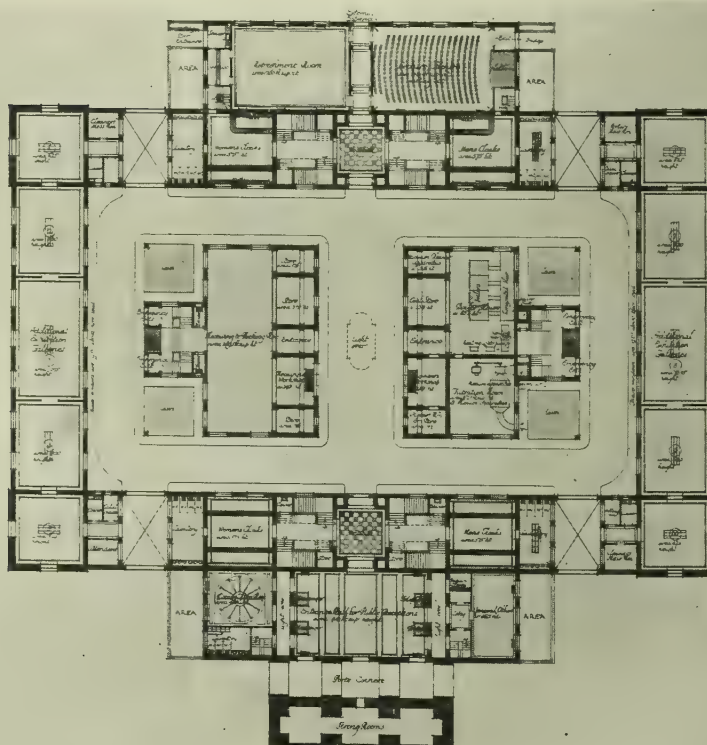
Manchester Art Gallery Competition: Third Premiated Design.

By MESSRS. A. W. S. CROSS, F.R.I.B.A., and KENNETH M. B. CROSS.

[The winning design was illustrated in our issue for June 12 and 19, and that placed second in our issue for June 26.]



UPPER GROUND FLOOR PLAN

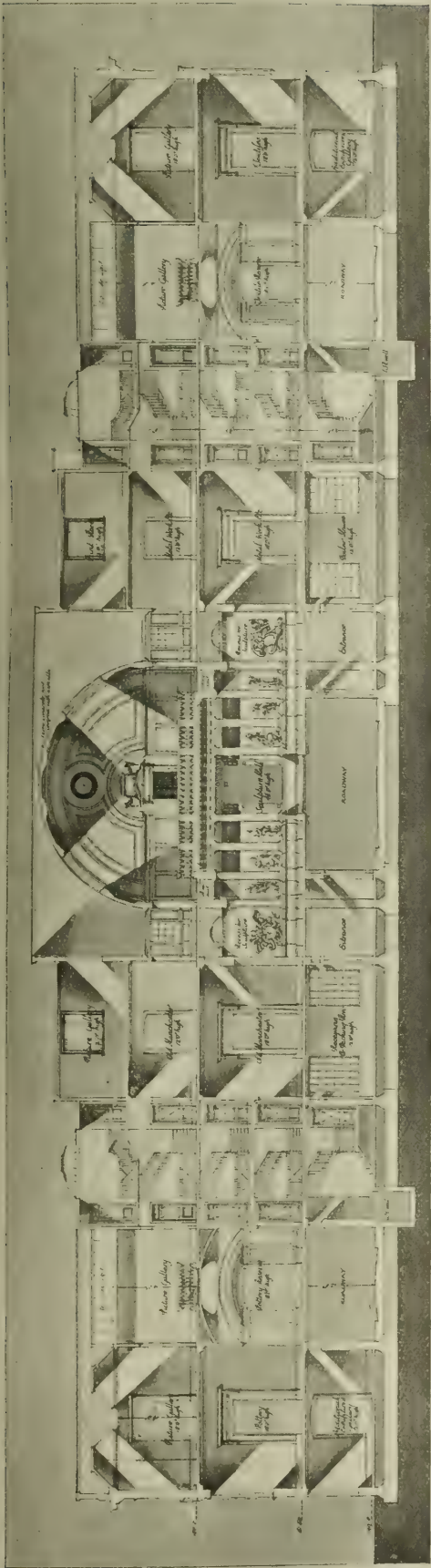


LOWER GROUND FLOOR PLAN

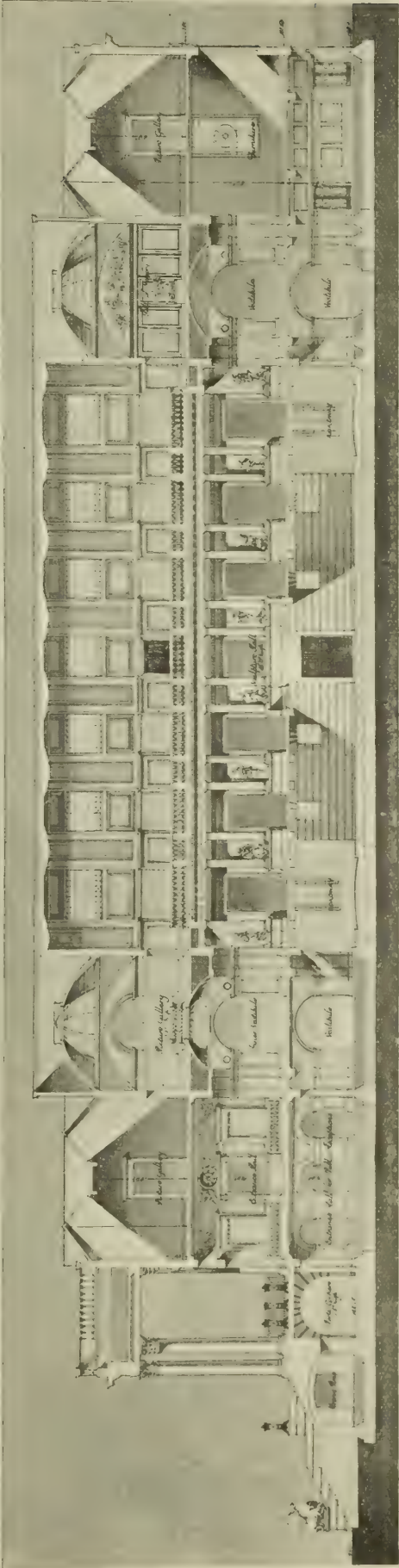
Manchester Art Gallery Competition : Third Premiated Design.

By MESSRS. A. W. S. CROSS, F.R.I.B.A., and KENNETH M. B. CROSS.

MANCHESTER ART GALLERY



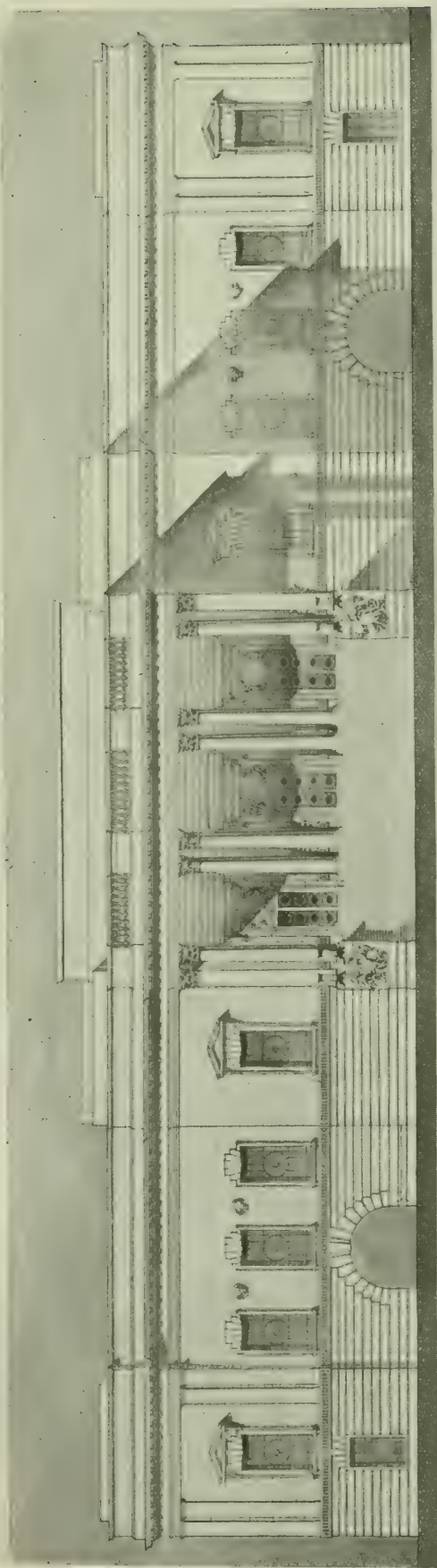
LONGITUDINAL SECTION



TRANSVERSE SECTION

Manchester Art Gallery Competition: Third Premiated Design.
By MESSRS. A. W. S. CROSS, F.R.I.B.A., and KENNETH M. B. CROSS,

MANCHESTER ART GALLERY

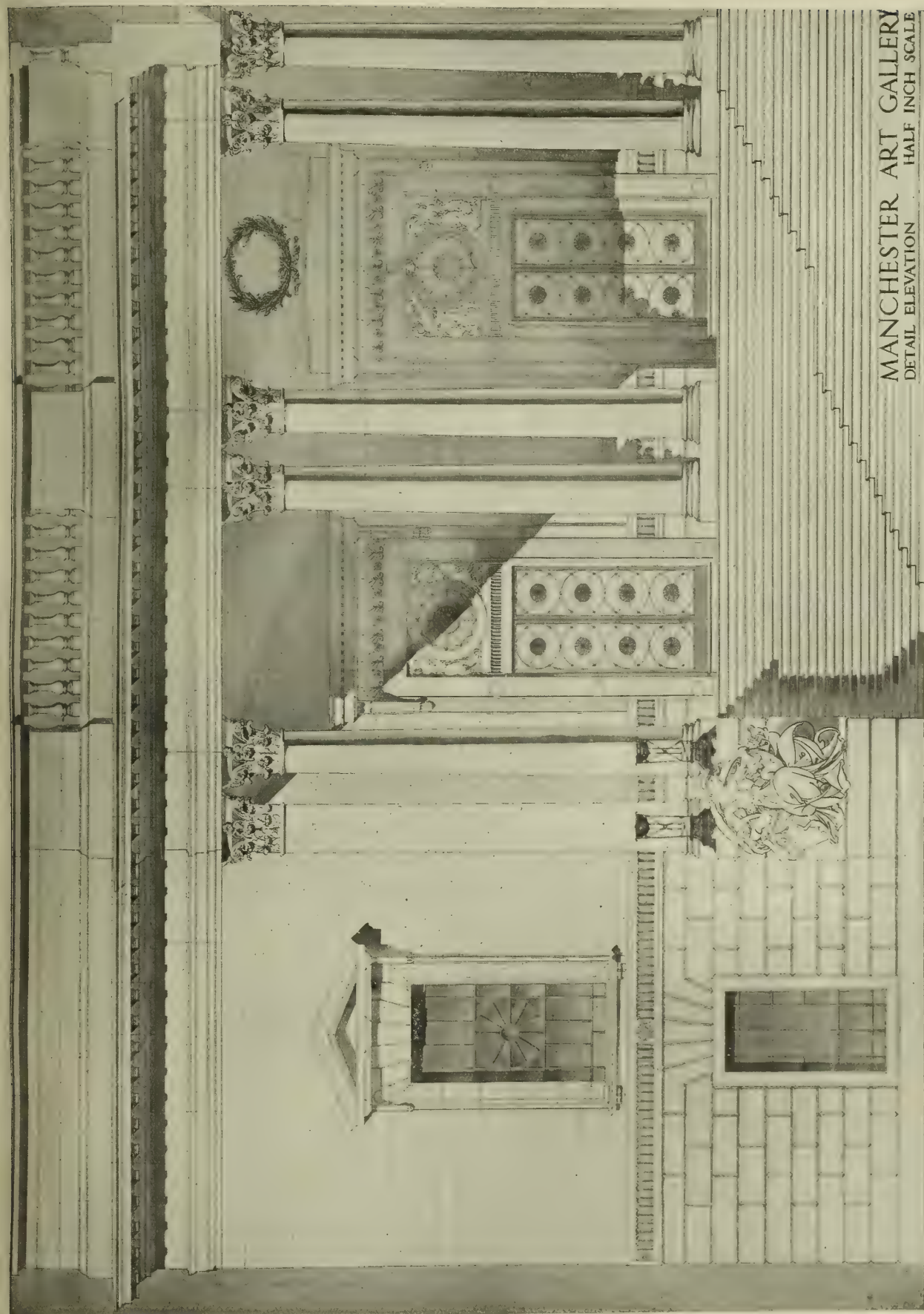


ELEVATION TO THE OPEN SPACE

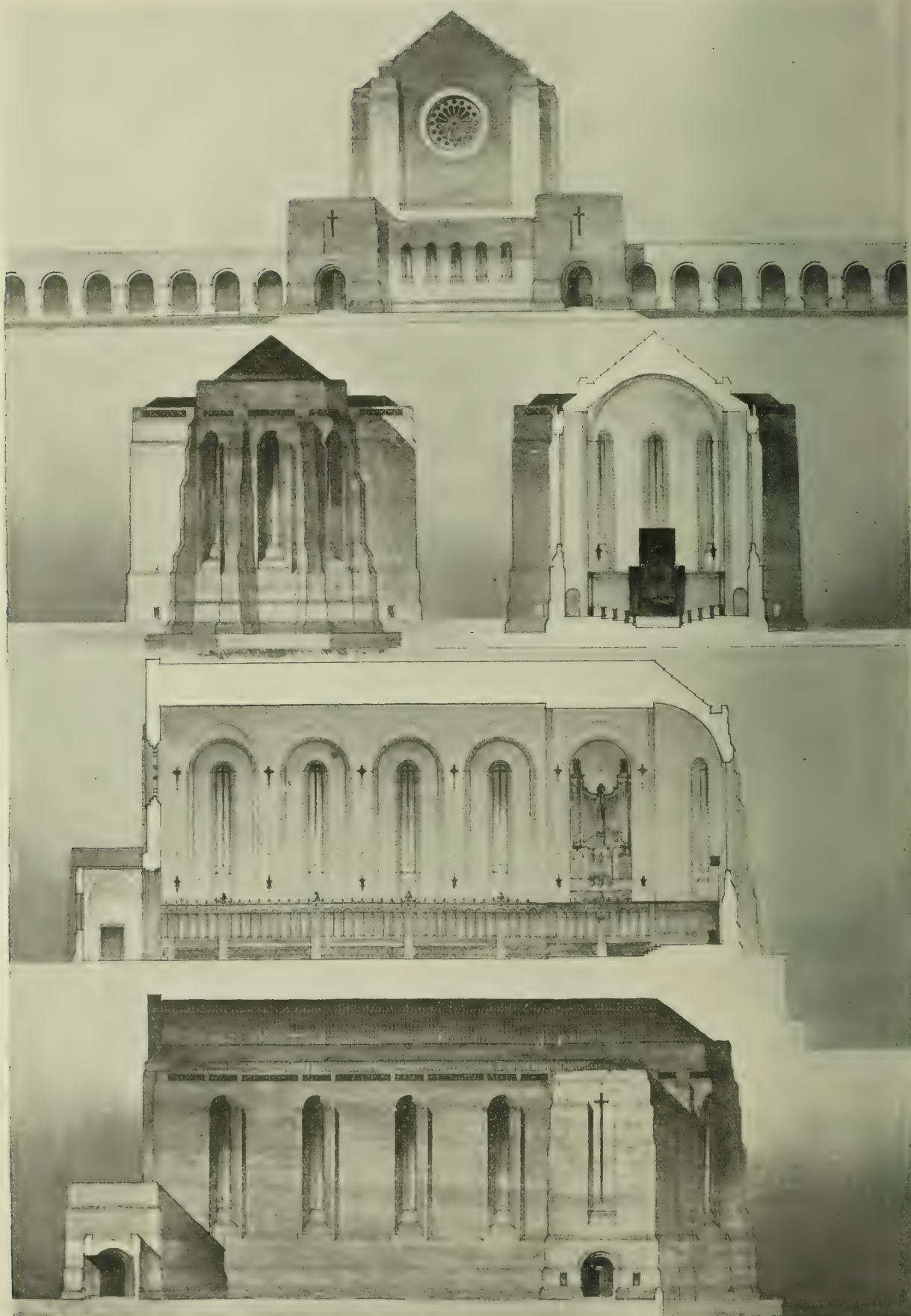


ELEVATION TO PORTLAND STREET

Manchester Art Gallery Competition: Third Premiated Design.
By MESSRS. A. W. S. CROSS, F.R.I.B.A., and KENNETH M. B. CROSS.



Manchester Art Gallery Competition : Third Premiated Design. By Messrs. A. W. S. Cross, F.R.I.B.A., and Kenneth M. B. Cross.



Design for a Church.

By MISS ELSIE ROGERS (Manchester University School of Architecture), who has been awarded an American Commonwealth Fund Fellowship.

R.I.B.A. MINUTES.

Notes from the Minutes of the last Council Meeting.

Registration of Probationers.—On the recommendation of the Board of Architectural Education, it was decided that the Day School Certificate (Higher) Examination and the Leaving Certificate Examination of the Scottish Education Department (covering the required subjects), be included in the list of examinations recognised in connection with registration as Probationer R.I.B.A.

Exemption from the R.I.B.A. Final Examination.—Exemption from the R.I.B.A. Final Examination was granted to the School of Architecture, Edinburgh, for the five years' all-day course and for the six years' part-time course, subject to the usual conditions and to revision on the occasion of the next visit of the R.I.B.A. Visiting Board to the School.

R.I.B.A. Students and the "Journal."—It was decided that, in future, all Registered Students of the R.I.B.A. should receive the *Journal* free of charge.

Students of Recognised Schools and Office Experience.—In order to assist advanced students of recognised schools up to the stage of the completion of their qualifications for the Final Examination, it was decided to open a register of such students together with a register of the names of architects in practice who are willing to take such students into their offices for the prescribed period.

The Tasmanian Institute of Architects.—The Tasmanian Institute of Architects was admitted as an Allied Society of the R.I.B.A.

Examination Fees: Relegated Candidates.—It was decided that candidates relegated in the Intermediate, Final, and Special Examinations, who—under the present rule must pay the full fee of five or six guineas (as the case may be), for the third and subsequent occasions upon which they present themselves—should, in future, be required instead to pay a fee of ten shillings and sixpence for each subject in which they have been relegated, on each occasion upon which they present themselves for examination.

New Class of "Subscribers."—The first applications for election to the new class of "subscribers" were received and approved.

BARTLETT SCHOOL OF ARCHITECTURE AWARDS

The following awards have been made in the Bartlett School of Architecture at University College:—

BARTLETT ENTRANCE EXHIBITIONS.—Edna M. L. Mills, Brighton and Hove High School; Harold F. Hoar, Latymer Upper School, Hammersmith.

HERBERT BATSFORD PRIZE (First Year Classes).—E. Somake.

CERTIFICATES IN ARCHITECTURE.—F. S. Bardell, G. R. Cochrane, Margaret A. de Quincy, H. T. Dyer, L. P. Ellicott, E. Forster, Jessie M. Greig, H. Kendall, D. H. Mirams, C. G. Weald.

SUB-DEPARTMENT OF TOWN-PLANNING: LEVER PRIZES.—First, C. D. J. Benton; second, L. M. Chitale and S. L. G. Beaufoy (equal).

CERTIFICATES IN TOWN-PLANNING.—S. L. G. Beaufoy, A. J. E. Benton, C. D. J. Benton, L. M. Chitale, Gertrude W. H. Leverkus, B. A. Moss.

The following further awards have been made:—**Donaldson Silver Medal.**—H. A. Johnson. **Lever Prizes in Architecture.**—First, J. N. Summerson; second, H. T. Dyer and L. C. Stokes (equal). **Ronald Jones Prizes.**—Medieval Architecture: A. C. Light. Renaissance Architecture: P. A. Wailes. "Architects' Journal" Prize for Design.—L. P. Ellicott.

UNIVERSITY OF LIVERPOOL EXAMINATIONS

The Examination Lists of the University of Liverpool School of Architecture for July are as follows:—

Faculty of Arts.

DEGREE OF B.A.RCH.—FIFTH EXAMINATION.—Honours in Architectural Design: Class I.—F. N. Astbury. **Class II.**—H. L. Barton, C. A. Minoprio, T. T. Wills. **Honours in Architectural Construction: Class II.**—C. C. Shaw. **Ordinary.**—L. C. Howitt, H. G. Phillips, H. A. Peters.

FOURTH EXAMINATION.—H. L. Barton, Norah Dunphy, C. A. Minoprio, H. G. C. Spencely.

THIRD EXAMINATION.—E. F. Davies, G. A. V. Hall, R. G. Heal, May Hutchinson, K. R. Mackenzie, G. A. Ridge, M. Z. el Tawil, Olwen Vaughan.

SECOND EXAMINATION.—S. J. Docking, W. A. Eden, H. G. Ellis, G. C. Hough, H. H. Powell.

FIRST EXAMINATION.—N. Bodhiprasad P. G. Freeman, H. H. Wilkinson, R. A. Williams, L. Wright.

DIPLOMA IN ARCHITECTURE.—FIFTH EXAMINATION.—Distinction in Architectural Design: Class I.—F. H. Crossley, Frances T. Silcock, H. Thearle. **Class II.**—Maud A. M. Wall. **Ordinary.**—H. B. Evans, M. Roushdy.

FOURTH EXAMINATION.—G. A. Butling, F. H. Crossley, M. Roushdy, A. C. Todd.

THIRD EXAMINATION.—W. R. Alderson, A. C. Cotton, W. H. G. Dobie, D. Hall, T. C. Haynes, J. H. Isherwood, O. Lewis, I. D. MacGillivray, J. B. Maxwell, J. G. Metcalfe, Marjorie M. Mocatta, C. E. Moore, H. B. Stout, B. A. Sumner.

SECOND EXAMINATION.—H. Bramhill, A. J. Davidson, P. J. Doran, A. Owen, H. T. Parry, D. B. Solomon.

FIRST EXAMINATION.—A. T. Ashworth, C. S. Brown, J. N. Cowin, Anne R. Dewson, E. G. Hearden, S. W. Kelly, G. G. Lance, F. Norman, G. J. S. Segar-Owen, S. Stern.

PRIZES AND SCHOLARSHIPS AWARDED.

Holt Travelling Scholarship (Third Year).—R. G. Heal.

Lever Prizes in Architecture (Third Year).—1st, J. B. Maxwell; 2nd, R. G. Heal.

John Rankin Prizes in Architecture (for Sketch Designs during Fourth and Fifth Years).—Fourth Year: G. A. Butling. Fifth Year: F. H. Crossley, C. A. Minoprio, H. Thearle.

Holland & Hannen and Cubitts' Prizes (for Working Drawings).—First, H. Thearle; second, Thelma Silcock.

White Star Line Prize.—C. A. Minoprio.

Rome Scholarship in Architecture.—G. A. Butling.

R.I.B.A. (Henry Jarvis) Studentship.—C. A. Minoprio.

THE IRONMONGERS' HALL

THE new hall of the Worshipful Company of Ironmongers, of which we publish a number of illustrations in this issue, has been erected in Shaftesbury-place, Aldersgate-street, from the designs of Mr. Sydney Tatchell, F.R.I.B.A., who holds the appointment of surveyor to the Ironmongers' Company. The building is in the Tudor style, which was decided on for its seemliness for the housing of an ancient guild. Mr. Tatchell has sought, very successfully, we think, to recapture the atmosphere of the Tudor period, though without any suggestion of mere copyism; the work is full of interest and has much original charm and freshness.

The site is **7** shaped, the upper arm being due north and south, and the lower arm east and west. The planning was in large measure determined by the approach from Aldersgate, the necessity for obtaining a sunny aspect for those rooms which are in permanent use by the clerk and his staff, and the maximum of light and air in a building in a somewhat restricted area surrounded by ancient lights.

The basement contains the strong rooms for the archives and plate, the wine cellar and store rooms, the heating chamber, vacuum cleaner plant, waiters' room, and other offices. On the ground floor are planned the entrance vestibule, hall, cloakrooms, luncheon-room, and lower buttery, the clerk's room, and those of his staff and the Court Chamber. The hall has a fireplace in oak and stone, filled with an old dog-grate and a fine example of a Sussex fire back. In the south-east corner of the site are the cloisters and fountain court, looking into which are the luncheon-room and the Clerk's room. The pool and the central pillar of the fountain are stone, the pillar being surmounted by a cast lead bracketed bowl, in which the famous lizards of the Company support the water nozzle. An electric passenger lift connects all floors,

and in addition to the grand staircase, which serves between the entrance hall and the reception rooms on the first floor, there is a secondary staircase for the beadle and his staff. Electric goods and service lifts are provided, together with an outside fire escape staircase, with suitable exits from each floor.

The reception landing, drawing-room or library, and the banqueting hall with its buttery are on the first floor. The lighting of the banqueting hall, and indeed of the building throughout, is electric. The crystal chandeliers have come from the old hall.

The great kitchen and beadle's quarters are on the second floor, and in the space over the banqueting hall is the Great Garrett (so named after an Inventory of 1553), which contains the dressing rooms for the Master, Wardens, and Members of the Court.

Features of special interest are bronze casements and multifarious examples of leaded lights and stained glass windows. The last-named include the arms of the City of London, of the Ironmongers' Company, and of many a Past Master, as well as a number of quaint little pictures depicting figures, such as Saint Lawrence, Saint Dunstan, and bygone craftsmen at work in forge and foundry.

The hall is erected on a reinforced concrete raft, which covers the whole site. Fireproof construction is used throughout and the building is, in addition, protected on the outside by drenchers, which operate automatically should a fire occur in surrounding property.

The heating is by low-pressure hot water; the cleaning by vacuum is controlled by an electric motor in the basement and operated at hydrant points distributed on the several floors; the ventilation of the luncheon-room, Court Chamber, and the banqueting hall is obtained by inlets of fresh air and by exhaust fans. The cooking is by gas. Inter-communicating house telephones are installed throughout.

English oak is used for all the panelling, the grand staircase, and the joinery generally on the principal floors. Thin hand-made bricks from the Daneshill Works near Basingstoke are employed on the Shaftesbury-place frontage, and in the fountain court; and Portland stone is used for the windows and doorways.

The general contractors were Messrs. Holland & Hannen and Cubitts, Ltd., and the following is a list of the sub-contractors: Electrical work, Jacob, White & Co., Ltd.; plumbing and sanitation, Durbin & Katesmark; constructional steelwork, Redpath, Brown & Co., Ltd.; asphalt, French Asphalte Co., Ltd.; roof tiling, Ames & Finnis; red facings, Daneshill Brick & Tile Works, Ltd.; locks, Hobbs, Hart & Co., Ltd.; cooking apparatus, Benham & Sons, Ltd.; service and goods lifts, James Ritchie & Sons; passenger lift, Waygood-Otis, Ltd.; jointless flooring, Bell's United Asbestos Co., Ltd.; oak and wood block flooring, Hollis Bros., & Co., Ltd.; floor tiling, J. C. Edwards; wall tiling, Martin van Straaten & Co.; gun-metal casements, C. E. Welstead, Ltd.; steel casements, Crittall Manufacturing Co., Ltd.; skylights and prismatic glazing, British Luxfer Co.; lightning conductors, J. W. Gray & Co.; vacuum cleaning plant, British Vacuum Cleaner Co., Ltd.; ventilation, James Keith & Blackman Co., Ltd.; automatic drenchers and fire appliances, Mather & Platt, Ltd.; fireproof floors, Kleine Patent Fire-Resisting Flooring Syndicate, Ltd.; escape stairs, George Wright (London), Ltd.; strong room doors and safe, Chatwood Safe Co., Ltd.; Akoustolith tiles, Building Products, Ltd.; sanitary fittings, John Bolding & Sons; secondary staircases, Patent Impervious Stone Co., Ltd.; internal paints and enamels, Wm. Harland & Sons; external paints, Indestructible Paint Co., Ltd.; steel cupboards, &c., Estler Bros.; electric light fittings, Burt, Escaré & Denelle; tapestries and curtains, Wm. Morris & Co., Ltd.; cast-lead work, J. L. Emms; cast-iron work, Thomas Elsley, Ltd.

The following craftsmen were engaged on the work: Stone and wood carving, George Alexander; heraldic glass, Reginald Bell; modelled plaster, George Jackson & Sons, Ltd.; wrought-iron work, F. G. Frost and Bainbridge Reynolds.

TOWN-PLANNING INSTITUTE

MR. W. T. LANCASHIRE (President) took the chair at the annual meeting of the Institute, held at 92, Victoria-street, S.W., when the accounts were adopted and the Council elected.

A motion by Mr. J. W. Mawson to the effect that a paragraph in one of the Articles dealing with the constitution of the Council should be deleted was discussed. The present article provides that the Council shall consist of twelve members, of whom three at least shall be members of the Royal Institute of British Architects, three members of the Institution of Civil Engineers, or the Institution of Municipal and County Engineers, and three members of the Surveyors' Institution. Mr. Mawson contended that the time was ripe for the deletion of such a provision, and that the Town Planning Institute should stand as the body for dealing with town-planning matters. The motion was eventually withdrawn.

President's Address.

The President, in his retiring address, summarised the activities of the Institute during the year, and dwelt on the success of the provincial Conference at Leeds. He suggested that it might be possible to keep the fires of enthusiasm and interest burning brightly by rather more often giving opportunities to country members by the holding of meetings in large provincial centres. He was glad to say there had been a large increase in the number of candidates for the examinations. Mr. Lancashire referred to the action taken by the Association in regard to Thames Bridges, London Traffic, and the initiation of a regional policy for London and the home counties, and in conclusion said he should do all he could to further the interests of the Institute, as he believed it was doing good work for the country and all concerned.

A hearty vote of thanks was passed to the President.

Traffic, Zoning, &c., in the United States.

Messrs. Barry Parker, G. L. Pepler, and R. Unwin, the delegates of the Institute at the International Conference on Town Planning held in America, gave some of their impressions of traffic, zoning, parks and design in the United States.

Mr. Barry Parker, who dealt principally with the city parks of America, said the idea of the freedom of the individual had been the dominating and controlling idea in American institutions and civilisation. To this had to be added a too great appreciation of the merits of the "practical man" and of what were called "practical" ideas. American habit in the past had been to tackle each problem as it arose, and to try and find a solution of that immediate problem, without much consideration as to other problems which the solution arrived at might create. He would give them an example: Finding a problem created by there being more people in the closely packed hearts of cities than could be accommodated there, a solution was found by increasing the heights of the buildings. This created another problem. The buildings now held more people than the streets could accommodate. The immediate solution of this problem was to improve means of transit and methods of transporting people. The owners of subways, elevated railways, buses, ferry-boats, bridges, and what not faced this problem to find an immediate solution of it. They proposed improvements in the facilities they offered, but before doing this they estimated carefully that the increased number of people their improved transport facilities would bring into the hearts of cities would render the improvements remunerative to them. So the cities found themselves with greater congestion in their streets than ever, and faced with the problem of accommodating an increased number of people in the hearts of the cities. They still further increased the heights of the buildings, producing worse congestion in the streets. This they met again by improving means of transport, and so they went round and round a

vicious circle seeking for an immediate solution of each problem as it arose, but not seeking where their solutions led. In all this they saw the dominant idea of the rights of the individual. The owner of a building must be allowed to raise that building to any height he liked regardless of the effect his doing this had on the streets and of the fact that his doing this transformed the streets into dismal canyons, and that by doing this he condemned others to lives spent among ill-lit surroundings, and largely without the benefits of sunshine. The owners of means of transport (ferry-boats, bridges, subways, elevated railways, buses, cabs, &c.) must be allowed to improve these means of transport, in their own interests, regardless of the effect these improvements might have on the life of a city as a whole.

But a change was coming over the spirit and outlook of the American people, and it was in the provision of parks that this change first manifested itself. Public parks are not promoted for individual gain, they were promoted in the interests of a community as a whole. The park systems in American cities could not fail to arouse admiration in the minds of visitors. Chicago was to have a complete ring of parks and parkways round it and a lakeside park artificially created in the shallow margin of the lake. Philadelphia was to have a magnificent parkway leading right out from the centre of the city where the City Hall stands to the Fairmount Park, which stretched for miles, and for part of its length lies on either side of the Schuylkill River. New York had the Bear Mountain Park on the New Jersey side of the Hudson, and for Washington a splendid park system is planned.

Shortly after he arrived in America, he was told that the American spirit was embodied in the phrase, "Individual aggrandisement and collective irresponsibility." He believed that was once true, he did not believe it was so true to-day. Idealism and vision were to be found in America to-day. Americans were beginning to wish to get things done well instead of merely wishing to get things done. Americans were now prepared to listen to the "man of vision" and to take the "long view." They now put the community before the individual when community interests did not unreasonably restrict individual freedom. Therefore the United States of America bid fair to become the dominant nation of the earth. Continuance of the enormous cash saving she is making by having adopted prohibition would render this inevitable.

Mr. G. L. Pepler, who confined himself chiefly to the subject of traffic, said the chief impression that remained after listening to American experts and traversing the streets of a few of their cities, was in the nature of a warning of what we may expect, although probably not to the same intensity. They were told that in the United States every 1.9 families now possessed a car, and Mr. Goodrich expressed the view that probably saturation point had nearly been reached in respect to the number of persons per registered car, so that in future the increase in number of cars was likely to be constant, corresponding (in present proportions) to the increase of population. He expected traffic to increase as about the square root of the registration. In England, he believed there was one car to every seven families, but Sir Henry Maybury had recently told him that nearly 2,000 new owners were registering cars each week. Judging by a week's observation in New York, and by what one was told, in U.S.A. the proportion of heavy lorry traffic was considerably less than in this country. Also, he hardly saw any motor bicycles or side-cars. There was every indication, therefore, that there was likely to be a large increase in motor traffic in this country—at any rate, for a number of years—although, as the cheapest cars and petrol were less expensive over there and the tax much less, it was not probable that they would ever be as widely owned here as they were there. Nevertheless, it seemed certain that this country would to a considerable extent catch them up in the matter, and they

ought to profit by their experience and at once take steps so that they might avoid the impasse that America had now reached.

In some of their cities, the tall buildings aggravated traffic congestion in a way that happily they had not experienced over here, but, on the other hand, their streets were, on the whole, considerably wider than in England. Mr. Unwin had stated that the Chicago streets represented 40 per cent. of the area against 28 per cent. in the City of London. Also, the checkerboard plan of their towns simplified control of traffic, although it was so much slowed down in the process as often to make riding more slow than walking. In New York City they had three tiers—the subway, the roadway and the elevated—and all were jammed full and overflowing at the rush hour. Reference should be made to one feature of the subway, or underground railway. Because it was shallow, it was possible to get direct connection from it to the basements of some buildings so that those having business in such buildings as were connected could get there direct from the train, without having to traverse the street at all. Examples that might be quoted were The Equitable building, which accommodated 15,000 people, and for which, at the expense of the owners, a special underground footway was built from Wall-street Station. The platform of another station was lengthened to give basement frontage to one of the big stores. A number of the large hotels have direct sub-ground communication with the great terminal stations. The much greater depth of English Tube Railways made the same plan impossible here, but it seemed worth while considering whether sub-ground stations might not in some cases be constructed part way down the lift shafts, and subways for foot passengers carried therefrom to some of the great stores or theatres or hotels.

The parking of cars was, of course, an acute problem in most American cities. It had been found necessary to prohibit standing vehicles except in certain specified streets, so that even if one had a chauffeur he might have to keep on circulating the car round the block. The man with no chauffeur found his car of little use to him in the central parts of the big towns, because he probably had to park it so far from the place he wanted to stop at. The result of this was that one large store in Boston and another in New York were supplying private garage spaces for their customers, and large industrial concerns were having to do the same for their employees. In Chicago, the car-owners of the Loop area have appropriated a large open space that was set aside for a park, where 25,000 cars at a time were now parked.

What were the proposals for relieving the situation? Double-decked streets, super-highways, parkways, &c.; but what was clearly emerging seemed to him to be that expedients were futile. At best they could only be partial palliatives. A cure could only be made, and in our case disaster could only be avoided, by a definite new policy of town development based on decentralisation. Some of the palliatives were excellent in themselves, and far the most attractive to him was the parkway. The most famous of these, perhaps, was the Fairmount Parkway, Philadelphia, cut through acres of built-up property, at a cost of about \$19,000,000, to bring a great park to the centre of the city.

Informed opinion seemed, however, rapidly coming to the conclusion that expedients would meet the case, and that the only hope lay in a new town policy. There must be redistribution and decentralisation. In this country, in March, 1920, the Unhealthy Areas Committee, of which the Right Hon. Neville Chamberlain M.P. (Hon. Vice-President) was chairman, and that made careful investigation into the problem of congested and unhealthy areas, reported that "many of the factories now located in London might apparently have been placed elsewhere without any disadvantage to themselves, and we are strongly of opinion that... there should be encouraged the starting of new industries and the removal of existing factories to garden cities which should be founded in

the country where the inhabitants will live close to their work under the best possible conditions." The idea behind this in reference to traffic was to avoid unnecessary movement in and out of the large centre, by intercepting transport, as it were, and placing people in healthy and pleasant surroundings, but near to their work-places. There would then be elbow room to reorganise the centre, placing things in their right place, avoiding the internecine wasteful warfare that now took place between incompatibles, and allowing room for recreation. Towns would be of loose texture, but compact, and large belts of open country would be kept free from the spoliation that now threatened so much of the countryside near every large town. If this policy of redistribution and decentralisation was not adopted, but an added mixed congestion was allowed to pile on the centre, while it was further hemmed in by a still wider belt of houses and works, surely it was inevitable that decay would set in and ultimately the city would destroy itself.

Mr. Raymond Unwin said the progress of zoning and of interest in city planning since his last visit to America, two and a-half years ago, had been very remarkable. Both zoning and planning had now become normal activities of most municipalities. There are 300 zoning and planning commissions at work, and 325 or more cities and towns had adopted Zoning Ordinances. Two-thirds of the urban population living in towns of over 25,000 inhabitants now lived under the benefit of zoning regulation. To understand the development of zoning and city planning in America it was needful to realise that the people of the United States embodied their cherished principles in a written Constitution which, until amended, prevailed over any legislation, whether Federal or State, that was inconsistent with it. Article V of that Constitution contains the following: "Nor shall any person be deprived of life, liberty or property without due process of law. Nor shall private property be taken for public use without just compensation." While it was true that we had no similar written constitution limiting the powers of King and Parliament, it was well to remember that the Americans derived their principles of liberty and property largely from us, and it was at least possible that the clearly defined distinction which their constitution compels them to draw between regulations which could legitimately be imposed without compensation, and others which it

would be unconstitutional so to impose, might not be without value in helping us also to recognise the line which justice required, but which the omnipotence of our legislature allowed us to vary according to the view of the day. If the American town-planning legislation departed from the line as constitutionally laid down, that legislation could be set aside by the Supreme Courts. If our legislation moved the line, the Courts were bound by that legislation. Both systems had their merits and their dangers, but each could learn much from the working of the other.

When considering the application of zoning and planning to built-up areas in this country we would perhaps derive most direct help from American experience in three directions: (1) In regard to drawing the line between regulations which should, when reasonable, not give a claim for compensation, and those which it would be unjust to impose without compensation; (2) in regard to the constitution, powers, and working of suitable tribunals of appeal; (3) in regard to the practical difficulties which are likely to arise and the exceptional cases which must be provided for either in the Ordinance or by appeal. By frequent testing in the courts experts had acquired a nice appreciation of the dividing line between that which the individual could be required to do, or abstain from doing, in the interests of general health, safety and welfare, without interfering with his just liberty or property rights, and that which, however desirable, should not be enforced except with the consent of the owner or with compensation. In regard to this it was interesting to note that the constitution requires "just compensation," not any supposed value.

The Board of Appeals in New York seemed to be working well and establishing a good reputation for fairness and for decisions based on merits in spite of much interested pressure at times. A traditional method of meeting the most common difficulties was growing up, a sort of case law or precedent. Difficulties arose mainly along boundary lines between zones where the sharp distinction between business and residence zones may cause hardships in various ways. The last residential plots would not sell for fear of injury from the adjacent business plot; the business on the margin line cannot extend, although there might be vacant land on the adjacent residence area. The extension of garages into residence areas was a common problem. In New York, apart from

any local ground for objecting, this was usually allowed on the conditions (a) that no openings, windows, &c., shall be on the residence side; (b) that the building on that side shall be enclosed by a well-designed wall faced with an approved facing material to preserve the amenity. This was a case in which the right to refuse entitled the board to attach any reasonable conditions to its sanction. The plots adjacent to buildings already existing which have a non-conforming use, also raised many cases for exception. This was often dealt with by allowing a partial relaxation of the strict residence rules on the plots affected by a non-conforming use; giving sanction to something which was intermediate in character and not likely to be injurious to either side. In fact, grading off gradually from extreme residence character to extreme business or industrial.

One of the most interesting and important developments in regard to city planning in America was the attempt which has been made by Mr. Edward M. Bassett and others to draw up a form of "State Enabling Act" for the purpose of empowering local authorities to carry out the planning of unbuilt-on areas. Hitherto, although in the one State of Pennsylvania the law seemed to uphold the validity of a plan laying down streets, &c., ahead of development, there has elsewhere been great difficulty in laying down a plan for unbuilt-on areas; and any such plan laid down had been liable to be upset as imposing an unconstitutional limitation on the property rights of the owners. Profiting by the experience in regard to zoning Mr. Bassett had now proposed an Enabling Act to empower local authorities to establish the position of thoroughfares and parks; to give them control of what the Americans called "planning," which we should call "site planning"; to secure an adequate supply of small parks in connection with all such plans; to protect the lines of the streets from the erection of buildings; to give power to modify the zoning in connection with site plans; to provide for a certain amount of distribution of density so long as the average is maintained; and to provide also for appeal and revision by the courts of law.

Some discussion followed, and a hearty vote of thanks was passed to the delegates.

SURVEYORS' INSTITUTION

GLOUCESTER, SOMERSET AND NORTH WILTS BRANCH.

MR. A. C. WILLIAMS presided over the annual general meeting of the Gloucester, Somerset, and North Wilts branch of the Surveyors' Institution.

The elections for the ensuing year were as follows:—Chairman, Mr. H. B. Napier; vice-chairman, Capt. Yates. Executive Committee: Past Chairman, *ex-officio* Members for five years, H. Knowles (Gloucester), Theodore Sturge (Bristol), Capt. C. H. Smith (Chippenham), A. E. Petter (Bristol), A. C. Williams (Cirencester). Fellows: C. A. Bernard (Bristol), C. F. Dawson (Bristol), F. A. S. Goodbody (Bristol), H. O. Holbrow (Bristol), C. Moirer (Taunton), A. W. Wilkinson (Taunton), W. J. P. Taylor (Bristol), W. E. Underwood (Bath). Professional Associates: F. W. Davies (Thornbury), W. J. James (Bristol), A. E. Oaten (Bristol), Capt. John Poore (Badminton), Reginald Price (Bristol). Hon. Secretary, C. H. Pritchard. Representative of the Institution on the Court of the Bristol University, H. B. Napier.

Mr. R. K. Price, who has resigned the hon. secretaryship after holding the office for ten years, was presented with a silver inkstand as a token of the members' appreciation. The presentation was made by Mr. Napier.

Obituary.

The death has occurred at his residence, Coquet Villa, Heaton, Newcastle, of Mr. Chas. Kirk, aged fifty-nine years, a partner in the firm of Messrs. Kirk & Dickinson, slaters and slate merchants.



Bronze Tablet unveiled during the Railway Centenary Celebrations at Stockton-on-Tees.

Designed by Mr. STEPHEN WILKINSON, F.R.I.B.A., Architect to the L.N.E.R.

THE BUILDING TRADE.

SOME OBSERVATIONS ON THE RIGHT TO LIGHT AND THE LAW RELATING THERETO.—XII

In our last article we were dealing with the forms of remedy for an infringement of the right to light, and it will have been seen that certain principles have been laid down on which the Courts will act in granting either damages or an injunction, and that damages may be given either with an injunction or in substitution for an injunction, and that now it has definitely been decided that damages may be awarded in *quia timet* actions. Before leaving the subject we may, however, point out that if a building when completed will cause such a degree of obstruction that the only effective remedy will be a mandatory injunction for the removal of a portion at least of the building, it is essential that the party aggrieved should act without delay. Any unreasonable delay will certainly be taken into consideration by the Court in deciding whether or not such an injunction should be granted.

Failing some agreement between the parties in such a case, possibly the safest course is at once to apply for an interim injunction. On such an application, it appears, several courses are open for the Court to adopt. Thus we have shown in our tenth article where the defendant has acted unreasonably even a mandatory injunction may be granted in the interlocutory proceedings (*Von Joel v. Hornsey*, 1895, 2 Ch. 774), or the Court may make a declaratory order with liberty to apply for an injunction as in the case *Litchfield-Speer v. Queen Anne's Gate Syndicate No. 2* (1919, 1 Cr. 407; *The Builder*, February 28, 1919). The decision in *Leeds Industrial Co-operative Society v. Slack* (1924, A.C. 851; *The Builder*, January 2, 1925) is too recent to enable it to be said whether the Court will ever give damages in respect of a threatened injury in interlocutory proceedings, but we should imagine it would only do so in very exceptional circumstances.

As regards offers made by the parties, we may refer to the comparatively recent case, *Vere v. Minter* (*Weekly Notes*, 1914, p. 89). In that case the plaintiffs were claiming an injunction against the defendants in respect of a building which was in course of erection and which would obscure their ancient lights. During the course of the trial the defendants offered to erect their building according to an altered plan which they alleged would prevent any real interference with the plaintiff's lights, and to give an undertaking to that effect, with an inquiry as to damages (if any) and to pay the plaintiff's costs, and they asked the Court on this footing to limit the injunction to building otherwise than in accordance with this altered plan. The plaintiffs did not consent, and the Court declined so to limit the form of the injunction, in the first place because if the altered plan would not involve a breach of the general injunction there would be no need for the limitation asked for; and secondly, because the Court would be deciding on inadequate evidence a question which could only be decided on a motion to commit for breach of the injunction. The injunction was, therefore, granted in the usual form.

Parties to Actions.

We have incidentally shown (see Article IV.) that lessees may maintain an action for the infringement of the right to light, and that they can acquire a right not only as against lessees from the same landlord but as against the landlord himself (*Morgan v. Fear*, 1907, A.C. 425). In *Simper v. Foley* (2 Johns & H. 555) it was held that a tenant from year to year could file a bill for an injunction to protect the right to the use and access of light, but the injunction would be limited to the period of the continuance of his tenancy; but

in *Jacomb v. Knight* (1863, 32 L.J., Ch. 601), where a tenant on a yearly tenancy complained of the obstruction caused by a building being erected by tenants of the same landlord and had received notice to quit from the landlord and had then filed a bill for an injunction, the Court, seeing that the interest of the tenant was small and the damage not serious, dismissed the bill for an injunction, but without prejudice to the plaintiffs taking action at law for damages. It will be remembered that at the time this action was brought the Courts of Equity and Common Law had separate jurisdiction, and even after the passing of Lord Cairns' Act and the subsequent fusion of the jurisdiction doubts existed until the decision of *Slack's* case in the House of Lords whether damages could be given in *quia timet* actions (see Article XI); thus in such cases where the interest in the property was small the Courts may well have hesitated to grant an injunction.

We venture to submit that the decision in *Leeds Industrial Co-operative Society v. Slack* (1924, A.C. 851) that damages can be awarded in respect of a threatened obstruction to light may have a very material bearing on the remedies that may be given where the interest of the person suing is slight—that is, where he is a lessee or tenant, or where the interest is, as it were, in suspense, that is in reversion. See, for instance, *Martin v. Price* (1894, 1 Ch. 276), where this question was raised.

The position of a reversioner is, however, somewhat different from that of a leaseholder or tenant, for the obstruction, whether temporary or not, may create an interruption and thus cause the easement to be lost. This aspect of the question was recognised in the Metropolitan Association for Improving the Dwellings of the Working Classes *v. Petch* (1858, 5 C.B.N.S. 504). In *Shadwell v. Hutchinson*, (1858, M. & M. 350) a reversioner bought an action in respect of a skylight erected over an area which obstructed an ancient light, and the defendant alleged that it was capable of being removed and the premises restored to their former state by a simple operation, but the Court, on the ground that the right might be lost, awarded nominal damages. The obstruction was not removed, and it was held in a subsequent action (1831, 2 B. & A., 97) that the continuance of the obstruction gave a fresh cause of action.

In passing, we may here note that in *Harris v. Kinloch* (1895, *Weekly Notes*, p. 60) it was held there was no difference in the easement of light between skylights and other windows.

Mr. Hudson, in his "Law of Light," states (at page 145) that an action will lie at the instance of the reversioner to a leasehold interest against a lessee who blocks up windows in the house possessed of rights to light, citing an old case, *Tomlinson v. Brown* (1755, Say 215), as an authority for this proposition. But where the property is leased the owner cannot prevent a neighbouring owner from acquiring an easement over the property thus leased unless his lessee will permit him to do so. This is expressed in the head-note to *Ladyman v. Grave* (1871, L.R. 6 Ch. 763), as follows:—"The owner in fee of land demised for a term of years is subject to any right to access and use of light over his land which may be acquired by the owner of an adjoining house during the demise," and this is supported by the fact, as we have shown in a previous article, that a tenant can give the consent or agreement mentioned in Section 3 of the Prescription Act, which will prevent a right to light being acquired (see *Hyman v. Van den Bergh*, 1908, 1 Ch. 167, *The Builder*).

This is the result of the prescriptive easement of light not having to be enjoyed as of right under the Act which distinguishes it from other easements or rights acquired otherwise than under the Statute.

Two considerations arise out of the above observations: first, that wherever such course is possible it is well to join all parties interested, both in occupation and in reversion, in any action respecting ancient lights; and secondly, that in leases where ancient lights may come in question a clause may with advantage be inserted preventing the lessees from blocking up the lights on the premises, and compelling the lessees, on terms, to be made parties to any action rendered necessary to prevent a right to light being acquired over the demised premises.

Hitherto we have only been considering the parties who can sue, but a word must be said as to the parties who can be sued. Primarily it may be said that as the obstruction of light is a tort, the person causing the obstruction will be liable for the wrongful act; thus if the servient tenement is in the occupation of the owner, he will be the person to be sued, while if a tenant is in occupation and causes an obstruction he will be the person liable.

A wrongful obstruction is, however, a continuing nuisance, and therefore where the obstruction has been caused before the tenancy began the lessor will be liable (*Rosewell v. Prior*, 1701, 12 Mod. 635), and therefore it appears that both parties would be liable to be sued, and that even if the property be sold with an existing obstruction which is illegal the vendor may still be sued (*Thompson v. Gibson*, 1841, 7 M. & W. 456), although the purchaser will still be liable if he permits the obstruction to continue, certainly after request has been made to him to remove it (*Penrude's case*, 1858, 5 Rep. 101a), or very possibly without such a request having been made (*Salmon v. Bensley*, 1825, Ry. & M. 189).

In *Born v. Turner* (1900, 2 Ch. 211) an action for an injunction was brought against an adjoining owner and his builder to restrain an interference with light and for trespass. The builder severed in his defence from his employer and appeared separately at the trial. An injunction was granted with costs as against the adjoining owner but it was held that the builder was entitled under the circumstances to a complete indemnity and to an order for payment of his solicitor and client costs from his employer.

Before leaving the subject of who may be sued, we may refer to the case *Jenks v. Viscount Clifden* (1897, 1 Ch. 694) as to the liability of executors and administrators when it was held that the continuance of an obstruction to ancient lights is an "injury committed" in respect of property within the meaning of 3 & 4 Will 4 C. 42, section 2, giving rise to a cause of action *de die in diem*, and therefore an action can be brought against executors or administrators for the same, although the obstructing building was erected and completed more than six months before the death of the person they represent who caused the obstruction to be erected, as it falls within the terms of the Statute which prescribes that the "injury shall have been committed within six calendar months before such person's death."

We have endeavoured in the foregoing articles to indicate some of the points arising in connection with the acquirement by prescription of the right to light and its enjoyment, and we have cited, where possible, some of the cases which relate to the points touched upon; but in our next article we propose giving a short notice of the cases not touched upon in our text which have been reported from about the year 1911, taking that date as what we believe to be about the date of the latest edition of any text book on Light, hoping that a brief digest of the latest decisions may be of service to our readers.

BUILDING CONTRACTS

By W. T. CRESWELL, Lic.R.I.B.A., Assoc. (late Fellow) of the Surveyors' Institution, F.R.San.Inst., Barrister-at-Law.

PRIVITY OF CONTRACT.

A SUB-CONTRACTOR is not a party to the contract between the employer and the contractor, and he cannot therefore bring an action against the employer upon it, there being no privity of contract between them.

There may, however, be communications or independent dealings between the sub-contractor and the employer, which may amount to an express or implied contract on the part of the employer to pay the sub-contractor. The burden of proof lies on the sub-contractor, who must show that the employer and not the general contractor was the real principal.

If the sub-contractor is personally ordered by the employer to do work the employer must pay him. See *Wallis v. Robinson* (1862, 3 F. & F. 307.) The employer can, however, call the general contractor to prove that on the accounts between him and the sub-contractor nothing is due to the latter. It is always open to the sub-contractor to show that the employer and not the principal contractor was the real principal, by producing evidence, that the employer personally gave orders to do work and supply materials for the same building to third parties as corroboration of his evidence that he himself was given orders to do work.

The fact that the sub-contractor employed by the general contractor confers a benefit upon the employer does not give rise to any privity of contract between the sub-contractor and the employer. If the article or work done by the sub-contractor is not affixed to the freehold he remains the owner of it until paid for it, and in the event of the general contractor becoming bankrupt he is entitled to claim it.

Some Cases Bearing on the Question.

In *Leslie & Co. v. Metropolitan Asylum District Managers* (1901, 68 J.P. 86), where the architect sent the general contractors for the work orders to give to the sub-contractors, and they gave them, and the sub-contractors delayed the work and caused the general contractors damage, it was held that the general contractors could not recover against the employer for delay.

In *Hobbs v. Turner* (1902, 18 T.L.R., 235), the contract provided that the provisional sums for goods to be ordered from special artists or tradesmen should, as the architect should certify, be payable by the builder or the building owner. The architect certified the sums as due from the defendant (the building owner), and it was held that the plaintiff was entitled to recover this sum direct from the building owner. This case was followed in *Young v. White* (1911, 28 T.L.R. 87), when specialists for the supply of steel work for a building were held entitled to sue the building owner as the real principal in respect of the goods supplied through the building contractor.

In *Crittall v. London County Council* (1911, 75 J.P. 203) sub-contractors were held to be entitled on the facts to sue the building owners as the real principals in respect of goods supplied through the general contractors.

In *Ramsden and Carr v. Chessum & Sons* (1913, 78 J.P. 49, H.L.) there was a contract in the R.I.B.A. form, which provided that "all specialist merchants, tradesmen or others executing any work or supplying any goods for which prime cost prices or provisional sums are included in the specification, who may at any time be nominated, selected or approved by the architect, are hereby declared to be sub-contractors employed by the contractor." Specialists were employed by the architect under p.c. items in the general contract to supply fittings. Before delivery of the fittings the general contractors were informed that the fittings were to be supplied by the specialists, and the general contractors used the fittings in carrying out their contract.

It was held that the delivery of the goods

and their use by the general contractor implied a contract on their part to pay for them.

In *Hampton v. Glamorgan County Council* (1915, 84 L.J., K.B. 1506 C.A.; affirmed 1916, 33 T.L.R. 58 H.L.) the respondents, a county council, made a contract with a builder whereby the latter undertook to build a school for a certain sum. The specification contained the following items: "Provide the sum of £450 for a low pressure heating apparatus," and "Allow the builder's profit on the above sum £5." The respondents' architects having asked the appellant to tender for providing the apparatus, he offered to do the work for £391, and they directed the builder to accept the tender. During the work the appellant received from the builder a payment on account, but before the appellant had completed his work the builder suspended payment. In an action by the appellant against the respondents to recover the balance of the agreed cost of the work of providing the heating apparatus it was held that the respondents were not liable, as neither the builder nor the respondents' architects had authority to pledge the respondents' credit, and that the builder had himself contracted with the respondents as to the heating and had merely employed the appellant as a sub-contractor, and was not the agent of the respondent to employ the appellant.

Young v. White and Crittall v. L.C.C. (ante) were disapproved. *Hobbs v. Turner* (ante) was distinguished for in the contract were express provisions by virtue of which the building owner became liable to the sub-contractors. *Leslie & Co. v. Metropolitan Asylums District Managers* and *Ramsden v. Chessum* (ante) were approved.

The case of *Hampton v. Glamorgan C.C.* (ante) established that there is no presumption in the case of prime cost or provisional items in a building contract, that the building owner is liable upon the contract under which the things in question are ultimately supplied. The fact that an item is a prime cost item, and that a sum is provisionally allowed for it in the contract does not show *prima facie* that the building owner is responsible for it; and there is no difference of principle as between a prime cost item and any other item in respect of which one person is to find and supply goods for the benefit of another which makes it any more or less likely that there is a contract between the person who supplies the goods and the person who ultimately enjoys the benefit of the goods.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting!—Ed.

Building with Flint.

SIR,—I should be much obliged if any of your readers could assist me with advice. I have a large quantity of large blue boulder flints at my disposal, and would like to use them, squared, for walling. I understand that 13 in. flint walls, solid, with a brick rubble core, would be impervious to moisture.

S. S. G.

Insect Nuisance.

SIR,—My house has been built for nearly two years, and since the recent hot weather I have noticed large numbers of tiny insects, which apparently come through the cracks of the wood-work, floors and window ledges. They are very small, some white and some brown, and when looked at through a magnifying glass very much resemble lice, but are much smaller. How may I get rid of them? Spraying the rooms out

thoroughly with Formalin has had no appreciable effect.

"ANXIOUS."

Underpinning Adjoining Premises.

SIR,—I am anxious to know the legal position with regard to the underpinning of adjoining premises as may be necessitated before the erection of a new building. Have I the right to underpin my neighbour's wall, or should permission be first obtained, and if this course is necessary, what is my position should that permission be refused? Have I to abandon or modify my building?

W. H. M.

[No one has the right to underpin his neighbour's wall for the purpose of placing thereunder foundations and footings prescribed by the by-laws in force in the locality, and so that the external wall of his new building is built to the extreme limits of his boundary. His neighbour has the natural right to have the soil of his land undisturbed by the operations of another from underneath or adjacent; and in all cases there is no natural right to the support of a building, but only just to so much support as would leave undisturbed the land, if there were no building upon it. Unless provision is made in the locality by statute on the subject matter of the query, as for instance in the Metropolis under the London Building Acts, the proper course for the enquirer to adopt is to endeavour to enter into an agreement, maybe on terms, with his neighbour. If unsuccessful, he need not abandon his project, but should get in touch with the local authority, who will probably make such concessions and arrangements as will result in enquirer being enabled to proceed with his scheme, and without modifying the building. Otherwise the projected building with its footings and foundations must be placed entirely on the land of the enquirer. Further, it may be stated, that if in excavating close to his boundary he shakes the foundations of his neighbour's wall so that it falls down, he is not liable for such injury in the absence of proof that either by prescription, or by reason of presumed grant, or implied reservation, he is under some duty to support the wall.]

Subsidy Houses.

[Re MR. REGINALD SLATER'S LETTER.]

SIR,—May I suggest another point of view to that expressed in the answer given in your issue for July 10. The Government, through the local authority, grants a subsidy to a piece of property, comprising a newly-built house and the land it stands upon, and certain restrictions are imposed, and generally an agreement made with builder or recipient of the subsidy, that no additions shall be made during a certain period—usually set at seven years. The building of a garage would constitute such an addition, and the local authority would seem to be within their powers in refusing their consent. Your correspondent would seem to have two alternative channels of redress: (1) Place all the facts before the local authority, showing that as purchaser he was not called upon to comply with the conditions under which the subsidy was granted, and suggest that consent to proceed with the building should be given. The local authority would then be able to sue the builder or former owner for the refunding of the subsidy amount forfeit by infringement of the conditions under which it was granted, the onus for binding the purchaser to respect the same being upon him—the vendor. Or (2) bring an action against the vendor for misrepresentation, in which case it would be a matter of damages that would be assessed upon the lowered value of the property as suffering under the building restrictions. The former would doubtless be the more satisfactory outcome, and one that should be quite possible in dealing with a fair-minded authority, but it is always necessary to first obtain the sanction of the authorities before building operations are commenced.

LEX.

NEW BUILDINGS IN LONDON.

Battersea.—A contract will be placed shortly for the erection of additions and alterations to the buildings at Walter St. John's School. Mr. A. H. Ryan Tenison, F.R.I.B.A., 21, Gt. Peter-street, S.W.1, architect.

Bermondsey.—New offices are to be erected in Lower-road, S.E., for the Board of Guardians. Messrs. Newman & Newman, 24, Railway-approach, London Bridge, S.E.1, architects.

Bond-street.—In connection with the "below ground" reconstruction of the Bond-street Station of the London Underground Railways, it is proposed to create a shopping arcade on the ground floor, lined with shops, and providing access to a booking hall below. The architect is Mr. Stanley A. Heap, of Electric Railway House, Broadway, S.W.1.

Camberwell Grove.—The L.C.C. has given a sum of £16,000 towards the cost of rebuilding a portion of the Mary Datchelor School for Girls. Mr. W. Curtis Green, A.R.A., 5, Pickering-place, S.W.1, architect.

Croydon.—Alterations and additions are to be made to the premises of Messrs. G. Goldsmith & Sons, Ltd., in Whitehorse-road, to the plans prepared by Mr. C. H. Ridge, Katherine-street, Croydon.

Denmark Hill.—The Salvation Army's proposed William Booth Memorial Buildings are estimated to cost £250,000. The architects are Messrs. Alexander Gordon, F.S.I., F.S.A., 97, Queen Victoria-street, E.C.4, and G. J. Morriss Viner, Lic.R.I.B.A., 11, New-court, Lincoln's Inn, W.C., with Sir Giles Gilbert Scott, R.A., 7, Gray's Inn-square, W.C., acting as consulting architect. The quantity surveyors are Messrs. Fleetwood, Eversden & King, 3, New-court, Lincoln's Inn, W.C.

East Ham.—A Memorial Hospital is to be erected from the designs of Messrs. Mennie & Smith, 11, New Court, Lincoln's Inn, W.C. Mr. J. Rockwood, 25, Bedford-row, W.C.1., quantity surveyor.

Edgware.—The Ministry of Health and the Hendon Board of Guardians are continuing negotiations with regard to the latter's proposal to build a hospital of 500 beds at Edgware at a cost of about £300,000. The first section, for which a provisional contract has been made, involves five wards holding 175 beds, nurses' home, laundry, power house, etc. The architects are Messrs. Payne & Hobday, 45, Bedford Row, W.C.1. The quantity surveyors are Messrs. John Leaning & Sons, 28, John-street, Bedford-row, W.C.1, and the consulting engineers are Messrs. Dolby & Williamson, 8, Princes-street, S.W.1.

Finsbury-square.—A large site in Finsbury-square, E.C.2, has been bought by the Maypole Dairy Co., Ltd., for the erection of a block of general offices. Plans have been prepared by Mr. W. A. Lewis, 11-12, Finsbury-square, E.C.2; quantities by Messrs. Gleed, Sons & Co., 8, Martin's-lane, E.C.4.

Hammersmith.—The large premises at Brook Green W.6, known as St. Mary's Training College, have been acquired by Messrs. J. Lyons & Co., Ltd., of Cadby Hall, W.14, who propose to adapt them for office purposes.

Hammersmith.—A large site in Askew-road, W.12, has been purchased by Messrs. Stansell & Gregory, Ltd., paper container manufacturers, for the building of a factory. Messrs. Wallis, Gilbert & Partners, 29, Roland Gardens, S.W.7, architects.

Hampstead.—The L.C.C. have agreed to contribute a further £14,000 towards the scheme for the extension of the Henrietta Barnett School at Central-square, at a cost of £30,000. The architect is Mr. John C. S. Soutar, "Wyldes," North End, N.W.

Harrow-on-the-Hill.—Plans for a new tower and additions to the St. John Baptist Church, prepared by Messrs. Alder & Turrill, 1, Arundel-street, W.C.2, have been approved. A contract for the building work has been placed

with Messrs. John Bentley & Sons, 42, Sun-street, Waltham Abbey.

Hendon.—Messrs. Haymills, Ltd., builders, Vivian-avenue, Hendon Central, N.W.4, propose to build 130 villas and dwellings.

Hornsey.—Hornsey Borough Council have approved the proposal to spend £40,000 on the erection of a new elementary school on the site in Rokesby-avenue, N. Mr. H. Carter Pegg, F.R.I.B.A., 35, Parliament-street, S.W.1, architect.

Ilford.—A new Wesleyan Methodist church is to be erected at the corner of Bennett's Castle-lane and Haydon-road, on the L.C.C.'s Becontree housing estate, at a cost of about £20,000. Messrs. H. Somerford & Son, Manor-street, Clapham, S.W., builders; Mr. George E. Withers, F.R.I.B.A., 50, Cannon-street, E.C.4, architect.

Kensington.—A new building is to be erected at the Queen's Club, West Kensington, W.14, to house two new covered courts. The contract has been placed with Messrs. Barrett & Power, 215, Upper Thames-street, E.C.4. Mr. P. M. Daveson, F.R.I.B.A., 34, Grosvenor-place, S.W.1, architect.

Kensington-North.—The proposed Princess Louise Kensington Hospital for Children is to be built at a cost of £80,000. The joint architects are Messrs. J. T. Saunders, F.R.I.B.A., 19, Linden Gardens, W.2, and George A. Lansdowne (Geo. A. Lansdowne & Brown), F.R.I.B.A., 9, Regent-street, W.1.

Lonsdale-road.—An addition is to be built at the works in Lonsdale-road, N.W.6, of the Kenbar Engineering Co., Ltd. Mr. Harold Shaw, 60, Nicoll-road, N.W.10, architect. Mr. G. Kentish, 91, Heath-street, N.W.3, builder.

Marylebone.—In connection with the blocks of tenement flats now being erected at Fisherton-street, W.2, it is proposed to build an additional story on each at a cost of about £10,000. The architects are Messrs. H. V. Ashley & Winton Newman, 14, Gray's Inn-square, W.C.1.

Merton.—The governors of the Nelson Hospital for Wimbledon and Merton, in Kingston-road, S.W.10, contemplate a scheme for extensions, including the provision of public and private wards, and clinics. Mr. J. Stuart Thompson, A.R.I.B.A., 49, Hill-road, Wimbledon, S.W., architect.

Mill Hill.—The Copt Hall estate, between Mill Hill and Hendon, N.W., is to be developed. The agents are Messrs. Daniel Smith, Oakley & Garrard, Winchester House, Old Broad-street, E.C.

Mortimer-street.—The Middlesex Hospital has now reached its £150,000 total, which is one quarter of the sum required to rebuild the hospital. The architect is Mr. A. W. Hall, of Messrs. Young & Hall, 17, Southampton-street, W.C.1.

Muswell Hill.—Muswell Hill Electric Theatre, N.10, is to be extended. Mr. E. G. Hastings, 18, Priory-grove, Hornsey, N., architect.

New Barnet.—The Willenhall Park estate is to be developed. The agents are Messrs. Daniel Smith, Oakley & Garrard, Winchester House, Old Broad-street, E.C.2.

Newington Causeway.—It is proposed to extend the outpatients' department of the South London Hospital for Women, at Newington Causeway, S.E., and a new building on a fresh site is projected. The hon. architect is Mr. M. E. Collins, 115, Old Broad-street, E.C.2.

Old Bond-street.—The contract for the new buildings to be erected at the junction of Old Bond-street and Burlington-gardens, W.1 in the Tudor style of architecture, for Messrs. J. B. Atkinson, Ltd., has been placed with Messrs. E. A. Roome & Co., Ltd., 7, Urswick-street, E. The architects are Messrs. Stanbrough & Harris, 29, St. James's-square, S.W.1.

Pall Mall.—New office premises are to be erected on the site of Nos. 87-88, Pall Mall, S.W.1. The builders are Messrs. F. G. Minter, Ltd., Ferry Works, Putney, S.W. Messrs. E. Howard & Partners, architects and surveyors, 15, King's-street, S.W.1.

Park-road.—The Anthroposophical Society propose to build a new hall in Park-road, N.W., adjoining the Institute. Messrs. Hoare & Wheeler, 22, Portman-street, W.1, architects.

Regent-street.—Further sections of the new Café Royal in Regent-street, W.1, are to be put in hand, and the rebuilding scheme will involve about £400,000. The general contractors for the first section are Messrs. Trollope & Colls, Ltd., 5, Colman-street, E.C.2. Messrs. Henry Tanner, 3, Hanover-square, W.1, architects.

St. Pancras.—Mr. George T. Coote, of 74, Milton-street, Fore-street, E.C.2, is building twelve lock-up garages and a large garage on the site, Wakefield-mews, St. Pancras, to plans prepared by himself.

West Ham.—Plans have been approved for extensive additions and alterations to the shop premises in Woodgrange-road, E.7, owned by Messrs. L. W. Spratt & Sons, drapers, Forest Gate, E.7. Mr. R. C. Turner Gordon, 304, Romford-road, West Ham, E., architect.

THE WEEK IN PARLIAMENT

WESTMINSTER, Wednesday.

Local Building Committees.

Sir K. Wood informed Mr. T. Thomson that the Building Industry Committee had set up Local Committees in most of the building centres of the country, and arrangements had been made for further Committees to be set up as required. The Committee were not yet in a position to furnish statistics as to the number of apprentices which had been engaged, but no obstacles had been reported as regarded the working of the scheme in connection with local authorities' contracts for house building.

A Scottish Rent Bill.

Sir J. Gilmour, Secretary for Scotland, has presented a Bill to make further provision with regard to notice of intention to increase rent under the Rent and Mortgage Interest (Restrictions) Act, 1920 to 1925, in its application to Scotland; to provide for the use of rent-books in certain cases; and to remove doubts in regard to the provisions of the Acts with respect to restriction on the right of possession.

Town Planning in America.

Sir H. Brittain asked the Minister whether his department was following the efforts being made by the United States of America in the direction of town and regional planning; and whether any official reports upon American progress had been received.

Sir K. Wood said that the Minister's Department kept in close touch with these developments and frequent reports were received.

Housing Loans.

Mr. R. Morrison asked the Minister of Health whether he was aware of the handicap in obtaining housing accommodation placed upon many poor people with families because of their inability to put down any lump sum towards the purchase of a house and the disinclination of many landlords to let apartments to tenants with families; and would he consider meeting this difficulty by an amendment of the law that would permit local authorities to lend the whole of the purchase price of a house instead of 90 per cent. as at present?

Mr. N. Chamberlain said the question of the maximum amount of loan which local authorities should advance under the Housing Acts and the Small Dwellings Acquisition Act was fully discussed during the passing of the 1923 Housing Bill, and it was felt that the extension of the amount which could be advanced to 90 per cent. of the value was as far as it was possible prudently to go. One of the special conditions of the letting of houses erected by local authorities under the Housing Act of 1924 was that reasonable preference shall be given to large families.

THE RATING AND ASSESSMENT BILL

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

It is extremely difficult to give any connected account of the proceedings on the Rating and Assessment Bill in Committee; thus, in our last issue we were unable to say definitely what had been the decision of the Committee on Clause 16, sub-clause (3), which relates to the composition of assessment committees in County Boroughs. The proceedings subsequently, however, appear to have commenced with a sensational development, as it is reported that the Minister of Health announced that he would accept an amendment, the effect of which would be that Revenue Officers would have no further place in the Bill. In his statement the Minister is reported as having said that when he had the "draft Bill" under consideration he had expected many things from the inclusion of those commissioners, including economy, uniformity, and the general question of simplification, but representations had reached him since then from many quarters outside, which had shown that the provisions of the Bill relating to Revenue officers had raised a great amount of opposition which was very real and had caused a great and growing apprehension in the minds of many persons. After careful consideration and discussion with experts he had come to the conclusion that it would be necessary to approach the question of uniformity more slowly than he had hoped to do. He also stated that representatives of the Inland Revenue had never believed that the inclusion of Revenue Officers would result in increased revenue under Schedule A. This amendment being pressed to division, was carried by 43 to 8. The point involved in this concession is, are the Government still adhering to the resolution announced last week or two ago that they intend to stand by clause 19, sub-clause (3), which makes the gross value of any hereditament as appearing in the valuation list conclusive evidence of the annual value of that hereditament for the purposes of income tax? In the Memorandum which was issued with the "draft Bill" it was stated, "The provisions of Part II of the Bill are designed to secure that reasonable uniformity of principle and practice in which the present system is so notoriously deficient, but which is essential if the valuation is to serve the purposes above mentioned. The collaboration of the Revenue officers with the local rating authorities will help to promote such uniformity, and inasmuch as the gross values are to be used for purposes of Imperial taxation, it is, of course, necessary that officers representing the Crown should be concerned in the preparation and revision of the valuation lists." It is impossible with the information at present available to say what effect the above decision may have on the Bill; the principle of one valuation has many opponents, and it was made an integral portion of the Bill. If, as was stated by the Minister the other day, this Bill is intended as a first stage in the reform of the Poor Law, it may appear wise to drop it in its present form and bring in one measure dealing with both subjects. Clause 22 was the next mentioned in Committee, a clause not in the "draft Bill," containing "provisions as to the valuation of hereditaments containing machinery and plant." That clause in effect provides that with respect to any hereditament occupied for any trade or business or manufacture, other than any such hereditament the value of which is ascertained by reference to the accounts, receipts or profits of the undertaking carried on therein, all such machinery and plant as belongs to the classes specified in the Third Schedule to the Bill shall be deemed to be part of the hereditament for rating purposes, but subject as aforesaid no account shall be taken of the value of any plant or machinery in or on the hereditament. An amendment was moved to leave out the reference to Schedule III, to make all machinery rateable, but this was rejected. On clause 29 (clause 23 in the "draft Bill") Sir Kingsley Wood, undertook to bring in a fresh clause to provide for appeals being taken to a convenient and not expensive court, in place of quarter sessions as provided in clause 29, sub-clause (1) of the Bill.

	Masons.	Bricklayers.	C'p'ters. Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Barnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bath	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bedford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Birkenhead	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bournemouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Brentwood	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bridgwater	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Brighton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Burton-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Cambridge	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Chatham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Chelmsford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Cheltenham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Colchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Crewe	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dudley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
E. Glam.(Mon. Val.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Eastbourne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Exeter	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Folkestone	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Gloucester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Grantham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Grays	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Grimby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Great Yarmouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Guildford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hartlepool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hastings	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hereford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Ipswich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Leamington Spa	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Lichfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Liverpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Llanelli	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
London (12-15 m. radius)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Luton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Maldstone	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Manfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Newport Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Northampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Norwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Oakham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Oxford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Portsmouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Reading	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Rochester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Rugby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
St. Albans	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Scarborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Shrewsbury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Southampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Southend-on-Sea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stroud	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Swindon	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Taunton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Torquay	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Tunbridge Wells	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Walsall	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Windsor	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Worcester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

*JULY 24.—**Chorley**.—**SCHOOL**.—Erection of Highfield Council School, for the Borough Council. Biram & Fletcher, architects, 17, George-street, St. Helens.

JULY 27.—**Cerlisle**.—**PAINTING**.—External painting and certain other works of decoration internally at the Girls' High School, for the T.C. H. C. Marks, City Surveyor, 18, Fisher-street.

JULY 27.—**Carlow**.—**REPAIRS**.—To cottages in Carlow R.D. Scheme No. 206, in accordance with the plan and specification prepared by the Engineer, Irish Sailors' and Soldiers' Land Trust, 30, Lower Fitzwilliam-street, Dublin. Deposit £1 ls.

JULY 27.—**Cork**.—**REPAIRS**.—To cottages in Cork R.D. Scheme No. 7, in accordance with plan and specification prepared by the Engineer, Irish Sailors' and Soldiers' Land Trust, 30, Lower Fitzwilliam-street, Dublin. Deposit £1 ls.

JULY 27.—**Dublin**.—**PAINTING**.—Painting work, &c., at Crookings Sanatorium, for the T.C. J. J. Murphy, Town Clerk.

JULY 27.—**Dublin**.—**HOUSES**.—218 houses at Keogh Barracks, Inchicore, for the C.B. City Architect, Exchange Buildings, Lord Edward-street. Deposit £2.

JULY 27.—**Finchley**.—**PAINTING**.—External painting of 200 houses on the Council's housing estate, Woodhouse-road, North Finchley, for the U.D.C. P. T. Harrison Engineer, 9, The Hawthorns, Regents Park-road, Finchley, N.3. Deposit £1.

JULY 27.—**Hull**.—**ALTERATIONS**.—Alterations and additions to the Norfolk-street Branch police station, for the T.C. City Architect.

JULY 27.—**Lymm**.—**HOUSES**.—Forty houses, for the U.D.C. D. Mort, Surveyor. Deposit £1 ls.

JULY 27.—**Motherwell and Wishaw**.—**HOUSES**.—128 houses at Forge Wood area, Bellshill-road, Motherwell; 204 houses at Glencalm area, Craigneth, Wishaw; and also the conversion of Glencalm House into three dwelling-houses and the alteration of Belhaven Lodge, together with the formation of a proposed new street and the construction of a 9 in. main sewer at Low Motherwell, for the T.C. A. Victor Wilson, Director of Housing, Motherwell.

JULY 27.—**Poultney-le-Fylde**.—**CONVERSION**.—Conversion of existing conveniences and sanitary work at the Cemetery, Moorland-road, Poultney-le-Fylde, for the Joint Burial Board. J. E. Hamer, Clerk to the Board, Tithebarn-street.

JULY 27.—**Salford**.—**NEW DOCK**.—Erection and completion of new dock offices, on a site in Trafford-road, Salford, for the Directors of the Manchester Ship Canal. Harry S. Fairhurst, A.R.I.B.A., 14, Chancery-lane, Spring-gardens, Manchester. Deposit £2 2s.

*JULY 27.—**Salisbury Plain**.—**REPAIRS**.—&c.—Repairs, construction, maintenance work, &c., War Department, Contract No. 5, Salisbury Plain, West Area, R.E. District. Deputy Commanding Royal Engineer, Royal Engineers' Office, R.A.O. Depot, Didcot.

JULY 27.—**Thurstonland**.—**HOUSES**.—Four dwelling-houses in Stockmoor-lane, for the U.D.C. J. Berry & Sons, architects, 3, Market-place, Huddersfield.

JULY 28.—**Barby**.—**SCHOOL**.—School and classrooms at Barby, near Selby. Rev. H. H. Mineum, Wesley House, Brook-street.

JULY 28.—**Basingstoke**.—**HOUSES**.—(1) Erection of 74 houses; (2) the drainage; (3) fencing; (4) paths, for the B.C. Wallis & Smith, architects, Cross-street, Basingstoke. Deposit £2 2s.

JULY 28.—**Cefnpennar**.—**HALL**.—For the Cefnpennar Welfare Committee. T. Roderick & Sons, architects, Clifton-road, Aberdare.

JULY 28.—**Chelmsford**.—**EXTENSIONS**.—Of existing building and other builders' work, at Mildmay-road, for the T.C. E. J. Miles, Borough Engineer and Surveyor. Deposit £1 ls.

JULY 28.—**Chesham**.—**HOUSES**.—Complete erection of six living room type of houses in one block on the site in Severalls-avenue, Chesham. Captain D. Hinchcliffe, R.E., Council's Architect and Surveyor, Council Offices, Chesham.

JULY 28.—**Colne**.—**PAINTING**.—Two gas holders at the works, for the Gas Committee. F. Thorpe, Gas Engineer.

JULY 28.—**Glasgow**.—**PRESERVATION**.—Steel brushing and coating of walls with stone preservative at four schools, for the E.C. J. Clark, Director of Education, 129, Bath-street. Deposit 10s. 6d.

JULY 28.—**Holywood**.—**ALTERATIONS**.—Alterations and repairs at the New Post Office premises Holywood, Co. Down, for the Government of Northern Ireland. Secretary, Ministry of Finance, 15, Donegall-square West.

*JULY 28.—**London, N.W.6**.—**PAINTING WORKS**.—Execution of certain cleansing and painting works required to be executed to (1) interior of Nos. 2 and 4, Dyne-road, (2) Superintendent's Lodge, Willesden Cemetery, Cobbold-road, Willesden, for the District Council. The Engineer, Town Hall, Dyne-road, Kilburn, N.W.6.

JULY 28.—**London, W.C.2**.—**PAINTING AND CLEANING**.—Internal painting, cleaning, &c., at the Royal Courts of Justice, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 ls. (Cheques payable to the Commissioners.)

JULY 28.—**Normanton**.—**DECORATIONS**.—Internal decoration of the Library, for the U.D.C. W. F. Copp, Surveyor.

JULY 28.—**Omskirk**.—**ALTERATIONS**.—To the Council office entrance and approach, for the U.D.C. J. Ashcroft, Clerk.

JULY 28.—**Salford**.—**SWIMMING BATH**.—&c.—Erection and completion of a public swimming bath, wash-house and slipper baths in Hodge-lane, Salford, for the County Borough Council, Charles Swain, 12, Exchange-street Manchester.

JULY 28.—**Smethwick**.—**HOUSES**.—The Corporation of Smethwick are prepared to receive tenders for the erection of the following:—88 houses in Sydney and Hamilton-roads, and 114 houses in Norman-road, Rathbone-road, and Sydney-road, for the C.B. R. Fletcher, Borough Engineer and Surveyor. Deposit £5 5s.

JULY 29.—**Ashford (Kent)**.—**LAVATORY**.—At Victoria Park, for the U.D.C. William Terrill, surveyor, 5, North-street, Ashford, Kent.

JULY 29.—**Dublin**.—**KIOSKS**.—Wrought-iron kiosks for the Electricity Department of the C.B. City Electrical Engineer, Fleet-street.

JULY 29.—**East Elloe**.—**COTTAGES**.—Working-class dwellings on the following sites:—Sutton St. Edmunds, Guanockgate, pair; Whaplode Drive, Chapel Gate, two pairs; Sutton St. James, Village, five pairs; Tydd St. Mary, adjoining church, four pairs; Tydd St. Mary, Hix's-lane, pair, for the R.D.C. S. S. Mossop, jun., Clerk, Holbeach.

JULY 29.—**Epping, Essex**.—Alterations and additions to Company Headquarters of Anti-Aircraft Searchlight Company, and 4th Battalion Essex Regiment, Hemmell's House, Epping, for the Territorial Army Association, County of Essex. The Secretary, Essex Territorial Army Association, Market-road, Chelmsford. Deposit £2 2s.

JULY 29.—**Hertford**.—**PUMP AND COMPRESSOR HOUSE**.—Pump and compressor house to be erected at the Sewage Works, Mead-lane, for the Corporation. The Engineer, The Castle, Hertford. Deposit £5 (cheque only).

JULY 29.—**Higham Ferrers**.—**HOUSES**.—Twenty houses on the Windmill-banks site, for the T.C. A. E. Lloyd, Borough Surveyor.

JULY 29.—**Manchester**.—**SCHOOL**.—Municipal school in Ravensbury-street, Clayton, for the E.C. P. M. Heath, Town Clerk. Deposit £1 ls.

JULY 29.—**Preston, Lancs**.—**SORTING OFFICE**.—Erection of a station sorting office, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, London. S.W.1. Deposit £1 ls. (Cheques payable to the Commissioners.)

*JULY 29.—**Wembley, Middlesex**.—**OFFICES**.—Erection of a two-story, timber-built office having a total floor area of approximately 1,500 square feet, for the Wembley U.D.C. Engineer and Surveyor, Council Offices, Wembley, Middlesex. Deposit £2 2s.

JULY 29.—**Woolwich, S.E.18**.—**PAINTING WORKS**.—Painting works, &c., to the Infirmary, High-street, Plumstead, S.E.18, for the Guardians of the Woolwich Union, Whincoop & Channer, Thomas-street, Woolwich.

JULY 30.—**Dewsbury**.—**HOUSES**.—Sixty-five parlour houses and 114 scullery houses on the Ravens Lodge housing site, for the C.B. Borough Surveyor. Deposit £1 ls.

JULY 30.—**Doncaster**.—**EXTENSIONS**.—To Grammar School, for the West Riding E.C. The Education Department, County Hall, Wakefield.

JULY 30.—**Glasgow**.—**ADDITIONS**.—Additions and alterations to Bellefield Sanatorium, for the T.C. Lindsay, Town Clerk. Deposit £2 2s.

JULY 30.—**Jarrow**.—**CONVERSION**.—Of 3,000 privy closets to the water carriage system, for the T.C. Scott Weir, Borough Engineer.

JULY 30.—**Thurles**.—**RENOVATIONS**.—To Gralla House, J. J. Robinson, architect, 8, Merion-square Dublin.

JULY 30.—**West Riding**.—**ALTERATIONS**.—Alterations and repairs to 19 properties on the Whitley estate, for the C.C. County Land Agent, County Hall, Wakefield. Deposit £1.

JULY 31.—**Cookstown**.—**ALTERATIONS**.—Alterations and repairs required at the Ulster Dairy School, Cookstown, for the Government of Northern Ireland. Secretary, Ministry of Finance, 15, Donegall-square West, Belfast.

JULY 31.—**Chepstow (Mon)**.—**PAINTING**.—External painting at Bulwark and Hardwick Housing Estate, Chepstow, for the Commissioners of H.M. Office Works. Contracts Branch, King Charles-street, S.W. Deposit £1 ls. (cheques payable to the Commissioners.)

JULY 31.—**Dublin**.—**PAINTING**.—Painting works (1) The Botanic Gardens and (2) the buildings in the Phoenix Park, for the Commissioners of Public Works, J. J. Healy, Secretary (Office of Public Works, Bala Atha Clath (Dublin). Deposit £1.

JULY 31.—**Elland**.—**ADDITIONS**.—Alterations and additions to the sewage works, for the U.D.C. W. Rhodes Nunn, Lic.R.I.B.A., 2, Albert-road, Saltair.

JULY 31.—**Grange-gorman**.—**BUILDING**.—For alterations to cattle sheds at farmyard, Portrane, new cemetery for Portrane Mental Hospital, two consumption sanatoria, one each at the male and female divisions, Portrane Mental Hospital, and (b) conversion of disused coastguard station at Portrane into dwelling houses for five married attendants, for the Mental Hospital. J. J. Doyle, chief clerk and accountant Grange-gorman Mental Hospital, Dublin.

JULY 31.—**Keighley**.—**PAINTING**.—Painting and colouring work to be done at the Keighley Institute for the West Riding C.C. H. Midgley, Secretary Education Offices, Town Hall, Keighley.

*JULY 31.—**Manchester**.—**HEATING**.—Heating installations, L.T. hot-water system, at High-street, Oldham-road "B" Sub-stations, for the T.C. S. I. Pearce, Manager, Electricity Department. Deposit £1 ls.

JULY 31.—**Rotherham**.—**PAINTING**.—Painting and distemping the Grammar School, for the C.B. J. A. Mair, Clerk to the Governors, Education Offices.

BUILDING TRADE WAGES IN SCOTLAND.

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Masons' Brick-layers' or Plasterers' Labourers.
Aberdeen	1/8	1/8 1/2	1/8	1/8	1/8	1/8	1/7	1/0 1/2
Aldrie	1/8	1/8	1/8	1/8	1/8	1/8	1/6 1/2	1/3
Alexandria	1/8	1/8	1/8	1/8	1/8	1/3	—	1/2 1/2 to 1/3 1/2
Arbroath	1/7	1/7	1/7	1/7 1/2	1/7	1/7	1/5 1/2	1/1 1/2
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3
Bathgate	1/8	1/8	1/8	1/8 1/2	1/8	1/8	1/6 1/2	1/2 to 1/3
Bialgowrie	1/7	1/7	1/7	1/7 1/2	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Canthridge	1/8	1/8	1/8	1/8	1/8	1/8	1/6 1/2	1/3 to 1/3 1/2
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Dunfermline	1/8 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Falkirk	1/7 1/2	1/7 1/2	1/7	1/8	1/7	1/7	1/6 1/2	1/2 1/2
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Greenock	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/0 1/2 to 1/3 1/2
Hamilton	1/8	1/8	1/8	1/8	1/8	1/8	1/6 1/2	1/3 1/2
Hawick	1/7	1/7	1/7	1/7 1/2	1/7	1/7	1/7	1/2 1/2
Helensburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3 1/2
Inverness	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/- to 1/1 1/4
Kilmarnock	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Kirkcaldy	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/-
Kirkwall	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/- to 1/1 1/4
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Motherwell	1/8	1/8	1/8	1/8	1/8	1/8	1/6 1/2	1/3 1/2
Perth	1/8	1/8	1/8	1/8	1/8	1/8	1/6 1/2	1/3
Stirling	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3 1/2
Stirlingshire (Eastern District)	1/8-1/10	1/8-1/10	1/8	1/8	1/7	1/8	1/6 1/2	1/3 1/2
Wishaw	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3 1/2

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 157.



JULY 31.—Walsoken.—REPAIRS.—Repairs and improvements to the Popenhoe farmhouse, premises and cottages, &c., for the Norfolk C.C. T. G. Ellis, County Land Agent, The Shirehouse, Norwich.

***AUGUST 1.—Crayford (Kent).**—HOUSES.—Erection of 50 houses in Crayford-road, for the U.D.C. The Clerk, Council Offices, Crayford, Kent. Deposit £2 2s.

AUGUST 1.—Hagworthington.—REPAIRS.—To the Church at Spilsby. W. G. Watkins, St. Edmunds Chambers, Silver-street, Lincoln.

AUGUST 1.—Hyde.—HOUSES.—Twenty-two houses at Allen-avenue, on the Back Bower site, for the T.C. J. H. Ward, borough surveyor. Deposit £2 2s.

AUGUST 1.—Loanhead.—HOUSES.—Thirty houses, for the T.C. Geo. B. Deas, architect, Central Chambers, Kirkcaldy. Deposit £1.

AUGUST 1.—Salford.—REPAIRS.—Demolition of the disused workhouse buildings in Eccles New-road, and for the clearance and levelling of the site, for the B.G. E. H. Inchley, Clerk to the Guardians, Poor Law Offices, Eccles New-road.

***AUGUST 1.—Shrewsbury.**—TECHNICAL INSTITUTE.—Proposed technical institute, Oakengates, Salop, for the Salop County Council. Secretary for Education, County Buildings, Shrewsbury.

***AUGUST 4.—Bridgnorth.**—DWELLINGS.—Erection of eight dwellings (and probably 12), in pairs, on an approved site in the Innage-lane, for the Borough Council. Borough Surveyor's Office, Bridgnorth.

AUGUST 4.—Manchester.—HOUSES.—From four to 610 houses on the Moston estate, for the T.C. Housing Director. Deposit £2 2s.

AUGUST 4.—Oban.—HOUSES.—Six blocks of houses (24 in all), at Mossfield-drive, for the T.C. D. Galloway, Borough Surveyor.

AUGUST 4.—Solihull.—HOUSES.—Olton, 10 houses, Lynton-road; Balsall, eight houses, Balsall-street; Barston, four houses, Oak-lane, for the R.D.C. Chas. H. Cook, Clerk of the Council. Deposit £1 1s. each.

AUGUST 5.—Brentwood.—BUNGALOWS.—Sixteen bungalows in pairs, near King's-road, for the U.D.C. A. J. Meeson, Surveyor. Deposit £1.

AUGUST 5.—Bristol.—ALTERATIONS.—Additions and alterations to thirteen houses and the re-building of a house in Berkeley-street, Eastville, for the T.C. Iessel S. McKenzie, City Engineer and Surveyor. Deposit £1.

AUGUST 5.—Dorset.—COTTAGES.—Two cottages at Bovington Camp, near Lulworth, Wareham, Dorset, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W. 1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 5.—Duns.—HOUSES.—Twelve houses at Bridgend, for the T.C. Jas. Millar, Town Clerk. Deposit £1.

AUGUST 5.—London, E.—EXTENSION.—Extension of Canning Town Employment Exchange, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W. 1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 5.—Manchester.—PAINTING.—At the Chester-road and Ancoats branch libraries, for the T.C. City Architect. Deposit 10s. 6d. each.

AUGUST 6.—Aylesbury.—HOUSES.—Forty-eight houses on the Southcott estate, for the T.C. Wm. Harold Taylor, Borough Engineer and Surveyor.

AUGUST 6.—Aylesbury.—WALLS.—Extension of the Markets, including boundary walls, sale rings, sheds, &c., for the T.C. Wm. Harold Taylor, Borough Engineer and Surveyor.

AUGUST 6.—Backnham.—SCHOOL.—Elementary school. Rev. A. Thompson, The Manse, Dromore, co. Down.

AUGUST 6.—Clacton-on-Sea.—EXTENSION.—Extension of Post Office, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W. 1. Deposit, ±1 1s. (cheques payable to the Commissioners).

AUGUST 6.—Grimsby.—ALTERATIONS.—Alterations to Grimsby Head Post Office, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W. 1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 6.—London, W.—PAINTING.—External painting at the Ministry of Pensions, Acton, W. 3, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W. 1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 7.—Dublin.—REPAIRS.—Roofing, flooring and other works, to the central portion of the south front of the Custom House, for the Commissioner of Public Works. J. J. Healy, Secretary, Baile Atha Cliath (Dublin). Deposit £5.

AUGUST 7.—Exeter.—SHOWYARD.—Erection of the showyard, including offices, grand stand, cattle, implement, and other sheds, &c., for the 1926 Exhibition at Crediton, and for two succeeding shows. The Secretary, 20, Queen-street, Exeter.

AUGUST 7.—London, E.C.—PAINTING.—Internal and external painting at the G.P.O., King Edward Building, E.C., for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W. 1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 7.—Middlesex.—EXTENSION.—Extension of the sub-station, National Physical Laboratory, Teddington, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W. 1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 8.—Leeds.—PAINTING.—Inside of Bramley Institution, for the B.G. J. H. Ford, Clerk to the Guardians, Poor Law Offices, South Parade.

***AUGUST 8.—London, E.14.**—SUBWAYS.—Construction of two subways through Double Wards "E.F." and "K.L." at St. Andrew's Hospital, Devon-road, Bow, E. 3, for the Poplar Board of Guardians. The Clerk to the Guardians, 45, Upper North-street, Poplar, E. 14. Deposit £2.

AUGUST 8.—Pontyberem.—HALL.—Memorial Institute, together with adding to and altering the public hall. H. S. Griffiths & Partners, architects, Tony-pandy.

AUGUST 8.—Rawtenstall.—HOUSES.—Twenty-two houses at Oakley; eighteen bungalows at Oakley; twenty-four houses at New Inn, Crawshawbooth; and 2 bungalows at New Inn, Crawshawbooth. A. Brocklehurst, architect, St. James's-chambers, Water-foot. Deposit £2 2s.

AUGUST 10.—Blackwood.—EXTENSION.—To Saint Margaret's Church, Blackwood (Mon.). A. F. Webb, L.R.I.B.A., architect, Tredegar-chambers. Deposit £2 2s.

AUGUST 10.—Blackwood.—INSTITUTE.—First portion of the Blackwood and District Workmen's Institute at Blackwood, Mon. for the Committee of the Blackwood Miners' Welfare Council. D. J. Thomas and A. F. Webb, L.L.R.I.B.A., architects. Deposit £2 2s.

AUGUST 10.—Clutton.—HOUSES.—Ten houses at Farrington Gurney, for the R.D.C. W. T. Hawker, architect, Council Houses, Temple Cloud, near Bristol.

AUGUST 10.—Clutton.—HOUSES.—Twenty-two houses at Paulton, for the R.D.C. W. T. Hawker, architect, Council Houses, Temple Cloud, near Bristol. Deposit £3 3s.

AUGUST 10.—Forehoe.—COTTAGES.—Five pairs cottages at Browick site, for the R.D.C. Wm. Farridge Smith, Clerk, Vicar-street, Wymondham. Deposit £1.

AUGUST 11.—Dundrum.—RESTORATION.—Of Dundrum ex-R.I.C. barracks, co. Dublin, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath (Dublin). Deposit £1.

***AUGUST 11.—Ferndale (Rhonda).**—POST OFFICE.—Erection of a post office at Ferndale (Rhonda, Glam.) Contracts Branch, H.M. Office of Works, King Charles-street, S.W. 1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 12.—Burgess Hill.—HOUSES.—Thirty-seven houses in a new road between Church-road and London-road, Burgess Hill, for the U.D.C. E. F. Farrington, surveyor, Council Offices, 20, Church-road, Deposit £2 2s.

AUGUST 12.—Croydon.—TELEPHONE EXCHANGE.—Erection of a telephone exchange. Contracts Branch, H.M. Office of Works, King Charles-street, S.W. 1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 12.—East Grinstead.—COTTAGES.—Erection of 38 cottages of various types on two sites, for the R.D.C. Ernest A. Chilton, Architect, Town Hall Chambers, Uckfield, Sussex. Deposit £2 2s.

AUGUST 15.—Goole.—HOUSES.—Eight non-parlour type houses at Snaith and West Cowick, for the R.D.C. R. Plewes, surveyor. Deposit £1 1s.

AUGUST 15.—Melton.—LIGHTING.—Public lighting of the parish of Melton, for the P.C. R. Bentham, Clerk.

AUGUST 17.—Swindon.—HOUSES.—Erection of 96 houses on Hurst Housing Estate, for the Corporation. Borough Surveyor, 34, Regent-circus, Swindon.

***AUGUST 18.—Godstone (Surrey).**—HOUSES.—Erection of sixteen Class "A" houses, and eight Class "B" houses at Tyler's Green site, Godstone, for the R.D.C. Council's Surveyor, Lloyds Bank-chambers, Oxted. Deposit £3 3s.

***AUGUST 18.—Hailsham (Sussex).**—HOUSES.—Erection and completion of sixteen houses in blocks of four in South-road, for the R.D.C. The Engineer, 17, London-road, Hailsham. Deposit £1 1s.

AUGUST 25.—Wigan.—SCHOOL.—To accommodate 768 scholars, at Whelley, for the C.B. R. B. Donald, Borough and Water Engineer. Deposit £2 2s.

NO DATE.—Abercraive.—REBUILDING.—The Abercraive Inn, for E. Evans Bevan, Neath. J. Cook Rees, F.R.I.B.A., Parade-chambers, Neath.

NO DATE.—Dumbarton.—LODGE.—Erection of the East Gate Lodge, Auchentorlie Estate, Bowling, for the D.C. of the C.C. J. Weekes, County Architect, 88, College-street, Dumbarton.

NO DATE.—Kingswinford.—HOUSES.—Sixty houses at Brook-street, Wordsley, and houses at High-street, Pensett, for the R.D.C. A. T. Butler, F.R.I.B.A., architect, Priory-street, Dudley. Deposit £2 2s.

NO DATE.—Ripon.—ELECTRIC LIGHTING.—Lighting of the Poor Law Institution, for the B.G. Master, 75, Allhallows-gate, Ripon.

NO DATE.—Southport.—ALTERATIONS.—To the headquarters and erecting new hall for the St. John Ambulance Association. J. C. H. Sandbach, chartered architect, 27, Albert-road.

MATERIALS. etc.

JULY 28.—Knaresborough.—FENCING.—170 yards fencing, 5 ft. high; horizontals 2 in. by 2½ in.; verticals ½ in. square, 5 in. apart; designs and price, including materials, oil painting, labour, tools, for the U.D.C. G. W. Boyes, Clerk.

JULY 29.—Farnworth.—MATERIALS.—Granite setts, granite chippings, and concrete flags, for the U.D.C. Surveyor.

JULY 29.—Santiago.—PIPING.—Cast-iron piping, for the Empresa de Agua Potable. Department of Overseas Trade, 35, Old Queen-street, London, S.W. 1.

AUGUST 1.—Rawtenstall.—GRANITE.—1,000 tons of 4 in. by 5 in. granite setts, for the T.C. Jas. Johnson. Borough Engineer and Surveyor.

AUGUST 4.—Rothwell.—PIPES.—6 in. and 8 in. cast-iron cement-lined water main and "spun" water main pipes, in lots of not less than 1,000 yds., for the U.D.C. J. Southward, Waterworks' Manager.

AUGUST 10.—Batley.—PIPES.—400 tons of cast-iron pipes and special castings, 18 in. diameter, for the Corporation. G. H. Hill & Sons (Manchester), Civil Engineers, 40, Kennedy-street Manchester. Deposit £1 1s.

AUGUST 10.—South Africa.—TRUSSES.—Sixty-three steel roof trusses, 53 ft. 9 in. clear span, 68 verandah brackets, 5 ft. 9 in. projection, steel angle and steel tee purlins, for the Port Elizabeth T.C. Department of Overseas Trade, 35, Old Queen-street, London, S.W. 1.

AUGUST 17.—Middlesbrough.—MATERIALS.—An nealed scoriae (broken) bricks, castings, concrete flags and kerbs, pitch and tar, sanitary pipes, gulleys, junctions, &c., slag (broken), tarred whinstone and slag, timber, whinstone and granite (broken), whinstone and granite setts, and kerbs, and sand, for the C.B. S. E. Burgess, Borough Engineer.

AUGUST 24.—Catherington (Hants).—WATER MAINS, &c.—About 4,100 yds. lineal of 6 in. cast-iron water mains; also, 4,850 yds. 4 in., and 2,700 yds. 3 in. ditto; with hydrants, &c.; also for construction of two concrete reservoirs and a pumping station. Mr. G. C. Vernon-Inkpen, F.S.I., engineer, 40, Commercial-road, Portsmouth.

ENGINEERING. IRON AND STEEL.

JULY 27.—Sunbury-on-Thames.—FOOTBRIDGE.—Permanent footbridge over the backwater at Sunbury, for the U.D.C. H. F. Coales, surveyor. Deposit £2 2s.

JULY 27.—Upavon.—RECONSTRUCTION.—Of the bridge, for the Wiltshire C.C. J. George Powell, County Surveyor, Trowbridge.

JULY 28.—Belfast.—BRIDGE.—Bridge over the Great Northern Railway at Tate's-avenue, for the C.B. McCarthy & Lilburn, quantity surveyors, 123, Scottish Provident Buildings. Deposit £3 3s.

JULY 29.—Chester-le-Street.—PILING.—Piling concrete wall, penning, &c., at Fatfield. Geo. W. Ayton, Highway Surveyor. Deposit £2 2s.

JULY 30.—Sirling.—BRIDGE.—Bridge over the River Forth between Stirling and Cambuskenneth, for the T.C. A. H. Goudie, Borough Engineer.

JULY 31.—Amphill.—TANKS.—Construction of new sedimentation tanks, percolating filters, channels, humus tanks, drains and pipe lines, and rearrangement of existing plant for storm water, and all other works in connection at the Sewage Disposal Works, for the U.D.C. A. T. Trethewey, Clerk to the Council, 88, Dunstable-street. Deposit £5.

JULY 31.—Helmington.—CULVERT.—Concrete culvert over the existing watering, for the East Suffolk C.C. W. Jervis, County Surveyor, County Hall, Ipswich.

AUGUST 1.—Buglawton.—TANKS.—Brick tanks and special fittings at the borehole, situate Silversprings, Buglawton, for the U.D.C. C. Russell Hall, Engineer, Chapel-street, Congleton. Deposit £1 1s.

AUGUST 4.—Southwold.—BRIDGE.—Removal of the existing bridge, erection of temporary bridge and of new reinforced concrete bridge, for the Suffolk C.C. W. Jervis, County Surveyor, County Hall, Ipswich. Deposit £4 4s.

AUGUST 4.—Warwickshire.—REPAIRS.—Reconstruction of Sheldon and Low Brook and the widening of Hatchford, Stonebridge, Pickford, and Hollywell bridges in reinforced concrete, for the C.C. D. H. Brown, County Surveyor, County Surveyor's Office, 8 Northgate-street, Warwick. Deposit £2.

AUGUST 5.—Biggleswade.—TANK.—Providing and laying about 4,000 yds. of 3 in. main, erection of engine house, together with the necessary pumping plant, and providing and erecting a cast-iron storage tank on a 40 ft. tower of steel structure, for the R.D.C. H. Chaudler, Clerk to the Council, 2, London-road. Deposit £2 2s.

AUGUST 10.—Kilkenny.—TANK.—Concrete tank at County Sanatorium, for the C.C. T. Drew, Secretary to Committee, Court House, Kilkenny.

AUGUST 11.—South Africa.—SLUICE GATES.—Two sluice gates, gearing superstructure, &c., for the Bulawayo T.C. Department of Overseas Trade 35, Old Queen-street, S.W. 1.

ROAD, SEWERAGE, AND WATER WORKS

JULY 27.—Coulson and Purley.—MAKING-UP.—Of Monahan-avenue, Purley, and the Chase, Coulson, and construction of approximately 234 lineal yds. of 9 in. pipe sewer and manholes, &c., in Sanderstead-road, and approximately 50 lineal yds. in Portnall-road, for the U.D.C. R. Chart, Surveyor, Council Offices. Deposit £2 2s. each.

JULY 27.—Dartford.—SEWERS.—Roads and sewers on the housing estate, Lowfield-street, for the U.D.C. Surveyor. Deposit £2 2s.

JULY 27.—Edinburgh.—ROAD.—Construction of Section F.G. (Dechmont to Broxburn), Contract No. 5 East, of a new road from Glasgow to Edinburgh, for the T.C. D. A. Donald, engineer, 271, Alexandra-parade, Glasgow. Deposit £3 3s.

JULY 27.—Greenford.—MAINS.—Extension of the main drainage system, for the U.D.C. Howard Humphreys & Sons, engineers, 25, Victoria-street, Westminster. Deposit £2 2s.

JULY 27.—Horsham.—SEWER.—Relaying 278 yds. 6 in. pipe sewer, 550 yds. cast-iron rising main, engine house, plant and tank, and for Sewage Disposal Works extension, for the R.D.C. W. R. Guilford, surveyor, 42, Albion-terrace. Deposit £1 1s.

JULY 27.—Tipton.—RESURFACING.—Resurfacing of about 17,400 sup. yds. of tarmacadam and about 1,250 sup. yds. of granite (Leicestershire) sett paving on reinforced concrete foundation, on various roads, for the U.D.C. Wm. H. Jukes, Engineer and Surveyor, Deposit £2 2s.

JULY 27.—Watford.—MAKING-UP.—Of Cassiobury-park-avenue, Shepherds-road, and Euston-avenue, for the T.C. W. W. Newman, Borough Engineer. Deposit £2 2s.

JULY 28.—Barking Town.—STREETS.—Private street works at Hurstbourne-gardens and Surrey-road, for the U.D.C. Engineer and Surveyor.

JULY 28.—Barnet.—SEWER.—Construction of approximately 223 lineal yds. of 9 in. diameter stone-ware pipe sewer, together with manholes and other incidental works in Rowley-lane, Arkley, for the U.D.C. E. Scott, Engineer and Surveyor. Deposit £1 1s.

JULY 28.—Barnet.—FOUNDATIONS.—For (a) constructing a reinforced concrete foundation, and (b) providing and laying 2 in. asphaltic carpet, of the Great North-road, Barnet Hill, for the U.D.C. E. Scott, Council Offices, Wood-street.

JULY 28.—Chelmsford.—MAINS.—Laying 2½ miles of 12 in. cast-iron rising-main, and the supply and laying of electric cable, from Sandford Mill to the Reservoir at Longtamps, for the T.C. E. J. Miles, Borough Engineer. Deposit £1 1s.

JULY 28.—Harrow-on-the-Hill.—SEWER.—Laying about 175 yds. lin. of 12 in. surface-water sewer and construction of manholes in Eastcote-lane, for the U.D.C. J. P. Bennetts, Engineer and Surveyor.

JULY 28.—Harrow-on-the-Hill.—IMPROVEMENTS.—Public street improvements in Bessborough-road, Sudbury-hill, and Roxeth-hill, for the U.D.C. J. P. Bennetts, Engineer and Surveyor.

JULY 29.—Cardiff.—STREETS.—Private street improvement works in parts of Caegwyn-road, Westfield-road, and Greenclose-road, also surface water sewers in the parish of Whitechurch, for the R.D.C. W. Farrow, Surveyor, Park House, 20, Park-place, Cardiff.

JULY 29.—Friern Barnet.—REPAIRS.—For widening works in Friern-lane, reconstruction of Bank-parade, Friern Barnet-road, and resurfacing part of Friern-lane, for the U.D.C. F. P. Kindell, Engineer and Surveyor to the Council.

JULY 29.—Shoreham-by-Sea.—MAKING-UP.—Making up, sewerage, paving, kerbing and lighting Old Fort-road, Ferry-road and Beach-road, for the U.D.C. A. W. Nye, Town Surveyor. Deposit £1 1s.

JULY 29.—Uxbridge.—MAKING-UP.—Parkfield-road, Ickenham, and Oak-avenue, Ickenham, for the R.D.C. E. E. T. Bolton, Engineer and Surveyor to the Council, Corn Exchange. Deposit £1.

JULY 30.—Biston.—MAKING-UP.—Of Bankfield-road, approximate area 3,100 super yards, together with the construction of a brook culvert, for the U.D.C. A. F. B. Sidwick, surveyor. Deposit £2 2s.

AUGUST 1.—Manchester.—SEWERING.—Sewering, draining, kerbing, ballasting, &c., the roads of the Burnage housing estate, for the T.C. City Engineer. Deposit £1 1s.

AUGUST 1.—Outwood.—FENCING.—180 yards of unclimbable steel fencing, 5 ft. 6 in. in height, for the Burial Board.

AUGUST 1.—Wycombe.—WIDENING.—Widening and improvement of road, Sands to Lane-end, for the R.D.C. A. L. Grant, surveyor, 15, High-street, High Wycombe. Deposit £10.

AUGUST 3.—Bridlington.—SEWER.—New road and sewer on the Priory Butt Hill estate, for Messrs. Byass & Bladen. E. Vincent-King, A.R.I.B.A., architect and civil engineer, St. James'-road. Deposit £2 2s.

AUGUST 4.—Hurst.—RECONSTRUCTION.—Of Curzon-road with concrete foundation, surfaced with ganitised rock asphalt, and other works incidental thereto, repaving of part of Lower King-street, and Union-road, for the U.D.C. D. Jenkinson, Surveyor.

AUGUST 5.—Cookstown.—DRAINAGE.—Drainage works required for 18 ex-Servicemen's cottages in the Townland of Tullagh, for the Government of Northern Ireland. Secretary, Ministry of Finance, 15, Donegall-square West.

AUGUST 8.—Wigan.—SEWERS.—Streets and sewers on the Bottling Wood housing site, for the C.B. R. B. Donald, Borough and Water Engineer. Deposit £2 2s.

AUGUST 10.—Darton.—MAINS.—Laying and jointing of about 1,262 yds. of 4 in. and 460 yds. of 3 in. cast-iron water mains and fittings, for purposes of supplying water to 250 houses now in course of erection, for the U.D.C. P. Wilkinson, Waterworks' Manager, Council Offices, Darton, near Barnsley.

AUGUST 24.—Mid-Glamorgan.—PIPES.—Providing and laying about 4,500 yards of 7 in. diameter cast-iron pipes between the Service Reservoir now under construction at Cefn Forest, Windmill Farm, in the parish of Llansannor, along the District-road, through the village of Llanharri to Dolau, Llanharan, including all appurtenant works, and the construction of two mass concrete service reservoirs, one near the "Red Cow" Inn, Maesteg, and one at Caerau, Maesteg, together with provision and laying of about 2,300 yards of 12 in. diameter cast-iron pipes, 120 yards of 9 in. diameter cast-iron pipes, 100 yards of 7 in. diameter cast-iron pipes, and 400 yards of 6 in. diameter cast-iron pipes, for the Water Board. Thomas & Morgan & Partners, Civil Engineers, Pontypridd. Deposit £10 10s. each.

Competitions.

(See *Competition News*, page 132.)

Auction Sales, Tenders, etc.

JULY 27.—Woolwich.—Vervard & Yates, by order of the National Council of the Y.M.C.A., without reserve, at High-street, Woolwich, timber and building material. Auctioneers, 365, Norwood-road, S.E. 27.

JULY 28.—London, S.W.—Vervard & Yates, without reserve, at 255, Clapham-road, stock of timber, fittings, and building materials. Auctioneers, 365, Norwood-road, S.E. 27.

JULY 29.—Ickenham.—Knight, Frank & Rutley, in conjunction with Joshua Baker, Cooke & Standen, at the Auction Mart, 155, Queen Victoria-street, E.C. 4. Portion of Swakeley's Estate, comprising freehold building land extending to 190 acres. Auctioneers, J. B. C. & S. 62, High-street, Uxbridge; Knight, Frank & Rutley, 20, Hanover-square, W.1.

JULY 30.—London.—Knight, Frank & Rutley will sell, in the Hanover Estate Rooms, freehold building estate overlooking Kingsbury Green. Auctioneers, 20, Hanover-square, W.1.

JULY 30.—Middlesex.—P. Chase Gardener & Co., at the Public Library, Treaty-road, Hounslow, freehold building lands at Heston-road and Sutton-road, Hounslow, Auctioneers, 269, High-street, Hounslow.

JULY 31.—Sevenoaks.—Knight, Frank & Rutley will sell, by direction of Mr. Robert Mond, J.P., at the "Royal Crown" Hotel, valuable freehold properties forming the remaining portions of the Combe Bank Estate, including Combe Bank Farm, also valuable building sites. Auctioneers, 20, Hanover-square, London W.1.

***AUGUST 11.—Derbyshire.**—Offers invited before 11 a.m. for the purchase of the remainder (33 occupied modern houses, &c.) of Langwith housing estate, by the Commissioners H.M.O.W. Contracts Branch, King Charles-street, S.W.1. Deposit £2 2s. (cheques payable to the Commissioners).

Public Appointments.

JULY 27.—Romford.—Third Building Inspector in the Surveyor's Department, required by the R.D.C. The Clerk, 16A, South-street, Romford, upon receipt of a stamped addressed foolscap envelope.

***JULY 24.—London, W.5.**—Building Inspector required by the Greenford U.D.C. Clerk to the Council, New Broadway Chambers, New Broadway, Ealing, W.5.

***JULY 31.—Wimbledon, S.W. 19.**—LECTURER.—Lecturer for builders' quantities, Grades 1 and 2, for session 1925-26, required at the Wimbledon Technical Institute. The Principal, Gladstone-road, S.W. 19.

***AUGUST 1.—Birmingham.**—CLERK OF WORKS.—Clerk of Works required to superintend the erection of new school buildings, by the Education Committee. Chief Education Officer, Margaret-street, Birmingham.

AUGUST 1.—Ilford.—BUILDING AND DRAINAGE INSPECTOR.—Wanted by the U.D.C. Mr. H. Shaw, M.Inst.C.E., Engineer and Surveyor, Town Hall, Ilford.

AUGUST 1.—Southampton.—DRAUGHTSMEN.—Two draughtsmen required in the County Architect's Department. Mr. A. L. Roberts, County Architect, The Castle, Winchester.

***AUGUST 10.—Cape Town.**—LECTURER AND ORGANISER.—Senior lecturer and organiser in the Building Trades Department of the Cape Technical College. Chalmers, Guthrie & Co., Ltd., 9, Idol-lane, London, E.C. 3.

AUGUST 22.—Croydon.—Architect required to superintend the erection of an elementary school within the borough to accommodate 800 scholars. Clerk to the Education Committee, Katherine-street, Croydon.

***NO DATE.—Ceylon.**—FOREMAN OF BUILDINGS.—Foreman of buildings required by the Government of Ceylon, for the Harbour Engineer's Department of the Colombo Port Commission, for a tour of four years with possible permanency. Crown Agents for the Colonies, 4, Millbank, London, S.W. 1, quoting M/13824.

***NO DATE.—Mansfield.**—ARCHITECTURAL ASSISTANT.—Architectural assistant in the Borough Surveyor's Department required by the Borough Council. Town Clerk, White Hart-lane, Mansfield.

***NO DATE.—Yorkshire.**—Clerk of Works required immediately for new buildings in extension of the Bridlington School, for the County Council. The Clerk of the Local Education Authority, County Hall, Beverley.

WORKMEN'S COMPENSATION

THE case, *Jones v. Tarr* (the *Times*, July 16), is the third case to reach the Court of Appeal in which a consideration of section 7 of the Workmen's Compensation Act, 1923, has arisen. This section provides that, for the purpose of the principal Act, an accident resulting in the death or serious and permanent disablement of a workman, shall be deemed to arise out of and in the course of his employment, notwithstanding that the workman at the time when the accident happened was acting in contravention of statutory or other regulations applicable to his employment, or of orders given by or on behalf of his employers, or without instructions from his employer, if such act was done for the purposes of and in connection with his employer's trade or business.

The applicant was the daughter of a man named Jones, who was employed by the respondent, the owner of one of several small and very shallow coal pits, to brick in the inset of a shaft. Jones had working with him a man named Smith and a lad named Gears, an adopted son of Jones. Jones found that he had omitted to bring with him a bricking hammer, a tool supplied by his employer, and he sent Smith and Gears to an adjoining pit, which was not owned by his employer, and which was a deep pit, to fetch a hammer belonging to his, Jones's brother, which he believed to be there. Smith lowered Gears into this pit, but whilst he was being hauled up he was overcome by fire-damp and fell out of the bucket. Smith went to Jones, who hurried to the pit and was lowered down it, but he was also overcome by fire-damp, and both lives were lost.

In these tragic and heroic circumstances, the County Court Judge had held that under

section 7 of the Act of 1923, Jones, in going to the rescue of Gears, was doing something for the purposes of and in connection with his employer's trade or business, and although it was outside the scope of his employment, the emergency brought the case within the Acts, and he awarded compensation to the applicant.

The Court of Appeal, whilst expressing their sympathy as being with the applicant, felt constrained to allow the appeal, and to set aside the award. The Court pointed out that this case did not raise any of the problems suggested by section 7. That section was passed to bring back within the ambit of the Act certain cases which had been held to fall outside the sphere of the workman's employment by reason of disobedience to statutory or other regulations, or the orders of the employer (*Davies v. Gwaun-caegurwen Colliery Company* (1924, 2 K.B. 651; *The Builder*, September 26, 1924), but it would be going far beyond any reported decision to hold that the section could be used to bring within the Acts an accident happening to a workman engaged in something quite outside the scope of the employment. The Court then cited the cases relating to the scope of employment, *Barnes v. Nunnery Colliery Co.* (1912, A.C. 44; *The Builder*, January 5, 1912; *Plumb v. Cobden Flour Mills*, 1914, A.C. 62), and applying the principles there laid down to the facts of this case, held that Jones, in sending Gears into the pit of another employer, had sent him there, not on his employer's business, but for his own purposes to borrow a hammer of Jones's brother, exercising his own authority over his adopted son right outside the sphere of the employment of both of them. The emergency had arisen also out of an act entirely foreign to the employment.

Section 110, subsection (2) of the Coal Mines Act, 1911, was cited to the Court, which provides that "Any workmen engaged in any rescue work or ambulance work at a mine shall, for the purposes of the Workman's Compensation Act, 1906, be deemed while so engaged to be employed by the owner of the mine," but this section was held to have no application, because the owner of the mine to which Jones went to the rescue of Gears was not the mine of the respondent, his employer, but of another owner, Harriman.

We have only drawn attention to the report of this case very briefly, but the Act of 1923, and in especial, section 7, have introduced such complications into the law relating to Workmen's Compensation that we propose in the near future publishing a series of articles dealing with the law as it now stands as amended by the new Act.

Insurance Against Bad (Export) Debts.

Mr. Arthur Michael Samuel, M.P., Parliamentary Secretary of the Department of Overseas Trade, has appointed a committee, under the Chairmanship of Colonel the Hon. Sidney Peel, to consider the question of insurance against bad debts in export trade. The committee comprises representatives of the banks, accepting houses, insurance companies, Lloyds, the Association of British Chambers of Commerce, the Federation of British Industries, together with the Comptroller-General of the Department of Overseas Trade. The Secretary is Mr. F. H. Nixon, of the Export Credits Department.

Wanted—A Paint Slogan.

The National Society for the Preservation of Property (by paint and varnish) announces a competition, open to the whole trade, to find a suitable slogan. Three prizes are offered 1st prize, 3 guineas; 2nd prize, 2 guineas; 3rd prize, 1 guinea. Selection will be in the hands of the organising manager and the advertising committee, and the results and names will appear in *The Builder*. Suggestions should be addressed to The Organising Manager, N.S.P.P., 25, Victoria-street, London, S.W.1. No contribution will be accepted later than first post on Monday, August 17. Envelopes should be marked "Slogan Competition."

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work, plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ATHY.—The U.D.C. are urging the rebuilding of the courthouse and barracks.

BARNET.—Mr. J. W. Fisher has prepared plans for the extension of the Barnet Girls' Grammar School, and the governors are to invite tenders for the work, which is estimated to cost £14,000.

BARNSELY.—The T.C. passed plans for the Trustees Ardsley Miners' Welfare Committee, shelters and conveniences to grounds off Barnsley-road, Stafrfoot. The Borough Engineer and Surveyor submitted a plan and estimate for the erection of a new public convenience at Monk Bretton Cemetery, and the Sanitary Committee recommended that the work be carried out at an estimated cost of £125.—The Town Clerk is to communicate with the M.H. on the question of a loan for alterations to the Corn Exchange.

BARTON-ON-HUMBER.—The Roman Catholic congregation are raising funds for the erection of a proposed new church.

BELFAST.—The E.C. propose to spend £29,000 on erecting a school in Crumlin-road, £27,000 on another in Mean Park, £18,000 in extension at Rosetta, and £500 in other extensions.

BERRY WOOD.—Northampton County Mental Hospital Committee have prepared a scheme for extensions to the hospital to provide additional accommodation for five hundred cases. An architect versed in institutional work has been employed to draw up sketch plans. The scheme is estimated to involve an outlay of £10,000.

BLACKHALL MILL.—Plans are being prepared by Mr. J. Eltringham, architect and surveyor, of Blackhall, for the erection of a new club and institute.

BLACKPOOL.—Messrs. Leach & Unsworth, builders, Seaberry-avenue, South Shore, have purchased land in Seaberry-avenue, where 37 houses are to be erected. **BOOTLE.**—Plans have been approved for the erection of a Roman Catholic elementary school at Stanley-ade, with accommodation for 300 children.

BOSTON.—The T.C. are to make application to the M.H. for sanction to borrow £5,000 for the erection of a pair of houses each in Fosdyke, Bell-lane, and Sham's Lands, North Fortyfoot Bank.

BOURNEMOUTH.—Messrs. Reynolds & Tomlins, architects, are to erect shops in Wimborne-road.—The Director of Education has reported as to sites for new schools.

BRADFORD.—The Corporation have arranged to erect 74 houses on land adjoining the Bradford Moor playing site. The City Architect is to proceed with the lay-out of housing sites at Eccleshill and Chellowange. It is proposed to secure 108 acres of the Eccleshill sewage land for housing purposes. The open cess system is to be introduced at the following rates:—Manningham, 4650; Bradford Moor, 4480; and Wibsey, 1160. The construction of a by-pass road at Wyke is recommended as a relief scheme, the cost being estimated at £56,000.—Plans passed: 24 houses, Jarwood-avenue, for Groves & Greenwood; 10 houses, High Park-drive, for H. Proctor; 12 houses, Leeds-ide, Eccleshill, for F. G. Burgess; 17 houses, Grenfell-ide, for J. H. Pitches & Son; 14 houses, Lodder-ide, for R. R. North & Co.; 14 houses, Wyke-crescent, for J. Sharp.

BRENTFORD.—The M.H. has agreed to the proposal of the U.D.C. to erect a maternity wing at the Cottage Hospital, at a cost of £2,160.

BRIGG.—The B.G. has decided to have plans prepared for a male vagrant ward to hold 40 beds and one for 20 beds.

BRISTOL.—The T.C. are to make application to the M.H. for the appropriation of land at Ham Green for the erection of eight non-parlour houses at an estimated cost of £4,176, and for authority to borrow the money.—The Housing Committee has arranged for the erection of demonstration steel houses of the Atholl, Weir, and Clifford type, at prices from £400 to £450, exclusive of foundations, &c.

BROMLEY.—The T.C. passed plans: Messrs. Dibben & Co., eight houses, Warren-avenue, and Bromley Mans, Ltd., 12 houses, Southlands-road.

BURNLEY.—The proposed new elementary school to be erected in Lionel-street, Burnley, will accommodate 60 children. The total estimated cost is £32,000.

CAMBRIDGE.—The "University Arms" Hotel at Cambridge is to be considerably enlarged according to plans, &c., prepared by Mr. George J. Skipper, R.E.B.A., of Norwich.

CARDIFF.—The Public Works Committee approved a plan for the first 500 houses of a scheme of 600 houses at Splott Park, submitted by Mr. Gordon Smith, architect, Whitechurch, on behalf of Messrs. Moss & Co.—The City Engineer has submitted 100 plans to the Plans Sub-Committee, which were approved.—The Corporation has granted applications for sites on the Ely estate for the erection of churches of the following denominations:—Church of Wales, Ward Movement, Congregationalists, Baptists, Roman Catholics, Plymouth Brethren, and Presbyterians.

CARLISLE.—The T.C. are shortly to invite tenders for widening of St. Nicholas Bridge.

CHESHAM.—Herts County Surveyor has been instructed to erect a small building at a cost of about £100 at the school for purposes of handicraft instruction.

LUTON.—The R.D.C. has received sanction from M.H. to a loan of £50,000 for the purpose of erecting sites. The Ministry has also been asked to grant subsidies for the 108 houses proposed to be built.

CHESHAM.—The R.D.C. has received sanction from M.H. to a loan of £50,000 for the purpose of erecting sites. The Ministry has also been asked to grant subsidies for the 108 houses proposed to be built.

CHESHAM.—The R.D.C. has received sanction from M.H. to a loan of £50,000 for the purpose of erecting sites. The Ministry has also been asked to grant subsidies for the 108 houses proposed to be built.

CHESHAM.—The R.D.C. has received sanction from M.H. to a loan of £50,000 for the purpose of erecting sites. The Ministry has also been asked to grant subsidies for the 108 houses proposed to be built.

CHESHAM.—The R.D.C. has received sanction from M.H. to a loan of £50,000 for the purpose of erecting sites. The Ministry has also been asked to grant subsidies for the 108 houses proposed to be built.

CHESHAM.—The R.D.C. has received sanction from M.H. to a loan of £50,000 for the purpose of erecting sites. The Ministry has also been asked to grant subsidies for the 108 houses proposed to be built.

CHESHAM.—The R.D.C. has received sanction from M.H. to a loan of £50,000 for the purpose of erecting sites. The Ministry has also been asked to grant subsidies for the 108 houses proposed to be built.

COCKERTON.—A new Church of England elementary school is to be erected at an estimated cost of £3,300.

DARFIELD.—The Education Sub-Committee have recommended to the West Riding C.C. a site for a new infant school to accommodate some 300 children.

DARLINGTON.—On a recommendation of the Unemployment Sub-Committee the T.C. agreed that paddling pools and sandpits for children should be constructed as unemployment schemes in the Park and Cockerbeck Valley, together with similar facilities in North End Park, at a total estimated cost of £1,500. The Borough Surveyor was authorised to prepare the necessary plans and estimates.

DORCHESTER.—The Dorchester Swimming Club are to provide swimming baths and cubicles near Louds Mill at Greys Bridge. Plans have been provisionally approved for 104 parlour type houses on the Victoria Park site. Efforts are being made to obtain a site for the erection of non-parlour houses.

EAST HAM.—The Borough Engineer submitted a draft plan for the erection of a new swimming bath adjoining the existing baths, allowing for a 90 ft. pool. The B.C. recommended that the draft plan be approved, and that the Borough Engineer be directed to prepare plans and estimates.—The Engineer and Manager reported relative to certain structural repairs to the engine-room and boiler-house, to the generating station, and the B.C. recommend that the action be confirmed.—The M.H. has agreed to the Council continuing to issue certificates to cover 176 houses.

EASTLEIGH.—A new elementary school for 350 children is to be erected by the Hampshire E.C.

ETON.—At Eton College the conversion is proposed of the side of the new school yard fronting on to the Slough road into classrooms, at a cost of about £20,000. The architects are Forsyth & Maule, F.R.I.B.A., 12, Stratford-place, W.1.

FARNBOROUGH.—The M.H. has granted a loan of £3,050 for housing purposes.

GLAMORGAN.—The County Main Roads Committee has obtained the approval of the M.H. for a scheme, estimated to cost £100,000, of road and bridge improvement at Jersey Marine.

GLASGOW.—The architect has been empowered to arrange for various alterations at the municipal buildings. The City Engineer has been asked to prepare plans for additional accommodation at Belvidere Hospital for the indoor treatment of venereal diseases. Plans have now been prepared for new washhouses at Wolseley-street, Hutchesontown, and the Baths Committee recommend proceeding with the scheme, which is estimated to cost £30,000. Messrs. MacTaggart have a scheme for the erection of 130 houses at King's Park, Florida.

GOOLE.—The R.D.C. has received sanction from the M.H. for the building of 24 houses at Snaith and Cowick, at a cost of £670 each.

GOSPORT.—The Corporation are purchasing a site at Burt Arch for the erection of a convenience.

HADDON.—The Public Health and Housing Committee of the Derbyshire C.C. reported that the proposals for the erection of an isolation hospital by the Haddon Hospital Committee has now been approved by the M.H., subject to certain amendments, including the provision of an ambulance, which have added to the estimated cost. The amount already approved by the Council is £12,800, and the revised estimate is £13,440.

HANWELL.—The U.D.C. has now agreed to purchase the Hopefield estate for housing purposes.

HATFIELD.—The site for the proposed new elementary school, which will accommodate 600 children, is at the bottom of the railway bridge on the Hatfield side. A further batch of houses is to be erected by the Housing Association at the continuation of Broadway.

HAYWARDS HEATH.—A new Roman Catholic church is to be erected in the near future with seating accommodation for 300. The architect is J. H. Beart-Foss, 19, The Common, Ealing, W.5.

HEADLEY.—Hampshire E.C. propose an expenditure of £3,500 on the provision of two classrooms, manual instruction room, &c., at the Headley Bordon elementary school.

HEMSWORTH.—The National Housing Corporation of Great Britain, Ltd., in conjunction with the R.D.C. and local colliery companies, propose to erect 1,000 houses in eleven various districts within the R.D. Council's area. Mr. Douglas Wood is the architect for the scheme.

HERTFORD.—All Saints' Church of England school premises are to be transferred to the Herts E.C., who are to carry out repairs at a cost of £1,450.—Mr. J. W. Fisher, of Welborough, has been instructed by the Herts E.C. to prepare plans for a new elementary school for 300 boys.

HOLME CULTRAM.—The U.D.C. is seeking permission to borrow £7,000 for extensions at Silloth Gasworks.

IRTHLINGBOROUGH.—Detailed plans and estimates of the cost of constructing new bridges over the river and railway at Irlthlingborough have been submitted by the Northamptonshire C.C. to the M.T.

KESTEVEN.—The U.D.C. Standing Joint Sub-committee recommend the acquisition of Grey House, Stamford, as a suitable site for a new police station. The architect has been instructed to prepare a scheme for the adaptation of the premises.

KETTERING.—The U.D.C. has received sanction from the M.H. to borrow £5,000 to pay 50 subsidies.

KILKENNY.—The County Surveyor has been authorised by the C.C. to proceed with the reconstruction of the bridge at Callan. The C.C. has further under consideration the rebuilding of destroyed courthouses at Callan and Thomastown.

KIVETON PARK.—The Kiveton Park Coal Co., Ltd., have intimated to the R.D.C. that they are prepared to build 50 houses.

LEEDS.—The Corporation have approved of a proposal to purchase from Mr. Albert Braithwaite 32 acres on the Hollin Park estate, for £20,715, subject to Mr. Braithwaite undertaking to complete the erection of 361 type "B" houses, at £538 per house.—The Corporation have also agreed to the proposal to purchase 6½ acres on the East End Park estate, for £6,000, from the East End Park Estate Co., subject to the company undertaking to erect 78 type "A3" houses, at £535 each.

LISS.—Extensions and works are to be undertaken by the Hampshire E.C. at the elementary school, at a cost of about £1,000.

LIVERPOOL.—The Corporation passed plans: Five houses and shops, by R. Owens & Son, for Williams & Jones, in St. Mary's-road, corner of Ranfurly-road; twelve houses, by J. C. Martin, for the Brierley Building Co., in Honiton-road; jam factory, by Medcalf & Medcalf, for Belle Vale Orchards, in Wambo-lane; cinema, cafe, billiard hall, &c., by Gray & Evans, for F. Hiscocks, in Upper Parliament-street and Berkeley-street; nine houses, by R. Owens & Son, for Hugh Jones & Son, in Aigburth-road, between Stratford and Alresford-road; elementary school, by Smith & Sons, for the Corporation, in Whitehead-road; eight houses and four houses, by F. H. Peate, for Scarrett Bros. & Davies, in Warnerville-road and Talbotville-road; twelve houses, by F. E. G. Badger, for the Brook Building Co., in Mossley Hill-road; twelve houses, by R. Owens & Son, for Williams & Jones, in Kintore-road; store building, by G. Bradbury & Sons, for A. J. Buckingham, in Clifford-street.—The Housing Committee approved plans for blocks of working-class houses at the north and south ends of the city. The sites are a disused timber yard measuring about 3½ acres in Melrose-road, Kirkdale, and land in South Hill-road, Dingle, now occupied by old mansions and gardens, comprising about 2½ acres.

LONDON (BERMONDSEY).—Alterations are to be made at the central library, at a cost of £800.

LONDON (BETHNAL GREEN).—Plans have been prepared for a new elementary school for about 300 children in Bonner-street, for the Church of Our Lady of the Assumption.

LONDON (BRIXTON).—The L.C.C. have passed plans for a school for 600, to be erected in Sudbourne-road, the cost being estimated at £29,611.

LONDON (CLAPHAM).—Plans have been approved by the L.C.C. for remodelling and enlarging the Stonehouse-street elementary school, at a cost of £23,500.

LONDON (ELTHAM).—Additional school accommodation for about 300 children is to be provided by the L.C.C. on the housing estate.—The L.C.C. approved plans for 14 semi-detached houses in a new road between Well Hall-road and Archery-road, Eltham, by H. Bower; 10 terrace houses in Gerda-road, New Eltham, by Kenneth Dalgleish.

LONDON (FINCHLEY).—The L.C.C. has decided to erect a schoolkeeper's house at the Vernon-square school, at a cost of £952.

LONDON (HACKNEY).—The L.C.C. recommend that consent be given to the erection by the B.C. of a convenience at Victoria Park, near the junction of Grove-road and Lauriston-road.

LONDON (HAMMERSMITH).—The L.C.C. has authorised alterations at the Trade School for Girls, at a cost of £374.

LONDON (HAVERSTOCK HILL).—Revised plans have been prepared by the L.C.C. for a schoolkeeper's house at the school, at a cost of £934.

LONDON (HOLBORN).—The managers of the St. Andrew's Church of England school are to carry out structural alterations for converting the premises into a central school.

LONDON (HOXTON).—The L.C.C. recommend that the estimate of expenditure on capital account of £16,835, submitted by the Finance Committee in respect of the erection of an extension of Archer House and another block of dwellings on an adjoining site on the Whitmore estate, including all incidental expenses, be approved.

LONDON (KILNATON).—Plans have been approved by the L.C.C. for the enlargement of the Monton-street school, Islington, the cost being estimated at £11,600.

LONDON (LAMBETH).—The B.C. are to build 188 houses and 36 flats on the Bloomfield estate, at a cost of £161,000.—The L.C.C. recommend the borrowing by the B.C. of £160,862 for housing purposes.

LONDON (LEWISHAM).—The L.C.C. has approved plans for four detached and 10 semi-detached houses in Coniston-road, by W. Reynolds & Co.—The L.C.C. has arranged for the enlargement of the Elfrida and the Athelney-street schools.—The L.C.C. has acquired "Brent Knowl," Mayow-road, for conversion into an open-air school.

LONDON (MILE END).—The L.C.C. are acquiring a site in Cephas-street, for the erection of an elementary school.

LONDON (NORWOOD).—The L.C.C. has decided to erect a central school for about 400 children, on a site in Carnac-street.

LONDON (ST. MARYLEBONE).—A £250,000 scheme for extending the Regent-street Polytechnic has been prepared by the governors.—The L.C.C. have under consideration an application from the governors of Regent-street Polytechnic for a substantial building grant for the purpose of providing additional accommodation to take the place of that now provided in annexes to the main building, and to meet the need for additional accommodation.

LONDON (ST. PANCRAS).—The L.C.C. recommend that, subject to the expenditure on rate account ranking for B.E. grant of 50 per cent., the estimate of expenditure on capital account of £50,000, submitted by the Finance Committee in respect of a grant to the governors of the North Western Polytechnic towards the cost of erection and equipment of the Polytechnic, be approved.

LONDON (STREATHAM VALE).—The L.C.C. has decided to provide an elementary school for about 1,200 children.

LONDON (WEST HAM).—The T.C. has received provisional approval from the Board of Control to the Farm site at Ockendon for the erection of an institution for mental defectives.

LONDON (WHITECHAPEL).—The managers of the St. Patrick's Roman Catholic School, St. George's-in-the-East, have decided to enlarge the school by 80 places.

LOUTH.—The T.C. have accepted a tender for the erection of 10 houses at a cost of £4,992.

MANCHESTER.—The Post Office authorities are seeking a site in the neighbourhood off the Anson Estate, Rusholme, for a sub-office. Alterations and improvements are to be made to the General Post Office. The Housing Committee approved the lay-out of an estate at Moston for the erection of 600 houses and 40 shops.

MARGATE.—The M.H. has held an inquiry into the application of the Corporation for sanction to borrow £6,260 for the provision of slipper baths.

MARTLEY.—The R.D.C. has instructed the surveyor to prepare plans and invite tenders for the erection of houses on various sites.

MERTHYR TYDFIL.—The B.C. has received sanction to embark upon unemployment relief schemes, to the value of £118,530.

MIDDLESBROUGH.—The Corporation has secured a site in Parliament-road for the erection of additional swimming baths and the Borough Engineer has been instructed to prepare plans and estimates. The Corporation is also considering erecting swimming baths at North Ormesby.

NEWCASTLE-ON-TYNE.—Canon Newson reports that an anonymous donor of £5,000 has decided to bear the whole cost of the new buildings in connection with the cathedral, and these will be proceeded with as quickly as possible.

NORTHWICH.—At a meeting of the E.C. it was reported that the County Plans and Buildings Sub-committee had directed the architect to report on the purchase of a site in Spencer-street, Northwich, for the provision of a central school.

OTLEY.—The U.D.C. are borrowing £24,000 for the erection of 50 houses at Carr Green.

OXFORD.—The T.C. are to have plans prepared for the erection of a block of buildings at 60, St. Aldate's-street, for the School Management Sub-Committee, at an estimated cost of £8,300.

PAIGNTON.—Mr. H. Whitley is to erect 72 houses on fields off Dartmouth-road.

PORCHESTER.—Hampshire E.C. has decided to enlarge the Council school by 120 school places.

PORTSLADE-BY-SEA.—The U.D.C. are to make application for sanction to borrow £6,000 for housing purposes.

PORTSMOUTH.—The Corporation are to purchase four acres at Stanshaw, for the erection of 72 dwellings, at a cost of about £38,000. Plans passed: 24 houses, Randolph-road, for Mr. A. H. Chase; 16 houses, Mayles-road, for Mr. J. May.

RHILL.—The R.D.C. are about to commence upon a scheme for the erection of 50 houses.

ST. ALBANS.—Herts C.C. have prepared a scheme for the provision of an institution for 400 mentally defectives, on a site at Hill End, at a cost of £120,000.

SANDBACH.—The R.D.C. has received sanction for a loan of £8,150 for waterworks.

SARISBURY.—Hampshire C.C. has acquired property at Cold East, comprising a large country house and 173 acres, for the provision of accommodation for mental defectives.

SCARBOROUGH.—Sketch plans have been prepared for the Corporation, for the provision of medical baths. The B.G. have decided to purchase a site of approximately three-quarters of an acre in Stepley-road, for erecting a new children's home.

SEDGLEY.—The U.D.C. propose to establish a show-room for the Gas Department.

SEVENOAKS.—Plans for the development of the housing estate at Westerham to be prepared by Mr. P. T. Potter, architect, 49, London-road.

SHEFFIELD.—The Roman Catholic congregation are raising funds for the erection of a proposed new church at Eckington.

SOUTHPORT.—The T.C. are to erect public baths at Compton-road, Birkdale, estimated to cost £4,500; and also erect shops and offices in Eastbank-street, adjoining the Municipal Buildings, estimated to cost £21,600. The T.C. has adopted a resolution to erect 208 houses at Canning-road, Shafesbury-road, and Shafesbury-avenue.

STOCKBRIDGE.—The U.D.C. have decided to acquire the premises known as "Moorland Rest" as an isolation hospital. A site has been chosen for the erection of an elementary school. Hampshire E.C. are to enlarge the elementary school at a cost of £3,250.

STOCKTON.—The Corporation is to proceed with the demolition of Housewife-lane unhealthy area, and the rehousing of the residents in another part of the town. The estimated cost of the scheme is £111,500.

STRETFORD.—The local authority has secured a site for the erection of new Council offices. The site is at the corner of Warwick-road and Talbot-road.

STRIBTON.—The U.D.C. approved plans for 50 houses and 40 houses to be erected by private enterprise.

SWANSEA.—The Borough Estate Agent submitted a plan showing the lay-out of land at Townhill, east of May Hill, which the Housing Committee wish to appropriate for the erection of 250 houses, which the C.B. agreed to.

The Borough Architect submitted a plan of a new police station to be erected at Llansamlet, which the Council approved. The C.B. resolved that application be made to the Electricity Commissioners for their sanction to the borrowing of the sum of £50,000 in respect of prospective extensions to mains and prospective house services.

The Parks Superintendent stated that cost of fencing and laying-out of the Maesteg Recreation Ground would be approximately £2,439. This was agreed to. The Council approved the scheme submitted by the Borough Architect for the provision of further accommodation at the Town Clerk's Department at an estimated cost of £1,000. The Borough

Architect submitted plans for the provision of an orthopaedic clinic by altering and adding to the premises in Dynevor-place, the estimated cost of the work being £992. The C.B. resolved that the plans be forwarded to the B.E. for approval. The Council resolved that the Town Clerk make application to the M.H. for sanction to the borrowing of £21,000 for the erection of 35 houses on the Maryhill housing site. The C.B. has approved the following schemes as unemployed schemes:—Mayals-road, from Brinnau House to Clyne Common, road widening and diversion, £31,000; Walters-road, Llansamlet, from site of proposed school to north of Penllr-neaudd, road widening, £6,000; Cwm level road, Landore, from Neath-road to Colliery Incline Bridge near Pentre Pit, road widening, £8,000; Swansea-road, Waunarlwydd, from Victoria-road to Roseland-road, road widening and improvement, £4,000; new access road to Townhill from Carmarthen-road, extending from near Peter-terrace to junction of Penygraig-road and Townhill-road, £32,000; new access road to Townhill from Cockett-road extending from junction of Cockett-road and Glanmor-road to Townhill Farm, £11,000; and Cockett-road, from Glanmor-road to Hill House, road widening, £27,000. Plans passed: Warehouse, Northampton-place, for Evan Rees.

TAUNTON.—The T.C. are to make application to the M.H. for sanction to the borrowing of £17,748 for the erection of 40 houses on the Wellington-road site.

TAVISSTOCK.—The U.D.C. are to acquire 3½ acres for the erection of 32 houses.

THORNABY.—The T.C. has received permission from the M.T. to borrow £40,650 for the erection of 100 houses. The School Attendance Sub-Committee recommend the North Riding E.C. to approve the plans for the proposed new Council Central School, providing accommodation for 400, at an estimated cost of £15,000, be forwarded to the B.E. for formal approval.

TOWCESTER.—Mr. J. T. Blackwell, architect, has now prepared detailed plans for a new school for the Grammar School. The cost is estimated at £20,000, and accommodation will be provided for 200 pupils, which may be increased later to 250.

TREVEGAR.—The U.D.C. has applied for sanction to erect 100 municipal houses.

UPTON (W. YORKS.).—Plans have been prepared by Mr. Wormald, of the Architect's department of the West Riding C.C., for the erection of a proposed new Council elementary school. Accommodation is to be provided for 350 children, the site being on the Common-road site.

WALTON.—The T.C. have appointed a sub-committee to report on the advisability of providing a public mortuary.

WALTON-ON-THAMES.—The U.D.C. instructed the architect to prepare plans and specifications, and obtain tenders for the erection of 16 non-parlour houses to be erected in pairs on land fronting Rodney-road, and both sides of road No. 4.

WATF.—Funds are being raised by the congregation of the Parish Church for the erection of a new Sunday school.

WELLINGBOROUGH.—Northamptonshire E.C. are purchasing a site in Doddington-road for the erection of a secondary school. Additional accommodation is to be provided at the Technical Institute at a cost of £2,350.

WELWYN.—Welwyn Garden City Co. are to erect a bridge to carry a new road over the Luton branch of the L.N.E.R.

WEMBLEY.—The U.D.C. are considering plans for a new Town Hall.

WEXFORD.—The C.C. propose rebuilding Wexford Courthouse.

WHICKHAM.—The U.D.C. has decided to erect 47 houses.

WHITEFIELD.—The D.C. is preparing to erect a tram shelter at the tram terminus.

WITHNELL.—At a parish meeting the vicar, the Rev. R. A. Sganzy, outlined a scheme for the erection of a vicarage as a memorial to the late vicar.

WORCESTER.—The workhouse infirmary is to have a new separate building.

WOBSBOROUGH.—The M.H. has approved of the U.D.C.'s scheme to erect 80 houses at Bank End for subsidiary purposes. The U.D.C. are to erect a convenience by direct labour in Furnace-yard. Mr. T. Shield is the engineer.

A Housing and Town-Planning Tour.

The Garden Cities and Town Planning Association has made arrangements for a special housing and town-planning tour to take place towards the end of September. The tour will include visits to slum areas and slum clearance schemes, new housing estates being developed by the big corporations of the North and South, the industrial villages of Port Sunlight and New Earswick, the garden cities of Letchworth and Welwyn, and the town-planning schemes prepared and in course of execution by the Corporations of Manchester and Liverpool. Opportunities will be given in the course of the tour for the inspection of houses erected by various new methods of construction, including concrete and steel. The tour, which will be personally conducted, will begin on September 21 and end on September 30. Particulars of the tour, which can be taken wholly or in part, may be obtained from the Secretary, Garden Cities and Town Planning Association, 3, Gray's Inn-place, London, W.C.1.

TRADE ITEMS,

Jubilee of a Well-known Firm.

Messrs. Nicholls & Clarke, Ltd., the well-known firm of builders' merchants, of Shore-ditch, London, are this week celebrating the jubilee of their establishment. Mr. Nicholls Sen., who founded the firm in 1875, is happily still taking an active share in the management of the business, the record of which is one of steady and continuous expansion. We shall deal more fully with the firm's present-day activities in our next issue.

Waygood-Otis Sports.

The Waygood-Otis Club have recently held their sixteenth annual sports and garden party, on their ground at Bellingham. Although the weather was dull, the attendance was very good, a large number of the members and their friends being present to enjoy the admirable programme provided. Among the most interesting events decided were the 100 yds. flat handicap (won by Mr. G. R. Maryon in 10.2.5 secs.) and the veterans' and the ladies' 100 yds. (being won by Mr. F. Eldridge and Mr. L. Barton respectively). The half-mile and one mile cycle handicaps were won by Mr. Davies; and the 440 yds. club championship cup, which carries with it a gold medal, was won by Mr. S. Piper—for the fourth time in succession. The one mile flat handicap was won by Mr. R. H. Maryon; the 220 yds. handicap by Mr. S. Piper; the hurdle race by Mr. G. R. Maryon; and the departmental relay race (six teams competing) by the contracts department. The departmental tug-of-war challenge cup passed from the existing holders—the service department—to the transport department, after a splendid pull lasting 6½ minutes. A cup presented to the club by Mr. H. C. Walker (the chairman of the company), to be held for one year by the winner of the greatest number of individual events, was awarded to Mr. G. R. Maryon. The distribution of the prizes by Mrs. C. Clarke (wife of one of the managing directors) was preceded by a presentation to Mr. C. H. J. Day (starter) of a silver cigarette box by the members, in appreciation of the active interest he had always taken in the affairs of the club. Mr. George Martin made the presentation.

Pollard & Co.'s Annual General Meeting.

The thirtieth annual general meeting of Messrs. E. Pollard & Co., Ltd., was held recently, at the company's offices, 8 John's-square, London, E.C.1, when the dividends on preference shares and 10 per cent. dividend on ordinary shares were passed carrying a large balance to reserve. The retiring directors were re-elected. The board regretted the loss of an old colleague and director, Mr. I. Thomson, who died recently.

During his remarks, the Chairman (Mr. E. Pollard) stated that the new branches at Manchester and Dublin were creating a large volume of new business, and it was essential to hasten on the building of the new factory with all possible speed. With regard to the Sundries Company, he was pleased to say that several new processes of manufacture had been allowed the company to compete with great success in foreign markets, and representatives were well established in India and the Far East, Australia, New Zealand, Africa, Canada, and South America. An expression of satisfaction from the shareholders and a vote of thanks to the Chairman concluded the proceedings.

Building Stoppage Said to be Possible.

The building trade operatives are being asked to take a ballot vote on a provision arrangement which would enable them to enjoy the current rate of wages throughout the country for the next twelve months. The understanding is that they should agree to the sliding scale arrangement for adjustments according to the cost of living. It is believed, however, that the operatives are declining to accept these terms because of influences outside their own Federation. The agitation is against the wishes of the Federation.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames			
up to London Bridge.		£ s. d.	
Best Stocks	.....	4	3 6
Second Hard Stocks	.....	3	18 6
Per 1,000, Delivered at London Goods Stations.			
Flemons, at	£ s. d.		
King's Cross	2 13 3	Best Blue	
Do. grooved for		Pressed Staffs	9 5 0
plaster	2 15 3	Do. Bullnose	9 15 0
Do. Bullnose	3 8 3	Blue Wire Cuts	7 5 0
Best Stourbridge Fire brick:—			
2 1/2 in.	8 11 0	3 in.	10 3 0
GLAZED BRICKS—			
Best White		D'ble Str'ch's	30 10 0
Ivory and		D'ble Headers	27 10 0
Salt Glazed		One Side and	
Stretchers	22 0 0	two Ends	31 10 0
Headers	21 10 0	Two Sides and	
Quoins		one End	32 10 0
nose and 4 in		Splays and	
Flats	28 10 0	Squints	30 0 0
Second Quality, £1 per 1,000 less than best. Cream			
and buff, £2 extra over white. Other colours, Hard			
Glaze, £5 10s. extra over white.			

BREEZE CONCRETE SLABS.

Delivered London			
2 in. per yd. super	s. d.	3 in. per yd. super	s. d.
2 1/2 in.	2 4	4 in.	2 9
			3 6

Thames Ballast	10 8	per yd.	
Pit Sand	13 9		
Thames Sand	14 6		
Best Washed Sand	14 6		
2 in. Shingle for Ferro-			
Concrete	12 9		
1 in.	14 0		
1 in. Broken Brick	11 6		
Pan Breeze	7 6		

Per ton delivered in London area in full van loads.

Best Portland Cement, British

Standard Specification. Test £2 18 0 to £3 3 6

51s. alongside at Vauxhall in 80-ton lots.

Ferrocete per ton extra on above.

Super Cement (Waterproof)..... 4 8 0

Roman Cement..... 8 15 0

Parian Cement..... 5 15 0

Keene's Cement, White..... 5 10 0

Plaster, Coarse, Pink..... 3 0 0

„ Fine..... 3 12 6

„ Coarse, White..... 3 9 0

Sirapite, Coarse..... 3 17 0

„ Finish..... 2 11 9

Grey Stone Lime..... 2 11 9

Chalk Lime..... 2 4 6

Best Ground Blue Lias Lime..... 17 0 0

Hair..... 1 12 0

Granite Chippings..... 1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited

1s. 6d. if returned in good condition within three

months, carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.

STONE.

BATH STONE—delivered in railway trucks at

Westbourne Park, Paddington, G.W.R., or

South Lambeth, G.W.R., per ft. cube..... 2 9 1/2

Do. do. delivered in railway trucks at Nine

Elms, L. & S.W.R., per ft. cube..... 2 11 1/2

PORTLAND STONE—

Brown Whitbed, in random blocks of 20 ft.

average, delivered in railway trucks at

Nine Elms, L. & S.W.R., South Lambeth

Station, G.W.R., and Westbourne Park,

Paddington, G.W.R., per ft. cube..... 4 4

Do. do. delivered on road wagons at above

stations, per ft. cube..... 4 5

White basebed, 3d. per ft. cube extra.

NOTE.—1d. per ft. cube extra for every foot over

20 ft. average, and 1d. beyond 30 ft.

HOPTON-WOOD STONE—

Delivered at any Goods Station, London.

Small random blocks, up to 10 ft. cube, P. ft. ch.

Random blocks from 10 ft. and over..... 17 0

Sawn two sides..... 27 0

Sawn three or four sides..... 32 0

YORK STONE, BLUE—Robin Hood Quality.

Delivered at any Goods Station, London.

6 in. sawn two sides landings to sizes (under

30 ft. super.)..... Per ft. super 5 6

6 in. rubbed two sides, ditto..... 6 0 0

3 in. sawn two sides slabs (random sizes)..... 2 3 1/2

2 in. to 2 1/2 in. sawn one side slabs (random

sizes)..... 1 6 1/2

1 1/2 in. to 2 in. ditto, ditto..... 1 4

HARD YORK—

Delivered at any Goods Station, London.

Scappled random blocks..... Per ft. cube 6 3

6 in. sawn two sides landing to sizes (under

40 ft. super.)..... Per ft. super 5 1 1/2

6 in. rubbed two sides ditto..... 6 1 1/2

4 in. sawn two sides slabs (random sizes)..... 2 10

3 in. ditto ditto..... 2 1 1/2

2 in. self-faced random flags .. Per yd. super 9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft.

cube.—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 x 11	23 0	3 x 6	23 0
4 x 9	26 0	3 x 11	23 0
4 x 8	26 0	2 x 11	23 0
4 x 7	25 0	3 x 9	25 0
4 x 6	24 0	2 x 9	25 0
3 x 7	23 0	3 x 4 1/2	23 0
2 x 7	22 0	3 x 4	23 0

PLANED BOARDS.

1 x 11	£32 0	1 x 9	30 0
--------	-------	-------	------

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
1 1/2	21	1 1/2	32 6
1 1/4	23	1 1/4	37 3
1 1/2	25		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.	Inches.	per sq.
1 1/2	25	1 1/2	16 6
1 1/4	32 6	1 1/4	20
1 1/2	37 6	1 1/2	25

BATTENS.

Inches.	s. d.
1 1/2 x 2	2 6 per 100 ft.

SAWN LATHS.

Per bundle	1" AND UP THICK.
	0 16 0 to 0 18 0

Dry Austrian Wainscot, per

ft. cube..... 0 16 0 to 0 18 0

Dry American and/or Jap-

anese Figured Oak, ft.

cube..... 0 15 0

Dry American and/or Jap-

anese Plain Oak, ft. cube

..... 0 11 0 to 0 13 0

Dry sq. edged Honduras

Mahogany, ft. cube.....

0 18 0 to 0 18 0

Dry Log cut Honduras

Mahogany, ft. cube.....

0 18 0 to 0 18 0

Dry Oak Mahogany, ft. cube

..... 0 13 0 to 0 15 0

Dry Teak, ft. cube.....

0 13 0 to 0 15 0

Dry American Whitewood,

ft. cube..... 0 11 0 to 0 14 0

Best Scotch glue, per cwt.....

4 10 0 to —

Liquid Glue, per cwt.....

4 7 0 to 5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage

paid in full truck loads to London Rate Station. Per

1,000 of 1,200.

24 by 12	£ s. d.	18 by 10	£ s. d.
37 12 6		21 2 6	

22 by 12	£ s. d.	18 by 9	£ s. d.
34 0 0		18 12 6	

22 by 11	£ s. d.	16 by 10	£ s. d.
31 5 0		17 12 6	

20 by 12	£ s. d.	16 by 8	£ s. d.
29 15 0		13 15 0	

20 by 10	£ s. d.		£ s. d.
25 12 6			

TILES.

Best machine-made tiles from Broseley or

Staffordshire district..... 5 12 6

Ditto hand-made ditto..... 5 17 6

Ornamental ditto..... 6 2 6

Hip and valley tiles (per dozen)

Hand-made..... 0 9 6

Machine-made..... 0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

R.S. Joists, cut and fitted..... £ s. d.

Plain Compound Girders..... 13 10 0

Stanchions..... 17 10 0

In Roof Work..... 20 10 0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
1/2 in.	16 10 0	2 in. to 2 1/2 in.	13 10 0

in.	14	10	0	1	1/8 in. to 2 1/8 in. ..	13	0	0
----------	----	----	---	---	-------------------------	----	---	---

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value

delivered direct from Works, 2 1/2 per cent. less above

gross discounts, carriage forward if sent from

London Stocks.)

Tubes.	Fittings.	Flanges.
Sizes	1" & Over	1" & Over

1" to 6"	under	1" to 6"	under	1" to 6"	under
Black Gas	55	47 1/2	50 1/2	57 1/2	60 1/2

Blue Water	50	42 1/2	45 1/2	52 1/2	55 1/2
------------	----	--------	--------	--------	--------

Red Steam	45	37 1/2	40 1/2	47 1/2	50 1/2
-----------	----	--------	--------	--------	--------

Galv'd Gas	40	37 1/2	40 1/2	47 1/2	50 1/2
------------	----	--------	--------	--------	--------

" Water	33 1/2	32 1/2	35 1/2	42 1/2	45 1/2
---------	--------	--------	--------	--------	--------

" Steam	27 1/2	27 1/2	30 1/2	37 1/2	40 1/2
---------	--------	--------	--------	--------	--------

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft.

Gutters.	Angles and	Stop
Ends.		

3 in.	1 1/2	1 1/2	3 1/2
-------	-------	-------	-------

3 1/2 in.	1 1/4	1 1/4	3 1/2
-----------	-------	-------	-------

4 in.	1 1/5	1 1/5	4 1/2
-------	-------	-------	-------

4 1/2 in.	1 1/6	1 1/6	4 1/2
-----------	-------	-------	-------

5 in.	1 1/8	1 1/8	5 1/2
-------	-------	-------	-------

O.G. GUTTERS.

3 in.	1 1/7	1 1/7	3 1/2
-------	-------	-------	-------

3 1/2 in.	1 1/7	1 1/7	3 1/2
-----------	-------	-------	-------

4 in.	1 1/10	1 1/10	4 1/2
-------	--------	--------	-------

4 1/2 in.	1 1/10	1 1/10	4 1/2
-----------	--------	--------	-------

5 in.	2 1/3	2 1/3	5 1/2
-------	-------	-------	-------

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.

Pipe.	Bends, stock	Branches,
Angles, stock angles.		

2 in. plain	1 1/9	1 1/9	1 1/2
-------------	-------	-------	-------

2 1/2 in.	1 1/11	1 1/11	2 0 1/2
-----------	--------	--------	---------

3 in.	2 1/4	2 1/4	2 6 1/2
-------	-------	-------	---------

3 1/2 in.	2 1/10	2 1/10	2 10 1/2
-----------	--------	--------	----------

4 in.	3 1/3	3 1/3	3 6 1/2
-------	-------	-------	---------

L.C.C. COATED SOIL PIPES—London Prices, ex Works.

Bends, stock Branches.

Pipe.	Angles, stock	Branches,
Angles, stock angles.		

2 in. per yd. in 6 fts. plain	2 11	2 3	2 9
-------------------------------	------	-----	-----

2 1/2 in.	3 5	2 6	3 5
-----------	-----	-----	-----

3 in.	4 1	2 9	4 0 1/2
-------	-----	-----	---------

3 1/2 in.	4 5 1/2	3 5	4 8 1/2
-----------	---------	-----	---------

PRICES CURRENT OF MATERIALS (contd.)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

Per Ft.	Per Pn.
15 oz. fourths .. 3 1/4 d.	32 oz. fourths 8 1/4 d.
15 " thirds 4 1/4 d.	32 " thirds 10 1/4 d.
21 " fourths .. 4 1/4 d.	Obscured Sheet, 25 oz. 4 1/4 d.
21 " thirds 5 1/4 d.	21 " 5 1/4 d.
26 " fourths .. 5 1/4 d.	Fluted 15oz. 6 1/4 d., 21oz. 9 1/4 d.
26 " thirds 7 1/4 d.	Enlaid 15oz. 5 1/4 d., 21 oz 7 1/4 d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

Per Ft.	Per Pn.
1/4 Rolled plate 4 1/4 d.	
1/4 Rough rolled 5 1/4 d.	
1/4 Rough rolled 5 1/4 d.	
Figured Rolled, Baltic, Oceanic, Arctic, Stip-polyte, and small and large Flemish white.. 6 1/4 d.	
Ditto, tinted 9d.	
Rolled Sheet 8d.	
White Rolled Cathedral 5 1/4 d.	
Tinted do. 7 1/4 d.	

Cast Plate is same price as rough rolled.

VARNISHES, &c.

Per gallon.	£ s. d.
Oak Varnish Outside	0 14 0
Fine ditto ditto	0 13 0
Fine Copal ditto	0 13 0
Pale Copal ditto	1 0 0
Pale Copal Carriage ditto	1 4 0
Best Ditto ditto	1 12 0
Floor Varnish Inside	0 13 0
Fine Pale Paper ditto	0 13 0
Fine Copal Cabinet ditto	1 2 6
Fine Copal Flattening ditto	1 0 6
Hard Drying Oak ditto	0 13 0
Fine Hard Drying Oak ditto	0 19 0
Fine Copal Varnish ditto	1 0 0
Pale ditto ditto	1 2 0
Best ditto ditto	1 12 0
Best Japan Gold Size ditto	0 12 6
Best Black Japan ditto	0 10 0
Oak and Mahogany Stain (water) ditto	0 12 0
Brunswick Black ditto	0 7 6
Berlin Black ditto	0 14 6
Knotting (patent) ditto	1 5 0
French and Brush Polish ditto	0 17 0
Liquid Dryers in Terebinte ditto	0 9 0
Cuirass Black Enamel ditto	0 7 0

TRADE NEWS

The Committee of the London Stock Exchange have now granted permission for the shares of Ewart & Son, Ltd., to be dealt in on the London Stock Exchange.

Mr. S. J. Pearson, publicity manager, William Shepherd & Sons, Ltd., road contractors, Milkstone, Rochdale, was amongst the speakers at the first British Advertising Convention, held recently at Harrogate, under the auspices of the Associated Advertising Clubs of the World (District 14). "Selling Constructional Materials" was the subject of Mr. Pearson's address.

Tangyes, Ltd.

Messrs. Tangyes, Ltd., of Birmingham, have issued a series of blotters illustrating some of their various manufactures. The firm, it may be noted, is exhibiting a number of specialties at the Royal Agricultural Show, Chester, at the Colliery and Mining Exhibition, Manchester, and at the Highland Show, Glasgow.

Monomarks.

A company has been formed with influential backing (Sir Sydney Skinner, chairman) to promote the Monomark System, which has been devised by Mr. William Morris, Chairman and Managing Director of Messrs. Wm. Morris & Co. (Westminster), Ltd. A Monomark is claimed to be the shortest officially recognised name and address in the world, and everyone can have one for 5s. a year. It is a symbol of from three to five characters, each one being absolutely unduplicated throughout the world. 25,000,000 different ones are available for Great Britain alone. They are easily written, telephoned or cabled. The following are typical Monomarks:—BM/EVO, BM/ADTA, BM/K2FXY.

Let us assume that a Monomark is applied for and the applicant is allotted BM/XOXI. Letters posted in any part of the world addressed to Monomark, "BM/XOXI, London," will reach unfailingly and without delay in whatever part of the country the owner of the mark lives. (The word "London" is added only to assist the Post Office.)

Arrangements have been made with the

G.P.O. whereby all letters received by them, from whatever part of the world, which are addressed by means of a British Monomark, shall be immediately handed over to British Monomarks, Ltd. At Monomark House these letters are not opened, but enclosed in new envelopes, re-addressed to the owner of the Monomark, re-stamped, and immediately returned to the Post Office for prompt dispatch.

All the uses of a Monomark have not yet been discovered, but some of them relate to lost property, stolen property, stolen motor-cars, laundry marks, cleaned and dyed articles, lost children, permanent address, telegraphic address, substitute for a box number, proving identity, concealing identity, and banking advantages. The present address of British Monomarks, Ltd., is 19, Abingdon-street, Westminster.

New Machines.

We have received from Messrs. A. Ransome & Co., Ltd., sawmill engineers and ironfounders, of Newark-on-Trent, copies of leaflets illustrating and describing two new machines of the latest and most up-to-date types, namely, the "plain band saw" and the "over and under planer." The plain band saw has the following special features:—(1) Both saw pulleys run on a combination of ball and roller bearings. (2) The top saw pulley is carried between two bearings and sustained on knife edges to form a very sensitive straining device, and further, the correct strain for any width of saw blade is clearly indicated on a graduated brass scale. This feature minimises broken saw blades, even if the saws used are of the narrowest widths. (3) The pressed steel disc saw pulleys cause practically no draught, thus increasing the comfort of the operator. (4) The table can be canted to any angle up to 45 degrees and locked securely by a lever and brought perfectly level again without the use of any tools. (5) The wide base enables the machine to be bolted down to an ordinary strengthened floor with the minimum of expense. (6) The machine is self-contained and can be driven from almost any direction.

The over and under planer has the following special features:—(1) All the four feed rollers are power driven. (2) The cutterblock runs in a combination of ball and roller bearings. (3) The heavy deep baseplate casting renders expensive foundations unnecessary, and keeps the machine rigid, reduces vibration, and enables better work to be done. (4) The power feed, or under, table is instantly clamped in position for any depth from 1-16th in. to 9 in. thick timbers, and is self-adjusting for taking up wear. (5) All gearing is totally enclosed and lubricated, and the feed is controlled by a single lever. (6) The fence is of specially rigid construction and needs no spanners to operate it. It can be moved across the full width of the machine, and is always square. It also cants to 45 degrees.

NEW BUILDINGS IN SCOTLAND

Salteoats.—SCHOOL.—The Dean of Guild Court has passed plans by the Ayrshire E.C. for the erection of a school for educating physically and mentally defective children. The new school will adjoin the Public School and will contain accommodation for 60 pupils, staff rooms, kitchen, and clinic for dental and ophthalmic work. The estimated cost of the building is £4,000.

Lennoxtown.—HOUSES.—After considering the report submitted in connection with the housing conditions in Lennoxtown, the Western D.C. of Stirlingshire agreed to erect 14 houses of the Weir type at Milton.

Roads "Up."

In response, doubtless, to the public outcry on the subject of the numerous roads and streets in London which are "up" and therefore closed or partially closed to traffic, the Ministry of Transport has issued a statement showing the streets in Central London on which works of road maintenance and improvement are either in progress or are to be commenced.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes accepted. † Denotes provisionally accepted. ‡ Denotes recommended for acceptance. § Denotes accepted subject to modifications.

ASHBY-DE-LA-ZOUCH.—Extensions to the hospital, for the Committee. Messrs. Pick, Everard, Keay & Gimson, architects, 6, Millstone-lane, Leicester. Quantities by J. T. Burt, of 6A, St. Martin's, Leicester:—

W. Moss & Sons, Loughborough	£5,825
W. Moss & Sons, Coalville	5,690
J. Chapman & Son, Leicester	5,551
Ford & Western, Derby	5,291
T. Lowe & Son, Ltd., Burton-on-Trent	4,999
Orton & Co., Coalville	4,975
T. Watton & Sons, Tamworth	4,967
Banks Bros., Ashby-de-la-Zouch	4,950
H. Martin & Son, Northampton	4,900
Griffin Bros., Ltd., Hugglescote	4,875
T. Orton & Son, Ashby-de-la-Zouch	4,775

AWBRIDGE.—Garden room and completing The Temple at the lake, Awbridge Danes. Mr. W. Conley Roles, Architect:—

	Garden Room.	The Temple.
G. Hurst & Sons	£289 0 0	£192 0 0
Goulding & Son	259 18 6	197 17 6
*F. W. Collins & Son	249 12 0	149 12 0

BALLINA.—Reconstruction of the ex-R.I.C. barracks, for the Commissioners of Public Works:—

*C. O'Malley, Westport.

BARNES.—Additions to Mortlake cemetery lodge, for the U.D.C.:—

*W. H. Pecover £697

BATLEY.—Four parlour type houses in Victoria-avenue, for the T.C. Mr. H. L. Hall, Borough Engineer:—

*Masons—G. Smith & A. Firth, Batley.
 *Joiners—Naylor & Wames, Bruntcliffe Morley.
 *Plumbers—Walshaw & Wood, Batley.
 *Slaters—J. Kellett, Morley.
 *Plasterers—J. Greenwood, Batley.
 *Painter—A. Greenwood, Batley.
 *Electricians—Hepworth & England, Batley.

BELFAST.—Extensions to the chancel and other buildings at St. Philip's Church, Grosvenor-road. Mr. W. C. Portel, Ecclesiastical Architect, 1, Howard-street:—

*Watson & Mackey, Belfast—	
First portion	£545
Second portion	1,000

BENFIELDSDALE.—For (a) Twenty houses at the Slonks, Shotley Bridge, and (b) thirty at Highgate, Blackhill, for the U.D.C. Mr. Thomas Knox, surveyor; quantities by the surveyor:—

	(A)	(B)
Rennoldson Bros., Dipton	£1,045 0 ..	£1,084 0 0
J. Westgarth, Blackhill	1,041 3 ..	1,054 8 9
Lough Bros., Consett	956 0 ..	988 0 0
R. Gallacher, Blackhill	980 0 ..	980 0 0
P. Duffy, Stanley	911 15 ..	926 15 0
*Ainsley Bros., Rowlands Gill	850 0 ..	889 0 0

BENTLEY.—Ninety-four houses on the Bentley Farm site, for the U.D.C.:—

*H. & L. Marshall, Bentley: £865 per pair (Subject to M.H. approval.)

BIGGLESWADE.—Additions to cemetery lodge for the Biggleswade Burial Board. Messrs. Cockrill & Selke, architects, Biggleswade:—

F. H. Bull & Son, St. Neots	£480
Seymour Bros., Stotfold	475
Styles & Son, Biggleswade	472
*L. Wright, Ltd., Langford	465

BIRMINGHAM.—Erection and painting of a steel superstructure, consisting of six steel-plate girders and pressed steel deck trough flooring, for the proposed new bridge over the Warwick and Birmingham Canal, Stockfield-road, South Yardley, for the T.C. Mr. H. H. Humphries, City Engineer and Surveyor:—

*A. Langley, Sparkhill.

BOSTON.—For (a) Pair of houses in Fosdyke, Bell-lane, and (b) pair in Pelham's Lands, North Fortyfoot Bank, for the R.D.C.:—

(a) ‡C. T. Pickering £804 per pair
 (b) ‡W. Dawson 820 per pair

BRADFORD.—Covering reservoirs at Gilstead, for the T.C.:—

*Sugden & Kirby, Bradford £6,995

BRADFORD.—Forty-four houses on the Swain House Estate, for the T.C.:—

†T. Obank & Sons, Ltd. £20,070

BROMLEY.—External decoration of the Valley Council School, for the E.C. Borough Engineer:—

W. H. Austen & Son	£250 10
H. Crossley	199 10
W. Hill	175 0
*Woodhams & Tyler	145 0

(All of Bromley.)

(Continued on page 166.)

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	s. d.
Add if in clay	" "	11 0
Add for every additional depth of 6 ft.	" "	1 0
Planking and strutting to trenches	per foot super	0 6
Do. to sides of excavation, including shoring	" "	0 5
	" "	1 0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	s. d.
Add if in underpinning in short lengths	" "	32 0
Add if in floors 6 in. thick	" "	7 0
Add if in beams	" "	3 3
Add if aggregate 1: 2: 4	" "	3 9
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	10 0
	" "	2 6

BRICKLAYER.

Reduced brickwork in lime mortar and Fletton bricks	per rod	£ s. d.
Add if in stocks	" "	30 0 0
Add if in Staffordshire blues	" "	7 10 0
Add if in Portland cement and sand	" "	22 0 0
	" "	1 10 0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0 0 1½
--	---------------	--------

POINTING.

Neat flat struck or weathered joint	" "	0 0 3
-------------------------------------	-----	-------

ARCHES.

Extra only to the price of ordinary brickwork:—		
Fair external in half brick rings	" "	0 0 10
Axed in stocks	" "	0 1 9
Rubbed and gauged jointed in putty camber or segmental	" "	0 6 0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0 1 0
Setting ordinary register grates and stoves	each	1 0 0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	" "	4 15 0

ASPHALTER.

Half-inch horizontal damp course	per yard sup.	s. d.
Three-quarter-inch vertical damp course	" "	4 3
¾ inch on flats in two thicknesses	" "	8 6
Angle fillet	per foot run	6 3
Skirting and fillet 6 in. high	" "	0 3
	" "	1 2

MASON.

York stone templates fixed	per foot cube	s. d.
York stone sills fixed	" "	13 0
Bath stone and all labour fixed	" "	22 0
Portland stone fixed	" "	10 6
	" "	20 0

SLATER.

Welsh 16 in. x 8 in. 3 in. lap, including nails	per square	s. d.
Do. 20 in. x 10 in. Do. Do.	" "	72 9
Do. 24 in. x 12 in. Do. Do.	" "	80 9
	" "	90 0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	s. d.
Do. joists	" "	5 0
Do. roofs, floors and partitions	" "	5 6
Do. trusses	" "	6 0
	" "	8 6

Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-
Flat centering for concrete floor, including struts or hangers	"				s. d. 50 0

FLOORING.

Deal-edges shot	per sq.	44/6	53/-	60/6
Do. tongued and grooved	" "	49/-	57/6	65/-
Do. matchings	" "	45/-	51/-	
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0
	" "	2/6		

SASHES AND FRAMES.

One-and-a-half moulded sashes or casements	per foot super	s. d.
Two Do. Do. Do.	" "	1 10
Add for fitting and fixing	" "	2 1
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	0 3
	" "	3 9

DOORS.

Two-panel square framed	per ft. sup.	1½"	1¾"	2"
Four-panel Do.	" "	2/1	2/4	2/6
Two-panel moulded both sides	" "	2/5	2/8	2/11
Four-panel Do.	" "	2/8	2/11	3/2
	" "	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

Deal wrot moulded and rebated	per foot cube	s. d.
	" "	14 0
Plain deal jamb linings framed	per ft. sup.	1' 1½" 1½"
Deal shelves and bearers	" "	1/7 1/8 1/11
Add if cross tongued	" "	1/4 1/6 1/9
	" "	2d. 2d. 2d.

STAIRCASES.

Deal treads and risers in and including rough brackets	2/1	2¼	2/9	2"	2½"
Deal strings wrot on both sides and framed	1/8	2/	2/2	2/8	—

Housings for steps and risers	each	s. d.
Deal balusters, 1 in. x 1½ in.	per ft. run.	0 11
Mahogany handrail; average 3 in. x 3 in.	" "	0 9
Add if ramped	" "	6 1
Add if wreathed	" "	11 10
	" "	23 9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting in to floor and	
Cupboard locks	1/5	making good	19/-

FOUNDER AND SMITH.

Rolled steel joists	per cwt.	s. d.
Plain compound girders	" "	16 3
Do. stanchions	" "	19 0
In roof work	" "	21 9
	" "	27 6

RAIN-WATER GOODS.

Half-round plain rebated joints	ft. run	1/6	1/9	2/-	2/6
Ogee Do. Do.	" "	1/9	2/-	2/6	3/3
Rain-water pipes with ears	" "	1/9	2/7		
Extra for shoes and bends	each	4/4	5/11		
Do. stopped ends	" "	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	" "	2/2	2/7	3/10	4/3

PLUMBER.

Milled lead and laying in flashings and gutters	per cwt.	s. d.
Do. Do. in flats	" "	60 0
Extra labour and solder in coated cesspools	each	59 0
Welt joint	per ft. run.	6 9
Soldered seam	" "	0 6
Copper nailing	" "	1 6
	" "	0 6

Drawn lead waste per ft. run	1½"	1¾"	1"	1½"	2"
Do. service	1/3	2/2	2/7	3/10	4/0
Do. soil	" "	" "	" "	" "	" "
Bends in lead pipe	each			3/3	8/2
Soldered stop ends	" "	1/2	1/8	2/1	2/10
Red lead joints	" "	11d.	1/-	1/3	1/11
Wiped soldered joints	" "	2/10	3/6	4/-	4/11
Lead traps and cleaning screws	" "				6/6
Bib cocks and joints	" "	6/4	9/7	15/4	14/7
Stop cocks and joints	" "	15/4	17/2	25/8	19/6
	" "				41/-
	" "				64/-

PLASTERER.

Render, float and set in lime and hair	per yard sup.	s. d.
Do. Do. Sirapite	" "	2 4
Do. Do. Keen's	" "	2 7
Add sawn lathing	" "	3 7
Add metal lathing	" "	1 7
Portland cement screed	" "	2 6
Do. plain face	" "	2 2
Mouldings in plaster	per l girth	3 3
One-and-a-half granolithic pavings	per yard sup.	0 1½
	" "	6 9

GLAZIER.

21 oz. sheet plain	per foot sup.	0 8½
26 oz. Do.	" "	1 0
Obscured sheet	" "	1
½ in. rolled plate	" "	0 9
½ in. rough rolled or cast plate	" "	0 10½
½ in. wired cast plate	" "	1 4

PAINTER.

Preparing and distempering, 2 coats	per yard sup.	0 9
Knotting and priming	" "	0 7
Plain painting 1 coat	" "	0 9
Do. 2 coats	" "	1 2
Do. 3 coats	" "	1 9
Do. 4 coats	" "	2 4
Graining	" "	2 3
Varnishing twice	" "	1 9
Sizing	" "	0 3
Flattening	" "	0 7
Enamel	" "	1 1
Wax polishing	per foot sup.	0 6
French polishing	" "	1 2
Preparing for and hanging paper	per piece 2/-	

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The above of the information given on this page is copyright. Prices include both materials and labour.

BURY ST. EDMUNDS.—Eight blocks of semi-detached houses on the Beet Sugar Factory-road site, for the T.C. Mr. R. H. Beaumont, Borough Surveyor:—

H. F. Sewell, Bury St. Edmunds.... £9,984
*A. Plummer, Bury St. Edmunds.... 9,447

CANTON.—Completion of the Secondary School Laboratory, for the Cardiff Corporation:—

*J. Stephens, Cardiff £9,419 2 6

CARNOUSTIE.—War memorial, for the Committee-Messrs. Bruce, Son & Morton, architects, 10, Whitehall street, Dundee:—

Charles Dick, Monifieth £1,620 0 0
Tulloch & Strachan, Bell-street, Dundee 1,360 13 1
*J. B. Hay & Co., Tay-street, Dundee 1,360 0 0

CLOWN.—Twenty-six houses at Elmtown-with-Creswell, for the R.D.C. Mr. J. Haslam, architect and surveyor, Ryton Chambers, Bridge-street, Workop:—

*J. S. Walker, Bolsover .. £432 10 per house
(Subject to the approval of the M.H.)

CROYDON.—Carrying out certain works of internal cleaning, painting and distemping to twenty-nine cottages on the Beddington Sewage Farm, for the C.B.:—

†Burnand & Pickett, Wallington £334 16

CROYDON.—Sub-station in Wellesley-road, for the C.B.:—

†Truett & Steel, Ltd. £460

CROYDON.—Extension of the heating system to "K" block, at the Hospital, for the C.B.:—

†Fretwell Heating Co. (fitter's work) £284 18 2
†R. Mansell (builder's work) 170 12 1

CROYDON.—Certain works of painting, at the Borough Hospital, for the C.B.:—

†A. Steavenson, Croydon £396 7 4

DAGENHAM.—Shop and house for Mrs. A. L. Jennings, Parrish Estate, Dagenham. Mr. E. Meredith A.R.I.B.A., architect, 7, Goodmayes-road, Goodmayes Essex:—

H. J. Gower, Ltd., Cheapside £1,980
Baker, Hammond & Laver, Ltd., Rainham 1,187
*J. Eaton & Sons, Chelmsford 1,122

DERREENDARRAGH.—Restoration of the National School, for the Commissioners of Public Works:—

*J. J. O'Sullivan, Lettermoniel, Tahilla, Kenmare.

DUBLIN.—Reinforcing the concrete foundations for the new houses at Keogh Barracks, for the City Commissioners:—

*Glasgow Expanded Metal Co. £1,186

DUBLIN.—Adaptation of McKee barracks, for the Commissioners of Public Works:—

*C. Jones & Sons, Ltd., Dublin.

DUBLIN.—Reconstruction of front block of the General Post Office, for the Commissioners of Public Works:—

*A. Hull & Co., Ringsend.

DURHAM.—Alterations to heating apparatus at the Girls' County School, for the C.C. Mr. F. Willey, F.R.I.B.A., architect, 34, Old Elvet:—

†R. Southren, Dipton £169 2 6

DURHAM.—Alterations to heating apparatus at the Girls' County School, for the C.C. Mr. F. Willey, F.R.I.B.A., architect, 34, Old Elvet:—

†R. T. Vaux & Son, Sunderland .. £369 16 6

DURHAM.—Repairs to roofs at the Durham Girls' County School, for the C.C. Mr. F. Willey, F.R.I.B.A., architect, 34, Old Elvet:—

†R. Southren, Dipton £494 12

EAST HAM.—Heating of the workshops at Arragon Depot, for the B.C.:—

*Fretwell Heating Co. £224 5

EAST HAM.—Secondary school on the White House site, Plasket-grove, for the B.C.:—

*H. C. Horswill £38,900

EDINBURGH.—Painting work at George Heriot's School, for the Heriot-Watt College and the Trustees, for the George Heriot's Trust, Ltd. Mr. John Anderson, F.S.I., architect and surveyor:— quantities by Mr. John Anderson:—

*A. Hutton & Son, Edinburgh £512 13 3

FARNBOROUGH.—Alterations to the town hall, for the U.D.C.:—

*C. Morgan & Son £219

GALWAY.—Restoration of Garda Síochána station, Eglington-street, for the Commissioners of Public Works:—

*P. Dooley, Galway.

GALWAY.—Repairs and alterations at the Central Hospital, for the Committee:—

W. O'Flaherty, Galway £1,829
*P. Pooley, Galway 1,725

GILDERSOME.—Ten non-parlour type houses on the Vicarage site, for the U.D.C. Mr. W. Wilby, surveyor:—

*Builders—Geo. Holdsworth & Son, Gildersome £2,331 18 0
*Joiners—Naylor & Warnes, Bruntcliffe 1,136 5 0
*Plumber—F. Hardy, Morley 492 10 6
*Slaters—Geo. Rogerson, Ltd., Morley 275 0 0
*Plasterers—Geo. Crossley & Son, Birstall 337 0 0
*Painter—J. Barrass, Gildersome 105 0 0

GREAT MUNDEN.—Construction of bridge over the ford, for the Herts C.C.:—

G. Handy £545 2
E. J. Marshall 474 10
*C. Chapman 461 0

GUISELEY.—Eighteen houses on the Kelcliffe-lane site, for the U.D.C. Mr. J. Battye, surveyor:—

Type "A," for ten houses. Each.
A. Hustwit, 133, Stafford-street, Leeds £600 0 0
W. J. & R. Turnbull, Dewsbury-road, Leeds 540 0 0
Chas. L. Walsh, Vancouver Works, Guiseley 515 0 0
Raine, Hallatt & Co., Albemarle Back-road, Scarborough .. 512 7 6
A. Dickinson & Son, Idle, Bradford 500 0 0
Wood Bros. (Leeds), Ltd., Had-don-place, Leeds 489 0 0
*Ed. Walsh & Son, Guiseley 477 4 6
Type "B," for eight houses. Each.
W. J. & R. Turnbull, as above .. 420 0 0
Ed. Walsh & Son, as above 418 0 0
*Chas. L. Walsh, as above 409 3 4

HARPENDEN.—Public convenience on the Common, at the junction of the High-street and Station-road, for the U.D.C. Mr. W. H. Johnson, surveyor:—

C. W. Dumbleton, St. Albans .. £1,338 9 6
C. Miskin & Son, St. Albans 1,276 0 0
J. Dennis, St. Albans 1,199 0 0
A. Harris & Son, Harpenden 1,175 0 0
Winter & Ward, Harpenden 1,170 0 0
J. Tomkins & Sons, Luton 1,138 0 0
E. C. Jarvis, Harpenden 1,098 0 0
*H. & R. Hall, Harpenden 1,052 0 0

HAVERCROFT.—Hotel, for Messrs. Beverley Bros., of Eagle Brewery, Wakefield. Messrs. Bessie & Holdsworth, architects, Wood-street, Wakefield:—

*Builders—Furness & Render, Wakefield.
*Joiners—R. Broadhead & Son, Wakefield.
*Slater—J. W. Illingworth, Wakefield.
*Plumber—J. Woodhead, Wakefield.
*Plasterers—Newton & Barnes.
*Painters—C. Turner & Son.

HEADCORN (KENT).—Proposed bungalow at Wick Hill, for Mr. H. M. Grover. Mr. A. H. Burtenshaw, architect, Tenterden:—

W. Elliott & Son, Tenterden £800 0 0
R. Weeks & Son, Tenterden 752 10 0
*Barden & Head, Maidstone 730 0 0

HERTFORD.—Repairs and decorations at residential school, for Herts E.C.:—

*Shephard & Co., Hertford £555 17

HERTFORDSHIRE.—Widening Great North Road, between Welwyn and Hatfield, for the C.C.:—

*J. Byrom & Co. £78,707 8

HERTFORDSHIRE.—Police cottages, for the Herts C.C.:—

*Hitchin (4), F. Newton, Hitchin... £2,706 0
*Watford (2), A. J. Eldred, Watford 1,664 0
*Great Berkhamstead (2), W. Harrowell & Sons, Berkhamstead .. 1,545 0
*Markyate (2), H. S. Grey, Harpenden 1,485 0
*Royston (2), Bedwell & Hale, Royston 1,189 10
*Tring (1), Humphrey Bros., Great Missenden 840 0
*Northchurch (1), W. Harrowell & Sons, Berkhamstead 795 0
*Adeyfield, Hemel Hempstead (1), W. Durant Wells, Piccotts End 843 0
*Leverstock Green (1), W. Durant Wells, Piccotts End 851 0
*Pirton (1), F. Newton, Hitchin 873 0
*Weston (1), Raban & Son, Baldock 830 0
*Sandon (1), F. Bailey & Co., Ashwell 860 0
*Standon (1), C. Chapman, Standon 838 0
*Watton (1), Hitch & Co., Ware 820 0
*Hunsdon (1), Hitch & Co., Ware .. 865 0

HORSFORTH.—Church, for the Roman Catholics of St. Mary's, in Broadgate-lane:—

*Mason work—W. Farnish & Sons.

ILFORD.—Repainting superintendent's house and painting railings at cemetery, for City of London Corporation:—

Vigor & Co. (Poplar), Ltd. £704 0
†Falkus Bros., Ltd. 599 8

KETTERING.—Boiler foundations, setting, &c., for the U.D.C.:—

*Poulton & Co. £2,865

KINGSWINFORD.—Fifty houses at Bromley, for the R.D.C.:—

*Successors of John Guest & Sons, Amblecote £22,342

LEEDS.—Repairs to the hot-water systems in Ward K5, at the Killingbeck Sanatorium, for the T.C.:—

*W. Miller, Leeds £182 12

LEEDS.—Reconstruction of premises in York-place, for Messrs. Benways, Ltd. Messrs. A. & F. Mosley, architects, Leeds:—

*C. Higgins

LEEDS.—Structural alterations at Royal Buildings, Lower Brigade, for Direct Woollen Supply, Ltd.:—

*C. Higgins.

LEITRIM.—Repairs to Mullinaleek and Bradogue Bridges, at the boundary of Leitrim and Donegal, for the C.C.:—

*M. Loughlin £290

LEXDEN AND WINSTREE.—Cottages with fencing and paths, for the R.D.C.:—

	Langenhoe	Messing	Stanway	Wakes
	four	six	six	Colne
	cottages.	cottages.	cottages.	six
	£ s.	£ s.	£ s.	£ s.
C. Deaves, Bures	1,575 0	*2,268 0	*2,377 0	*2,304 0
C. M. White, West Mersea	1,639 0	2,513 14	2,490 15	2,531 17
F. Hutton & Son, Birch.	—	—	2,873 0	—
J. W. Trudgett, Colchester	2,087 0	2,970 0	3,073 0	—
Scrutton & Sons, Marks Tey	*1,545 0	—	—	—
E. Downes & Son, Ardleigh	—	—	2,350 0	2,320 0

LEXDEN AND WINSTREE.—Cottages, for the R.D.C. Mr. E. Fincham, A.R.I.B.A., architect, Marks Tey, Colchester:—

	Aldham	Chappel	Gt. Tey (1)	Gt. Tey (2)
	four	six	four	four
	£	£	£	£
C. Deaves, Bures	1,509 ..	*2,455 ..	1,545 ..	1,540 ..
A. French, Marks Tey	1,535 ..	—	*1,493 ..	*1,485 ..
C. M. White, West Mersea	—	2,736 ..	—	—
J. W. Trudgett, Colchester	2,035 ..	3,196 ..	2,025 ..	2,030 ..
Scrutton & Sons, Marks Tey	1,545 ..	—	—	1,575 ..
E. Downes & Son, Ardleigh	*1,475 ..	2,530 ..	1,700 ..	1,700 ..

LINCOLN.—Usher Art Gallery, for the T.C. Sir Reginald Blomfield, R.A., architect:—

*Wm. Wright & Sons (Lincoln), Ltd., Lincoln £38,000

LONDON.—Interior decorations to 110 houses and flats on the Portobello and Holderness estates, for the Lambeth B.C.:—

*T. Singfield & Sons, London.

LONDON.—For provision of low-pressure hot-water heating apparatus at five elementary schools, for the L.C.C.:—

Cobourne-road (Camberwell N.):
J. T. Meredith & Co., Ltd. £2,760
Wm. Freer 2,386
Brightside Foundry & Engineering Co., Ltd. 2,377
Barrett & Wright, Ltd. 2,280
J. & F. May 2,250
J. Jeffreys & Co., Ltd. 2,245
Thames Bank (Blackfriars) Iron Co., Ltd. 2,225
W. G. Cannon & Sons, Ltd. 2,195
Clark, Hunt & Co., Ltd. 2,175
Wembley Heating Co., Ltd. 2,170
*Fretwell Heating Co. 2,094

The architect's comparable estimate is £2,200.

Compton-street (Finsbury)
Davis, Bennett & Co. £1,732
Palowkar & Sons 1,681
E. Deane & Beal, Ltd. 1,495
Buckleys (London), Ltd. 1,410
*Colley, Meikle & Co., Ltd. 1,323

The architect's comparable estimate is £1,509.

The Medburn (St. Pancras, S.E.):
W. G. Cannon & Sons, Ltd. £2,900
J. & F. May 2,810
Palowkar & Sons 2,742
Central Heating, Ltd. 2,487
Comyn, Ching & Co., Ltd. 2,295
Fretwell Heating Co. 2,280
*Clark, Hunt & Co., Ltd. 2,231
Buckleys (London), Ltd. 1,899

The architect's comparable estimate is £2,317.

ckham-lane (Woolwich, E.):

J. & F. May	£1,470
S. W. Gibson & Co. (Dartford), Ltd. . .	1,345
J. T. Meredith & Co., Ltd.	1,285
Wembley Heating Co., Ltd.	1,284
Barrett & Wright, Ltd.	1,280
W. G. Cannon & Sons, Ltd.	1,279
Thames Bank (Blackfriars) Iron Co., Ltd.	1,257
Brightside Foundry & Engineering Co., Ltd.	1,245
Heywood & Bvett	1,225
Clark, Hunt & Co., Ltd.	1,192
*Fretwell Heating Co.	1,157
The architect's comparable estimate is £1,250.	

x's-lane (Battersea, S.):

Barrett & Wright, Ltd.	£2,296
Thames Bank (Blackfriars) Iron Co., Ltd.	2,231
B. Finch & Co., Ltd.	2,228
J. Jeffreys & Co., Ltd.	2,218
Brightside Foundry & Engineering Co., Ltd.	2,198
Fretwell Heating Co.	2,181
Clerk, Hunt & Co., Ltd.	2,180
J. & F. May	2,179
G. Davis	2,176
W. G. Cannon & Sons, Ltd.	2,133
Beaven & Sons, Ltd.	2,087
*H. J. Cash & Co., Ltd.	2,028
The architect's comparable estimate is £2,000.	
(All of London.)	

LONDON.—Painting work in the south-east district, the L.C.C.:-

J. Scott Fenn	£1,595	0	0
H. Groves & Son	1,560	0	0
W. J. Dixon & Son	1,465	8	1
R. Harding & Son	1,002	16	0
N. Harris & Sons	995	0	0
*C. & R. Harcurry	811	5	5
(All of London.)			

LONDON.—Iron railings and gates at Tabard-lens, for the L.C.C.:-

Bromsgrove Guild, Ltd., Worcester-shire	£1,075	0	0
Hill & Smith, Ltd., Brierley-hill, Staffs.	738	4	6
Wm. Hayward & Sons, Ltd., Wolverhampton	652	0	0
Wm. H. Allen, London	624	0	0
Bayliss, Jones & Bayliss, Ltd., London	598	10	0
T. Blackburn & Sons, Ltd., Preston	447	12	8
*T. W. Palmer & Co., London	410	0	0

LONDON.—Painting in the north-west district, the L.C.C.:-

Marchant, Hirst & Co.	£958
Stevens & Sons	894
A. & F. Polden, Ltd.	870
E. B. Holmes & Co., Ltd.	725
*Roy Gibson	658
(All of London.)	

LONDON.—Dwarf walls, railings and gates in hard-gardens, for the L.C.C.:-

Wm. Akers & Co., Ltd.	£2,383
Harry Groves & Son	1,898
W. J. Dixon & Son	1,869
John Garrett & Son	1,780
J. E. Billings & Co., Ltd.	1,666
Rowley Bros., Ltd.	1,562
(All of London.)	

LONDON.—Painting in the north-east district, for the L.C.C.:-

Whitby's, Ltd.	£1,315	0	0
E. B. Holmes & Co., Ltd.	1,113	0	0
Roy Gibson	924	0	0
Barrett & Somer	849	7	6
W. Simms	770	4	1
G. Butters	751	12	11
(All of London.)			

LONDON.—Shelter and mess room at the depot, the Islington B.C.:-

Geo. S. Stevens, 219, Isledon-road, N. 7	£399	12	4
Stevens & Sons, Crouch Hill, N. 4	377	1	9
A. C. Mackinlay, 12, Fortnam-road, N. 19	349	7	2½
Randall & Sons, 467, Holloway-road, N. 7	348	0	0
W. H. Wagstaff & Sons, 9, Bartlett-buildings, E.C. 4	340	0	0
Leonard Lown & Co., Crayford-road, N. 7	306	14	1
Jos. Johnson, 49, Halton-road, N. 1	300	0	0
H. J. Goodman, 40, Mercers-road, N. 19	294	4	2
John C. Mather, 38, Northampton-street, N. 1	292	0	0

LONDON.—Painting schools, for the Hackney B.C.:-

E. Setchell	£798	16	6
W. Silk & Son, Ltd.	649	14	0
W. M. Brand	596	0	0
W. H. & T. Kelland	476	0	0
C. Plumley	471	16	9
G. Stoddart & Sons	467	0	0
(All of London.)			

LONDON.—Painting non-provided schools, for the L.C.C.:-

St. Joseph's R.C. (Rotherhithe) :	£775	0	0
*T. Rutter & Son	716	0	0
St. Thomas' R.C. (Fulham, W.) :	659	0	0
*J. W. Kidney	659	0	0
St. Peter's Italian (Holborn) :	659	0	0
*W. Mills & Sons	659	0	0
St. Clement's C.E. (Kensington, N.) :	510	0	0
Christ Church (Kennington) :	548	10	0
*W. A. King & Sons	548	10	0
St. Stephen's C.E. (Kennington) :	598	0	0
*John Greenwood, Ltd.	598	0	0
St. Gabriel's (Bow and Bromley) :	511	0	0
*Harris & Wardrop	511	0	0
Westminster Jews' Free (St. Pancras, S.W.) :	545	2	0
*J. Kinnimont & Sons	545	2	0
St. Luke's C.E. (Limehouse) :	727	0	0
*Turnbull & Son	727	0	0
The Redcoat (Mile End) :	737	10	1
*W. Stuttle & Son	737	10	1
Jews' Free (Whitechapel and St. George's) :	6,580	0	0
*C. Taverner & Son	6,580	0	0
St. Martin's-in-the-Fields (Abbey, Westminster) :	564	0	0
*Sabey & Son	564	0	0
St. Martin's Northern (Abbey, Westminster) :	585	10	0
*J. H. & W. Heal	585	10	0
Woolwich C.E. (Woolwich, W.) :	722	9	6
*Edwards Construction Co., Ltd.	722	9	6
(All of London.)			

LONDON.—Alterations and re-decoration of 28, Lower Clapton-road, for the purposes of a Maternity and Child Welfare Centre, for the Hackney B.C.:-

*E. Setchell, London	£785
--------------------------------	------

LONDON.—Alterations and additions at the Electricity Station, for the Islington B.C.:-

†G. Bennett & Son, London	£1,375
-------------------------------------	--------

LOWER GREEN.—Repairs to farm buildings, for the Herts Agricultural Committee:-

†C. Pole, Hertford	£427	2
------------------------------	------	---

MAAM.—Restoration of the ex-R.I.C. barracks, for the Commissioners of Public Works:-

*P. Burke, Ballinderreen, Killoigan, co. Galway	
---	--

MANCHESTER.—Modernisation of St. Alban's R.C. Schools. Messrs. Sandy & Norris, architects, 9, Albert-square:-

*Thomas & Jones, Ltd., Rusholme	
---	--

MANCHESTER.—First section of a new gasworks to be erected at Partington, for the Corporation:-

†Drakes, Ltd., Ovenden, Halifax	£130,000
---	----------

MORLEY.—Forty-two houses on the Middleton-road site, for the T.C. Mr. F. Turner, Borough Surveyor:-

*Brickwork and Joiners—J. Clegg & Sons, Morley	
*Plumbing—Morley Builders' Association	

NEWTON-LE-WILLOWS.—Vicarage for St. Peter's Church, for the Rev. F. Stone. Mr. E. J. Dod, A.R.I.B.A., architect, Cunard Buildings, Liverpool:-

*J. Johnson & Sons, Wigan	
-------------------------------------	--

PLYMOUTH.—Installation of electric lights in certain schools, for the E.C.:-

Heath & Co.	
Graver, Cousins & Co.	
Ashfold & Co.	
Brewer & Phillips	
(All of Plymouth.)	

PONTEFRACT.—For (a) 34 non-parlour, and (b) 22 parlour type houses on the Love-lane site, for the B.C. Plans by Mr. H. Newton, Borough Surveyor:-

(A)	
*Builders—Barber & Heselting	
*Carpenter—C. L. Jackson	
*Slaters—Stewart Bros. & Son	
*Plasterer—J. Shaw	
*Painters—T. Burton & Son	
*Plumbers—W. Pearson & Sons	
(All of Pontefract.)	
(B)	
*Builder—G. Ward	
*Carpenters—Fox & Jackson	
*Slaters—G. Spuir & Sons	
*Painters—Bargains & Buckley	
*Plasterers—T. W. Senior & Sons	
*Plumber—R. Leng	
(All of Pontefract.)	

PORTSMOUTH.—Two shelters at Southsea Esplanade, for the T.C.:-

*Slaters—G. Spuir & Sons.	
*Painters—Bargains & Buckley.	
*Plasterers—T. W. Senior & Sons.	
*Plumber—R. Leng.	
(All of Pontefract.)	

PORTSMOUTH.—Two shelters at Southsea Esplanade, for the T.C. :—

	Each.
†W. McFarlane & Co.	£640 10
David Rowell & Co., Ltd.	582 0
The Lion Foundry Co.	522 0
W. A. Baker & Co.	456 0
Gardner, Son & Co.	408 10

PORTSMOUTH.—Steel work for tramways sub-station in Vivart-road, for the T.C.:-

John Lysaght, Ltd.	£395	0
W. H. Sperring & Co., Ltd.	373	0
Redpath, Brown & Co., Ltd.	320	0
McKinlay & Co., Ltd.	290	0
Sir Wm. Arrol & Co. (Swansea), Ltd.	250	0
*H. & W. Davis, Ltd.	234	6

READING.—Fifty-nine houses in Oxford-road, for the T.C.:-

*A. A. Moynihan's	£28,747
-----------------------------	---------

RETTFORD.—Extensions to the Grammar School, for the Governors:-

*A. Richmond & Sons, Retford	£8,300	1	4
--	--------	---	---

RICHMOND (SURREY).—Painting and decorating work at the Guardians' Offices and Receiving Home in Parkshot, for the B.G. Messrs. Brewer, Smith & Brewer, architects, 11, The Green, Richmond:-

*Speechley & Smith, Richmond	
--	--

RICHMOND (YORKS).—Thirty-two houses, for the T.C.:-

*J. F. Bainbridge, Redcar	£16,680
(Subject to M.H. approval.)	

ROYTON.—Extensions and addition to Park Mill No. 2, for the Directors of Park Mill, Ltd. Mr. A. Turner, architect, Oldham:-

*S. & J. Smethurst, Ltd., Oldham	
--	--

SALFORD.—Concrete foundations for an electric high tension switch-gear and transformer, and building up partition walls in the boiler-house at Frederick-road Power Station, for the C.B. Mr. S. J. Watson, Borough Electrical Engineer, Salford:-

*E. B. Jones & Rawlinson, Ltd., Salford	£1,689	13	10
---	--------	----	----

SANDBACH.—Reservoir, for the U.D.C.:-

*Messrs. Hazel, Manchester	£2,856
--------------------------------------	--------

SHEFFIELD.—Extension of ropeway at generating station, for T.C.:-

*R. White & Sons	£2,145
----------------------------	--------

SHEFFIELD.—Transformer sub-station in Benty-lane, Crosspool, for the T.C. Engineer, City of Sheffield Electric Supply Dept., Commercial-street. Quantities by the General Manager, Electric Supply Dept.:-

*H. C. Hornbuckle, Sheffield	£1,003	3
--	--------	---

SKETTY.—Public convenience at Eversley-road, for the Swansea C.B. Mr. J. R. Heath, Borough Engineer and Surveyor:-

*A. L. Mansell, Sketty	£995
----------------------------------	------

SLEAFORD.—Extensions to the electricity works, for the U.D.C.:-

*Banks & Sons, Sleaford	£849
-----------------------------------	------

SPENBOROUGH.—Public abattoir, for the U.D.C.:-

*Masons—J. Horkin & Son	
*Joiner—A. Elsworth	
*Painting—U.D. Council own Department	
*Slater—W. Drake	
*Ironfounder—B. Tordoff	
*Electricians—Butler & Horn	
*Hot Water Installation—The Milan Hydro Works	
*Plumber—A. Jackson	

SPENBOROUGH.—Electrical installation work at 60 houses, for the U.D.C.:-

*Stead & Firth, Cleckheaton	
---------------------------------------	--

STOCKTON.—120 houses on the Blue Hall estate, for the T.C.:-

*H. M. Nowell	
-------------------------	--

STRETFORD.—Conservative Club, for the Committee, Mr. S. W. Growcock, architect:-

*Smith & Briggs, Ltd., Old Trafford	
---	--

SURBITON.—Alterations, additions and redecoration to Rex House, St. Andrew's-square, for Mr. F. W. Barnes. Mr. R. Lane Pearce, architect, 119, Victoria-street, S.W.1:-

Vergine & Hansard, Surbiton	£697	0
F. D. Hidden & Co., Ltd., Brentford	675	15
H. H. Mitchell, Surbiton	654	0
*E. Stevens, Thames Ditton	456	3

SWAFFHAM.—Twelve non-parlour type houses at Spore-road, for the U.D.C. Mr. Owen Williams Parry, Surveyor. Quantities by Surveyor:-

*W. Peeke-Vout & Son, Watton	£5,060
--	--------

SWANSEA.—Painting interior of schools, for the C.B.:-

*Brynmill Council School : Lee & Thomas	£295
*Pentrepeth Council School : A. T. Clarke	376
*Terrace-road Council School : A. E. Radford	378
*St. Helen's Council School : F. Morgan	315
*Sketty Council School : Pugsley & Son, Ltd.	184

SWANSEA.—Twenty-two houses on the Llanerch housing site, for the C.B.:-

*Samuel & Evans	£11,387	10	10
---------------------------	---------	----	----

TAUNTON.—Forty houses on the Wellington-road site, for the T.C.:-

*Spiller & Browne, Taunton	£443	7	each
--------------------------------------	------	---	------

TORQUAY.—Construction of the Gaze Hill reservoir, for the C.B.:-

*Heath Bros., Bovey Tracey	£3,452	14	7
--------------------------------------	--------	----	---

TORQUAY.—New roof and alterations at the fire station, for the T.C.:-

*A. E. Brock	£400
------------------------	------

TORQUAY.—Improvements at Babbacombe conveniences, for the T.C.:—

*E. P. Bovey & Son £164 10

WAKEFIELD.—Bandstand in Clarence Park, for T.C.:—

*G. Crook & Sons, Ltd. £1,514

WALSALL.—Ten non-parlour type houses on the Coal Pool site, for the T.C.:—

*G. Insley, Ltd. £3,950
(Subject to M.H. approval.)

WHITLEY AND MONKSEATON.—Pair of cottages at the Council's cemetery, for the U.D.C. Mr. W. H. Wood, F.R.I.B.A., architect, Newcastle:—

*Bird & Newton, Monkseaton £1,200



PARQUET & WOOD-BLOCK
FLOORING supplied and fixed in any locality.
Post, or Phone (Park 1885), Particulars of requirements to
TURPIN'S PARQUET FLOORING CO.,
25, NOTTING HILL GATE,
LONDON, W.11
ESTD. 1866

FITZPATRICK & SON

Masons and Paviers,

455, OLD FORD ROAD, BOW, E.3

Phone: EAST 4808.

Granite Setts and Kerb (redressed and second-hand), York Paving Spur Stones, Granite Chippings, and Granolithic and Sett Paving.

J. GLIKSTEN & SON

LIMITED

Specialities in

SEASONED

HARDWOODS

MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.

REGISTERED OFFICE AND WHARF

CARPENTERS RD.
STRATFORD
LONDON E.15

Telephone:
EAST 3771
(5 lines)

Telegrams
GLIKSTEN 'PHONE
LONDON

WHITSTABLE.—Public convenience, slipper baths and shelter at Horsebridge-road, for the U.D.C. Mr. J. Dunn, Surveyor and Water Engineer:—

†J. Kemp, Builder, Whitstable £2,985

WIGAN.—Renovations to New Church Rectory, for the Rector. Mr. E. J. Dod, A.R.I.B.A., architect, Cunard Buildings, Liverpool:—

*J. Johnson & Sons, Wigan £442

WILLINGTON.—Additional classroom, heating chamber, latrines, &c., at the Infants' Council School, for the Durham C.C. Mr. F. Willey, F.R.I.B.A., architect, 34, Old Elvet, Durham:—

†Walton Bros., Crook £1,683

WOKING.—For (a) Fifty-two houses on the Westfield site, and (b) six pairs of cottages at Knaphill, eight pairs of cottages and two pairs of flats at Kirby-road and Knaphill, for the U.D.C.:—

†Mr. Jones, Woking £25,237
†Triangular Construction Co., Molesey 17,110

WOLVERHAMPTON.—For fencing various lands as follows, for the T.C.: Merridale-road, Red Hill-street, Coleman-street, Pond-lane, Willenhall-road:—

*T. Bowen £1,403 5 10

WOLVERHAMPTON.—Thirty-six non-parlour type houses on the Willenhall-road housing estate, for the C.B.:—

C. Type. A. Type.
*A. M. Griffiths, Wolverhampton £373 .. £403

YORK.—New premises for Messrs. Marks & Spencer, Ltd.:—

*Wm. Birch & Sons, Ltd.

Building Surveyors' Association.

The fourth annual general meeting of the above Association was held at the Town Hall, Stoke-on-Trent, on Saturday, July 4. The routine business included a report on the applications of six new members, who were recommended for approval, this bringing the total number of new members for the past year to twenty-four. The subject of certificates was discussed at length, and it was ultimately decided to appoint a sub-committee to draw up a certificate and seal and report to the next Executive meeting. It was arranged that the quarterly general meetings for the ensuing year be held at Leeds, Manchester and Liverpool in October, December and January respectively. Papers will be read at these meetings on some typical subject of interest to building

J. J. ETRIDGE, J^r.

SLATING AND TILING
SLATE MERCHANTS
CONTRACTORS.

Inspections and Reports made on
OLD OR FAULTY ROOFS
in any part of the country.

Telephone: Bishopgate 1944/5, or write,

Bethnal Green Slate Works,

BETHNAL GREEN, LONDON, E

surveyors, the first by Mr. F. E. Drury, M.Sc. Tech.M.I.Struct.E., &c., at Leeds.

The officers were unanimously re-elected. The president, Mr. W. J. Stone, M.R.S., thanked members for the honour of re-election and said he hoped the Association would continue the progress it had made in the four years of its existence.

BEST SEASONED

OAK FLOORING

AUSTRIAN
&
JAPANESE

PREPARATION TO ANY SECTION
CAN BE UNDERTAKEN AT ONCE

SYDNEY **PRIDAY & SONS**

WAINSCOT OAK MERCHANTS (EST. 1880)

25 Monument St., London, E.C.3

Tel: ROYAL 1162-3.

School & Hospital Stoves

MAKERS OF

WRIGHT'S IMPROVED and also SHORLAND PATENT
WARM AIR VENTILATING PATTERNS.

GEO. WRIGHT (LONDON LIMITED)
19, Newman St., Oxford St., London, W.1
Burton Weir Works, Rotherham.

HIGH-CLASS

FLOORINGS

of every description in
WOOD BLOCKS. PARQUETRY
SEASONED T. & G. WAINSCOT OAK
TEAK AND MAPLE.
FACTORY AND ROADWAY PAVING

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASANT
WANDSWORTH, S.W.18.
(Phones: Putney 1700 & 245)

COPPER ROOFING WITH CONICAL ROLLS

ABSOLUTELY WATERTIGHT. VERY DURABLE

ESTIMATES FREE

F. BRABY & CO. LTD 352-364 EUSTON RD. N.W.1.

AND AT DEPTFORD, LIVERPOOL, BRISTOL, GLASGOW, FALKIRK & BELFAST.

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VOL. CXXIX.—No. 4,304

JULY 31, 1925

BY-LAWS AND STEEL FRAME BUILDINGS.

THE subject of building by-laws and regulations has become in recent years one of considerable complexity, and this, combined with the fact that it is not very interesting, tends to make us restrict our study of it to those details with which we have to deal in our everyday work. It is, however, a subject of very great importance and may do a great deal to assist or retard the art and industry of building, and it is well periodically to study the trend of its movement and to ask ourselves if all is well.

In the first place we must realise that building by-laws and regulations have their justification in the general well-being of the people; in the public interest it is essential to lay down certain laws governing the erection of buildings to ensure that the safety and health of the citizens shall not be prejudiced, and in this country we have an instinctive respect for law and order which makes us recognise the need for means for safeguarding the public in respect of buildings. There are, however, certain tendencies against which we must ever be fighting if we are to prevent official regulations from adding unduly to the cost of buildings and hindering progress in improved methods of construction; these tendencies arise undoubtedly from the zeal of the officials concerned and seem to be inseparable from all official systems. It is very easy to criticise official bodies, but before such criticism is of any real value it must be absolutely impersonal and must take into account certain inherent difficulties under which officials have to work. In the first place official action must be absolutely impartial, and we are very proud of the fact that in this country an extremely high standard is maintained in this respect; in the second place we must remember that the action of any particular official is usually governed not by his views on the matter, but on the instructions which he receives from his superior authorities. Sometimes these instructions are based upon Acts of Parliament or upon decisions of the High Court and cannot be altered without further legislation, and in other cases they are based upon a meticulous regard for past practices which modern advances have rendered obsolescent. In the third place, we must recognise the fact that there is a considerable body of people who endeavour to evade regulations which they must, in their better moments, recognise as desirable, and therefore the officials tend to make the regulations more stringent than necessary in order to have something in reserve and to regard everybody as having evasive propensities.

The regulations governing the erection of buildings in London are based upon a whole succession of Acts of Parliament, some of which seem to contradict each other, and which appear to have become successively more stringent. As more modern methods of construction have established their position in the industry new Acts or regulations authorised by Acts have been introduced, and these Acts and regulations have added to the difficulties of architects and engineers, as well as of the district surveyors, by the amount of detail calculations and drawings which must be submitted, and by the amount of detail inspection which the surveyors are called upon to give.

In articles which have appeared recently in our columns we have dealt in some detail with some of the drawbacks of the steel frame Act—drawbacks which have often resulted in a steel frame building costing more than one with the thick brick walls of the 1894 Act. There are even greater objections in the L.C.C. Reinforced Concrete Regulations, the 188 clauses of which have added greatly to the difficulty of erecting reinforced concrete buildings in London. In many of the more recent Building Acts provision has been made for giving elasticity to the regulations by the insertion of "waiver" clauses by means of which the Council may waive any particular clause which may present difficulty in special cases, and there appears to be a tendency to extend this procedure in order to provide for methods of construction not contemplated at the time that the regulations were made.

There are, however, serious objections to this procedure which many architects and engineers do not appear fully to have realised. In the first place, the waiver is usually granted upon conditions which the Council may deem fit to impose, and sometimes these conditions involve an increase in cost of the building which the client did not foresee when he gave instructions for application for waiver to be made. Apparently immediately one makes application for a concession, one is likely to set going an avalanche of requirements and various departments take the opportunity of safeguarding the public to an extent which is denied them in an ordinary building; the Fire Brigade is very zealous in this respect. We have known of cases in which several thousand pounds additional expense—in the opinion of the architect responsible for the work quite needless expense—have been involved in a building as conditional upon concessions granted by the London County Council.

In the same way that doctors who specialise in certain diseases forget that most people never get them, so fire officials appear to imagine a devastating fire to be likely in every building. In defence of the Fire Brigade it is sometimes urged that Insurance Offices often are stringent in their specifications; but the position is quite different in the two cases. An insurance company is a private firm, and in return for a consideration it is entitled to make any stipulations which its clients are willing to accept, but nobody need go to any particular insurance company unless he likes, and the position is merely one of a commercial bargain—incidentally, we have heard of a fire insurance company which is installing in its own building a floor which does not conform to its specification for fireproof floors.

The second serious objection to the waiver procedure is that it involves a great deal of additional trouble and expense in the preparation of special plans and involves delay in the progress of the building; the official machinery takes a long time to operate. A great improvement in this respect would be effected if the Council would publish precedents of concessions under the waiver clause. If, for instance, on application to the Council, one may obtain permission to stress filler joists up to 9 tons per sq. in., this should be published as an official decision, so that one could refer the district surveyor to this decision for future cases, and thus need not apply to the Council at all.

This procedure would obviate the objections which we have against the present form of waiver practice and would provide a ready means of enabling construction to keep pace with advances in scientific knowledge and in improved materials. Recently, for instance, two new forms of cement have been introduced—one known as aluminous cement and the other as rapid hardening Portland cement—but at present it is doubtful whether they may be used in a reinforced concrete building, even if their additional strength be neglected in the design; and unless the whole method of procedure under the London Building Acts is radically altered it must be years before rules governing their use can be laid down. If the London County Council could issue a decision allowing their use under specified conditions—not, we hope, too severe—then engineers and architects could refer to that decision by number in submitting their plans to the District Surveyor, and thus much additional labour and delay would be saved. Periodically—we suggest every five years—these decisions could be collated and incorporated in Rules under the London Building Acts.

In all matters of social legislation and reform the cost of any improvement should be scrutinised very carefully before it is made compulsory; in recent years we have allowed reformers to pass legislation which the country literally cannot afford to carry out, however desirable the reform may appear. In the building industry many causes have led to a great increase in cost, and, therefore, every possible encouragement should be given by official authorities to cheapen methods of construction, and they should take great care that they do not take back with one hand what they have given with the other.

NOTES.

**The
Minister of
Education
at the A.A.**

THE A.A. prize-giving is always an interesting function, but on Friday last it became an unusually important event since the prizes were distributed by the Minister of Education, Lord Eustace Percy. The Board of Education is the Government Department that can do more than any other to foster the arts, for whereas the Ministry of Health and the Office of Works can set an example by encouraging and building good architecture, the Board of Education alone can touch the mainspring—the education of the masses. It was the more gratifying to hear that the Minister realises the demand for more light that is gradually becoming insistent, and that the whole question of art training is to be seriously taken in hand. Architecture suffers from the terrifying characteristic that bad work remains constantly with us, spoiling our towns and ruining our countryside, and for this reason we hope that the Minister of Education will give his serious attention to the two vital needs of architecture to-day—the adequate training of the professional, and (which is even more urgently needed) the training, in understanding and appreciation, of the ordinary citizen.

**The A.A.
School
Work.**

It is not easy to estimate fairly the results of such teaching as is carried on at the A.A. Schools by the annual exhibitions of students' work. If, for instance, the admirable studies of Corinthian capitals which are now on view could always be conjured into

existence in the first term without some very pronounced talent and efficiency beforehand, we should consider it a high testimony to the school's guidance and help, for two or three of these studies could hardly be surpassed for accuracy and feeling. But even if one feels there must be some reservation to the credit of previous knowledge or training, we cannot doubt the efficiency of a school which can show so much creditable work for a first year. We generally find that the second year's productions indicate the most pronounced successes in relation to the time-table, and this year is no exception to the rule. Is it that the added dignity of the third-year student chastens and modifies his enthusiasm and makes him more sensitive to criticism? There is a lot of quite beautiful drawing and highly creditable design in the second-year room which does not leave the third-year work on a very exalted pedestal above it. Even a first- or second-year student could hardly succumb more completely to the influence of the jazz design and music of the day than some of the third-year students have done.

**The Higher
Education
in
Arch'tecture.**

WE are still looking for more designs which show an instinct for really fine proportions and distinction of emphasis and a little more real evidence of pleasure in our art. When we were listening to the statements of the A.A. President at the prize-giving function as to the numerical success of the school, we were already anticipating something of the ideals which might be kept in view for us all, and found some expression of them in the very welcome

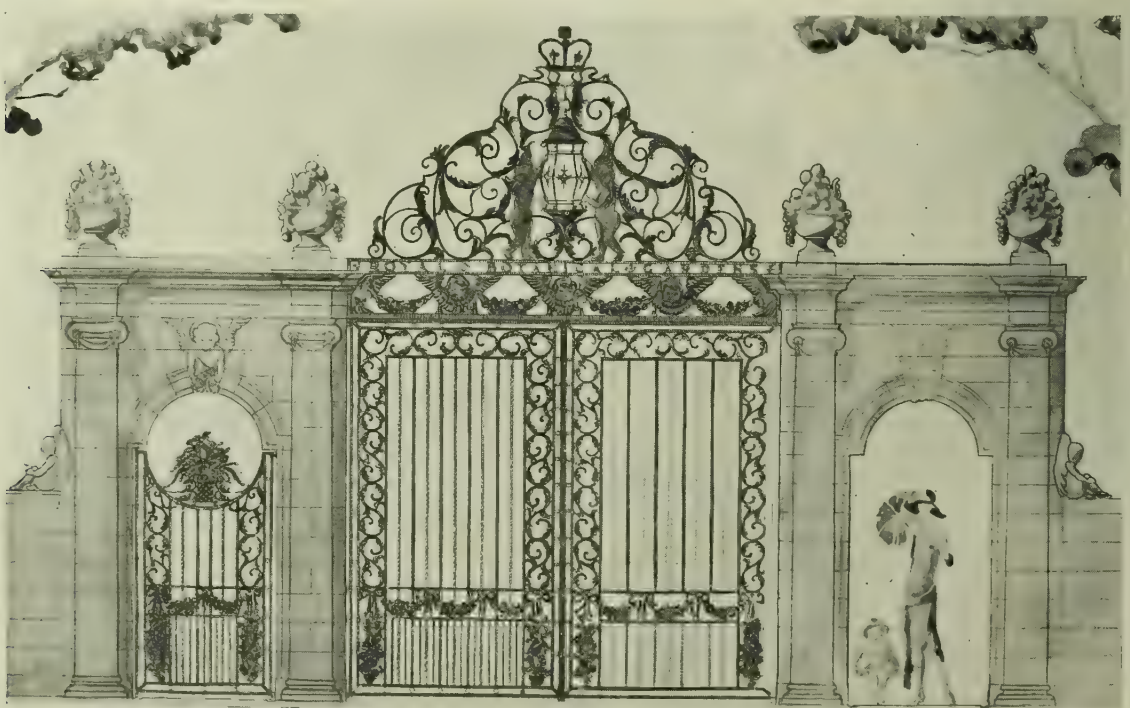
remarks of Mr. Maurice Webb, who let it be plainly felt that we have still much to do before our educational efforts will satisfy the full needs of modern architecture.

**Zeal for
Knowledge.**

THAT the functions of the architect and builder are of some little use when one wants to build is borne in upon us by the series of questions propounded to us in a letter from a correspondent who would build a bungalow. Our advice is sought as to how to dig and lay out the foundations—how much concrete would be required—whether clinkers would keep down the cost—how to proceed in laying of drains—what is the necessary procedure in regard to the erection of bungalows—advice wanted as to central heating and fireplaces. As against all this lack of knowledge our correspondent claims that he could fix the guttering! After this we are inclined to believe he sees some definite means of paying for everything else. In some sense this naïve request for a great deal of useful information is amusing, but we should like to see a little more general readiness to spend a few pounds on the advice of young architects, or the decent profit which a builder might exact for providing a great deal of useful, practical information in carrying out a job.

**The
Picturesque
in Building.**

ONLY the other day we were impressed by the advantage from an architectural point of view of simplicity of treatment in housing schemes, for the long lines of unbroken roofs have a restfulness and breadth which gives added value to the economy with which



Entrance Gates to a Botanical Garden. By MR. DYCE SAUNDERS (Architectural Association School of Architecture).



Church of the Twelve Apostles, Salonica.
From an Etching by MR. E. PRENTICE MAWSON.

such design is carried out. The little group of Durham cottages, sketched by Professor Richardson (last week's *Builder*), shows what excellent emphasis is given by the little break of gables at each end of the frontage. But in too many of our modern housing schemes an attempt at variety and picturesqueness often spoils the whole picture. A correspondent has, however, fallen foul of monotony, and quotes a paper which decries, "the mere boxes of brick which add nothing to the amenities of either town or countryside." We see here the craving for a picturesqueness which is only tolerable when kept in check by a wise designer. The picturesqueness which is obtained by well-placed chimneys of suitable height and bulk and position, by well-placed dormers and gables, by pleasing juxtaposition of buildings, by the emphasis of features which are a natural and easy outcome of plan—this is a picturesqueness which we may always welcome, but the picturesque which results from an illicit connection between uselessness and extra cost is a sort one should learn to do without.

Lord Curzon's Will.

LORD CURZON'S will, under which the public will gain in many directions, is remarkable in that among the bequests he has left Tattershall Hall, Lincolnshire, and Bodiam Castle, Sussex, to the National Trust, with ample provision for their maintenance. One is irresistibly reminded of the will of Æsop as described by Shakespeare: Moreover, he hath left you all his walks, his private arbours and new-

planted orchards, on this side Tiber: he hath left them you, and to your heirs for ever: common pleasures, to walk abroad and recreate yourselves. Here was a Cæsar! When comes such another?" Lord Curzon's will is the best reminder of the great mind and warm idealism of a remarkable man, an idealism that was often obscured in the public mind by the coldly ceremonious front that he appeared to present to those who did not know him.

The Southern Railway.

ON the first day of electrification on this line there were two stoppages in the Penge tunnel—one of them lasting for the best part of an hour. Passengers must have suffered acutely in the appalling atmosphere of London's worst anachronism. Surely no other country in the world could have arrived at the year 1925 and still see steam trains running close upon each other's heels through an unventilated tunnel over a mile long within a few minutes of the city. This tunnel is a disgrace and one is more than ever ashamed of it, seeing that it is on the Continental line from Dover to London. The complete electrification of the Penge tunnel is an urgent necessity.

Town Planning Schemes.

THE official figures issued by the Ministry of Health are of considerable interest as showing the progress that is being made in town-planning schemes. An analysis of the figures shows that out of a total of 355 areas that come under local authorities who

are under statutory obligations to prepare schemes, 144 up to March 31 last had taken no effective steps; 160 had passed a resolution deciding to prepare a scheme or had been authorised by the Minister to prepare it; 39 had had a preliminary statement of proposals approved; while only twelve areas had passed the final stage and had schemes in operation. These figures are perhaps disappointing at first sight, but it must be remembered that town-planning cannot be carried out in a hurry, and the transition from the first to the later stages is bound to be slow, but at the same time there can be no valid excuse for a neglect to pass the primary resolution.

Alleged Overcrowding of the Architectural Profession. THE Report which we give on p. 177 of the findings of the joint Committee of three representatives of the R.I.B.A. and three of the Association of Architects, Surveyors, and Technical Assistants, on the question of the alleged overcrowding of the architectural profession, contains some interesting information on the numbers engaged in the pursuit of architecture, but very little that will cause surprise to those who have given careful consideration to the matter. On figures which are incapable of absolute proof, but which are, no doubt, substantially correct, the Joint Committee believe that at least as many men are entering the profession as can at the present time be absorbed, and are of opinion that steps should be taken not to limit the numbers entering the profession, but to warn the profession and the public of the fact, and "to ensure that the training given to students wishing to become architects is thoroughly adequate." With this last observation we heartily concur, as we do with the belief of the Committee that there is no overcrowding so far as the highly-trained, competent man is concerned, which carries with it the belief that "there is a surplus of indifferently-trained persons." There is really nothing in the Report which will cause any surprise to those who have studied the subject, but it is well to place the ascertained facts on record, especially that "the recognised Architectural Schools are in no way contributing to the overcrowding of the profession."

It is certainly an encouraging sign that the London Waterloo Bridge. County Council are so far really alive to the value of

Waterloo Bridge that they intend to secure the advice of an eminent architect as to its possible treatment for traffic. What we probably need now is the advice of an enlightened traffic expert who would agree to put before the eminent architect a possible solution and who would not insist on a council of perfection. What will occur to many will be whether the eminent architect, in order to solve a very difficult problem of providing four carriage and two footways, will suggest over-hanging footways!

GENERAL NEWS

Grant to School of Architecture.

Bristol Education Committee has decided to recommend that a grant of £200 be made to the Royal West of England Academy School of Architecture for the current year.

Improvements at Croydon Aerodrome.

Work has now been commenced on the scheme to make the London Terminal Aerodrome at Croydon "the finest commercial aeroplane station in the world." The cost is estimated at £225,000.

New School for Bush Hill Park, Edmonton.

Plans for a new elementary school at Bush Hill Park, by Messrs. Talbot Brown & Fisher, architects, of Wellingborough, have been accepted by the Edmonton Education Committee.

New Housing Order.

The Ministry of Health has issued a Housing Act (Form or Orders and Notices) Order, 1925, which has been made by the Minister, prescribing forms of certain notices and other documents. The order, which comes into operation on September 1, 1925, can be obtained of H.M. Stationery Office, price 7d.

Housing Progress in Scotland.

The following figures show the progress that has been made in State-aided housing schemes in Scotland to June 30, 1925:—

	Completed.	Under Construction.
1919 Act	24,672	824
Private Subsidy Schemes	2,324	—
Slum Clearance Schemes	1,502	2,627
1923 Act	3,047	6,440
1924 Act	157	1,493
	31,702	11,384

Of the total number of houses completed and under construction under the 1923 Act, 2,951 are by the local authorities, and 6,536 by private enterprise.

The Fitzwilliam Museum.

Out of the £100,000 required for the desired extensions to the Fitzwilliam Museum, Cambridge, £55,000 has already been subscribed. The architects of the new extension are Messrs. Smith & Brewer.

Irish War Memorial.

Merrion-square, Dublin, will shortly be acquired by the Irish National War Memorial Committee for the purpose of establishing the square as an Irish war memorial. It is proposed to erect at the four corners wrought-iron entrance gates and to lay it out as a public park. The cost will be about £40,000, which sum is already available.

Flats and the Ministry of Health.

The attitude of the Ministry of Health in refusing sanction to schemes for building flats in London is being severely criticised in many quarters. A correspondent writes: "I hear that a scheme approved by the Westminster City Council for erecting six-storied flats designed by Mr. H. V. Ashley has been turned down by the Ministry's architects on the grounds that it will mean undue congestion. A few weeks ago permission was refused to Hampstead to proceed with a scheme for building four-storied flats, planned by Major Douglas Wood, a former Housing Commissioner, unless one story was removed, but under pressure the Ministry has given way."

Crumbling Parliament Buildings.

That the Office of Works takes a serious view of the crumbling away of the stonework of the Houses of Parliament is evident from the posting by the First Commissioner of a notice on the Terrace warning members to keep away from the walls of the building. It is the view of the authorities that as much as £1,000,000 may be required for the complete restoration of the structure.

Proposed Memorial Chapel, Westminster Abbey.

In memory of all those, known and unknown, who gave their lives in the Great War, the Dean and Chapter of Westminster have decided to convert the enclosure at the south-west corner

of the Nave into a chapel, to be known as the Chapel of the Holy Cross. In this chapel will be placed a tablet or brass inscribed with the names of the old choristers and other members of the Abbey staff who fell in the war. A provisional design for its furnishing has been prepared by Mr. J. N. Comper.

COMPETITION NEWS

*Coventry and Warwickshire Hospital: Proposed New Ward Block.

Members of the R.I.B.A. must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for architectural competitions.

Reconstruction of the Mosque of Amrou, Cairo.

An international competition for designs for the reconstruction of the Mosque of Amrou, Cairo, has been instituted by the Comité de Conservation des Monuments de l'Art Arabe. Designs will be judged about January, 1927. The premiums offered are: First, £E.2,500; second, 1,000; and third, 500. A document in French, giving full particulars of the competition, may be seen at our office.

Fanmakers' Competition Award.

On the recommendation of the assessors, the Court of the Worshipful Company of Fanmakers have awarded the Company's Silver Medal in the annual competition, 1924—(subject, The Ventilation of a Police Court), to Mr. J. Vernon Shaw, Tower House, Lodge-lane, Warrington.

Other Competitions.

Other competitions still open include the following (the dates given are, first the sending-in date, and second the issue of *The Builder* in which full particulars were given):—Argentine Institute (Dec. 31; April 24). Copenhagen Bridge (Sept. 1; April 24). Newcastle Fire and Police Station (Oct. 8; June 12). Drammen Bridge (Oct. 1; May 29).

* Competitions when "warned" or vetoed by the R.I.B.A. are starred.



Posters designed by Mr. G. H. Butling, advertising the Annual Exhibition of Students' Work, Liverpool School of Architecture.



A Renaissance Composition.

By MR. H. H. GOLDSMITH (Architectural Association School of Architecture).

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

The Manchester Art Gallery Competition.

SIR,—There surely can be no doubt whatever that the chosen design is in every way most admirable and worthy of the occasion. The promoters have good reason to congratulate themselves on the result, and it would be a monstrous misfortune should this building not be carried out in accordance with the selection made by the assessors. The subject of competitions in the past has already furnished quite enough mishaps, without adding another catastrophe with regard to the corporate buildings of Manchester.

I make no apology for intervening in this way, and I do so with strict reference to impartiality; besides, I can claim in a practical sense, perhaps, something like a unique experience during many years in connection with a vast number of architectural competitions, not so much as a competitor as a reviewer for the professional press. The object of these contests absolutely consists in obtaining the most befitting design. As a referee, too, I know the difficulties incidental to such a choice, and particularly when the instructions issued to competitors happen to be over-elaborated by secondary details hampering a clear-cut scheme and masterly conception of outstanding merits. It would be invidious to recall instances, but this question, do what you may, will continue to arise as to whether an umpire should throw out such a scheme and recommend a vastly inferior one because, technically, it may more rigidly comply with the letter of the conditions issued by authority. Anyway, I do not claim, of course, that mistakes have not taken place; on the contrary, I am alive to the fact that sometimes the professional referees have been very blameworthy, because it is certain that wretched designs have occasionally been inexplicably chosen by assessors of excellent repute. In this case of the Art Gallery at Manchester no such reflection can be suggested, consequently it appears most untoward that protests of the kind now being published should be considered necessary. Anyhow, action of this character is deplorable and can do no possible good: the result inevitably must be disastrous. The author of the selected design is quite unknown to me, and I do not exactly remember who the assessors were. Being away from home I cannot look up their names. They cannot be wisely brought before any other tribunal unless fraud is suggested, and no one dreams of such an accusation.

MAURICE B. ADAMS.

Distribution of Wren's Work.

SIR,—Members of the University Athenæum, the new confederation of arts, held their first annual meeting at the Crystal Palace on Saturday (July 11, 1925), and in the discussion on the problem of city churches, the opinion was expressed that the best of Wren's work might be permitted to remain, while some other edifices, in close proximity, could be removed (after the manner of Crosby Hall) to places in the suburban belt, where new churches are needed.

The survey of the southern area of London from the north tower of the Palace impressed us with the thought that beautiful architecture adds to the charm of the wide-spreading picture. We considered that a distribution of a few of Wren's churches would be a benefit to the general public, and they would be seen to better advantage than they now are. The opinion of your readers on this subject would be greatly appreciated.

NELSON GODFREY.

Luton.

[This does not strike us as a desirable suggestion.—ED.]

New York Cathedral, and Some Theories.

SIR,—Referring quite lately in your "Notes" to this building, you quoted a correspondent whose remarks I should like, with your leave, to comment upon. But he puts one in this difficulty, that while condemning the "pseudo-Gothic" of this edifice, he suggests no clearer alternative than "a more robust and genuine form of building"—although, it may be observed, the thirteenth-century type apparently adopted is the most "robust" of the Gothic varieties. It must of course be presumed that this "more genuine form" of architecture equally excludes pseudo-classic and pseudo-Byzantine; so that one is moved to ask, What other precedent offers? Or is it proposed to experiment, stylistically, upon a cathedral? Surely it is a sound proverb which tells us that such a proceeding should be effected *in corpore vili*, as a beginning.

The term "pseudo" itself, however, is very much of a question-begging epithet, and although this building may have all the demerits described (as to which I know nothing), I think one cannot be far wrong in supposing that at the root of the whole criticism lies the familiar assumption that there can be no such thing as modern Gothic in any true or legitimate sense. In this case one may take leave to point out that certain basic elements of mediæval architecture are permanently valid. The pointed arch and vault, for instance, are valid and logical construction; the proportional system employed is a valid rhythmic system, however imperfectly elucidated so far; mediæval design, *qua* composition and disposition, remains æsthetically valid, and capable, moreover, of indefinite "freedom" in its application. Again, the characteristic treat-

ment of mouldings is as valid to-day as are the laws of light and shade which governed it; and, incidentally, far more so for us than that evolved under the skies of Greece or Italy; while even the typical conventions ruling in form and figure sculpture remain, æsthetically, valid conventions. Are such technical and artistic factors as these of so small account in the total validity and vitality of an architectural mode, that their permanent significance should be commonly ignored by the present-day critic of architecture? Must we not rather perceive in this fact a current prejudice and obsession which has never, to my knowledge, shown its justification? "Corporate impulse" may, indeed, have evolved or created these basic elements of style; but, once evolved, they are, I submit, established and available for always.

W. RANDOLPH.

The Church and Freemasonry.

SIR,—I have been giving considerable attention to masonic history for the last fifty years, and nothing has surprised me more than the letter by Mr. Hubert Burrows (*Builder*, June). Where did Mr. Burrows get his information? In the years mentioned, there were no speculative masons, and facts do not go beyond three hundred years.

HENRY LOVEGROVE.

Landed Property Practitioners (Registration) Bill.

We have received from Mr. John Stevenson, General Secretary of the Incorporated Society of Auctioneers and Landed Property Agents, a letter on this subject. As this is too long for publication in full, we have omitted some paragraphs of lesser importance.

Mr. Stevenson draws attention to the following paragraph appearing in the Law Society's Report for 1925:—

"Further discussions with the Surveyors' Institution have occurred with regard to this Bill. These have now culminated in a letter from the Surveyors' Institution stating that the Committee promoting the Bill had unhappily found that there was a fundamental difference of principle between the Committee and the Council of the Law Society, which is incapable of being reconciled, and must be adjudicated upon by Parliament. The letter states further that while the Committee will take steps to have the Bill introduced into Parliament in due course, they do not propose for various reasons to do so in the Session of 1925."

"It may be remembered," writes Mr. Stevenson, "that the Bill above referred to was first introduced in the House of Commons in 1923. It was presented by Sir Edgar Chatfield-Clarke. . . . Had the Bill been passed into law it is more than probable that thousands of those who had practised for many years would have found themselves precluded from registration and thus seriously hampered in their efforts to earn a livelihood in the profession. . . ."



S. ELEVATION

THE ARCHITECTURAL ASSOCIATION

PRESENTATION OF PRIZES.

On Friday afternoon last, at 34, Bedford-square, Lord Eustace Percy (President of the Board of Education) presented to students of the Architectural Association the scholarships and prizes for 1925. Opening the meeting, Mr. H. S. Goodhart-Rendel (President), who occupied the chair, observed that the past year had been a very successful one for the school. Their numbers were now getting up again to the high level that they reached immediately after the war. This did not mean, as many people appeared to believe, that they were overcrowding the profession; all it meant was that the school system was replacing the pupilage system. Generally speaking, the need for school training was increasing as the years went by, for the reason that people who were not so trained found that they could not compete with those trained in the schools. The Association, he continued, had had a good number of successes in prize competitions during the past year. The Tite Prize was awarded to Mr. D. H. Beatty Pownall, and Miss Sligh had gained hon. mention; Mr. Bennett had won the Boscom Studentship; Mr. Cameron, the Grissell; and Mr. Bucknell, the Godwin Bursary. He was very sorry to have to announce that the staff of the school was about to suffer some losses. Mr. Keesey had been appointed one of H.M. Inspectors of Art Schools; Mr. Rees would be leaving, perhaps only temporarily, to carry out work in competitions; and Mr. Keith Murray would be going also—and very sorry they all were to lose them. On the other hand he had some very good news to announce, that was, the foundation of two new scholarships of £1,000 each—one by Sir Walter Lawrence and the other by Mr. F. G. Minter. This was the most valuable sort of help they could get, and they were very grateful for it. The President then congratulated Mr. Rowland Pierce and Mr. James Burford upon their recent success in the Valetta Town-planning Competition. Mr. Pierce, of course, was a member of the school staff; while Mr. Burford was formerly a student and member of the staff. To Mr. Howard Robertson he offered congratulations on his success with the British Pavilion at the Paris Exhibition, which had been praised by all whose opinion Mr. Robertson might be expected to value and abused by all he would sooner abuse it. To Mr. Robert Atkinson they were perpetually grateful for the inspiration that he unfailingly provided; he was a living tradition.

Lord Eustace Percy then presented the scholarships and prizes, of which a list is given hereunder. At the end of this ceremony Mr. Howard Robertson presented a "special book prize" (as he described it) to the two members of the staff who would be leaving them—Mr. Walter Keesey and Mr. Keith Murray. Their going, he said, was a real personal regret to him; their loss would be felt very deeply.

Lord Eustace Percy then addressed the meeting. He was, he said, only just beginning to realise the number of educational bodies for which he was officially and personally responsible, including the Architectural Association. The whole question of education in the arts in this country was, he continued, one that needed very careful consideration. The movement in art education was nowhere more strong than in architecture, and rightly, for the architect was at last becoming a very important person. One of the most remarkable developments of the last few years was the growing appreciation of architecture. The planning of towns and the initiation of great building schemes had brought architectural problems to the notice of all classes of the community. He was very glad to be present on that occasion. He knew that in the discharge of his official duties he would receive and could rely upon the advice, impetus, and stimulation on the subject of architecture from those who were competent to pass an

opinion. He congratulated the Association on its work and successes, and wished it all good fortune in the future.

Mr. Maurice E. Webb, proposing a vote of thanks to Lord Eustace, said that that occasion was the second upon which the Association had been honoured by the presence of a President of the Board of Education. In more difficult times, Mr. Fisher, Lord Eustace's distinguished predecessor, had visited them. They dined him, and he stayed to look into the work of the School. The result was that the Board of Education decided to support the School, although it was not associated with a university or an art school. This was a great precedent, and the presence of Lord Eustace Percy that afternoon was, he thought, proof that a precedent had not been established in vain. They were all most grateful to the Board of Education for the help and moral support that it gave, and for the unfailing courtesy of its officials. Architectural schools, continued Mr. Webb, should, he thought, turn towards the university type or to that of their own school—the A.A. In technical schools, architects were too much associated with plumbers, chemists, and so forth. They wanted architectural schools to develop on the lines of Medical Schools and Law Schools. He regarded it as a great compliment that when the Board of Education wanted an inspector they came to the Association and appointed Mr. Keesey. He had very great pleasure in proposing a hearty vote of thanks to Lord Eustace for coming and presenting the prizes that afternoon.

Mr. Holland, seconding the vote of thanks on behalf of the students, referred to the sorrow that they all felt at the going of Mr. Keesey. Only those who had passed through the School under Mr. Keesey could realise with what skill and patience he coped with the difficulties of drilling into embryo architects what he might describe as the lighter and more charming side of architecture. To him (Mr. Keesey) they hoped to owe their sense of co-operation with the work of sculptors and painters. Though Lord Eustace might not perhaps know it, the students of the Association did not spend all their time over the drawing-board. In the winter they played Rugby and Association football, but gave most time to mixed hockey. In the summer they danced and played tennis and cricket; but, most important of all, they produced a pantomime. They hoped that they might be honoured with Lord Eustace's presence at the next production.

Lord Eustace, in reply, said that, with regard to architectural education, he would be docile if they would instruct him as to what he ought to do. If circumstances permitted, he would be very glad to see how students got up a pantomime.

Following is a list of the Scholarships and Prizes:—

Public School Entrance Scholarship (value £75 12s.), David Booth, Christ's Hospital.

Open Entrance Scholarship (value £75 12s.), Robert D. Scott, School of Art, Watford.

A.A. Essay Prize.—No competition.

First Year Course.—1st Prize, "Howard Colls" Travelling Studentship (value £15 15s.), D. R. Burles; 2nd Prize (books, value £5 5s.), H. R. Thompson. Art Subjects (books, value £3 3s.), E. Playne. General Progress (books, value £2 2s.), H. M. Peskett. Scholarship tenable for one year in Second Year Course (value £63), D. R. Burles.

Second Year Course.—1st Prize, A.A. Travelling Studentship (value £26 5s.), H. H. Goldsmith; 2nd Prize (books, value £10 10s.), G. I. C. Hight. Art Subjects (books, value £5 5s.), Miss B. Scott. General Progress (books, value £3 3s.), J. Buchanan.

Third Year Course.—Holloway Scholarship, tenable for two years (value £300), J. Breakwell. 1st Prize, "Henry Florence" Travelling Studentship (value £50), W. R. Brinton; 2nd Prize (books, value £21), R. P. Cumming; 3rd Prize (books, value £15 15s.), J. V. Hamilton.

General Progress (books, value £5 5s.), Dyce Saunders. "Alec Stanhope Forbes" Prize for best colour work during the year (books, value £5), J. Breakwell. Scholarship tenable for one year in Fourth Year Course (value £42), C. W. Sully.

Fourth and Fifth Years.—Design (books, value £10 10s.), R. M. Smith. Town Planning (books, value £10 10s.), Miss D. Lewis. Construction (books, value £10 10s.), A. E. Cameron. Colour (books, value £10 10s.), Miss M. R. F. Ellis.

Architectural Association Diploma (on satisfactory completion of five years School Course and a period of six months' office experience).—A. M. Allen, R. G. Booth, H. Braddock, A. E. Cameron, P. Cutbush, B. M. Flegg, G. G. Grant, F. E. Green, Miss A. F. Jones, Miss D. A. Lewis, W. T. Lord, D. F. Martin-Smith, Miss E. Meikle, A. G. Morris, F. Roscoe, Junr., Z. Sirotkin, Miss A. Sleight, R. M. Smith, V. J. Wenning, and J. W. Wood.

The following students have qualified for the Diploma subject to completion of six months' office experience.—Miss E. Moseley, Miss M. F. R. Ellis, F. L. Preston, and R. M. Walker.

Medal presented annually by the Société des Architectes Diplômés par le Gouvernement, Paris, to the best Diploma student of the year.—E. Wamsley Lewis.

R.I.B.A. "Henry Jarvis" Scholarship (value £50).—Not awarded.

Architectural Association Measured Drawing Prize, for the best set of measured drawings submitted in the School (value £10 10s.).—Prize divided: W. R. Brinton, W. V. Trubshawe and W. T. Lord; 2nd prize (value £5 5s.).—Prize divided: C. Green and Miss M. L. Bennett.

Royal West of England Academy School of Architecture (affiliated with the Architectural Association).—Prize in Design (value £5 5s.), awarded to Mr. J. H. Bourne.

The Late Senator Boni.

Giacomo Boni, the great Italian archæologist, who died last week, was born in Venice in the early sixties of the last century. He once said that he owed everything to John Ruskin, whom he met when he was a boy in Venice, and to whom he traced his first inclination towards intellectual things. "It was not till 1898," says the writer of a recent appreciation, "that he was appointed Director of the Forum excavations, with which his name will for ever be associated. Those who remember what the Roman Forum was before it became the 'Forum Boni' can alone estimate the magnitude of his work. He laid bare the pre-Romulean necropolis, he discovered the inscribed pillar found under the 'black stone.' With his work are connected the Basilica Æmilia, the Temple of Augustus, the shrine of Juturna, and the Byzantine Church of Santa Maria Antiqua. Outside the Roman Forum he excavated in that of Trajan, as well as at the tomb of Bibulus, while in recent years he was appointed Director of the Palatine excavations also. There he went down to depths never reached before; he traversed with his shafts every stage of Roman history, and he unveiled the lovely frescoes of the 'Iliad,' and some of the most beautiful mosaic pavement in Rome."

Nonsuch Palace.

Ewell Castle, Surrey, which is for sale, contains the ruins of the banqueting hall of ancient Nonsuch Palace. Ewell Castle itself is of no great antiquity—it was built in 1804 by Sir Jeffrey Wyattville, the restorer of Windsor Castle. It looks out over lawns and fields that slope gradually up to the old banqueting hall of Nonsuch Palace, once the property of Henry VIII, who destroyed the manor house and village of Cuddington, fenced in 1,600 acres of park, and built there a magnificent country retreat. The Stuart kings also favoured Nonsuch; until in 1670, Charles II gave it to one of his favourites, Barbara Villiers, Duchess of Cleveland, who dismantled it and sold the contents.

A COMPETITION SUGGESTION

By J. HEMBROW, A.R.I.B.A.

It has always seemed to the writer that our method of arranging competitions has been wrong. It is immoral to obtain one hundred different schemes for one fee—plus a few pounds. Though the arguments in favour of open competition are irrefutable and continually justifying themselves, the practice and the manner are at fault.

Having examined numerous sets of competition drawings on exhibition lately, notably those for the proposed Art Gallery at Manchester, one realises two things: one, that here is a competition where the winning design has been aptly and justly chosen (indeed, after a careful examination of all the sets submitted there does not exist a question), the author of which is a young man hitherto unknown who might not have achieved early merited repute if it had not been for the competition system. On the other hand, one is distressed by the enormous waste of effort of more than ninety others.

We all of us know what tremendous labour and self-sacrifice it means for an assistant entering in his spare time an important competition. It costs months of loving and anxious toil, and some expense too. Those of us who are principals know what it costs in money to prepare such a set of drawings in an established and fairly large practice. There is no doubt in the writer's mind that three-fourths of the competitors in this competition never had a chance at all of winning this or any other of similar importance, and they could fairly have been eliminated without being put to the trouble of producing purely abortive works which, even if pathetic or comic, cost their authors infinite labour and pains.

It seems altogether foolish and wrong to allow such people to give their labour so fruitlessly, and also wastes the time of the assessors (though not much, possibly) and merely makes some who may be good enough fellows in their sphere, mere laughing stocks. It should not be beyond the wit of the profession to find some solution.

And to repeat the statement that it is immoral to obtain a hundred schemes for one fee—it is certainly only common sense to extend it and say that qualified architects, whether they be principals or one of those gentlemen who give them loyal and careful assistance, should not be asked to prepare for nothing so elaborate a set of drawings as was required for this competition. It is wrong in principle and unsuited to the dignity of a profession. It brings the architects engaged to the level of street vendors shouting their wares one against the other.

It would seem possible to keep the benefits of the open competition, but reduce the waste of labour and effort to a minimum and eliminate the immoral entirely. It is quite true that where there is one opportunity and only one man can fill it, it is proper to get the most suitable man—it is more, it is a duty. But do we, in deciding, we will say, an important public appointment, parade every one of the hundred applicants before the Selection Committee, putting them to all the expense of railway travel and hotel bills? It would be too foolish—but that is exactly what we do in a big architectural competition.

In making an appointment the applicants are tabulated in alphabetical order, the table showing accurately their experience and qualifications. By this means it is a simple matter for the scrutineers to strike out a large number of gentlemen who are eminently unsuited to the position and whom it would only be a waste of time to interview. The remainder form what is called a "short list," which may consist of any number from three to eight or ten, and these gentlemen are interviewed, a selection made and their expenses are paid. They have only, therefore, suffered the cost of making their first application, which need not have been great. Surely, it should be possible to devise a parallel method in our big competitions. For the sake

of discussion I suggest it would seem that a possible solution would be as follows:—

It may be taken as true that any assessors, such masters of their job as were the assessors in the Manchester Art Gallery Competition, would not need a complete set of drawings to eliminate seventy per cent. of the competitors—one plan of one floor from those competitors would have been enough to judge upon and seventy out of the hundred aspirants would have been saved bootless toil and final discouragement. Of the remaining thirty one elevation would have been sufficient to clear two-thirds more and we should be left with ten out of, say, one hundred.

Now, say the premiums offered are under the present system £500, £300, £200; or £1,000 in all. Let it be agreed that the cost of preparing the complete set of drawings in an ordinary good practice is £50, and let it be agreed that it is necessary to guard against the person who would prepare a set of drawings with the £50 in view and so not give a fair test—which is really not so—we can redistribute our £1,000 in the following way: £500 to be the first prize and each competitor to receive £50 for his scheme.

To select these ten it is not necessary to have a full elaborate set of drawings. Any assessor of note and ability can eliminate many at a glance. It would seem enough if the problem were given in the usual way, and one plan of a given floor—that which the assessors consider offers the most difficult problem—one elevation, that which is most vital—and where there is a lay-out and block plan (the first two of 1-16th scale and the block plan such as is suitable). This would be all that would be needed to enable a judicious selection to be made and the competition system to be put upon an equitable basis, which at the present moment it is not.

EXHIBITION NOTES

ST. GEORGE'S GALLERY.

THERE is some distinction about the present small exhibition at the St. George's Gallery, for it holds some fine drawings by Brangwyn, Austin Spare and Lovat Fraser, besides some very interesting small studies by Gordon Craig. In his ship unloading at London Bridge, Brangwyn gives us a perfectly modulated piece of tone and colour, whilst his drawing of a black engine looming up upon a blue-grey background, Cannon-street Station, is an impressive and satisfying picture. It seems almost a pity that such admirable studies of the nude by Austin Spare were not of a pleasanter nature; they look very true, but they emphasise some of the less pleasing aspects of the female form. This little exhibition is much above the average in quality.

MANCHESTER ART GALLERY COMPETITION

Mr. Theodore Sington, writing to the *Evening Chronicle* (Manchester), with further reference to the Art Gallery Competition, says that the City Council must disown the assessors' award; failing that, legal proceedings may be taken to test the meaning of Sections 10 and 13. "I respectfully submit," he continues, "that the only course open to the City Council is to organise another competition, with assessors appointed by the R.I.B.A., limited to the recent competitors, with fresh instructions. As the site will not be available for several years, there is unlimited time. There should be at least six clear months after the answers to questions have been sent out. To save trouble, the elevations could be to a scale of 12 ft. to the inch, and the large scale detail might be omitted. An important point is whether the Art Gallery should be asked to the buildings facing Piccadilly, Portland and Baker-streets. . . . As the City Council may organise a competition for the Reference Library, it is most important, in the interests of both the Corporation and competitors, to have it authoritatively stated whether conditions are to be adhered to or ignored."

ROYAL INSTITUTE OF BRITISH ARCHITECTS

Amendments of the By-laws.

By an order of the Lords of His Majesty's Privy Council dated July 10, 1925, the following amendments to By-law 29, with regard to the representation of Dominion Allied Societies on the R.I.B.A. Council and the addition of the Chairmen of the four Standing Committees, were approved:—

By-law 29 (d).—To be amended by the addition of the following words:—"Provided always that in the event of the representative nominated by any such Society being absent from the United Kingdom such Society shall be entitled to nominate a member of the Council of the Royal Institute for the time being who is practising in the United Kingdom to represent it upon the Council during the absence of the representative first so nominated as aforesaid."

By-law 29 to be amended by the addition of the following words after paragraph (g):—" (h) The Chairman for the time being of each of the four Standing Committees referred to in By-law 52."

Intermediate Examination.

The Intermediate Examination, qualifying for registration as Student R.I.B.A., was held in London from May 22 to 28, and in Leeds from May 22 to 27. Of the 83 candidates who presented themselves 42 passed and 41 were relegated. The successful candidates were as follows, the names being given in order of merit as placed by the examiners:—

T. M. Galbraith, A. E. Long, F. Greenwood, J. H. Ecclestone, J. Cohen, H. Greenwood, F. G. A. Hall, G. L. Thompson, R. F. Orfeur, W. L. Ward, J. W. Lee, F. E. Parkes, W. E. Troke, G. E. Tassell, A. E. J. Goodall, C. C. Bowring, J. F. Stott, C. T. Ayerst, R. N. Brown, G. S. Buckingham, H. G. Cadman, J. F. H. Checkley, J. H. Clark, R. R. A. Dunn, G. F. Evans-Vaughan, J. E. Gale, G. S. Harrison, W. D. Hartley, V. C. Hunt, E. L. Jopling, E. J. Liddle, N. A. Lyon, E. C. Mount, A. G. R. Payton, S. H. Rushworth, J. A. Schofield, T. R. Shaw, T. E. D. Skurray, A. Slade, H. C. D. Whinney, D. A. Wilkie, N. B. Wood.

Notes from the Minutes of the Last Council Meeting.

Overcrowding of the Architectural Profession.—The Council approved and ordered the publication of the Report of the Joint Committee of the R.I.B.A. and the Association of Architects, Surveyors, and Technical Assistants on the subject of the alleged overcrowding of the architectural profession. (See p. 177.)

Improvement of R.I.B.A. Organisation.—The Council approved a scheme for improving the work of the Council and Committees of the R.I.B.A., which involved the creation of an Executive Committee and the holding of monthly instead of fortnightly meetings of the Council.

R.I.B.A. Soirée.—It was decided that the occasion of the completion of the amalgamation of the Society of Architects with the R.I.B.A. should be marked by a Soirée, to be held in the R.I.B.A. Galleries in the coming autumn.

British Architects' Conference, 1925.—A cordial vote of thanks and appreciation was passed in favour of the Northern Architectural Association for having organised and carried out the arrangements for the Conference with such conspicuous success.

The University College of the South-West of England.—Mr. J. Leighton Fouracre was appointed to represent the R.I.B.A. as a member of the Court of Governors of the University College of the South-West of England for the three years beginning on August 1, 1925.

The Institution of Public Lighting Engineers.—Mr. W. Alban Jones (President of the Leeds and West Yorkshire Architectural Society), was appointed as the representative of the R.I.B.A. at the second annual meeting and conference to be held at Leeds on September 14, 15 and 16, 1925.

THE ALLEGED OVERCROWDING OF THE ARCHITECTURAL PROFESSION

In the year 1924 a joint Committee was set up by the Council of the R.I.B.A., consisting of three representatives of the R.I.B.A. and three representatives of the Association of Architects, Surveyors and Technical Assistants, under the chairmanship of Mr. Maurice E. Webb, F.R.I.B.A., for the purpose of examining into the question of the alleged overcrowding of the architectural profession. This Committee has just completed its work and submitted a report to the Council of the R.I.B.A. as follows:—

To the President and Council of the R.I.B.A.

The Joint Committee set up by the Council of the R.I.B.A. and the Architects' and Surveyors' Assistants' Professional Union (now the Association of Architects, Surveyors, and Technical Assistants) have held four meetings and have carefully considered their Reference, which was as follows:—

"That the Council set up a small joint Committee of six to examine and report within six months upon the alleged overcrowding of the profession. The Board of Architectural Education and the A.S.A.P.U. to be asked to give this Committee all the information and statistics they possess as to numbers of students in schools, pupils in offices, entrants for R.I.B.A. Examinations, &c., and generally assist in the inquiry." The Joint Committee was constituted as follows:—

Mr. Maurice Webb	} representing the R.I.B.A.
Mr. Arthur Keen	
Mr. Francis Jones	
Mr. Charles McLachlan	} representing the A.A.S.T.A.
Mr. F. R. Jelley	
Mr. J. W. Denington	

From the statistics and other information carefully collated and placed at our disposal by the R.I.B.A. and the A.A.S.T.A., we beg to report that we have reached the following conclusions:—

1. That there are to-day some 12,000 architects (this figure does not include 647 temporary architectural draughtsmen in the Civil Service who were returned in the Census as Civil servants), including 1,300 pupils and students in England and Wales, as against 7,000 forty years ago. These figures are obtained from the census returns, and represent an increase of 0.65 per cent. The population of England and Wales has increased from twenty-six millions to thirty-eight millions during the same period, representing an increase of 46.15 per cent. In other words there is to-day one architect or potential architect to every 3,167 of population in England and Wales, compared with one to 714 forty years ago.

2. It appears, therefore, that the number of architects who describe themselves as such in the census returns has risen in a greater proportion than the population during the past forty years.

3. Approximately four hundred would-be architects are now being trained in schools providing whole-time courses. So far as can be ascertained there are nine hundred pupils or learners in offices, and of this number about one hundred are taking part-time courses in a recognised school of architecture. This means that there are about 1,300 youths to-day in training for the profession. These figures do not include the comparatively large number of persons who enter the profession irregularly or incidentally by promotion from the office-boy or clerical grades.

4. If three and a-half years be taken as the average period of training before wage-earning begins, it will be seen that some four hundred young architects presumably enter the profession every year. Of this number three hundred have been pupils and one hundred have undergone whole-time training in the recognised schools.

5. If the average professional life of an architect be taken as thirty-years (this figure is somewhat conjectural, but the Committee believe in

the absence of accurate information, which they made every effort to obtain, that it is a reasonable average), it follows that sufficient men are being trained to maintain the total numerical strength of the profession at 12,000. This does not allow for wastage, which will probably account for the difference between this figure and that of the 10,700 architects who are earning a living to-day as professional men.

6. Admitting that these figures are incapable of absolute proof, the Joint Committee feel that at least as many men are entering the profession as the profession can at the present time absorb, and are of opinion that steps should be taken, not to limit the numbers entering the profession, but to warn the profession and the public of this fact, and to ensure that the training given to students wishing to become architects is thoroughly adequate.

7. From the evidence available, of which the salient parts have been quoted above, and from the evidence of those responsible for the keeping of employment registers, the Committee believe that there is no overcrowding so far as the highly-trained, competent man is concerned. But they believe also that there is a surplus of indifferently trained persons, especially amongst the junior grades.

8. Finally, we consider that the utmost importance attaches to the following points, which we believe should be widely circulated to the profession:—

(A) OVERCROWDING NOT CAUSED BY THE SCHOOLS.—The figures which we have examined prove beyond question that the recognised Architectural Schools are in no way contributing to the overcrowding of the profession. Owing to their lengthy courses and to the cost of maintaining a school student away from home, the tendency is, if anything, the other way. As an illustration of this opinion it may be mentioned that in the districts where the pupilage system still survives, namely, everywhere, except in London and Liverpool, there are only some twenty-five whole-time students per annum who are passing through the schools.

We therefore recommend:—

(i) That the Board of Architectural Education be requested to get into touch with all unrecognised schools, art schools and polytechnics with a view to the improvement of the architectural courses at such schools.

(ii) That letters be addressed to headmasters of all public and secondary schools, to the Association of Headmasters and to all educational authorities setting forth the method of entry into the architectural profession.

(B) TRAINING AND MAINTENANCE.—Architects in practice should be reminded of the unfairness of taking a boy into an office in a junior capacity without making adequate arrangements for his education and training if he shows a bent for architecture. In this connection the Committee desire to record their whole-hearted support of the present proposals of the Board of Architectural Education for the establishment of Maintenance scholarships, which they consider will be invaluable as a means of encouraging the growth of whole-time training.

(C) CASUALISATION OF EMPLOYMENT.—There is a growing tendency to casualise employment in architects' offices. Assistants are engaged for special work for a few months only, and are then cast aside to swell the employment registers. We recommend that private practitioners should be urged to avoid short-term employment of assistants wherever possible, and to remember the evils in the building and other industries of which casual labour has been the cause.

(D) INTERCHANGE OF ASSISTANTS.—It is suggested that by local co-operation more particularly between the Allied Societies and the branches of the A.A.S.T.A., some system of interchange of assistants between offices might relieve the present difficulties of casual labour.

We recommend that the Allied Societies be urged to elaborate some such system as this. We also recommend that students, on termination of their pupilage, be recommended for and aided to obtain employment if possible in some town where they can obtain useful experience and further professional tuition in some good evening school.

(E) TEMPORARY OFFICIAL STAFFS.—Government Departments and Municipal Authorities are particularly prone to the engagement of temporary staffs, a practice from which many cases of extreme hardship have resulted and will result. For example, at the present time the War Office, the Admiralty, H.M. Office of Works, the Board of Trade, the Air Ministry, the Ministry of Transport, the Ministry of Health and the Post Office employ 647 temporary and unestablished draughtsmen. If the system cannot altogether be avoided, these authorities should be urged to alleviate the hardships which it entails.

(F) EDUCATION OF PUPILS AND ASSISTANTS.—We recommend that all architects' assistants who have not passed the R.I.B.A. Examinations should be urged to do so. We also recommend that no articulated pupils should be accepted in an architects' office under the age of 17 years, and unless they possess qualifications of the standard required for Probationership of the R.I.B.A. or for entrance to a recognised school of architecture. We also suggest in this connection that the Board of Architectural Education should be invited to consider whether it is not possible to provide some kind of training syllabus for the use and guidance of architects who take in pupils. This suggestion applies particularly to districts where school education is not easily attainable.

(G) INDENTURES.—We recommend the Council of the R.I.B.A. to resist the practice of incorporating in indentures clauses restrictive of future practice within a certain prescribed area, and to encourage the use of the R.I.B.A. Form of Articles of Pupilage.

(H) OVERCROWDING IN SCOTLAND.—Owing to the difficulty of obtaining up-to-date statistics and other information, Scotland has not been included in the field covered by this report, which deals with England and Wales only. We recommend that the Incorporation of Architects in Scotland be invited to initiate a similar inquiry into the question of overcrowding in Scotland.

BOARD OF ARCHITECTURAL EDUCATION

Conference with Teachers of Building.

On Tuesday, in the R.I.B.A. Galleries, the Board of Architectural Education held a conference with the representative teachers of building who are in London on a course arranged by H.M. Board of Education. Papers were read on "The Teaching of Building Construction from the Architects' and from the Teachers' Points of View," by Professor Beresford Pite and Mr. M. S. Briggs, H.M.I., respectively. A discussion followed. There was an exhibition of architects' working drawings in the galleries.

Professor Pite dealt with the teaching of building construction from the architects' point of view. He laid it down that the primary element of architecture was construction or building, but it must be animated by intelligence. The animating intelligence which converted a heap of material into a useful building was architecture. The second primary element was idea, and the combination of both elements in education was vital.

Mr. Martin S. Briggs, who spoke from the teachers' point of view, urged that building construction must never be taught as an isolated subject. It was impossible to understand building without some training in mathematics, science, and geometry. In a two years' course they could take the student through the constructional work of an average dwelling house, but not much more. There should be supplementary lessons in building science in a laboratory.

LEADING CONTENTS. PAGE

BY-LAWS AND STEEL FRAME BUILDINGS ..	169
NOTES	170
GENERAL NEWS	172
COMPETITION NEWS	172
CORRESPONDENCE	174
THE ARCHITECTURAL ASSOCIATION	175
A COMPETITION SUGGESTION.....	176
THE ALLEGED OVERCROWDING OF THE ARCHITECTURAL PROFESSION	177
THE ROYAL SANITARY INSTITUTE CONGRESS AT EDINBURGH	186
INCORPORATED INSTITUTE OF BRITISH DECORATORS	187
LEGAL SECTION	188
THE BUILDING TRADE.....	191
ARCHITECTS' AND BUILDERS' INQUIRY BUREAU	192
THE WEEK IN PARLIAMENT	193
NEW BUILDINGS IN LONDON.....	195
CONTRACTS, COMPETITIONS, ETC.	197
PROPOSED NEW BUILDINGS AND OTHER WORKS	199
TRADE NEWS	201
TENDERS	203

ILLUSTRATIONS

New Premises for Messrs. Courtaulds,
St. Martin's-le-Grand.

This building, now being erected, has frontages in St. Martins-le-Grand and Foster-lane, the latter being used for the service of the company's merchandise. It has a width of 73 ft. and a depth of 139 ft., the site having been reduced on both frontages for street widenings. The building has ten stories, including the basement and sub-basement, which extend 22 ft. below pavement level. These two lower floors are devoted to the boilers and services of the building and the fire-resisting compartment stores for goods. The floors above ground are reserved for show-rooms, offices, and staff welfare. The main entrance in St. Martins-le-Grand is intended for the use of the company's clients coming to the upper floors of the building, the staff entrance being in the rear. The entire ground floor is set apart for the receipt, examination and issue of goods, a loading dock being arranged in Foster-lane for the access of lorries, which can be withdrawn from the congestion of the street while delivering and receiving.

Light being an essential requirement, the main staircase and passenger lifts are placed well within the building in the position least likely to interfere with it, access to the staircase hall being gained through the main entrance loggia and a vestibule. The staff lift is in the well of the staff staircase, and a goods lift serves every floor. The first floor is occupied by the large open tapestry department, offices for a portion of the directorate being placed across the main front. The second floor is somewhat similar in arrangement, and is to be used for the shipping or foreign department, the private rooms on the main front being set apart for the use of clients and foreign visitors. The share and transfer and counting-house departments occupy the whole of the third floor, the boardrooms and directorate being placed on the fourth floor, a small portion of this floor being reserved for accountants and auditors. The housekeeper's quarters, kitchens, staff luncheon and club rooms are situated on the fifth floor, a small lift from the kitchens serving meals to the directors' luncheon rooms on the floor below. The kitchen is designed to cook for 300, the staff dining-room being intended to serve the staff in two batches of 150 each. The sixth and seventh floors are for showroom purposes, patterns, samples and extension. The seventh floor has no windows to the south or west in order to shut out the sun, and has a large number of north lights of a saw-tooth section in the roof to gain as much light of a clear quality

as is possible. A somewhat unusual feature in the design of these floors is the arrangement of the dormers facing Foster-lane, which, complying with the London Building Acts, enables a great amount of window space to be gained, while at the same time, almost throughout the frontage of the building though in a sloping roof, the internal treatment is vertical, the concrete portion between the window-cills and the floor forming a strong longitudinal beam. In buildings of this character where daylight is of such importance this extra window arrangement is considered of value. The staircases are carried up to the roof.

The façades are of a somewhat studied simplicity in Portland stone crowned by heavy cornices, for which the carving is being done by Mr. Henry Poole, A.R.A. A factor in the Foster-lane elevation is the wide opening for the loading dock, which has an unobstructed span of 42ft., over which the superstructure is carried. The sixth floor on the St. Martins-le-Grand front, with the consent of the London County Council, is set back and built vertical. No windows being required on the seventh floor on this front, the roof-slope is covered with lead having heavy vertical rolls.

The land having been Crown property and in Crown occupation ancient lights had not accrued, and the problem has, therefore, been freed from troubles of this nature. The building is designed in accordance with the requirements of the London County Council (General) Powers Act, 1909, of steel framework and is of fire-resisting a quality as it is possible to devise, with solid concrete floors specially designed by Dr. Faber. The requirements conditional on the various consents necessary from the County Council have added very considerably to the cost of the building. In view of this large additional outlay on a building already designed under a stringent Act intended for the prevention of fire, it may appear desirable for architects wherever possible to advise clients to build outside the county area. It is impossible to estimate in advance the cost of these growing demands, which can only have the ultimate effect of a deterrent to building.

The foundations on this site are particularly difficult, inasmuch as there are about 13 ft. of ballast overlying the blue clay, the lower 12 ft. of which are water-logged, and though parts of it are firm other parts are sufficiently unreliable to involve an improper risk of founding so tall and permanent a building upon it, having regard to its water-logged condition and the fact that there is much building likely in the neighbourhood in the future which may withdraw the water. Under these circumstances it was decided desirable to get down to the blue clay. As the contract of sale imposed the conditions that no pumping should be done in such a way as to withdraw water from the ballast because of risk to the neighbouring Post Office building and to St. Paul's Cathedral, the problem of carrying these foundations down on the blue clay without violating these conditions presented some difficulty. These difficulties have been overcome by the use of steel sheet piling, and it was found that piling supplied by the British Steel Sheet Piling Co., in which alternate sections are 5 in. joists with a special section between gripping the flanges of the joists, was the most satisfactory arrangement, and since this section was adopted no trouble has been experienced.

The superstructure is designed as a steel-frame building, and perhaps the most interesting feature of the steelwork is the large plate girder of nearly 50 ft. span, carrying a load of approximately 500 tons, which gives a wide entrance for motor lorries on the Foster-lane front. A drawing of this girder is shown. The water supply is obtained from an artesian well, and the heating consists of "Classic" type of radiators in all rooms except the board-room and one of the directors' rooms. The electrical supply is obtained from the companies, with, however, the provision of a stand-by set in case of a breakdown or strike.

All the floors are provided with sprinklers, in view of the great value of the materials stored in the building and of the requirements of the London County Council. The floors are of solid reinforced concrete finished on top with oak boarding. The retaining walls are self-supporting "L" type reinforced concrete walls, approximately 30 ft. high.

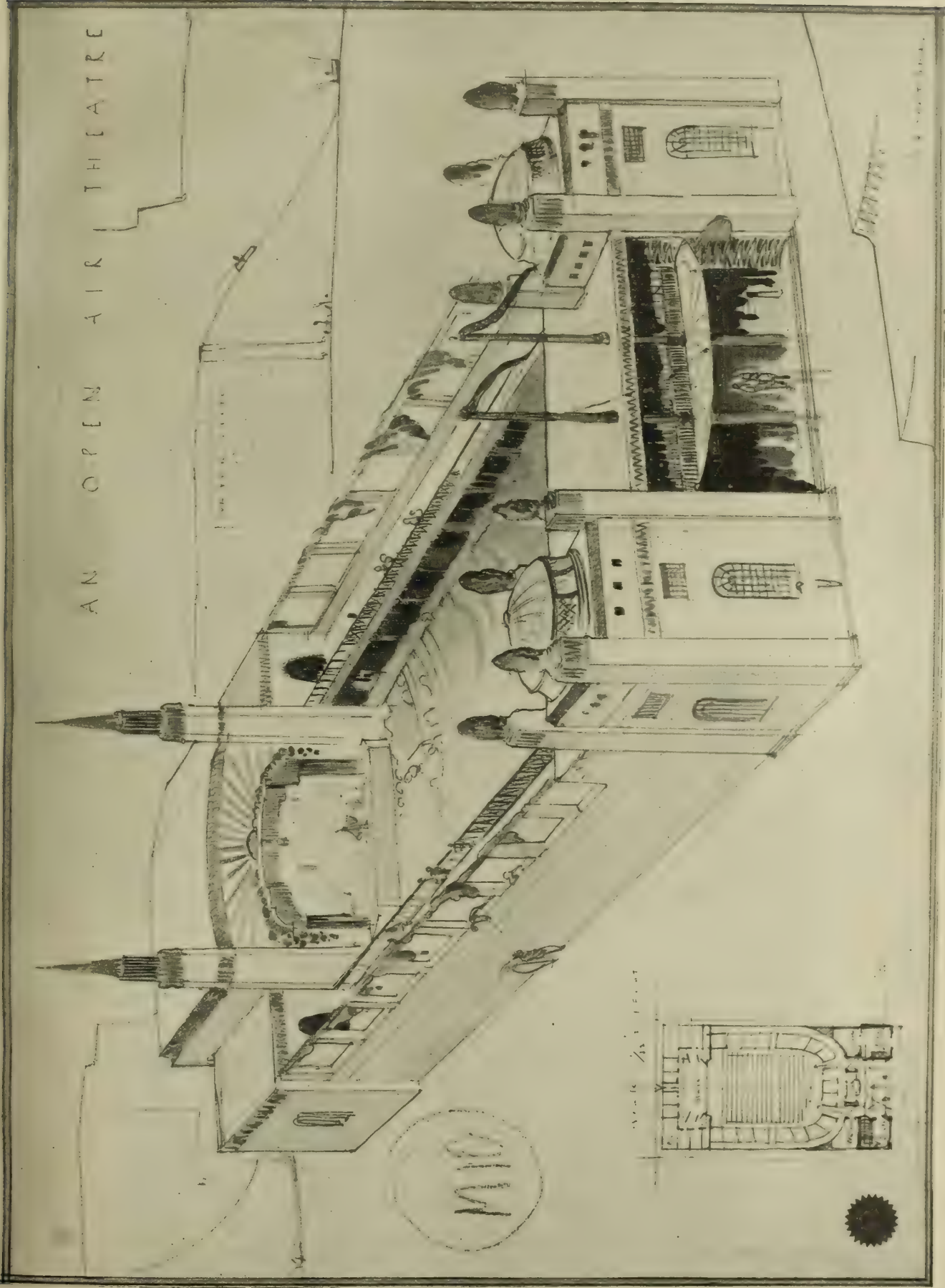
The building has been designed by Mr. S. Sullivan, F.R.I.B.A., in collaboration with Dr. Oscar Faber, O.B.E., the consulting engineer. The general contractors are Messrs. Holloway Bros. (London), Ltd. The steel windows, etc., are by the Crittall Manufacturing Co., Ltd.; sanitation by Dent & Hellyer, Ltd.; marblework by the Art Pavements and Decorations, Ltd.; lifts by Waygood Otis, Ltd.; strong-room doors by Chatwood Safe Co., Ltd.; rolling sheet shutters by A. I. Gibson, of Twickenham; ornamental plasterwork by George Jackson & Sons, Ltd.; steelwork by Redpath, Brown & Co., Ltd.; heating by Broadhurst, Craig & Ching, Ltd.; the quantity surveyor is Mr. Louis C. Veale, F.S.I.

Downside Abbey.

The work recently carried out at Downside Abbey by Sir Giles Gilbert Scott, R.A., consists in adding seven bays of the nave to the existing church, together with chapels adjoining. Before the addition of these bays the church consisted of choir and transepts, with chapels grouped around the choir, and an unfinished tower. The choir was designed by the late Mr. Garnett, and the transepts, chapels, and tower by the late Messrs. Dunn & Hansom. The work recently completed has been to a certain extent influenced by the existing building. It does not yet complete the nave, which will eventually be a few bays longer; a temporary wall now closes in the west end. Bath stone has been used for the work both internally and externally. This has been supplied and worked by the Bath & Portland Stone Firms, Ltd., but the actual building has been entirely carried out by the Abbey's own staff of men, under the supervision of their resident clerk of works. The carving was entrusted to Messrs. Wall Co., of Cheltenham.

The East Kent Coalfield.

Mr. H. E. H. Rice, of Tilmanstone, who has succeeded the late Lord Milner as chairman of the committee set up to confer with the owners and miners for the purpose of meeting the needs which will arise from the development of the East Kent Coalfields, has stated that Professor Abercrombie has made a very careful survey of the position and his report will soon be available. The area concerned roughly the whole of the county east of a line drawn from Folkestone to Whitstable and including Canterbury. Turning to figures and prospects of the immediate future, Mr. Rice said at present two collieries were raising coal, Chislet and Tilmanstone—one at Snowdown would, in all probability, be raising it in a few months' time, and another at Northbrook which had not yet been sunk to the coal, would probably be two years before raising. With regard to the population to be expected within either of the mines was going at full production, which was nowadays the necessity for economic success, each would be surrounded by from 10,000 to 12,000 people. That gave for the two mines 40,000 to 50,000 population, and it was necessary to consider steps for accommodation of them. Many people—and some great capital—considered that the increase would not be at 50,000, but would hardly be less than a quarter of a million in time. Probably 200,000 or 300,000 houses would be built a year until the total required had been erected. Mr. Rice also considered that with all this increased population, new schools, new churches, and other buildings would be required, and he spoke with hopefulness of the problem being met and solved with success.



An Open-Air Theatre. By Mr. W. R. Brinton (Architectural Association School of Architecture).



ROYAL ACADEMY EXHIBITION,

New Premises for Messrs. Courtaulds, Ltd., St. Martin's-le-Grand, London, E.C.

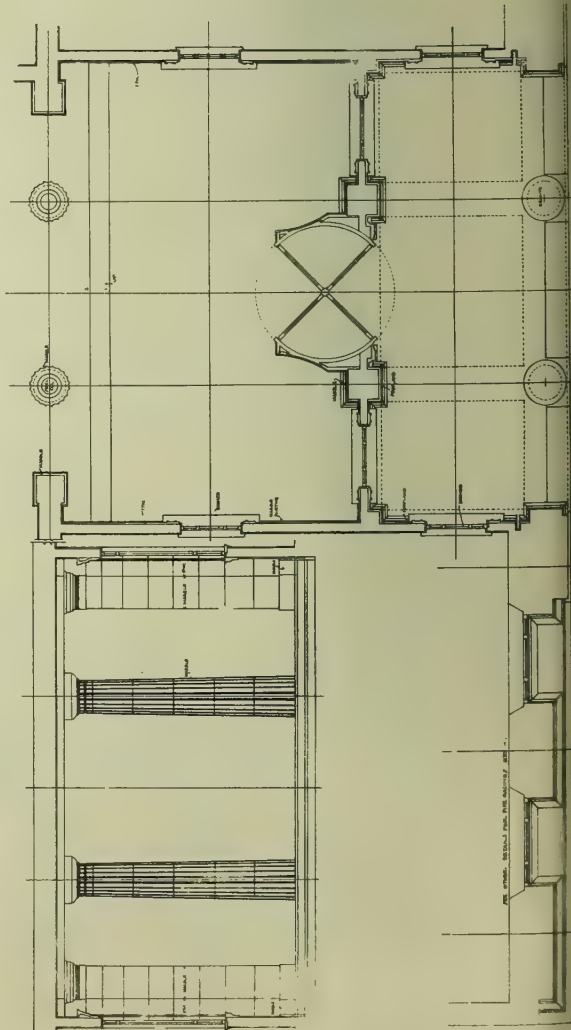
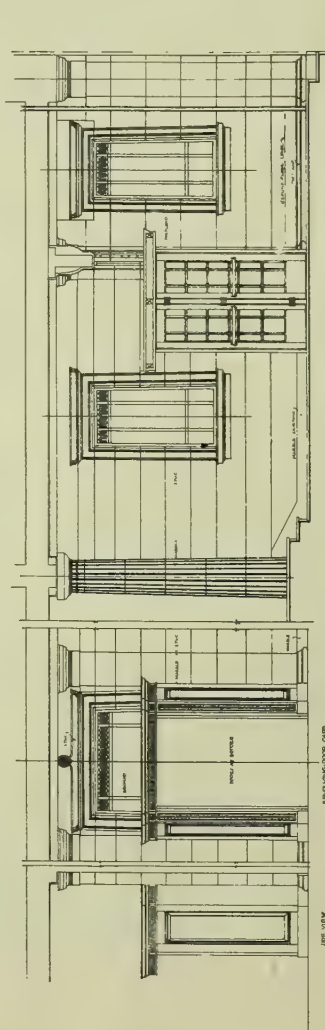
MR. LEO S. SULLIVAN, F.R.I.B.A., Architect, in collaboration with DR. OSCAR FABER, Consulting Engineer.



Photo: Herbert Lambert, F.R.P.S.

Downside Abbey, near Bath : A View of the New Nave from Aisle.

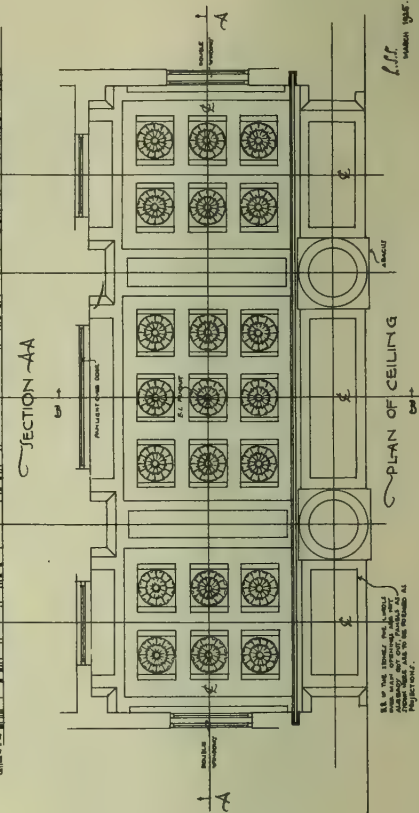
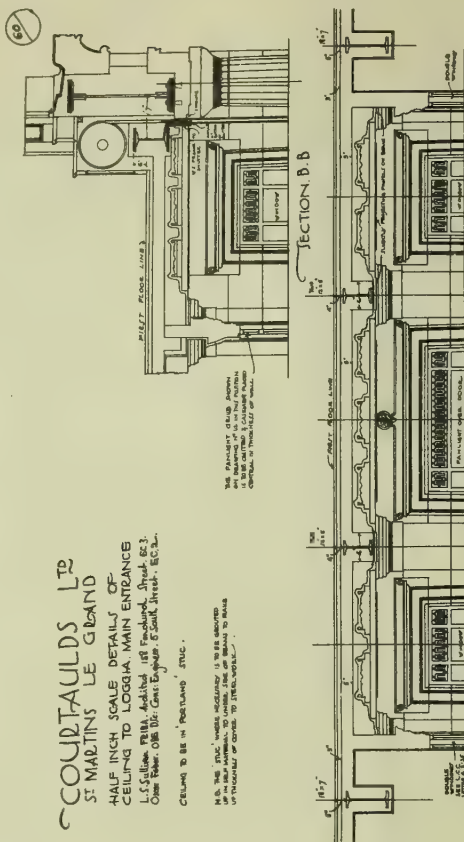
SIR GILES GILBERT SCOTT, R.A., Architect.



COURTAULDS LTD
ST MARTINS LE GRAND
HALF INCH SCALE DETAILS OF
CEILING TO LOGGIA MAIN ENTRANCE
L.S. CULLEN PRIMA. Archd. 187 Fenchurch Street EC3.
Over Faber. Old Vic Court Entrance, 6 South Street, EC4A.
CEILING TO BE IN PORTLAND STUCCO.

N.B. THE STUC' WERE HELD ONLY IF TO BE DELETED
UP IN THE MARCH TO UNDER, SIDE OF BEANS TO MAKE

THE PAINTING DESIGN SHOWN ON DRAWING NO. 14 IN THIS PARTION IS TO BE OBTAINED BY CARVING PLACES CENTRAL IN THICKNESS OF WALL.

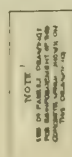
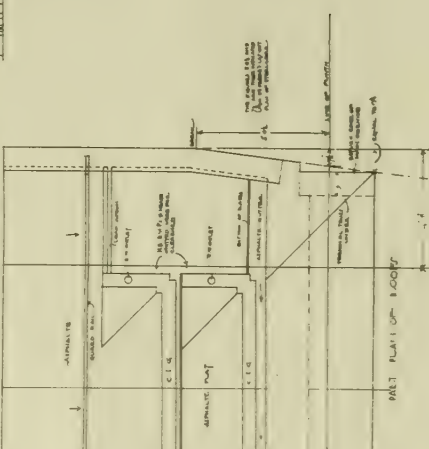


IS IN THE STOMACH FOR A WHILE
EVERY DAY OPENING AND NOT
ALREADY GOT OUT, PAINFUL AS
STOMACH HERE ARE TO BE FORWARDED AS
PROJECTIONS.

1935



ST. MARTINS-LE-GRAND, E.C.: NEW BUILDINGS.
MR. LEO S. SULLIVAN, F.R.I.B.A., ARCHITECT (IN COLLABORATION WITH DR. OSCAR FABER, THE CONSULTING ENGINEER).



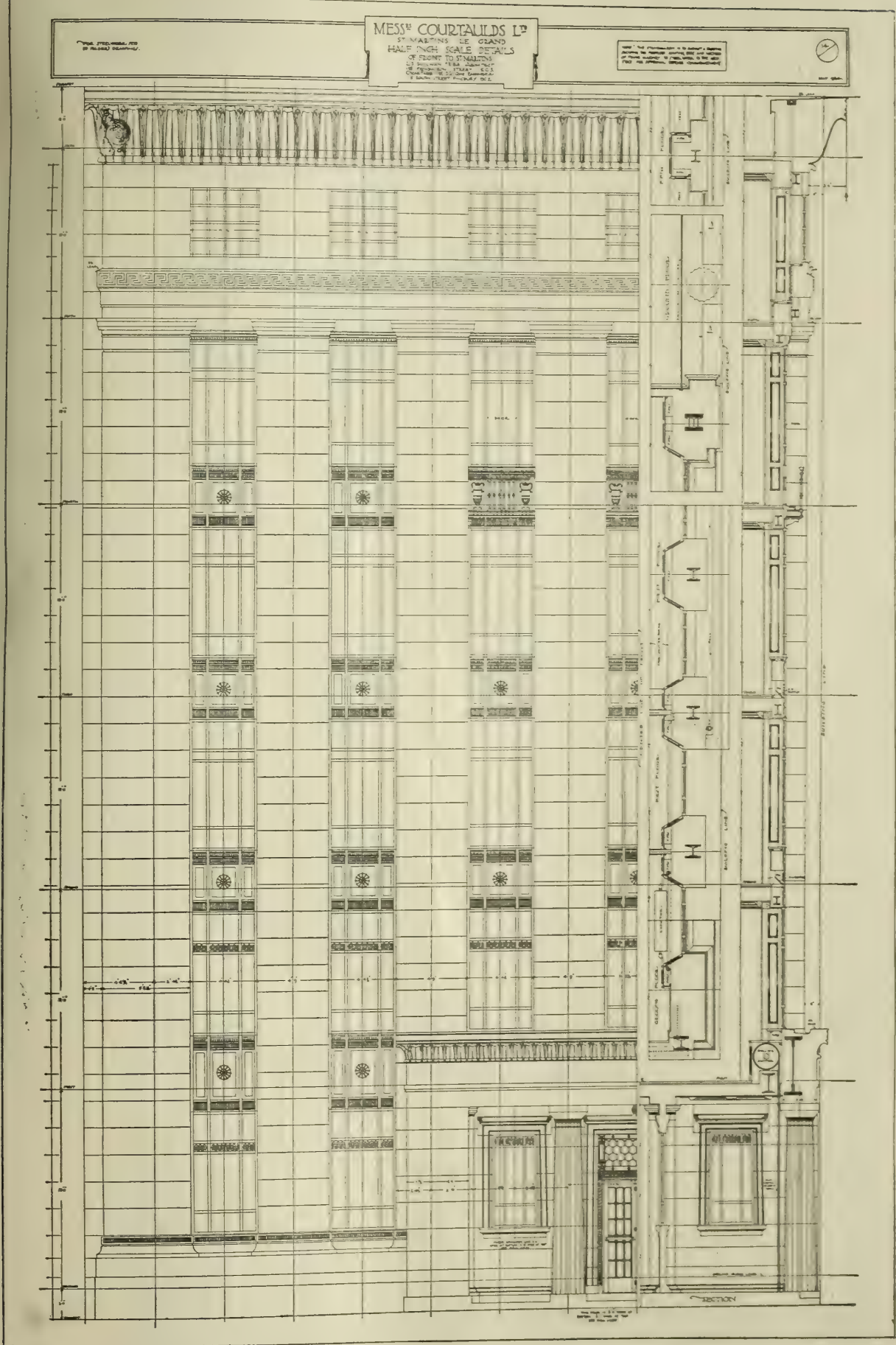
ST. MARTINS-LE-GRAND, E.C.: NEW BUILDINGS.
MR. LEO S. SULLIVAN, F.R.I.B.A., ARCHITECT (IN COLLABORATION WITH DR. OSCAR FABER, THE CONSULTING ENGINEER).



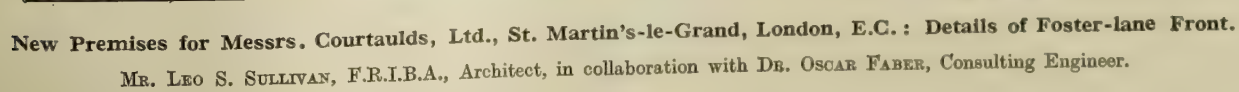
Photo: Herbert Lambert, F.R.P.S.

Downside Abbey, near Bath : The New Nave.

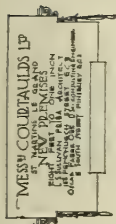
SIR GILES GILBERT SCOTT, R.A., Architect.



New Premises for Messrs. Courtaulds, Ltd., St. Martin's-le-Grand, London, E.C.: Details of Elevation.
MR. LEO S. SULLIVAN, F.R.I.B.A., Architect, in collaboration with DR. OSCAR FABER, Consulting Engineer.



ST MARTINE LE GRAND
NEW PREMISES
FIGHT FIRST 10 ONE INCN
SUSAN PALSA ARCHITECT
JULY 1985
ONE PALMA 85 8 YEARS 6 C
A COOPERATING PRESENTS
A FOURTH FLOOR 800



FIFTH FLOOR PLAN

SECTION CC
LOOKING EAST

SEVENTH FLOOR PLAN

New Premises for Messrs. Courtaulds, Ltd., St. Martin's-le-Grand, London, E.C.: Plans and Section.

MR. LEO S. SULLIVAN, F.R.I.B.A., Architect, in collaboration with DR. OSCAR FABER, Consulting Engineer.

THE ROYAL SANITARY INSTITUTE CONGRESS AT EDINBURGH

THE Congress of the Royal Sanitary Institute was held last week in Edinburgh, from July 20 to July 25, under the presidency of Sir John Gilmour, Bart., M.P., Secretary for Scotland. Some 900 delegates attended. The first function was a public luncheon held in the hall of the University Union, previous to which Lord Provost Sir W. L. Sleigh and other municipal representatives received the visitors.

Mr. E. F. Macpherson, proposing the toast of "The Institute," said there was a hope that, with the development of medical research, dreadful diseases might vanish away like a bad dream, as well as those conditions of darkness, of impurity, of bad housing, and all the attributes of human discomfort to which diseases owed their genesis. The social reformers found their footsteps dogged by that dread spectre, Economy, with the "Geddes axe" slung over his shoulder. They knew the resources of the nation were not bottomless, but still good progress had been made, and in that the Royal Sanitary Institute had borne no unworthy part. There were attending the conference representative men who had devoted their lives to some particular branch. Their Local Authorities were taking an active part in the proceedings. He was impressed, Mr. Macpherson said, by the programme of the Congress. There were no fewer than fifty-two items embraced in the subjects of discussion.

Sir Henry Tanner, responding, said the Institute was established immediately after the passing of the Public Health Act, 1875. Next year would be their jubilee. They had attending the Congress representatives from China, France, Egypt, Poland, and the United States.

Sir John Gilmour's Address.

Sir John Gilmour delivered the inaugural address in the M'Ewan Hall, in the course of which he said that this was the first time the Institute had met in Edinburgh. Few better places could have been chosen for the purpose. For here one breathed the very atmosphere of all that stood for a long and notable tradition in medical achievement; here we had a medical school known for its progress and noted for its enlightenment; here, indeed, was one of the greatest medical capitals of the world. What more fitting background could they wish for the Congress than that? To understand the course of public health development in Scotland, one must first take account of the geographical features of the country. As to the all-important subject of water supply, it would be difficult to find any other area of a similar size that could equal us in available resources of river and loch. There was no place in Scotland remotely removed from a source of water supply. An adequate supply of wholesome water—both for consumption and for drainage purposes—was almost the first essential in any efficient system of sanitation. Other countries were sometimes forced to carry water by artificial means to their centres of population for incredible distances. Scotland stood, if not unique, at least equalled by few in her natural advantages in this respect. In nearly all the burghs of Scotland there was now a reasonably sufficient supply of clean water. The service was led right to the water-tap, inside the houses, and the old-fashioned well or pump was found only in exceptional cases. Drainage, too, was largely water-borne, and for the most part satisfactory. But matter had by no means stood still in the county areas. Much useful work had been done by making use of the ingenious machinery of the special districts. On the whole the infectious disease provision in the landward areas had reached a satisfactory level. The county hospital was, by reason of the smaller population it requires to serve, a smaller unit than was found in the burghs and large towns. Often this meant that the interests of economy and efficiency must suffer.

He thought, therefore, that in the future their efforts should be directed towards the enlargement of the county unit, the elimination of the small hospital, and the organisation of a service over a wider area which would enable combining authorities to pool their resources, and so attain a greater measure of efficiency and economy in administration.

With regard to the housing problem, the speaker said it was unfortunate that precise information was not obtainable with regard to the demoralisation, the ill-health, and the mortality among our people that could be directly attributed to life in the slums, and in houses that were below the datum-line of habitability. He felt certain that if such information could be condensed into a comprehensible statement of fact, the nation would receive a shock the like of which it had rarely before experienced. We must free our minds from preconceived notions that the only materials of which houses could be built are brick and stone, and we must be prepared to investigate fairly and without prejudice the possibilities of other materials, and of other methods of building, than those in operation in the past. Whatever criticisms had been made on the standard of construction, the people would not be huddled together in congested villages and towns as in the past. To use the striking phrase of the Royal Commission, "the clotted masses of slums" in the great cities would not be repeated in the developments of the twentieth century.

Housing of Town Population.

Opening the Engineering and Architectural Section, Professor T. Hudson Beare said the most urgent of all the many post-war problems which the country had had to solve was that of providing adequate housing accommodation for both the urban and the rural population, on, if possible, an economic basis. When the Armistice was signed in 1918, one of the first reconstruction questions to be taken up by Parliament was that of the housing of the people. On the face of it, the problem seemed one that could be easily dealt with, but unfortunately the optimistic forecasts proved to be lamentably wrong. The most serious of the many factors which prevented the possibility of the rapid provision of houses was the economic one. The only solution of the difficulty was to utilise building materials of a type which would not require so much skilled labour as brick, stone, &c. The question of the housing of town populations was closely interlocked with other engineering problems, notably that of the provision of cheap and efficient mechanical transport. If they were not to

create once more the same evils in regard to slum areas as those inherited as a result of the lack of foresight of our forefathers, the rehousing of the urban population on satisfactory lines meant a great diminution of the permissible population per acre of habited area. That involved that the housed population would, in the majority cases, have their homes in a quarter of town which would be at a considerable distance from that in which they spent their working hours, hence any rehousing scheme to be a success must be one in regard to which the transport difficulty had been fully considered and adequately provided for, a scheme that was equally necessary, whether the housing scheme was one which provided a series of self-contained houses or one in which the tenement system was adopted.

The Modern Plumber.

Mr. Walter Scott, reading a paper on "The Modern Plumber and His Work," said that the plumbing of to-day was very different from that of fifty years ago. While the early plumbers exercised all the skill of their hands in the manipulation of lead, with scarcely a thought for the science of hygiene or the health of the community, the plumber of to-day, owing to the great inroads of science into his trade and changed conditions generally, was more intelligent, and necessarily occupied a higher position amongst his fellows and in the community at large, because he combined with the routine of his trade and the uses of his hands and tools an intelligent mastership.

National Registration of Plumbers.

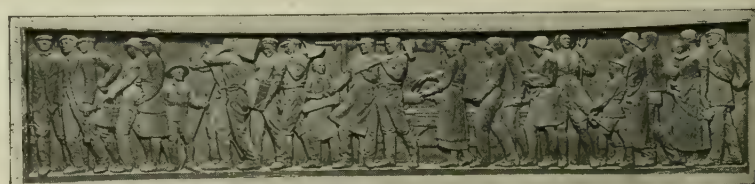
Sir Archibald Craig, LL.D., member of the Court of the Worshipful Company of Plumbers (London) and Secretary of Glasgow Registration Council, in a paper on "The National Registration of Plumbers," stated that the movement had originated in a reaction of the grave evils arising from defective sanitary conditions and the fact that there was no trade on which health and comfort of the home was more dependent than that of the plumber. The ancient Guild, the Worshipful Company of Plumbers, which dates from 1327, placed itself at the head of the movement, and had spent its resources freely in promoting it. A register was created to enable the public to distinguish and select craftsmen who had given evidence of their skill and competency as plumbers, and undertaking the responsibility of attaching to registration. The movement was aimed at the better training of the rising generation of plumbers by a proper system of apprenticeship combined with technical education.

Homes and Hygiene.

Mr. Arthur F. Wickenden, A.R.I.B. (Imperial College of Science and Technology), reading a paper on "Economic Homes,"



MILITARY FRIEZE.



ROYAL ACADEMY EXHIBITION.

CIVIL FRIEZE.

Bronze Panels for Bury War Memorial.

MR. HERMON CAWTHRA, A.R.B.S., Sculptor; Architecture by SIR REGINALD BLOMFIELD, R.



hygiene," said the suggestions and criticisms in that short paper were intended to draw attention to several matters in design, construction and equipment of small dwellings which offer scope for the application of hygienic principles without unduly increasing cost. As a basis for the matter under consideration it was suggested that three important essentials to hygienic homes were: (a) plenty of light and fresh air; (b) adequate room to live decent and well-ordered; (c) every facility for promoting cleanliness. Although the value of sunlight and fresh air was urged with increased vehemence by modern medical and health authorities, yet strangely enough, the tendency of present-day house building was to reduce the sizes of windows. The latest types of casements, although possibly more artistic in appearance, provided in many instances much less window area than the hung sashes installed in pre-war houses. Sliding casements to fold back and leave the entire window space open when the weather was favourable did not seem to prove very attractive to builders, even though such an arrangement was quite a practical and common-sense proposition and might even be made an economical one.

With regard to the provision of adequate sleeping accommodation, it must be admitted that the dimensions of rooms in many modern houses for the poorer classes were far too restricted, and an even worse defect was the lack of sufficient accommodation for storage purposes. Much of the ordinary household lumber and domestic equipment inseparable from normal family life had to be stored in living rooms and bedrooms, thus creating a litter all over the house, and being conducive to untidy and slovenly habits. There were numerous details in the construction of houses that could assist in promoting the essential cleanliness in the house. Although elaborate cornices to ceilings, skirtings, chairtraces and other such features were less fashionable than in years gone by, yet perfection in such matters had not yet been reached. Built-in cupboards and wardrobes were frequently finished with boarded tops about a foot or so below the ceilings, instead of being taken to the full height of the room. Fine harbours for dust and dust were thus provided. Deep cupboards, stair cupboards with insufficient ventilation, inaccessible spaces behind baths and over fittings all formed traps for dirt, and could often be avoided by care and common-sense planning. In the furnishing of the home, carpets, pictures, ornaments, &c., should in the interest of cleanliness be reduced to a minimum.

Workmen's Dwellings.

Reading a paper on Workmen's Dwellings, Mr. John Wilfrid Green, M.Inst.M. and C.E. (City Engineer, Durham), said the house shortage was not a consequence of the war alone, the Housing Act of 1909 seriously affected cottage property (the building average decreasing from 10,000 to 84,000 per annum). During the war years building came to a standstill, and Rent Restriction Acts of the present time had stopped private enterprise building for letting purposes. Assuming there were 8,000,000 houses in the country, and the life of this class of property to be 80 years, 100,000 houses were required annually to replace old property alone. The marriage rate of the country was about 300,000 a year, and it had been said that the new houses required under this head were at least 30 per cent. of that number. There were also large numbers of houses in a dilapidated and insanitary condition, which only awaited an easing of the situation before being condemned.

Under existing conditions it was questionable whether our housing ideas were not too idealistic, or whether we should insist on a density of five houses per acre, in view of the density of houses in which people are now living, and the sub-letting of these houses which occurred. Though large gardens might be appreciated by day tenants, it must be admitted that the appearance of many housing schemes showed that the occupants had no inclination after a hard day's work, and perhaps some time spent

in travelling, to attend to a garden. To provide houses at twelve to the acre in the vicinity of large towns necessitated the land being acquired at a considerable distance from the area in which people worked, and as, unfortunately, conditions of employment were often insecure at the present time, people did not feel inclined to remove to these newly-developed areas, and spend money in travelling to and from their work each day. It was questionable also, whether the few hours spent at night in the more open space compensated for the trying time spent in the crowded atmosphere of 'bus or train after a hasty breakfast or a hard day's work, and perhaps long overtime at shop or office. The author considered that suitably designed blocks of flats should receive more sympathetic attention from housing committees, and accommodation provided for old couples and others who did not require three bedrooms and a bathroom. Blocks of flats with separate front doors, built in addition to the type of house now generally favoured, would give an opportunity of catching up. Such houses could naturally be erected at less cost than the semi-detached and block of four type now being put up, the less acreage of land, and the decreased amount of roadwork, sewerage and fencing, and the less cost of gas and water services, &c., would allow of more families being decently housed in a given time for a given capital sum. The point was that something intermediate might usefully be done between the present slum condition of our cities and the garden village.

At present, about 40 per cent. of the hours spent in the erection of house property was accounted for by the bricklayer and his labourer, and about 12 per cent. by the plasterer; the carpenter, joiner, slater, plumber, and painter making up the rest. The author thought that to prevent exploitation such as characterised the "Addison Scheme," alternative materials and trades should have careful consideration. To a large extent the bricklayer and mason had been displaced in the making of bridges, and there seemed no reason why we should not depart from the methods of Nebuchadnezzar in the construction of buildings.

INCORPORATED INSTITUTE OF BRITISH DECORATORS

PRESENTATION OF GOLD MEDAL.

An interesting ceremony took place on Monday evening last at a *Conversazione* held at the Painters' Hall, Little Trinity-lane, when Sir Banister Fletcher (accompanied by Lady Fletcher) presented the Gold Medal of the Incorporated Institute of British Decorators to Mr. Leonard A. Shuffrey, the distinguished decorative artist. Among those present were the President of the Institution, Mr. Arthur Seymour Jennings, and Mrs. Jennings, Mr. Octavius Satchell (Master of the Painters' Company), Mr. W. Stewart Green (Past-President of the Institute of British Decorators), Mr. Hugh Davies, Mr. Martin S. Briggs, Mr. Manson, Mr. Edwin Lott, Mr. Fred Dakin, Mr. W. H. Cantrell, and many others, including a number of teachers of building subjects who are now taking a refresher course of instruction in London, under the aegis of the Board of Education.

Before asking Sir Banister to make the presentation, the President, in the course of some introductory remarks, pleaded for an increase in membership of the Institute to enable them to broaden the scope of their work, especially in the direction of establishing more travelling scholarships. Mr. Jennings concluded with the prophecy that women were likely to engage more and more in decorative work because of the natural sense of colour which they possessed.

Sir Banister Fletcher, in presenting the Gold Medal to Mr. Shuffrey, said he did so with the greatest possible pleasure, for he and Mr.

Shuffrey were very old friends. Their friendship went back more years than he cared to remember. Briefly tracing Mr. Shuffrey's career, Sir Banister recalled that he (the Medallist) became a member of the Architectural Association in 1871, and in 1880 founded the business of Shuffrey & Co., in collaboration with George Sherrin, at 38, Welbeck-street, Cavendish-square, for the design and manufacture of objects required in interior decoration—wall-papers, fire-grates, chimney-pieces, plaster ceilings, tiles, &c., to be carried out under the patronage of architects. Mr. Shuffrey had been helping architects in interior decoration for the past fifty years, and had done much for interior architecture. He became a member of the Incorporated Institute of British Decorators in 1899, the year of its institution, under the presidency of J. D. Crace, and he had been in turn a member of council, vice-president, treasurer, and president. He had read valuable papers on "The Use of Relief Ornament," "The Position of the Decorator and His Craft," "The Treatment of Woodwork in Decoration," and "Chateaux of the Loire Valley." He also designed the Crace illuminated address. One of his most distinguished achievements was a book which was probably to be found in the library of every architect, "The English Fireplace and its Accessories," published by Batsford. Mr. Shuffrey designed and executed the plaster ceiling in the entrance of the dining hall of the Painters' Company, and had also designed and executed war memorials for Witney Grammar School, Bloxham School, Oxon, and Walpole Park, Ealing. Sir Banister recalled that only three Gold Medals had been previously awarded—to Sir William Richmond, R.A., J. D. Crace, and Metford Warner (of Jeffery & Co.). Investing Mr. Shuffrey with the Medal amid loud applause, Sir Banister said the recipient had devoted his life to the service of his art. The Gold Medal of the Institute was the highest honour they could bestow upon him. It gave him (the speaker) the utmost personal pleasure to be the agent of the presentation.

Mr. Shuffrey, in replying, dwelt upon some of the interesting events of his career, recalling, incidentally, that one of his associates in his early days at the A.A. was Sir Aston Webb.

A vote of thanks to Sir Banister was proposed by Mr. Octavius Satchell, and seconded by Mr. Stewart Green. Sir Banister, replying, mentioned the interest that the Painters' Company (in whose historic hall, by Wren, it was their privilege then to be) had taken in the Trades' Training School, which was one of his own interests in life as it had been his father's before him.

Light refreshments were then taken, after which the company proceeded to the upper hall, where an interesting exhibition of Decorative Art is now being held. One of the attractions of a very pleasant evening was an excellent programme of music rendered by a string quartet.

A Græco-Roman Theatre Find in Transjordan.

In the excavations of the Græco-Roman theatre at Jerash, the classical Geraza or Decapolis, beyond the Jordan, Mr. Horsfield, the architect and former student of the British School of Archaeology at Jerusalem, who is now charged with the conservation of historic monuments, has made an important find. While the foundations of the proscenium of the theatre were being tested, the podium at the back of the stage was disclosed, apparently intact all across, with its fourteen monolithic columns, the lower order standing complete in position, which is rarely seen; also traces of the upper order and statues and inscriptions and three stage doors; also the vaulted main entrances from both wings to the stage and the orchestra. The whole is said to constitute one of the most complete classical theatres.

LEGAL SECTION.

NOTES ON CURRENT CASES

Covenants Against Assigning or Parting with Premises.

OUR readers will have noticed the number of decisions recently delivered by the Courts on the effect of covenants in leases not to assign, underlet or part with the possession of premises or parts of premises the subject of the lease, which we have had occasion to note recently. The latest decision on this point is *Abrahams v. Mac Fisheries, Ltd.* (1925, 2 K.B. 18), the current number of the Law Reports, but the facts are somewhat complicated. By an indenture of lease dated January 1, 1924, two shops with flats and tenements above them, 34 and 35, Thayer-street, were demised by the plaintiff's predecessor in title to the defendants for the term of 14 years from March 25, 1924. Possession of No. 34 was given about March 25, but of No. 35 not until June.

The lease contained a covenant by the lessees that they would not assign, transfer, underlet, or part with the possession of the premises or any part thereof, other than an under-letting of the upper part for residential purposes only, without the previous consent in writing of the lessors, which consent should not be unreasonably, arbitrarily, or vexatiously withheld, and there was a provision in the lease for re-entry on the premises or any part thereof in the event of breach of covenant. The upper part of the premises were in the occupation of tenants who were under the Rent Restriction Acts.

The facts are voluminous, and are also contained in considerable correspondence, but perhaps it will suffice to enable the points of law decided to be understood if they are very briefly stated. The defendants, the lessees under the above lease, were desirous of sub-letting the shop No. 35, and early in June, 1924, through their agents, entered into negotiation with the managing director of a firm of wine merchants, who, on June 12, made the following offer: "I hereby make you a firm offer to take the above premises on a full repairing lease for 14 years or as near that period as possible, and to pay the rent of £225 per annum exclusive" (this meaning exclusive of rates and taxes) "for the first three years; thereafter the rent to be £250 per annum exclusive, provided certain repairs are carried out, or alternatively I am allowed two quarters' rent in lieu of same." Subsequently the solicitors for the wine merchants wrote enclosing a cheque for rent or deposit, saying it was understood that possession of the premises was to be given in order that certain repairs should be undertaken, and asking for the key. To this the defendants' agents replied, pointing out that no repairs could be put in hand until a schedule of the same had been submitted to their superior landlord and stating that the key had been handed over, but asking for its return in a few days. Subsequently, having seen a schedule of repairs, they, however, wrote that they did not consider that the nature of the works would necessitate a reference to the superior landlord, and authorising the work being commenced, on the understanding, however, that any works done prior to the agreeing of the draft lease, and to the defendants receiving the licence to sublet from their superior landlord, were to be carried out at the responsibility of the sub-lessees, and that if any hitch occurred it must be understood "possession" should be surrendered to the defendants immediately. On June 23 the defendants informed their agents that the landlord had refused consent to the sub-letting of the premises, but they had placed the matter in the hands of their solicitors. On June 26 the defendants' agents sent the draft lease to the sub-lessees, stating it was submitted subject to all necessary consents. On June 27 the sub-lessees' solicitors wrote to the defendants' solicitors, pointing out that a considerable sum had been then expended in alterations. On

June 30 the defendants' solicitors wrote to the sub-lessees' solicitors stating that they had no doubt that sufficient particulars and references could be furnished to render any withholding of licence unreasonable, and they noted these were being obtained. On the same date the draft lease was returned approved by the sub-lessees, and the report states that the sub-lessees "were then apparently installed in the premises, and carrying out there the business of a wine merchant." On July 21 the defendants' solicitors sent the counterpart lease for execution, but at the same time pointed out it could not be proceeded with until the superior landlord's licence was forthcoming. By August 2 apparently something had been said as to the sub-lessees vacating the premises, for the solicitors of the sub-lessees wrote they could not see that the defendants had any right to call upon their clients to vacate. On August 6 the defendants' solicitors wrote that, failing their sub-lessees producing acceptable references, the proposed sub-letting would, of course, fall through, and the sub-lessees would have to vacate the premises if in fact they had taken possession of them. On September 17 the defendants' solicitors informed the sub-lessees' solicitors that they had been notified that unless the matter was put upon a proper footing the superior landlord would institute proceedings for forfeiture of the lease owing to the sub-lessees being in occupation without consent. It is sufficient to say that the sub-lessees' solicitors intimated that they would resist any attempt to take forcible possession.

The plaintiff, the superior landlord, instituted proceedings on September 23 to recover possession of the premises from the defendants for breach of covenant. It was alleged that the defendants had assigned or underlet or parted with the possession of the premises or part thereof without previous consent in writing, and in the particulars it was stated that the business of a wine and spirit merchant was carried on upon the premises from about the month of July until September by some person other than the defendants, and that over the door appeared the name of the wine merchants. The defendants alleged that they had neither assigned nor underlet nor parted with possession, and in the alternative pleaded that if they had they would rely upon Section 14 of the Conveyancing Act, 1881, as to absence of notice before action brought. The first part of the defence, that there had been no under-letting or parting with the possession, was based upon the cases *Peebles v. Crosthwaite* (13 T.L.R. 37, 198), and *Jackson v. Simons* (1923, 1 Ch. 373; *The Builder*, July 27, 1923), that no estate or interest had been conferred upon the sub-lessees, but they were on the premises merely by licence from the defendants.

On this point the Court, on the facts, held that the defendants had parted with possession of part of the premises. The handing over of the keys, as the Court intimated, would not in itself be necessarily conclusive evidence, but here the sub-lessees were in occupation of the shop for a considerable period, were carrying on their business there with their name over the door, and refused to go out; the defendants had not, in fact, cashed the cheque received, but they allowed substantial repairs to be carried out by the sub-lessees, and they appeared, as the Court found, to be satisfied, that they had got everything they wanted, only stipulating that, if there should be any hitch, then the sub-lessees should give up "possession," a word the Court laid stress on, coupled with the money spent on repairs and the installation of the business.

The second defence as to the Conveyancing Act had still to be considered, and this is the point of interest in the case, as the Court said

it raised a question of considerable difficulty. Section 14, subsection (1) of the Conveyancing Act, 1881, provides that a right of entry for forfeiture under any proviso or stipulation in a lease for a breach of covenant or condition in the lease shall not be enforceable until notice of the breach has been served on the lessee, and if the breach is capable of remedy requiring the lessee to remedy the breach, and in any case requiring the lessee to make compensation in money. Subsection (6), however, provides: "This section does not extend (1) to a covenant or condition against the assigning under-letting or parting with the possession or disposing of the land leased . . ." The second point, therefore, was this: It was contended by the defendants that even if they had parted with the possession of part of the premises, that has been held not to be a breach of the covenant not to assign or part with the possession of the premises, and, therefore, the provision contained in subsection (1) had no application, and notice was necessary.

As to the distinction between covenants not to part with the possession of premises as a whole and a parting with a part of the premises we may refer our readers to our note on *Terrell v. Chatterton*, in the House of Lords (*The Builder*, December 28, 1923).

As to the point now raised, whether subsection (6) applies where possession of a part only has been given without consent in breach of covenant, this was raised in the case *Russell v. Beecham* (1924, 1 K.B. 525; *The Builder*, June 27, 1924), where Lord Justice Scrutton decided that a parting with part of the premises did not come within subsection (6), and therefore notice must be given, but the majority of the Court of Appeal decided that case on another ground, and therefore his judgment is not that of the Court of Appeal as a whole.

The learned Judge therefore intimated that there was no actual decision binding upon him on the point, and came to the conclusion that the apparent intention of the Legislature and the history of the law of relief indicated that the language of subsection (6) should be construed in the wider sense to include a covenant against parting with the possession of a part of the premises. The Court also observed that numerous decisions had been brought to its notice in which this same point could have been raised, and had never been taken.

We may note that in *Terrell v. Chatterton* the covenant only applied to parting with possession of the premises as a whole, and Lord Wrenbury pointed out that the remedy was simple, for to make the covenant effective it was only necessary to add the words "or any part thereof." The remedy, however, would not be simple if the distinction followed that Section 14, subsection (1) of the Conveyancing Act did not apply where the whole premises were dealt with, but did apply where the breach of covenant only affected a part, and that notice of breach before action must be given in the latter case, but not in the former. The learned Judge, in the case we are considering, pointed out that the reason why the Legislature had excepted covenants against assigning, under-letting, or parting with the possession of premises from the operation of subsection (1) was plainly because breach of these covenants cannot be remedied specifically, and that logically this must apply equally, whether the whole or part of the premises were dealt with in breach of covenant. In our note to *Terrell v. Chatterton* we observed that a parting with a portion of the premises might well have more objectionable features in it than a parting with the whole, and in these days when large houses are a drug in the market and conversion is often resorted to, it is certainly far more likely that a breach may relate to part of the premises than to the whole.

The case being complicated in its nature has had to be dealt with at some length in this note, but the result may be summarised briefly, that where there has been a breach of covenant in

starting with possession or under-letting a part of the premises demised, notice of the breach is not required under subsection (6) before a right of re-entry or forfeiture is enforced by action or otherwise.

In our Legal Section last month we noted the case *re Gibbs v. Houlder Bros.*, and discussed the grounds upon which refusals to assignments could be based. The user of the premises was one of those grounds, and the fact that intoxicating liquors were to be sold on the premises would appear to furnish reasonable grounds for a refusal in such cases.

LAW REPORTS.

Architects' Action for Libel.

In the King's Bench Division (before the Lord Chief Justice), *Morgan & Cowles-Voysey v. Southern Publishing Co., Ltd., and Glover.*

The plaintiffs (Messrs. Charles Cowles-Voysey and Hugh Townhend Morgan, A.A.R.I.B.A.), joint architects, of 14, Gray's Inn-square, W.C., brought the action to recover from the Southern Publishing Co., Ltd., of Castle-road, Hastings, and Mr. Jas. W. Glover, of 19, Sackville-street, London, W., damages for an alleged libel, which appeared in the *Evening Argus*, a newspaper owned by the first defendants, on October 18 st year.

Sir H. J. Slesser, K.C., said that the plaintiffs were architects of considerable experience and professional reputation, and they were engaged in connection with the erection of a music pavilion at Hastings, for the County Borough, and were at pains to take expert opinion on acoustics, heating, and ventilation. In October, 1924, plans had been prepared, but no buildings had been begun. Mr. Glover, who was a music conductor, wrote a letter to the *Evening Argus*, which was published in that newspaper on October 18, in which he said:—

"As the inventor of the suggestion that the new borough surveyor might be consulted before another penny is wasted on Alderman Fox's preposterous, extravagant, and never-to-day pavilion scheme, I should like to say a little more. When the building starts, it is the new surveyor who will be asked for guidance and to assess and advise payment of all the accounts. He is the referee of all our finance; he is the person to whom we can look for any possible sort of redress. The pavilion has been rightly or wrongly designed by two clever young men, who, with the knowledge that it was a concert pavilion where people had to hear music in the first instance, forgot that it was necessary for anyone to hear in it; they only called in an acoustic expert when a strong protest was made by me. What turns up now is that, having accepted plans where, whether through carelessness or ignorance, no provision had been made for 1,500 people to hear whatever went on therein, we actually have it admitted that, to save 1,500 people from being frozen to death in the winter and stifled to death in the summer, another £1,000 is wanted for heating and ventilation. An attempt being made, as Councillor Morgan stated, to 'hustle' this through for £1,000, it was shown that only £650 would be required, so that another £350 was to go over the top as bluff. Were not these three points—(a) acoustics, (b) ventilation, and (c) heating—considered by the celebrated professors who advised us to have this design?"

Sir H. J. Slesser said that the defendants had said that they could not sustain these allegations, because all necessary precautions were taken by the plaintiffs. The defendants had agreed to express, without reservation, their sincere regret for having published of the plaintiffs the words complained of. They agreed that the aspersions cast on the plaintiffs had no foundation in fact and should never have been made; that no ground of complaint had ever existed against the plaintiffs with regard to their professional skill, or to the care and attention which they had given to the work on which they had been

engaged for the Hastings Town Council; or that the plaintiffs in any way fell short of their duty with regard to the acoustics of the music pavilion, or with regard to the heating or ventilation of the building, or that they were in any way subjected to pressure with regard to these matters. The plaintiffs accepted the apology, and as far as they were concerned the matter was at an end.

Mr. Doughty, K.C., for the defendants, stated that, as soon as they investigated the matter, they realised that the contents of the letter could not be justified, and they made an ample and full apology.

The apology was as follows:—

"We desire without reservation whatsoever to express our sincere regret at having published of the plaintiffs the words contained in the letter herein complained of, which appeared in the issue of the *Evening Argus* for October 18, 1924. The aspersions thereby cast upon the plaintiffs had no foundation in fact, and we fully recognise that they should never have been made. There has never existed any ground of complaint against the plaintiffs or either of them, either with regard to their professional skill or with regard to the care and attention which has been given by them to the work upon which they are engaged for the Hastings Town Council, or in any way whatsoever, and we ought never to have been a party to any suggestion to the contrary effect and desire to withdraw wholly from it. It is quite untrue that the plaintiffs in any way fell short of their duty with regard to the acoustics of the music pavilion or with regard to the heating or ventilation of the building or that they were in any way subjected to pressure with regard thereto. We now, as the result of investigation, know, and are glad frankly to admit, that in every respect the reverse was the case, and the plaintiffs, of their own accord and animated by the highest regard for the interests of the Borough, not only amply fulfilled their professional duty, but, at their own expense and upon their own initiative, went far beyond what could in any way have been required of them, and obtained expert advice upon these matters which will be of the greatest benefit to the public. We are satisfied that this apology ought to be as ample and as full as we can make it in every respect, and we can only hope that the plaintiffs will accept it in that spirit and that neither any professional injury to them nor any tone of bitterness in their relations with Hastings will remain hereafter."

By consent, the record was withdrawn.

Depositing Soil on the Highway.

A novel charge of interest to the building trade was heard at Blackwood (South Wales), this week, when Harold Layman (39), a builder, of Ynysyddu, was summoned on the unusual charge of laying soil on the highway to the injury of the highway. Mr. Trevor Griffiths (Clerk to the Council) prosecuted, and Mr. Harold Lloyd (Cardiff) defended. Mr. Griffiths said that defendant started building developments in the district at a spot where a large quantity of loose soil had to be excavated. He conceived the idea that the most economical way to dispose of it was to take it a few yards away and deposit it on the road, and although he was called upon to desist the request was unheeded.

Defendant, giving evidence, said that, first of all, he deposited the material at the junction of two roads, thinking the ground was that of the Tredegar estate. When this was stopped by the surveyor, that official told him to fill in the ruts in the road with it, and then to tip on the road itself and make the level up. He did this for three weeks, and then a meeting of the Council was held on the site and he was stopped. He had done the road a lot of good by putting this stone, not dirt as alleged, upon it. If necessary, he could remove it for £15.

The bench fined defendant £2 with £10 10s. costs, and £30 damages, the Clerk remarking that if defendant removed the stuff, he would save the £30, but that that was a matter for their own arrangement.

CHANCERY DIVISION.

(Mr. Justice Tomlin.)

Ancient Lights Action.

HARTMAN v. AUSTIN REED, LTD.

In this case Mr. Fredk. Henry Hartman and his wife, Beatrice Eliza Hartman, who carry on business as Andrews & Co. at 11, Red Lion-square, W.C., brought the action for an injunction to restrain the defendants, Austin Reed, Ltd., from erecting, or allowing to remain erected, upon the rear part of 11, Red Lion-square any buildings so as to darken, injure or obstruct the plaintiffs' ancient lights and to deprive them of access to the rear of their premises through a yard and door opening into the Yorkshire Grey-yard and thenceforth communicating with Eagle-street.

Mr. Gavin Simonds, K.C., for the plaintiffs, stated that the defendants were now their landlords and also the owners of property adjoining No. 11, Red Lion-square, to the south and the east of those premises, and upon that property they had erected the buildings complained of. The obstruction of light divided itself into two heads. In the first place they were ancient lights, and in the second it was an obstruction raised by the plaintiffs' own landlords, and therefore fell within the well-known principle of derogation of grant even if they had not been ancient lights. With regard to the right of way, it was no longer available for use, as the defendants had blocked up the exit. The plaintiffs were manufacturers of roller duplicates and kindred appliances, and the right of way afforded ready access for the delivery of heavy packages to the back of their premises. It was essential for their business that their premises, which consisted of the ground floor and basement, should be adequately lighted—he did not say they required a specially high degree of light—for the examination of their wax-coated stencils and the determination of the colours of the inks used in the machines for demonstration to probable customers.

The defendants denied that their new buildings had diminished substantially, or at all, the access of light to the plaintiffs' windows, and in the alternative said that the premises had still amply sufficient light. They further claimed that they had the right under their contract to close the alleged right of way.

Mr. Percy J. Waldram, of John Waldram & Sons, civil engineers and surveyors, of Dean-street, W.C., and Buckingham Gate, S.W., who has made a special study of daylight illumination, stated that, with the exception of small portions close to the windows, the plaintiffs' premises would, by reason of the defendants' new buildings, be wholly inadequately lighted even on a bright midsummer day. He would regard it as wholly unreasonable to expect any employee to do clerical work there without artificial light. The brightness reflected from a glazed brick wall as compared with the brightness of the sky was very low.

Mr. Chas. Wm. Willoughby, of Wetherall & Green, auctioneers and surveyors, of Chancery-lane, E.C., gave similar evidence.

Mr. Hartman, the plaintiff, said that unless the obstruction to his light was removed it would be necessary for him to get premises elsewhere. He had tried to find another place.

Cross-examined: It was ridiculous to suggest that the premises were as reasonably fitted for the purpose of his business as when he took them.

Witnesses were then called for the purpose of proving the uses for many years of the alleged right of way and the necessity of using artificial light under the present conditions in the plaintiffs' premises or working close up to the windows in midsummer time, whereas before defendants' buildings were erected there was ample daylight in almost every part of the rooms for the purposes of the business.

At the close of the plaintiffs' case Mr. Westwood, of J. P. Westwood & Embleton, architects, of 7, Adam-street, Adelphi, gave evidence for the defence. He said his firm acted as architects for the defendants and prepared the plans. Negotiations between the parties having broken down, he modified the plans so as to

substantially leave the plaintiffs the light they were enjoying

His Lordship: Is it your opinion that the light to the windows owing to the glazed bricks and other alterations you have made has improved under these conditions?—Yes.

You think it is a better light than before?—I do. They are new buildings in the place of dirty old buildings. Witness said he had visited the plaintiffs' rooms after listening to Mr. Waldram's evidence and was able to read aloud perfectly easily a leaf from a time-table at the walls farthest away from the windows. He could see no difficulty whatever in clerical work being done at the tables in the centre of the rooms. There was quite a reasonable light there. It was certainly equivalent to what it was before the defendants' work was done.

On July 24, when the hearing was resumed, Mr. Simonds stated that the parties had arrived at a settlement—the defendants would pay the plaintiffs' taxed costs, which were to include the cost of the model, and £100 paid into Court by the defendants would be paid out to the plaintiffs. The proceedings would be stayed on terms which had been scheduled. Those terms provided for the payment of a further

sum, of which part would be paid within one month and the remainder on the surrender of the premises, which was to be on July 24 next year, with liberty to surrender them at an earlier date. The plaintiffs were also to be at liberty to unpack their cases in the passage in dispute.

His Lordship expressed the view that the parties had been very wise to arrive at a settlement.

KING'S BENCH DIVISION.

(Before Mr. Justice Fraser.)

Quantity Surveyors' Claim for Fees.

Booth & Dickie v. Associated Cinematograph Theatres, Ltd.

In this case the plaintiffs, Messrs. Booth & Dickie, quantity surveyors, of Chandos-street, Strand, W.C., claimed from the defendants, the Associated Cinematograph Theatres, Ltd., £375 for work done as quantity surveyors in respect of a proposed enlargement of and alteration to the Palladium Cinema, Croydon, owned by the defendant company, the amount claimed being 2½ per cent. upon the builder's estimate for the work.

The plaintiffs' case was that in 1918 the defendants desired to enlarge the Palladium so as to increase its accommodation from 900 to about 2,000. Originally plans of the proposed alterations were got out by Mr. Bertie Crewe, but nothing could be done in 1918 because the Government had prohibited the building of cinemas until houses had been built. The plan of the site handed to Mr. Crewe included offices which were not part of the cinema, the intent being to take in some part of the adjoining property. Defendants were long-leaseholders of the premises, including offices that were let off on shorter under-leases. In 1923, the Government's restriction having been removed, Mr. Crewe's first rough estimate was that the alterations would cost about £40,000, which placed the scheme out of the regions of possibility and amendments were made in the scheme which brought the cost down to about £20,000. Defendants then said they would go on if the work could be done approximately for £15,000. Mr. Crewe would not take the responsibility, saying that the work could be done for £15,000 but said that if the defendants wanted to find out whether it could be done at that price they must employ quantity surveyors, and accordingly the defendants got into touch with the plaintiffs. Mr. Dickie afterwards came to the conclusion that the work could be done for approximately £15,000, and the plans were revised, and definite instructions were given to the plaintiffs to prepare bills of quantities, the fee to be 2½ per cent. on the cost of the alterations if it were brought out at approximately £15,000. The plaintiffs brought out the cost at £15,450 and therefore the condition of the neighbourhood of £15,000 was fulfilled. Later, difficulties arose with regard to the possession of the site and in getting the Registrar of Births and Deaths out, and defendants determined not to proceed with the work.

Evidence having been given in support of the plaintiffs' case, Mr. Sheridan, who had conducted the negotiations on behalf of the company, gave evidence for the defence. He said that, in view of the mistake that had been made with regard to the site, it was agreed not to go on with the work of getting out the quantities, and if Mr. Dickie had already done some work he had done it on his own responsibility. No order was given to Mr. Dickie to get out the quantities at the date he had started.

Mr. Justice Fraser, at the conclusion of the arguments of counsel, in giving judgment, said there had been no mistake and that he thought Mr. Sheridan's memory was at fault and there would be judgment for the plaintiffs for £375 with costs.

£25 having been paid into Court by the defendants, that sum was ordered to be paid out to the plaintiffs in part satisfaction.

Regent-street Rents.

In reply to a question in Parliament, Mr. Wood (Minister of Agriculture), has stated that the original leases reserved rents of Regent-street amounted in the aggregate to £26,383 9s. 7d., and it was estimated that on completion of the re-building the rents would amount to £450,000 per annum.

Cardiff Technical College: Department of Architecture and Civic Design.

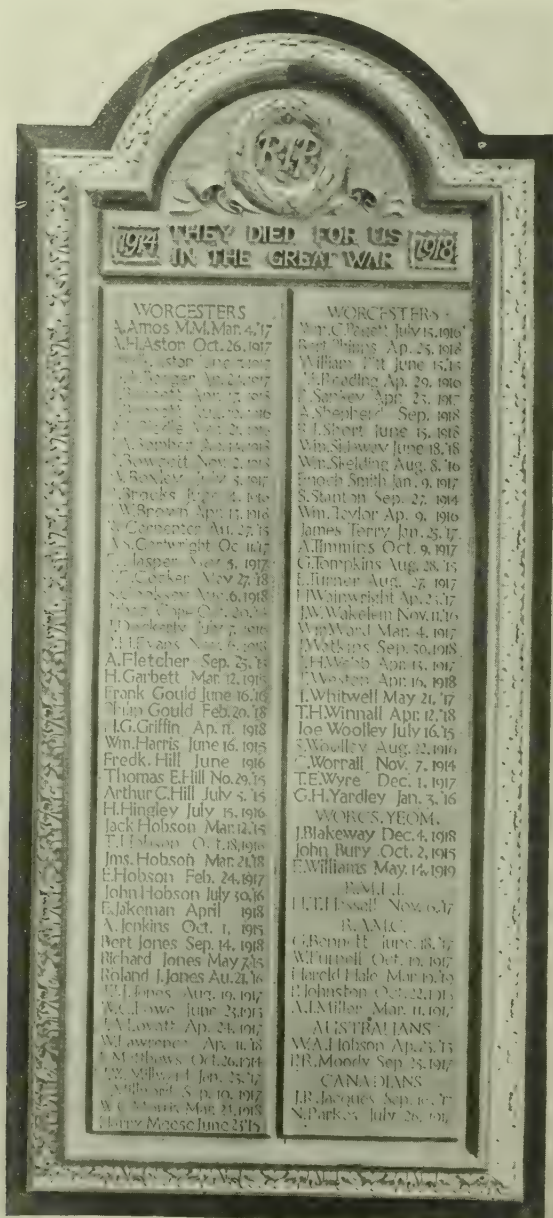
The following awards have been made as a result of the Sessional Examinations at the School of Architecture at the Technical College, Cardiff. Professor A. C. Dickie, M.A., F.S.A., A.R.I.B.A., was the External Examiner.

FOURTH EXAMINATION.—F. Harper, V. Banks, H. Barton, J. Wride.

THIRD EXAMINATION (for the Certificate awarded at the end of the three years' full-time day course, exempting from the R.I.B.A. Intermediate Examination).—H. Bull.

SECOND EXAMINATION.—P. G. Budgen, J. T. Banks.

FIRST EXAMINATION.—C. J. Bartlett, F. W. Honeywell, A. E. Jewell, Miss O. E. Price, I. F. B. Richards, C. L. Bugler, J. Lewis, Llewellyn ap Gwynn.



One of two oak Memorial Tablets in the Church of St. Thomas, Stourbridge.
Designed by Mr. A. TROYTE GRIFFITH.

THE BUILDING TRADE

SOME OBSERVATIONS ON THE RIGHT TO LIGHT AND THE LAW RELATING THERETO.—XIII

At the conclusion of the last article we expressed our intention of referring to some of the latest decisions on light, and also a few of the cases that have not fallen within the findings of the text of previous articles.

Access of Light: Buildings and Apertures.

It will have been seen from some of the cases which we have cited in the course of these articles that the easement of light has been claimed in respect of skylights, but this has also affirmatively held in the case *Harris v. Kinloch & Co.* (1895, *Weekly Notes*, 60), the headnote of which case is, there is no difference as to the easement of light between skylights and other windows; but in the comparatively recent case, *Levet v. Gas Light & Coke Co.* (18, *Weekly Notes*, 381; *The Builder*, December 6, 1918) it was held that a claim of light could not be maintained in regard to windows which were frequently left open, and one to admit light to a work bench and the other to admit light and air to a shop. In this case the Court said that so far as the reported cases went this was the first instance where it had been contended that a prescriptive right to light could be claimed where an owner opens an ordinary door whenever he passes and by this means lights the space behind the door, and the Court held that section 3 of the Prescription Act applies only to windows or apertures in the nature of windows, not to apertures with doors in them which are primarily constructed for the purpose of being closed. It is not stated whether the windows in question were glazed, but as this is not mentioned it may perhaps be assumed that they were not.

One of the leading text books, *Bullers v. Benson* (1885, 29 Ch. Div. 155) and *Presland v. Bingham* (1889, 41 Ch. Div. 268) are cited as authorities that a light easement can be claimed in respect of a glazed door, but in the headnote to those cases in the *Law Reports* that does not appear to have been the chief point of the decisions. There, however, seems no reason to doubt that a claim can be made in respect of a glazed door except for the decision which we have just cited, *Levet v. Gas Light and Coke Co.*, which was decided since the last edition of the work referred to.

Greenhouses are "buildings" within section 3 of the Prescription Act, and prescriptive right may be acquired in respect of them. *Lord v. Holt* (1899, 1 Ch. 698; *Easton v. East*, 1903, 1 Ch. 405). But in *Harris v. De la Haye* (1886, 33 Ch. Div. 288) the meaning of the words, "dwelling house, workshop, or building" in section 3 were considered and it was held in the Court of first instance that the building must be something of a like character with a dwelling house or workshop. The structure in that case consisted of upright stakes of timber or standards fixed in stone and built on brick piers with cross beams and diagonal iron braces divided into floors or bays with open unglazed ends or apertures between the uprights, and was used for storing and seasoning timber, and it was held by the Court of Appeal, without deciding the point as to the structure being a "building," under section 3 it must be shown that the interrupted access of light reached the building by one and the same definite channel for the statutory period. It was further held that the nature of the structure and the mode of carrying on business the timber might be so as to block up some of the apertures from time to time and uninterrupted access could also not be proved.

In this latter point this case may be compared with *Presland v. Bingham* (*ubi sup*)

where the defendant relied as an interruption to a claim for light on the fact that he had been in the habit for many years of piling up packing cases to a height exceeding that of the wall complained of as an obstruction to the light, but there was evidence that the packing cases were removed from time to time, and it was held that there had been no "interruption" within section 4 of the Prescription Act, and that where interruption is in its nature fluctuating and temporary, the onus of proving that in fact it continued and was acquiesced in is laid upon the defendant, whereas where the obstruction is of a permanent character then the onus is on the plaintiff to prove that it did not continue with his acquiescence for a year.

Contracts of Sale, and Light.

We may note two cases decided since the latest editions of the Text Books on light, which relate to contracts for the sale of property and the right conferred as to light.

In *Smith v. Colbourne* (1914, 2 Ch. 538) the Court of Appeal decided the following points. A contract to sell buildings described by a plan which shows windows does not imply any warranty of a legal right to the access of light to these windows; further, the existence of an agreement which prevents the statutory period of prescription from beginning to run does not create an encumbrance on the property, and the non-disclosure of such an agreement does not invalidate the contract of sale. A clause in such an agreement that the owner of the buildings will block up the windows is an affirmative covenant only and cannot be enforced against subsequent purchasers. A further clause in such an agreement that the adjoining owner may enter and build up the windows, in default of the owners of the buildings doing so, is a mere revocable licence and does not give the adjoining owner any interest in the land, and if it did give such an interest it would be void for perpetuity. None of the points mentioned above make a title too doubtful to be forced upon a purchaser.

But the case *Pemsel and Wilson v. Tucker* (1907, 2 Ch. 191) should be compared with the above so far as enforcing the contract is concerned, as there in an open contract for the purchase of two houses it had definitely been made "subject to right of light with owner of adjoining property being guaranteed," but, on investigation of title, it appeared that the vendor was not in a position to guarantee the light. The houses had been built in 1892 by the vendor and possessed no ancient lights. The adjoining house had also been built by the vendor and sold by him to a purchaser in 1897 under an agreement that neither the vendor nor that purchaser should do anything to prejudice each other's light. This being a mere personal agreement with the vendor (see *Smith v. Colbourne* above) he was not in a position to guarantee the light, for instance, if the purchaser who had bought the other house sold it without notice of the agreement his purchaser would be at liberty to obscure the light to the houses now being sold under this guarantee, and it was held that the guarantee in such circumstances constituted a defect in the title and the contract of sale could not be enforced.

To pursue this further would lead us outside the scope of the present articles, which we have limited to Statutory Prescription, and involve the consideration of grants, a distinct and difficult branch of the subject. At present in these last two articles we are confining ourselves to noting some of the cases reported since the latest editions of the Text Books.

Measure of Damages: Site Value.

Two recent decisions require noting under this heading as they appear rather to extend the principle as to damages. In the first, *Griffith v. Richard Clay & Sons, Limited* (1912, 2 Ch. 291; *The Builder*, May 24, 1912) the plaintiff was the owner of two houses fronting Brunswick-street, Blackfriars, having windows, ancient lights. The defendants, by erecting new buildings on the opposite side of the street, had obstructed the light to these windows, and had paid £150 into Court by way of damages. The plaintiffs had waived their claim to an injunction, and the only issue was the amount of damages. The plaintiffs owned a piece of land immediately at the rear of and adjoining these two houses on which was a warehouse separately rated, and having no windows looking towards the defendants' buildings. All the buildings were old and dilapidated, but the district, though no longer residential, was adapted for workshops and factories. The area of land covered by the two houses was 1,000 square feet, the surface of the land behind being 1,050 square feet. The court held that in considering the damage to the plaintiffs by the diminution in the value of the premises caused by the obstruction to the ancient lights the fact must be taken into consideration that the plaintiffs were the owners of the whole 2,050 square feet as a building site, and the damages were assessed at £200. This decision was affirmed by the Court of Appeal without calling for argument by the respondent's counsel.

This case was followed in the more recent case, *Wills v. May* (1923, 1 Ch. 317; *The Builder*, November 30, 1923). The facts are rather complicated, and need not be stated at length. The plaintiff owned adjoining houses, 117 and 119, Church-street, Croydon, and the defendant's house was to the north of 117 a passage running between that and the two houses on which some of the windows in the plaintiff's house, 117, looked. The defendant had developed the site on which his house stood, and erected thereon a shop and offices which obstructed some of the plaintiff's lights, and a mandatory injunction was claimed. The court found that the injury could be compensated by damages, and assessed the damage as regards the obstruction to light to 117 at £50, a sum at which the rooms affected could be rendered as comfortable as they were before, but, in addition to this, it had been contended that the site of the two houses for the purposes of damages must be treated as one, and the following facts were put in evidence. The plaintiff had purchased the two houses by auction in February, 1921. The character of the neighbourhood was changing from a residential to a commercial district, and the site upon which the plaintiff's houses stood was adapted for the erection of a shop of much the same height and character as that erected by the defendant, and at the auction the sites had been offered as one lot as affording sites for a factory or other commercial premises. The two sites formed a compact site suitable for the erection of a factory or warehouse, but it was impossible so to develop them for about 14 years as No. 119 was subject to a lease, unless a surrender could be arranged. It was also proved that the obstruction to the light made the sites less valuable for the erection of a factory or other buildings.

The court, following *Griffith v. R. Clay*, assessed the damages for the combined sites at £100. That was to be taken as £50 in respect of each site in addition to the £50 above mentioned in respect of the structural alterations at No. 117. The Court pointed out a distinction between this case and *Griffith v. R. Clay*. In the latter case the houses were old and dilapidated and would have had to be demolished almost immediately, whilst in this case the houses were in a condition to last some years, and in the case of 119 develop-

ment must be delayed for 14 years unless the lease could be got rid of.

It may be pointed out in regard to the remoteness of damage in this case that in Griffith's case the Court of Appeal had observed that if an injunction had been granted it would have protected the whole site in that case, and this appears the key to both decisions.

PRIME COST AND PROVISIONAL SUMS—III

PRIME cost, or p.c. sums, and provisional sums in a building contract are in all respects similar. If there is a difference it is that the term p.c. is generally applied to small sums. Both are the subject of additions to or deductions from the contract sum, according to whether the work contemplated under these sums is wholly or partially executed or omitted, or whether the prices actually paid for the work so performed exceed or are less than the sums or items included in the contract under these terms. Provisional sums are generally few in number, and are usually kept under a separate heading in the specification and bill of quantities; whereas prime cost sums are spread all over the various trades as required, both in the specification and bill of quantities.

In all cases the contract should contain clauses defining the object of these items, and clearly stating what they are, whether, e.g., they are the net sums to be paid or payable, and whether with or without any allowances to the contributor for profit. Also how they are to be dealt with in the final adjustment and settlement of account. Where such clauses exist the contract must be referred to.

Clauses 27 and 28 of the R.I.B.A. Form of Contract (1909) particularly refer to these items, giving their meanings, and how they are to be dealt with under the contract when this form is used.

In tendering, as a general rule, the contractor adds a percentage for profit upon all p.c. item and provisional sums. The amount of the profit to which he eventually becomes entitled depends upon whether the work is wholly or partly executed; just in the same way as his profit upon the work in the ordinary contract, containing powers of omission and addition, depends upon the extent to which the contract work is omitted or varied under those powers. Where no special terms are provided in the contract, then it would seem that if there is no expenditure required in connection with these prime cost items and provisional sums, such items and sums together with anything added thereto for profit, carriage and fixing, can be deducted in full. But if there are special circumstances and the provisional sum is inserted in the contract for a specific work such work cannot be omitted and given to another contractor, for then the employer may be liable for damage and loss of profit to the general contractor.

The contractor is, it appears, not entitled to recover what the cost is to an ordinary person, i.e., the cost out of which he has had the benefit of trade discounts as well as discounts for cash (see *Hippisley v. Knee Bros.* (1905) 1 K.B. 1.). The employer is under no other obligation than to pay the prime cost, though in very special circumstances he may not be able to recover the amount received by the contractor in respect of discount for cash; for the contractor is under no obligation to pay cash, and if he does so he cannot charge the employer more than he has in fact paid.

If under the contract the contractor added profit, carriage, and fixing to the amount named for prime cost items or provisional sums, and the ultimate expenditure under these heads is far less than originally contemplated, although the items used involved the same cost of carriage and labour in fixing had the original expenditure been made on the items, etc., purchased, it appears clear that whereas the contractor is only entitled to a proportion of the

profit at *pro rata* rates, he nevertheless is entitled to the full original carriage and fixing.

If no profit is provided the contractor is in most cases able to produce his prime cost book in support of the expenditure; and this, with a reasonable percentage for profit added thereto, will usually satisfy all parties. In this case also he is entitled to a reasonable remuneration for the labour of fixing together with the actual amount paid for carriage.

When there is a deduction made of a certain percentage from the total amount of the schedule of prices to arrive at the amount of the tender, all the rates in the schedule of prices are subjected to a deduction of that percentage both on "extras" and "omissions." Similarly when there is a percentage added, the rates in the schedule of prices are subjected to an addition of that percentage in the case of "omissions" and "extras." Much depends on whether the schedule of prices form part of the contract. These percentages, on or off the rates in the schedule of prices, do not apply to prime cost items or provisional sums. They are excluded in all cases.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting?—Ed.

Waterproofing Sand-faced Brickwork.

SIR,—What is the best preparation for silicating or waterproofing sand-faced brickwork, to prevent water driving through? We want something which will not alter the colour of the brickwork, nor show that anything has been applied.

W. J. RENDELL.

Rights of Light.

[REPLY TO "CROWN GLASS," JULY 17.]

SIR,—An easement of light is not attached to the window, skylight, or aperture, but to the building. The nature of the aperture may be of some importance, but the right to light does not consist in a right to the stream of light to the aperture, but to a right to prevent the diminution of light within the building.

There is no definite rule as to the amount of light the dominant owner is entitled to. There used to be a rule known as the "Forty-five degrees rule"; and although it may still be used as a sort of test in the absence of any other mode of arriving at a conclusion, there is no rule of law, or of evidence, and certainly no presumption, that where the angle is less than forty-five degrees the access of light is substantially interfered with.

In *Colls v. Home and Colonial Stores, Ltd.* (1904, A.C. 179), Lord Halsbury, L.C., said the test was, whether the obstruction complained of was a nuisance, and that what might be called the uncertainty of the test might also be described as its elasticity.

In *Semon & Co. v. Bradford Corporation* (1922, 2 Ch. 737) it was stated that certain conclusions had been reached in order to ascertain the quantitative value of the light in a room under varying conditions of obstruction, the light being measured at a height of three feet above the floor. That cill light is the light available at the outside cill of the window from an unobstructed horizon; that the daylight factor, a constant for any particular part of a room, is the percentage which reaches that part, that for a schoolroom one per cent. is adequate lighting, and when clerical work is done, 0.4 per cent. is satisfactory. In the case above referred to 0.8 was considered an illumination adequate for the plaintiff's business, which was that of woollen merchants.

In general the dominant owner in order to succeed in a Right of Light case, must show that light has been taken away, and that what

is left is not sufficient for the ordinary notion of mankind.

Applying the above to his projected so-called "Crown Glass" will no doubt safeguard him against any liability.

SIR,—Right of light is not bound by law, any hyperbolic rules as to distances and beyond a certain dependence upon precedent. Lights that have been established for a number of years are entitled to suffer no deduction in light by the erection of new adjacent buildings, or to damages in default, and ruling as to whether or not the new building so offended is in the hands of the court. Lights are rarely judged to suffer by adjacent buildings, except in exceptional cases of special damage can be proved. The only I can think of where this has occurred is that a diamond merchant in London, where a lighted room was used for examining jewels under a microscope, and the light was of great value. This case was not carried to court, but advice on both sides was such an angle of light of 45 per cent. from the glass line of the top light was respected. In a case quoted by your correspondent, the light could not be considered of the same value, only such angle of light as to give "reasonable illumination" in the pantry would be up in law, and the extent could only be agreed on the site. A better idea of the facts of the case could be obtained if your correspondent would furnish a sketch plan, showing heights as well as distances.

Veneers.

[REPLY TO MR. J. EVETTS.]

SIR,—Any timber merchant in a large business would furnish your correspondent with sample veneers, and the actual material is a far better guide than any coloured plate. A good workman might be sent to see the material in greater areas and bring away a still better idea of the grain than by viewing a small sample, and results are often better and more where the memory guides, than where a sample pattern is held before the eye.

Coloured plates of marbles will be found in the Architects' Standard Catalogues, which may be of service; but here, again, a view of broad surfaces of the actual material is far better. The still better way is to eliminate altogether the rather immoral practices of graining and marbling, for in the modern vernacular we have many simple ways of expressing good work, where expensive materials cannot be included, without imitating them.

REALIST

Tiling Phenomena.

SIR,—In this district I have known a steep pitched roof covered with Bridgewater tiles that has failed after a year's wear, while near a roof of well under 40 deg. pitch has stood well for several years though covered by similar tiles. Can any of your correspondents throw light upon these phenomena? JERSEY

Hot Water System.

SIR,—It is proposed to install a hot-water system in a small country house, which has relied upon a well for its water supply, and I should be glad if some of your readers could give some information on the following points: (1) What size storage tank, for all purposes, should be used? the hot-water is to be provided by an independent boiler and supplied to a lavatory basin, and sink. (2) Could the storage tank be used as the cold water tank for the system, or would another have to be provided, and if the latter, what head is necessary between the two? (3) At what distance from the pump (a semi-rotary), which is to be in the house, should the well be sunk, and what size suction and delivery pipe to storage tank should be used? "SEEKER."

THE WEEK IN PARLIAMENT

WESTMINSTER, Wednesday.

IN the House of Lords, the Bishop of Southwark called attention to the continued shortage of housing accommodation for the working classes, and to the impossibility of meeting the deficiency unless there was a large increase in the labour available for house building. The real difficulty, he said, was not one of material or of money, but of labour. Work was being hindered through the shortage of labour, and apparently there was very small prospect of any large increase in the number of skilled craftsmen available.

The BISHOP OF MANCHESTER contended that future progress depended really on raising the status of the building industry, and in trying to get into it a better class of men, especially in the bricklayers' and plasterers' departments, and also in the development of the apprenticeship scheme.

VISCOUNT GAGE, responding for the Government, said they intended to continue to base their housing policy on the Acts of 1923 and 1924. The full effects of those Acts had not yet been properly felt. Up to the present they were working fairly satisfactorily. Under the three principal Acts 307,689 houses had been built, and there were under construction 3,023 houses. In addition, there were a number of houses of a working-class character which had been erected privately without State assistance, in regard to which statistics were not yet complete. He was, however, safe in saying that since the war over 500,000 houses had been built. Schemes for dealing with slum areas were in process of completion throughout the country, sixteen of them in London. For the last twelve months to March 31—a record year for housing—136,889 houses were completed, about half with State assistance and half without, and of that total 117,817 were classed as working-class houses. New houses were being completed at the rate of 7,000 a month. There was no reason to suppose that the supply of materials would be interrupted, and the Government were convinced that by using new methods they could give satisfactory accommodation. Special financial arrangements had been made for the erection of four different new types of houses in different parts of the country. Later in the debate Lord Salisbury announced that the Government had no desire to repeal the Act of 1924.

School Buildings.

During the debate on the Education Estimates, Lord E. Percy, President of the Board of Education, said that he had appointed a special committee to examine how best to deal with difficulties in the building industry as concerned school buildings could be met.

Building Lines.

During the passage of the Roads Improvement Bill through Committee in the House of Commons, an amendment was agreed to, including among the subjects for which grants may be made out of the Road Fund to highway authorities the prescription of building lines for the purposes of subsequent road widening. Amendments were inserted in Clause 4, which imposes restrictions as to fences at dangerous crossings, to prevent the demolition of walls forming part of an ancient monument or other object of archaeological interest. Viscount Peel announced that the Government intended to introduce a Bill dealing with building

Houses Approved.

Mr. N. Chamberlain informed Mr. Montague that since the end of November last 915 local authorities had received approval to proposals for the erection of houses under the Housing Act of 1923, and 414 under the Act of 1924. (241 local authorities received approval to schemes under both Acts.) The numbers of houses authorised were as follows:—

	Housing Acts.
	1923. 1924.
Local Authorities' Schemes ...	1,484 51,847
Private Enterprise Schemes ...	44,913 1,129
Total	46 397 52,976*

* Including 12,927 houses previously approved under the Act of 1923.

Precise figures as to houses under consideration on the first inst. were not available, but it could be said that practically all applications had been dealt with at that date. It was not a condition of the grant of subsidy that his specific approval should be obtained to the erection of houses with materials other than bricks, except in cases in which the type of construction was one for which a period of less than 60 years would be allowed for the repayment of a loan.

Houses Under Construction.

Mr. N. Chamberlain informed Lt.-Commander Kenworthy that on June 1 last the latest date for which figures were available, 43,400 houses were under construction under the Housing, etc., Act, 1923, and 16,039 under the Housing (Financial Provisions) Act, 1924.

Dwelling Houses as Factories.

Captain Garro-Jones asked the Minister of Health whether, since February 12 last, he had received representations from local authorities with regard to the use of dwelling-houses as factories and workshops; and whether he was now satisfied that it warranted some legal restriction?

Mr. N. Chamberlain said he had received representations, but he did not think that a case had been established for further restrictive legislation of this kind at present.

Westminster Hall Statues.

Mr. Day asked what had become of the statues that were removed from Westminster Hall during its rebuilding and reconstruction; and, in view of their public interest, whether they would be replaced in their original positions?

Mr. Locker-Lampson said that the statues in question were lent to the City Corporation in 1913. The First Commissioner of Works did not propose to have them replaced in Westminster Hall.

Ancient Monuments.

Sir W. de Frece asked the Under-Secretary for the Home Department, as representing the First Commissioner of Works, whether, in view of the large number of ancient and historic buildings now coming on the market for sale or removal, and seeing that there was no compulsion on the owners to report the fact to the authorities with a view to securing their preservation, he would consider the desirability of legislation to that end?

Mr. Locker-Lampson said that the First Commissioner had at present under consideration proposals for amending the Ancient Monuments Act, and he would give consideration to the hon. member's suggestion in connection with those proposals.

Replying to Mr. B. Peto, Mr. Locker-Lampson gave the following figures of expenditure on various ancient monuments:—

	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
Expenditure on Ancient Monuments and Historic Buildings	£113,392	£165,659	£175,957	£137,697	£171,025	£186,950
of London—						
Expenditure	18,504	31,999	33,642	25,132	26,468	19,366
Expenditure on pointing	204	—	—	600	699	127
at Castle—						
Expenditure	700	1,057	1,056	859	600	584
Expenditure on pointing	56	140	47	—	—	—
at Castle—						
Expenditure	1,184	1,360	1,308	1,105	892	1,723
Expenditure on pointing	244	238	165	214	152	45

Price of Houses.

Mr. N. Chamberlain informed Lt.-Col. Harlick that the average prices of houses included in contracts let by local authorities during May in recent years had been as follows:—

Year.	Non-Parlour.	Parlour.
1922	£392	£422
1923	368	371
1924	404	476
1925	436	495

These prices did not include the cost of land and development.

The New Cavalry Memorial.

Lt.-Col. James asked the Under Secretary for the Home Department, as representing the First Commissioner of Works, whether the attention of the Office of Works had been called to the obstruction caused to traffic by the new cavalry memorial at Stanhope-gate; whether he was aware that the memorial itself made it impossible for drivers to see on-coming traffic; and whether the question of moving the gates a few yards to points where greater visibility could be secured would be favourably considered by the department?

Mr. Locker Lampson replied that the First Commissioner had not hitherto received any complaint on this subject, but he would have the matter investigated in conjunction with the Police authorities.

Imported Wall Paper.

Mr. Livingstone asked what was the quantity of finished wall paper imported into this country from Canada and Germany respectively for the years 1913 and 1924; and the total quantities of finished wall paper imported into this country for the same years?

Mr. A. M. Samuel said the following statement gave the information desired:—

	1913.	1924.
	Printed and Embossed Paper Hangings.	Printed and Embossed Paper Hangings.
Country whence consigned;	Cwts.	Cwts.
Total Imports from all sources	57,304	70,486
Of which consigned from—		
Canada	2	6,361
Germany	38,210	47,781

The particulars for 1913 related to imports into Great Britain and Ireland; those for 1924 related to Great Britain and Northern Ireland only. Owing to changes in the classification which became operative in 1920, the particulars for 1924 were not strictly comparable with those for 1913.

Specimen Houses.

Mr. J. Baker asked the Minister of Health how much of the money allocated for the erection of specimen houses had been spent or promised; whether applications were still being considered from local authorities who desired to take advantage of the special subsidy; in what towns the various types of houses had been erected, whether they were occupied; and what had been the total amount of subsidy paid in respect of each of the Beardmore, Weir, Atholl, Steelcon, Wild, Tilson, and any other similar type of house in which steel was used in the construction?

Mr. N. Chamberlain said that the special subsidy of £200 per house was available only for a limited number of houses of the types specially recommended for demonstration purposes by the Committee on New Methods of House Construction. So far, four types had been so recommended, namely, the Weir, Atholl, Telford, and Wild types. Of the total of £50,000 voted for the purpose of these grants, £34,000 had been provisionally allocated, made up of £10,000 for each of the Weir, Atholl, and Telford types, and £4,000 for the Wild type, but no actual payments of subsidy for these experimental houses had yet been made. Over fifty local authorities were taking part in the experiment. Four of those already had houses completed and open for inspection, and in six other districts the houses were at present under construction. If for any reason any of the selected local authorities should be unwilling to pro-

seed with the experiment, the houses would be offered to other local authorities.

British Goods.

Asked by Sir W. de Frece whether the Government would consider the loan of a percentage of space in or on all public buildings for the display, with due regard to artistic effect and under control by a small expert official committee, of poster, pictorial, and electric sign appeals to the community to promote the purchase of British goods, Mr. Locker-Lampson said that the First Commissioner would give careful consideration to the suggestion.

Clopton Bridge.

Mr. Day asked the Minister of Transport if his attention had been drawn to the dissatisfaction being expressed regarding the proposed erection of a modern ferro-concrete bridge adjoining Clopton Bridge, Stratford-on-Avon; and, in view of the plans drawn up by the conference of the Stratford Town Council and the Warwickshire County Council, which would provide for a bridge retaining the antique appearance of this historic spot, would he withdraw the order for the erection of a new bridge so as to avoid disfiguring the upstream face of the existing bridge?

Colonel Ashley said that, at the request of public bodies interested in Clopton Bridge, he convened a conference of those concerned and put forward suggestions which met with general favour for the construction of a ferro-concrete bridge adjoining the old structure—leaving the latter intact. He hoped that the project would be accepted by the responsible highway authorities to whom he had offered a substantial grant. No order had been or could be made by his department for the erection of any bridge.

The Epstein Bas-Relief.

Sir W. Davison asked the Under-Secretary of State for the Home Department, as representing the First Commissioner of Works, whether the Epstein bas-relief which had been erected in the bird sanctuary in Hyde Park was now the property of the nation, by whom was the gift made, and by whom was it accepted on behalf of the nation?

Mr. Locker-Lampson said that the bas-relief was erected by a committee formed to commemorate the work of the late Mr. W. H. Hudson. It was now the property of the nation in the sense that the First Commissioner had, with the assent of the Treasury, undertaken that his department should be responsible for its future care and maintenance.

Warwick Priory.

Sir M. Conway asked the Under-Secretary whether he was aware that Warwick Priory, a fine Elizabethan house with a later wing in the English Renaissance manner, was threatened with early demolition; and whether the Ancient Monuments Department of His Majesty's Office of Works was putting The Ancient Monuments Act, 1913, into action with a view to preventing the loss of this building?

Mr. Locker-Lampson said that the First Commissioner was aware that this building was threatened, but he very much regretted, for financial reasons, he was unable to intervene under the Act. The First Commissioner was acutely conscious of the loss which the district would suffer by the destruction of this fine old mansion. He very much hoped that a local effort would be made to save it.

Loan Repayments.

Lieut.-Colonel Horlick asked the Minister of Health what loan period was allowed for the Weir, Atholl, Wild, Telford, Nissen, Burney, and Dorman Long houses, respectively; and what distinction in this respect was made between brick houses and other forms of alternative construction that were reported to be equally durable and permanent?

Mr. N. Chamberlain said in the case of houses of the Weir, Atholl, Telford, and Nissen types he was allowing a period of 40 years. In the case of houses of the Wild type, he was allowing 60 years. In regard to the two other types referred to, the loan period had not yet been fixed.

ANOTHER HOUSING BILL?

[FROM A CORRESPONDENT.]

SOME interesting proposals are being discussed by Conservative supporters of the Government with a view to encouraging mass production of houses. During recent weeks the Unionist Housing Committee have had the opportunity of discussing the position with Lord Weir, Colonel Nissen, Commander Burney, M.P., Messrs. Braithwaite, and representatives of the Duke of Atholl. As has been well known in building quarters for some months past, the "Steel" house in its different forms has aroused no enthusiasm whatsoever among local authorities, who alone are in the position to give large orders. A number of pairs of demonstration houses are to be put up under the stimulus of £200 cash down from the Ministry of Health, but, with the exception of the Wild house, which is partly brick superimposed upon a steel frame, hardly any progress is being made.

The general tendency of local authorities—who at present are the deciding factors in regard to the type of house which they require to be built—is to prefer the brick type of house, as it is a known type, and they are not inclined to go in for new methods unless the difference in price as between the brick type and the new method is considerable. The difficulty before those controlling the new methods is that until large orders can be given it is not possible to reduce the price of the new method appreciably on what is now being paid for brick houses.

The only new methods which need be seriously considered are those which have been devised upon a basis of mass production, as it is only by mass production methods that the cost can be materially reduced; but no method of mass production is possible except upon the basis of a large output. Consequently, the possible contribution of these new methods towards the solution of the housing problem is prevented from becoming effective owing to the difficulty of obtaining a start.

Probably the cheapest and most direct method of overcoming the difficulty, so it was suggested recently in a Committee Room at the House of Commons, would be for the Minister of Health, after he has satisfied himself on the advice of his experts that any special mass production system was both practical and satisfactory, to place a block order of, say, 5,000 houses, and for the Ministry to act as a broker between the builder and the local authority. This solution, however, is not practical from the political point of view, as it would be attacked as being a species of State trading. Accordingly, therefore, some other solution must be looked for, and the Unionist Housing Committee have considered the following suggestion:—

Under the 1923 Chamberlain Act a subsidy of £75 is given to the builder, and the house so constructed may be sold. Under the Wheatley Act of 1924 the total capitalised value of the subsidy is £180 and the local authority contribution is £60, making a total subsidy of £240. But there is the proviso that houses built under the Wheatley Act may only be let, and not sold.

In both Acts, therefore, the interest to the State in obtaining a reduction of the cost of houses is very great, as under the Chamberlain Act for each 5,000 houses built the State contributes £375,000, and for houses built under the Wheatley Act the State and the local authority between them contribute no less than £1,200,000 for every 5,000 houses built.

It was proposed therefore, that the following scheme should be considered:—

(1) That the Government should introduce a short one-clause Bill and obtain permission from the House to capitalise the subsidy as paid by the State under the Wheatley Act for 25,000 houses, and for permission to be given for houses built under this provision to be sold, either to a local authority or to individual buyers.

(2) The Minister of Health to be empowered to investigate the various new methods and new materials which have been composed, and after he is satisfied as to the type of house to be erected, to issue certificates to the constructor to build 5,000 houses upon this basis.

It was anticipated that, given the reduction in cost which could be made on a productive under mass principles, which, added to an increased subsidy, would enable houses to be sold at a cheaper rate, there would be little or no difficulty in obtaining individual orders for houses. The number would be limited to 25,000 houses. It was anticipated that the price at which the mass-production house would be sold after the expiry of this special selling subsidy would be somewhat higher than those sold at first. This would give an advantage to those buyers who first overcame the prejudices towards new methods, and would, at the same time, enable sufficient houses to be built throughout the country gradually to turn not only public opinion, but also the local authorities towards these new methods.

They who advocate this proposition urge that there is little doubt that, if the new method could be established, cutting the price of house by £80 per house, not only will it allow the Government to reduce the general scale of subsidy, but it will also have the effect of increasing competition with brick houses, and so obtain a reduction in the price of the brick house as well.

Whether the Minister of Health will accept these proposals or not is, of course, unknown. The Treasury, however, will certainly investigate the suggestion with the greatest care, for not only does it necessitate the provision of capital payments, instead of loans over a period, but also 25,000 houses built under the 1924 Act would cost £4,500,000 exclusive of the expenditure to local authorities, as against under £2,000,000 under the 1923 Act. There is also the danger of private interests being too much subsidised. But even allowing for this, there appears to be good reason to suppose that unless some action of this sort is taken we cannot expect under present conditions to see any immediate progress in the mass production of houses, and therefore this outline of the proposals now under consideration by supporters of the Government who are also ardent housing reformers, is of interest to architects and builders.

L.C.C. and Housing Problem.

The Housing Committee of the L.C.C. stated in a recent report they are of opinion that the approval of the Council should be given to the adoption of new methods of house construction as an alternative or addition to the use of bricks, in order that a more rapid solution of the housing problem may be secured. Speaking generally, the Committee do not wish to depart from the methods referred to in the reports of the Moir Committee, and they remind the Council that the three interim reports issued by that Committee deal with various methods of construction, as follows:—

(1) Houses faced with steel plates; (2) concrete houses in various forms; (3) houses with a steel framework and various kinds of infilling or external casings; (4) (a) houses of normal timber construction built entirely of timber; (b) houses with timber framing and infilling of various other materials; (5) schemes where factory construction may be possible in suitable units and the work of assembly carried out on the site; (6) various forms of clay construction; (7) substitutes for particular materials—e.g., plaster, and for roofing materials.

Birmingham Housing Experiments.

Houses have been erected at Hay Mill, for the Birmingham Corporation, for the purpose of demonstrating to the public how new materials and new methods of building working-class houses can be used. Among these are two of the steel houses towards which Mr. N. Chamberlain (the Minister of Health) has given a grant of £200. Another interesting experiment at the Birmingham district is a pair of houses now being built at Bournville that will be equipped throughout for both heating and lighting with electricity. Only one fire-grate being built in each house. It is estimated that this will bring about a saving of some £20.

NEW BUILDINGS IN LONDON.

Acton.—A large garage and repair works are to be erected at Acton, W.3, for Messrs. Stewart & Arden, Ltd., 103, New Bond-street, W.1, to the designs of Messrs. A. H. Davis & Partners, 19, Hanover-square, W.1. The builders are Messrs. H. & J. Taylor, 177, Lewisham-road, S.E.7. The quantity surveyor is Mr. H. W. Langdon, 57-58, Chancery-lane, W.C.1.

Alton.—A new branch is to be erected in the High Street, for the Westminster Bank, Ltd., Lombard Street, E.C.2, to the plans of Messrs. Kemp & How, 4, Bloomsbury-square, W.C.1. The contractors are Messrs. Goddard & Son, East-street, Farnham, Surrey.

Ashted.—Large premises have been acquired by the Rayon Manufacturing Co., Ltd., 62, New Broad-street, E.C.2, for conversion into and equipment as an extensive silk manufactory.

Basinghall-street.—An important site covering some thousands of square feet, and occupied by old buildings, is about to be let on lease for development by the Mercers' Company.

Battersea.—The L.C.C. have decided to make a grant exceeding £11,000 towards the cost of building new classrooms, etc., at Sir Walter St. John's Grammar Schools, in Battersea High-street, S.W.11. The architect to the Governors is Mr. Victor Wilkins, F.R.I.B.A., 12, York Buildings, Adelphi, W.C.2.

Bermondsey.—In connection with the rebuilding of the slum area known as "Hickman's Folly," it will be necessary to rebuild the "George" public-house in Flockton-street. Plans have been prepared by Mr. Kirby, architect to Messrs. Courage & Co., Ltd., brewers, the owners.

Bethnal Green.—New branch premises are to be opened in Green-street, Bethnal Green, E., for Messrs. Rego Clothiers, Ltd., Shoreditch. The architects to the company are Messrs. Davis and Emanuel & H. C. Smart, 73a, Queen Victoria-street, E.C.4.

Catford.—A large number of houses are to be erected in Tatnell-street, S.E. The builders are Messrs. W. T. Champion & Son, Peckham Rye, S.E.15.

Catherine-street.—Alteration and additions are to be made to the business premises at Nos. 25-27, Catherine-street, S.W.1, to the plans prepared by Messrs. Boddy & Dempster, 19, Palace-street, S.W.1.

Croydon.—New shops and showrooms are to be erected in Park-street to plans prepared by Mr. N. K. Humphries, Cleave Way, Woodcote Valley-road, Purley, Surrey. The builder is Mr. H. P. Hawkes, Sandersted-road, South Croydon.

Croydon.—Forty houses in Florida-road, and 10 in Green-lane, Croydon, are to be erected by Mr. J. T. King, Mitchell-lane, Croydon. Mr. W. G. Ingram, Verulam-buildings, Gray's Inn, W.C., is the architect.

Dagenham.—A large factory is to be erected by Messrs. Ballington, Ltd., 45, Basinghall-street, E.C.2, in conjunction with Messrs. Kotzin Bros., an American company, for the manufacture of silk hosiery.

Dollis Hill.—Extensions of the St. Andrew's Hospital are shortly to be put in hand. The architect is Mr. T. H. B. Scott, 11, Finsbury-square, E.C.2.

East Ham.—No. 351, Green-street, East Ham, E., owned by the Rego Clothiers, Ltd., 110a, High-street, E.1, is to be rebuilt, to the design of Messrs. Davis & Emanuel and H. C. Smart, 73a, Queen Victoria-street, E.C.4.

Euston-road.—A proposal for the reconstruction of Euston-square Station N.W.1, including the provision of enlarged surface buildings and booking halls, is under the consideration of the Metropolitan Railway Company. The architect to the railway is Mr. C. W. Clarke, Baker-street Station, W.1.

Harrow.—The St. Margaret's Estate at Harrow is being laid out for building purposes. Plans for a large number of good-sized houses will be executed by Mr. Clifford Sabey, Watford-road, Sudbury, Middlesex.

Harrow.—The premises at No. 354, Station-road are to be converted into a branch bank for the National Provincial Bank, Ltd., 15, Bishopsgate, E.C.3, to the plans of Mr. F. C. R. Palmer, F.R.I.B.A. Messrs. F. Troy & Co., Ltd., 194, Finchley-road, N.W.3, builders.

Hornsey.—A contract is about to be allocated for the building of the proposed extensions of the Hornsey, Finchley and Wood Green Isolation Hospital at Coppett's-road, Muswell Hill, N.W. The additions, estimated to cost £24,000, have been designed by Mr. E. J. Lovegrove, Southwood-lane, W.6.

Hounslow.—A group of 30 houses is to be erected in Spring Grove-road, Hounslow, ranking for subsidy. The builders are Messrs. Perry Bros., 48, Uxbridge-road, W.5.

Kensington.—New offices and showrooms are to be built for Messrs. John Barker & Co., Ltd., at the corner of Ball-street, W.8. Messrs. J. Greenham, Ltd., Worton-road, Isleworth, builders; Mr. H. L. Carbucho, O.B.E., F.R.I.B.A., architect.

London, W.—Large structural alterations are being carried out in extensions to the Palace Hotel, Lancaster Gate, which include the premises recently in the possession of the Unique Centre Club, Ltd. Messrs. G. H. Carter, Ltd., of Holloway, N.7, are responsible for the whole of the work, including central heating, hot and cold water in all bedrooms, &c.

Lothbury.—Operations have now started on the second portion of the reconstruction of the head offices in Lothbury of the Westminster Bank, Ltd. With the completion of this section a commencement will be made on the Lothbury frontages. The architects are Messrs. Lewis & Davis, 22, Conduit-street, W.1.

Maida Vale.—Messrs. G. H. Carter, Ltd., are carrying out extensive additions in Hamilton-terrace, forming a new music room, studio, &c. Lieut.-Col. G. W. Rhys Jenkins, of 65, Chancery-lane, is the architect.

Newbury.—The Reading and District Co-operative Society, Ltd., are about to extend the accommodation at their branch stores in Cheap-street, Newbury. Messrs. Bethall Swannell & Durnford, 1, Broad-street Buildings, E.C.4, are the society's architects.

Regent-street.—Work has started on the site of No. 113, Regent-street, W.1, where new shops and offices for Messrs. Austin Reed, Ltd., outfitters, are to be erected. Messrs. P. J. Westwood & Emberton, 7, Adam-street, Strand, W.C.2, are the architects, the builders being Messrs. W. F. Blay, Ltd., Dartford, Kent.

Richmond.—Extensive alterations and improvements to the Greyhound Hotel—the oldest hostelry in Richmond—were foreshadowed by the chairman of Messrs. Shorts, Ltd., 310, High Holborn, W.C., at their recent annual general meeting.

St. Helen's-place.—Messrs. Dove Bros., Ltd., Cloudesley-place, Islington N., have commenced work on the foundations of a new building in St. Helen's-place, Bishopsgate, E.C.3, for the Leathersellers' Company. Mr. Henry A. Saul, F.R.I.B.A., 10, Gray's Inn-square, W.C., is the architect.

South Kensington.—A row of shops with flats over is to be built on a site in Fulham-road, S.W., for which the agents are Messrs. Alfred Boys & Co., Staple House, Chancery-lane, W.C. Mr. Matthew J. Dawson, 11, New Court, Lincoln's Inn, W.C., architect.

Stamford Hill.—A large block of new property, consisting of 18 shops and showrooms with flats above, is being erected at the corner of Stamford Hill and Clapton Common, E. The contractors are Messrs. West & Brookes (Leyton), Ltd., 59, First-avenue, Hoe-street, E.17, who are working to the designs of Messrs D. Morris & Sons, 57, Charing Cross, S.W.1. A new cinema, to be called the "Stamford Hill Cinema," forms another section of the scheme.

Stepney.—Premises in Bower-street, E., have been purchased by the Council of Toynbee Hall for conversion into a boys' hostel, physical training gymnasium, and social club. Messrs. Culpin & Bowers, 27a, Bush-lane, E.C.4, are the architects.

Strand.—A new story is to be built on the roof of the north-west corner of King's College, in order to house additional laboratories. The contract has been placed with Messrs. Hudson Bros., 207, St. John's Hill, S.W.1, and will be carried out to the designs of Mr. Roberts, the senior lecturer in engineering.

Streatham.—The existing premises on the Aspen House site, S.W., are to be converted into an open-air school at a cost of about £6,000. The builders are Messrs. T. Brown & Son, 280, Milkwood-road, Herne Hill, S.E.24, and the architect Mr. G. Topham Forrest, F.R.I.B.A.

Tooting.—Plans have been approved for the rebuilding of the "Fountain Hotel," at the junction of Fountain-road and Garrett-lane, S.W., for Messrs. Watney, Coombe, Reid & Co., Ltd., Westminster. The work is being carried out by Messrs. John Garrett & Son, 83, Balham-hill, S.W.12, under the direction of Mr. M. T. Saunders, the brewery surveyor.

Victoria-street.—A new office building, with accommodation for a bank or shops on the ground floor, is to be erected, at the corner of Victoria-street and Allington-street, S.W.1. Mr. J. Stanley Beard, M.S.A., 52, Baker-street, W.1, architect. The contractors are Messrs. Holliday & Greenwood, Ltd., Stewart's-road, Battersea, S.W.

Victoria.—The site of an old factory in Gillingham-street, Wilton-road and Berwick-street, S.W.1, is to be cleared and a public covered-in market erected, providing accommodation for about 200 shop spaces. Plans have been prepared by Mr. S. Gordon Jeeves, 16, Hanover-square, W.1.

Wembley.—A new cinema is to be erected in Park-lane on a site opposite the Post Office, which has just been disposed of to a syndicate, the agent being Mr. George H. Ward, 116, High-road, Wembley.

Westminster.—Plans, prepared by Mr. Clough Williams-Ellis, F.R.I.B.A., 226, Ebury-street, S.W.1, have been approved by the Westminster City Council for alterations to No. 48, Royal Oak-pace, Eaton-square, W.

Westminster.—The City Council have approved the proposal for the rebuilding of the "King's Arms" public-house in Buckingham Palace-road, S.W.1, owned by Messrs. Watney, Combe, Reid & Co., Ltd. The architects are Messrs. Petel & Femand, 12, Buckingham Palace-road, S.W.1.

Westmorland-street.—A new wing and other additions at the National Hospital for Diseases of the Heart at Westmorland-street, W.1, are being erected. The contractors are Messrs. Prestige & Co., Ltd., Cambridge Wharf, Grosvenor-road, S.W.1. Mr. Harold Goslett, F.R.I.B.A., 28 Theobald's-road, W.C.1, is the architect.

Wimbledon.—A new school is to be erected in Wellington-road, S.W., for the Borough Education Committee. Plans have been prepared by Mr. Joseph Bowen, Town Hall, S.W.19.

Woolwich.—An expenditure of £57,396 is to be made by the L.C.C. on a new school in Red Lion-lane, Woolwich. Mr. G. Topham Forrest, F.R.I.B.A., County Hall, S.E.1, architect.

British Medical Association Building.

We are asked by Messrs. Bath Arcraft, Ltd., to state that the furniture in the Committee Room of the above building, illustrated on page 101 of our issue for July 17, was designed and made by them.

Obituary.

The death, in his 75th year, of Mr. E. C. Norris, of the firm of Messrs. E. C. Norris & Co., builders' merchants, Bath Bridge, Bristol, has occurred.

HEMOCROFT SETTLEMENTS

The chief subject of debate at a week-end conference of the Bristol Association of Industrial Research was "Homecrofting," an American scheme to provide the worker not only with a house, but also with sufficient land attached to it to enable him to raise sufficient foodstuffs to sustain himself and family in times of unemployment. The plan was outlined by Professor J. W. Scott, of University College, Cardiff, who has written a book upon the subject.

The Professor described "Homecrofting" as a plan to hit both the housing shortage and the cost of living at the same time. The idea was to establish Homecroft settlements—that was, working-class suburbs built on cheap land near industrial centres. The settlements would have schools in the middle of them, and the workers would be transported to and from their work night and morning. Every family would have its own self-contained house, which would have half an acre of land attached to it upon which the householder would be able to raise food; in fact, the germ of the idea was to make every dwelling a food factory. Professor Scott said he thought that we were thinking too much about houses and housing shortages. A housing shortage was a temporary affair, and the one we were in would not last much longer, as anyone could see who watched the rate at which things were moving, for whatever else was slack just now, house construction was not. He maintained that all the thought which we were giving to houses should have been given to the food question. He thought there were thousands of working men to-day who were ready to spring at such an idea. If a workman could make up the difference between his present rent to 18s. per week, the house and the land would become his own property in 18 years, but though ownership was to be preferred, a man should have the option of renting. Homecrofting was simply a proposal to enable a man whose money had stopped for a time to make the things he could not buy.

Following Professor Scott's address the conference proceeded to discuss the scheme, with the result that many criticisms as well as suggestions were forthcoming; but it was realised, after the matter had been thoroughly examined, that there were far more possibilities in it than were at first recognised.

APPRENTICESHIP IN THE ROYAL AIR FORCE

The Air Ministry announces that seven hundred aircraft apprentices, between the ages of 15 and 16½, are required by the Royal Air Force for entry to the Aircraft Apprentice School at Halton, Bucks., in January next. These apprentices, who must be well educated and physically fit, will be engaged as the result of two examinations, one an open competition conducted by the Civil Service Commissioners, and the other by a limited competition carried out by the Air Ministry in conjunction with the local education authorities throughout the country. Boys accepted for employment will be attested as airmen and will engage to complete a period of 12 years' service on the active list of the Royal Air Force, the period commencing to run from the date of their attaining 18 years. On completion of their active list service they will be discharged to civil life or may be allowed to re-engage to complete 24 years' service for pension. Normally their duties are carried out on the ground in the technical workshops of the Air Force. Application to sit in the open competition must be made to the Secretary, Civil Service Commission, Burlington Gardens, W.1, not later than September 3. Candidates for the limited examination should make application, if they are still at school, to their Headmasters with a view to securing a nomination from the education authority responsible for the school. If they have left school, application should be made to the Advisory Committee for Juvenile Employment in their area.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	C'p'ters. Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Bedford	1/9	1/9	1/8	1/9	1/9	1/9	1/8	1/4
Birkenhead	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bournemouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Brighton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Cambridge	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Cheltenham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Crews	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
E. Glam. (Mon. Val.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Eastbourne	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/2
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Grays	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Hallifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hartlepool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/2
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Ipswich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Lancaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Liverpool	1/9	1/9	1/8	1/9	1/9	1/9	1/8	1/4
Llanelli	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
London (12 m. radius)	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
London (12-15 m. radius)	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Maidstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Newport Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Newport N.	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Norwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Oakham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Rochester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Southend-on-Sea	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stockton-on-Tees	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stroud	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Swansea	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Taunton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3

(For rates of wages in the Building Trade in Scotland, see Page 187.)

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

AUGUST 3.—**Reigate**.—HOUSES.—Twelve houses at Betchworth, for the R.D.C. W. J. Hutton, District Surveyor, 48, High-street. Deposit £3 3s.

AUGUST 4.—**Ammanford**.—LODGE.—Caretaker's lodge on the site of the proposed cemetery, near Dyffryn House, and constructing of carriageways, paths, fencing, &c., on a portion of the field for burial purposes, for the U.D.C. D. Thomas, architect and surveyor, Quay-street.

AUGUST 4.—**Bridgnorth**.—DWELLINGS.—Erection of eight dwellings (and probably 12), in pairs, on an approved site in the Image-lane, for the Borough Council. Borough Surveyor's Office, Bridgnorth.

AUGUST 4.—**Ellon**.—FLATS.—Two blocks of flatted houses at Gordon-place, for the B.C. Edwin L. Williamson, architect, 207, Union-street, Aberdeen.

AUGUST 4.—**Manchester**.—HOUSES.—From four to 610 houses on the Moston estate, for the T.C. Housing Director. Deposit £2 2s.

AUGUST 4.—**Oban**.—HOUSES.—Six blocks of houses (24 in all) at Mossfield-drive, for the T.C. D. Galloway, Burgh Surveyor.

AUGUST 4.—**Penistone**.—PAINTING.—Painting, paper-hanging and whitewashing of schoolrooms at the Grammar School, for the Governors.—Clerk.

AUGUST 4.—**Solihull**.—HOUSES.—Olton, 10 houses, Lynton-road; Balsall, eight houses, Balsall-street; Barton, four houses, Oak-lane, for the R.D.C. Chas. H. Cook, Clerk of the Council. Deposit £1 1s. each.

AUGUST 4.—**Sunderland**.—BUILDING.—Potting shed, heating chamber and greenhouse at the Barnes Park, for the C.B. Borough Engineer. Deposit £1 1s.

AUGUST 5.—**Brentwood**.—BUNGALOWS.—Sixteen bungalows in pairs, near King's-road, for the U.D.C. A. J. Meeson, Surveyor. Deposit £1.

AUGUST 5.—**Bristol**.—ALTERATIONS.—Additions and alterations to thirteen houses and the rebuilding of a house in Berkeley-street, Eastville, for the T.C. Lessel S. McKenzie, City Engineer and Surveyor. Deposit £1.

AUGUST 5.—**Dorset**.—COTTAGES.—Two cottages at Bovington Camp, near Lulworth, Wareham, Dorset, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W. 1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 5.—**Duns**.—HOUSES.—Twelve houses at Bridgend, for the T.C. Jas. Millar, Town Clerk. Deposit £1.

AUGUST 5.—**Glasgow**.—REPAIRS.—At 17 and 19, Kelvinside-avenue, North Kelvinside, for the E.C. J. Clark, Director of Education, 129, Bath-street. Deposit 10s. 6d.

AUGUST 5.—**London, E.**—EXTENSION.—Extension of Canning Town Employment Exchange, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles street, S.W. 1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 5.—**Manchester**.—PAINTING.—At the Chester-road and Ancoats branch libraries, for the T.C. City Architect. Deposit 10s. 6d. each.

AUGUST 5.—**Norwich**.—HOUSES.—Sixteen houses at the Mile Cross estate, for the T.C. Stanley J. Wearing, A.R.I.B.A., architect, 3, Redwell-street.

AUGUST 5.—**Shipley**.—ELECTRIC LIGHTING.—Installation of electric light at four Council schools and the Salt High Schools, for the E.C. H. Dawson, Surveyor and Architect.

AUGUST 5.—**Stanley**.—HOUSES.—Sixty houses on South Stanley housing estate, for the U.D.C. A. Routledge, surveyor. Deposit £2 2s.

AUGUST 5.—**Strichen**.—TRADES.—Mason, joiner and slater works of alterations at Steading of Loanend. C. W. Sleigh, Strichen.

AUGUST 6.—**Aylesbury**.—COTTAGE.—Caretaker's cottage at 7, Friarage-road, for the Comrades' Club. Chas. H. Wright, A.R.I.B.A., 3, Bourbon-street. Deposit £1.

AUGUST 6.—**Aylesbury**.—HOUSES.—Forty-eight houses on the Southcourt estate, for the T.C. Wm. Harold Taylor, Borough Engineer and Surveyor.

AUGUST 6.—**Aylesbury**.—PENS.—Cattle and sheep pens, gates, &c., at the Markets, for the T.C. Wm. Harold Taylor, Borough Engineer and Surveyor.

AUGUST 6.—**Aylesbury**.—WALLS.—Extension of the Markets, including boundary walls, sale rings, sheds, &c., for the T.C. Wm. Harold Taylor, Borough Engineer and Surveyor.

AUGUST 6.—**Backnamullagh**.—SCHOOL.—Elementary school. Rev. A. Thompson, The Manse, Dromore, co. Down.

AUGUST 6.—**Clacton-on-Sea**.—EXTENSION.—Extension of Post Office, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W. 1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 6.—**Dowlais**.—PAINTING.—Cleaning and painting at Bethania Chapel, South-street, Dowlais, also the schoolrooms at South-street, Gellifaelog, Caeharris, Pant and Pwllwhiaid. J. Jenkins, Hon. Secretary, 6, Panscallog-terrace, Dowlais.

AUGUST 6.—**Dowlais**.—REPAIRS.—To Bethania Chapel, South-street, Dowlais, also the schoolrooms at South-street, Gellifaelog, Caeharris, Pant and Pwllwhiaid. J. Jenkins, Hon. Secretary, 6, Panscallog-terrace, Dowlais.

AUGUST 6.—**Grimbsy**.—ALTERATIONS.—Alterations to Grimbsy Head Post Office, for the Com

missioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W. 1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 6.—**London, W.**—PAINTING.—External painting at the Ministry of Pensions, Acton, W. 3, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W. 1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 6.—**Manchester**.—ALTERATIONS.—To conveniences at Bradford Recreation Ground, for the T.C. City Architect. Deposit £1 1s.

AUGUST 6.—**Quarry Bank**.—HOUSES.—Six parlour and 20 non-parlour type houses, together with the construction of about 60 yds. of 10 ft. carriageway and footpaths on the building site at Hammer Bank, Lower High-street, for the U.D.C. A. Homfray, Clerk. Deposit £1 1s.

AUGUST 6.—**Worsborough**.—HOUSING.—For (1) streets; (2) drains and sewers; (3) 10 houses, each with paths and fences, for the U.D.C. T. Shield, surveyor. Deposit £1 1s.

AUGUST 7.—**Dublin**.—REPAIRS.—Roofing, flooring and other works, to the central portion of the south front of the Custom House, for the Commissioner of Public Works. J. J. Healy, Secretary, Baile Atha Cliath (Dublin). Deposit £5.

AUGUST 7.—**Exeter**.—SHOWYARD.—Erection of the showyard, including offices, grand stand, cattle, implement, and other sheds, &c., for the 1926 Exhibition at Crediton, and for two succeeding shows. The Secretary, 20, Queen-street, Exeter.

AUGUST 7.—**London, E.C.**—PAINTING.—Internal and external painting at the G.P.O., King Edward Building, E.C., for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W. 1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 7.—**Middlesex**.—EXTENSION.—Extension of the sub-station, National Physical Laboratory, Teddington, for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, S.W. 1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 7.—**Rotherham**.—HOUSES.—Twenty houses on the site adjoining Firbeck-lane, Loughton-en-le-Morthen, for the R.D.C. J. E. Knight, architect, Regent House, Moorgate. Deposit £2 2s.

AUGUST 7.—**Witham**.—HOUSES.—Five pairs of semi-detached houses on the Cock's Farm site, for the U.D.C. W. P. Perkins, surveyor, Collingwood-road.

AUGUST 8.—**Enniskillen**.—GARAGE.—Motor garage and motor repair shop for the Erne Motor Engineering Co., Anne-street. James Donnelly, M.R.I.A.I., architect.

AUGUST 8.—**Leeds**.—PAINTING.—Inside of Bramley Institution, for the B.G. J. H. Ford, Clerk to the Guardians, Poor Law Offices, South Parade.

AUGUST 8.—**London, E. 14**.—SUBWAYS.—Construction of two subways through Double Wards "E.F." and "K.L." at St. Andrew's Hospital, Devon's-road, Bow, E. 3, for the Poplar Board of Guardians. The Clerk to the Guardians, 45, Upper North-street, Poplar, E. 14. Deposit £2.

AUGUST 8.—**Newcastle-upon-Tyne**.—BUILDING.—Timber-framed building at the Moothall, for the Northumberland C.C. J. A. Bean, County Surveyor, Moothall.

AUGUST 8.—**Pontyberem**.—HALL.—Memorial Institute, together with adding to and altering the public hall. E. S. Griffiths & Partners, architects, Tony-pandy.

AUGUST 8.—**Rawtenstall**.—HOUSES.—Twenty-two houses at Oakley; eighteen bungalows at Oakley; twenty-four houses at New Inn, Crawshawbooth; and two bungalows at New Inn, Crawshawbooth. A. Brocklehurst, architect, St. James's-chambers, Waterfoot. Deposit £2 2s.

AUGUST 8.—**West Riding**.—SHELTERS.—Ten sectional wooden shelters, for the C.C. West Riding Architect, County Hall, Wakefield.

AUGUST 10.—**Belfast**.—BUILDING.—For (1) erection of school at Everton; (2) additions to school at Rosetta; (3) additions to school at Skegoniel; (4) heating Strand school, for the C.B. Education Architect, College-square. Deposit £2 2s. each.

AUGUST 10.—**Blackwood**.—EXTENSION.—To Saint Margaret's Church, Blackwood (Mon). A. F. Webb, L.R.I.B.A., architect, Tredegar-chambers. Deposit £2 2s.

AUGUST 10.—**Blackwood**.—INSTITUTE.—First portion of the Blackwood and District Workmen's Institute at Blackwood, Mon, for the Committee of the Blackwood Miners' Welfare Council. D. J. Thomas and A. F. Webb, L.L.R.I.B.A., architects. Deposit £2 2s.

AUGUST 10.—**Bridlington**.—HOUSES.—Fifty-eight non-parlour type and 30 parlour type houses on the Postill housing estate, for the T.C. Borough Engineer and Surveyor. Deposit £2 2s.

AUGUST 10.—**Chelmsford**.—COTTAGES.—For (a) two pairs of cottages at Little Leighs; (b) two pairs of cottages at Little Baddow; (c) two pairs of cottages at Retendon, for the R.D.C. J. Dewhurst, Engineer and Surveyor, Council Offices, Waterloo-lane.

AUGUST 10.—**Clutton**.—HOUSES.—Ten houses at Farrington Gurney, for the R.D.C. W. T. Hawker, Architect, Council Houses, Temple Cloud, near Bristol.

AUGUST 10.—**Clutton**.—HOUSES.—Twenty-two houses at Paulton, for the R.D.C. W. T. Hawker, Architect, Council Houses, Temple Cloud, near Bristol. Deposit £3 3s.

AUGUST 10.—**Dublin**.—REPAIRS.—Repairs to cottages in Thomastown R.D. Scheme No. 6. Chief Clerk, Irish Sailors' and Soldiers' Land Trust, 30, Lower Fitzwilliam-street. Deposit £1 1s.

AUGUST 10.—**Dumbarton**.—LODGE.—Of the East Gate Lodge, Auchentorlie Estate, Bowling, for the D.C. of the C.C. Joseph Weekes, County Architect, 88, College-street, Dumbarton.

AUGUST 10.—**Enniskillen**.—HOUSES.—Two, and alternatively seven, houses at Sedan-terrace, James Donnelly, M.R.I.A.I., architect. R. J. Lyons, Willoughby-place, Enniskillen.

AUGUST 10.—**Forehoe**.—COTTAGES.—Five pairs cottages at Browick site, for the R.D.C. Wm. Partidge Smith, Clerk, Vicar-street, Wymondham. Deposit £1.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters. Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Masons' Brick-layers' Plasterers' Labourers.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/7	1/0½
Airdrie	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/2½ to 1/3
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½
Avr	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6	1/2 to 1/3
Balgownie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/3	1/3
Coatbridge	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3 to 1/3½
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dumfries	1/8½	1/6½	1/6½	1/6½	1/6½	1/6½	1/8	1/2
Dundee	1/8	1/8	1/8	1/3	1/3	1/3	1/8	1/3
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Edinburgh	1/8	1/8	1/8	1/8	1/7	1/7	1/6½	1/2
Falkirk	1/7½	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Fort William	1/8	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Glasbeith	1/7	1/7	1/7	1/8	1/8	1/8	1/3	1/3½
Glasgow	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½
Hamilton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Hawick	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3
Helensburgh	1/5	—	1/5	1/4	1/5	1/5	1/4	1/- to 1/1
Inverness	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3
Kilmarnock	1/3	1/3	1/3	1/8	1/8	1/8	1/8	1/3
Kirkcaldy	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/3
Kirkwall	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3
Perth	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3
Stirling	1/3	1/3	1/8	1/8	1/8	1/8	1/8	1/3
Strirlingshire (Eastern District)	1/8-1/10	1/8-1/10	1/3	1/9	1/7	1/8	1/6½	1/3½
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 108.

AUGUST 10.—Kingsbridge.—HOUSES.—Eighteen houses at Rack Park, for the U.D.C. J. Hole, architect. Deposit £2 2s.

AUGUST 10.—Sherburn-in-Elmet.—ALTERATIONS.—Extensions and alterations to the Small-pox Hospital, also for the cleaning down, painting, and alterations to the existing buildings, for the Committee. Geo. A. Bromet, Clerk to the Hospital Authorities, Sherburn.

AUGUST 10.—Thorne.—HOUSES.—Seventy houses on the housing site at Ellison-street, for the R.D.C. F. Turner, architect, Carlisle-street, Goole. Deposit £2 2s.

AUGUST 11.—Bolton.—HOUSE.—Residence for the Medical Superintendent of the Townleys Hospital at the junction of Wash-lane with the road leading to the entrance gates of the Fishpool Institution in Farnworth, for the B.G. John Ward, architect, 24, Mawdsley-street. Deposit £1 1s.

AUGUST 11.—Dundrum.—RESTORATION.—Of Dundrum ex-R.I.C. barracks, Co. Dublin, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath (Dublin). Deposit £1.

AUGUST 11.—Ferndale (Rhondda).—POST OFFICE.—Erection of a post office at Ferndale (Rhondda, Glam). Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 12.—Burgess Hill.—HOUSES.—Thirty-seven houses in a new road between Church-road and London-road, Burgess Hill, for the U.D.C. E. F. Farrington, Surveyor, Council Offices, 20, Church-road. Deposit £2 2s.

AUGUST 12.—Croydon.—TELEPHONE EXCHANGE.—Erection of a telephone exchange. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 12.—East Grinstead.—COTTAGES.—Erection of 38 cottages of various types on two sites, for the R.D.C. Ernest A. Chilton, Architect, Town Hall Chambers, Uckfield, Sussex. Deposit £2 2s.

AUGUST 12.—Manchester.—ELECTRIC LIGHTING.—Providing and fixing complete electric lighting installations at the Harpurhey High School for Girls, Church-lane, Harpurhey, for the T.C. P. M. Heath, Town Clerk.

AUGUST 12.—Swallownest.—ADDITIONS.—Additions and alterations to the administrative block at Swallownest, for the South Rotherham and Kiveton Park District Isolation Hospital Committee. J. Haslam, architect and surveyor, Ryton Chambers, Worksop. Deposit £2 2s.

AUGUST 12.—Thedwastre.—COTTAGES.—Six at Walsham-le-Willows, and two at Beyton, for the R.D.C. Hunt & Coates, architects, 51A, Abbeygate-street, Bury St. Edmunds.

AUGUST 13.—London, W.—Internal painting at the Post Office Savings Bank, Blythe-road, Kensington, W., for the Commissioners, H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

AUGUST 13.—South Dublin.—PAINTING.—External painting to cottages in the South Dublin R.D. Scheme No. 143—in accordance with the specification prepared by the Engineer, Irish Sailors' and Soldiers' Land Trust, 30, Lower Fitzwilliam-street, Dublin. Deposit 10s.

AUGUST 15.—Goole.—HOUSES.—Eight non-parlour type houses at Snaith and West Cowick, for the R.D.C. R. Plewes, surveyor. Deposit £1 1s.

AUGUST 15.—London, N.W.9.—HOUSES.—Construction of 12 houses at Buck-lane and two houses at Barnhill-road, Kingsbury, N.W.9, for the Kingsbury U.D.C. Surveyor, Council Offices, Kingsbury-road, The Hyde, N.W.9. Deposit £3 3s.

AUGUST 15.—Milton.—LIGHTING.—Public lighting of the parish of Milton, for the P.C. R. Bentham, Clerk.

AUGUST 15.—Newport.—FOUNDATIONS.—Construction of ferro-concrete foundations for a 10,000 k.w. turbo-alternator and condensing plant, for the C.B. A. Nichols Moore, Borough Electrical and Tramways Engineer. Deposit £2 2s.

AUGUST 17.—Dublin.—PAINTING.—External painting to cottages in the Rathdown No. 1 R.D. Scheme No. 154. Chief Clerk, Irish Sailors' and Soldiers' Land Trust, 30, Lower Fitzwilliam-street, Dublin. Deposit 10s.

AUGUST 17.—Swindon.—HOUSES.—Erection of 96 houses on Hurst Housing Estate, for the Corporation. Borough Surveyor, 34, Regent-circus, Swindon.

AUGUST 18.—Angel-street.—PAINTING.—The General Post Office, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works, &c.).

AUGUST 18.—Birkenhead.—ALTERATIONS.—Structural alterations to the premises, "Manor Grange," Egerton-road, for the B.G. E. Kirby & Sons, architects, 5, Cook-street, Liverpool.

AUGUST 18.—Godstone (Surrey).—HOUSES.—Erection of sixteen Class "A" houses, and eight Class "B" houses at Tyler's Green site, Godstone, for the R.D.C. Council's Surveyor, Lloyds Bank-chambers, Oxted. Deposit £3 3s.

AUGUST 18.—Hailsham (Sussex).—HOUSES.—Erection and completion of sixteen houses in blocks of four in South-road, for the R.D.C. The Engineer, 17, London-road, Hailsham. Deposit £1 1s.

AUGUST 25.—Wigan.—SCHOOL.—To accommodate 768 scholars, at Whalley, for the C.B. R. B. Donald, Borough and Water Engineer. Deposit £2 2s.

AUGUST 29.—Oswestry.—HOUSES.—Erection of 26 non-parlour type houses on the Llwyn Estate, for the Borough Council. P. Ridge, A.R.I.B.A., Bailey-street, Oswestry. Deposit £1 1s.

NO DATE.—Ayr.—HOUSES.—Houses at Auchinleck and elsewhere in Ayr, for the D.C. R. Welsh, District Clerk, 21, Wellington-square.

NO DATE.—Frimley.—HOUSES.—Twenty-two pairs of semi-detached houses on land opposite "Woodlands," Frimley-road, Camberley, for the U.D.C. W. H. Tucker, architect, "Ayston," Firwood-drive Camberley. Deposit £3 3s.

NO DATE.—Heswall.—ADDITIONS.—Alterations and additions to the Royal Liverpool Children's Hospital, for the Committee. H. F. Russell, architect, 15, Sweeting-street, Liverpool. Deposit £1 1s.

NO DATE.—Mynachdy.—EXTENSIONS.—New school room at Mynachdy for the Presbyterian Forward Movement. Henry Budgen & Co., 95, St. Mary-street, Cardiff. Deposit £2 2s.

NO DATE.—Whitlesey.—COTTAGES.—Six cottages at Eastrea, for the R.D.C. H. W. Hawkins, Old Fletton, Peterborough. Deposit £1 1s.

MATERIALS. etc.

AUGUST 4.—Rothwell.—PIPES.—6 in. and 8 in. cast-iron cement-lined water main and 1½" spun" water main pipes, in lots of not less than 1,000 yds., for the U.D.C. J. Southwart, Waterworks Manager.

AUGUST 7.—Newtownards (Ireland).—FENCING.—Supply and erection of gates and fencing to eight cottages in the R.D., for the Government of Northern Ireland. Secretary, Ministry of Finance, 15, Donegall-square West, Belfast.

AUGUST 10.—Batley.—PIPES.—400 tons of cast-iron pipes and special castings, 18 in. diameter, for the Corporation. G. H. Hill & Sons (Manchester), Civil Engineers, 40, Kennedy-street, Manchester. Deposit £1 1s.

AUGUST 10.—South Africa.—TRUSSES.—Sixty-three steel roof trusses, 53 ft. 9 in. clear span, 68 verandah brackets, 5 ft. 9 in. projection, steel angle and steel tee pultrins, for the Port Elizabeth T.C. Department of Overseas Trade, 35, Old Queen-street, London, S.W.1.

AUGUST 12.—Manchester.—RAILINGS.—Supplying and fixing of wrought-iron railings and gates at the Peacock-street Municipal school, Gorton, for the T.C. P. M. Heath, Town Clerk. Deposit £1 1s.

AUGUST 17.—Middlesbrough.—MATERIALS.—Annealed scoriae (broken) bricks, castings, concrete flags and kerbs, pitch and tar, sanitary pipes, gulleys, junctions, &c., slag (broken), tarred whinstone and slag, timber, whinstone and granite (broken), whinstone and granite setts, and kerbs, and sand, for the C.B. S. E. Burgess, Borough Engineer.

AUGUST 26.—Bournemouth.—RAILS.—600 tons rails, for the C.B. I. Bulfin, General Manager. Deposit £2 2s.

SEPTEMBER 11.—Durban.—MATERIALS.—Steel, cast-iron pipes and specials, and sluice and air valves, for the T.C. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

ENGINEERING, IRON AND STEEL.

AUGUST 4.—Warwickshire.—REPAIRS.—Reconstruction of Sheldon and Low Brook and the widening of Hatchford, Stonebridge, Pickford, and Hollywell bridges in reinforced concrete, for the C.C. J. D. H. Brown, County Surveyor, County Surveyor's Office, 8, Northgate-street, Warwick. Deposit £2.

AUGUST 5.—Biggleswade.—TANK.—Providing and laying about 4,000 yds. of 3 in. main, erection of engine house, together with the necessary pumping plant, and providing and erecting a cast-iron storage tank on a 40 ft. tower of steel structure, for the R.D.C. H. Chandler, Clerk to the Council, 2, London-road. Deposit £2 2s.

AUGUST 7.—Roscommon.—WELL.—Artesian well and the erection of a pump thereon in each of the townlands of Carrowkeel, Fuerty, and Carrowalasson, for the R.D.C. J. Gilleran, Clerk.

AUGUST 10.—Ilminster.—WELL.—Construction of intake works in connection with the water supply, including the sinking of a borehole and well, and about 300 yds. of trenches and drains, and other works incidental thereto. A. P. I. Cotterell & Son, engineers, 17, Old Queen-street, Westminster, S.W.1. Deposit £3 3s.

AUGUST 10.—Kilkenny.—TANK.—Concrete tank at County Sanatorium, for the C.C. T. Drew, Secretary to Committee, Court House, Kilkenny.

AUGUST 11.—South Africa.—SLUICE GATES.—Two sluice gates, gearing superstructure, &c., for the Bulawayo T.C. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

AUGUST 15.—Inverness.—RECONSTRUCTION.—Of the Findhorn and Spey bridges, for the C.C. Chief Engineer, Inverness-Perth road, 98-102, Academy-street, Inverness. Deposit £5 5s.

AUGUST 15.—Skipton.—WIDENING.—Widening of the West Approach to the Holme Canal Bridge, which carries the Keighley and Kendal main road over the waterway of the Leeds and Liverpool Canal Co., near Gargrave, Skipton, for the West Riding C.C. West Riding Surveyor, County Hall, Wakefield. Deposit £1.

AUGUST 17.—Horsham.—BOREHOLE.—Sinking of a new borehole at Whites Bridge, Magpie-lane, for the U.D.C. C. G. Atkinson, surveyor. Deposit £2 2s.

AUGUST 19.—Louth.—RECONSTRUCTION.—Removal of five existing bridges and the construction of five reinforced concrete road bridges over the Louth Canal, Lincolnshire, for the R.D.C. John H. Haiste, consulting engineer, Union Bank Chambers, Trinity House-lane, Hull. Deposit £1 1s.

AUGUST 20.—Lancashire.—CULVERT.—For the diversion of a length of the Lancaster, Pilling and Blackpool road, and the construction of a culvert in masonry at Carr Bridge, for the C.C. W. H. Schofield, County Surveyor and Bridgeman, County Offices, Preston.

AUGUST 26.—Bournemouth.—RECONSTRUCTION.—Of the permanent way, for the C.B. I. Bulfin, General Manager, Tramways Offices, Wootton-gardens. Deposit £2 2s.

NO DATE.—Market Harborough.—BRIDGE.—Reinforced concrete road bridge over a canal, for the R.D.C. F. C. Salmon, surveyor, Kibworth, Leicester.

NO DATE.—Tadcaster.—BORING.—Boring and lining a 14 in. borehole at Tadcaster. Wm. Broadbent, architect and surveyor, 12, East Parade, Leeds.

ROAD, SEWERAGE, AND WATER WORKS

AUGUST 3.—Pembroke.—REPAIRS.—Laying reinforced concrete on Barrow-street and Shelbourne-road, about 12,420 sq. yds. roadway, more or less, with the requisite laying of paths, kerbs, &c., incident to new road and all other works necessary, for the U.D.C. Joshua C. Manly, Clerk, Town Hall, Ballsbridge, Co. Dublin.

AUGUST 4.—Hurst.—RECONSTRUCTION.—Of Curzon road with concrete foundation, surfaced with granitic rock asphalt, and other works incidental thereto, repaving of part of Lower King-street and Union-road, for the U.D.C. D. Jenkinson, Surveyor.

AUGUST 4.—Lisburn.—RECONSTRUCTION.—With concrete flags, of footpaths, for the U.D.C. T. M. Wilson, Town Clerk.

AUGUST 4.—Wellington.—FENCING.—For (a) provision and erection complete of approximately 630 lins. of 7 ft. corrugated iron fencing, on steel framework, together with three pairs of double doors and two single doors, at the Council's refuse disposal depot, Bennetts Bank; (b) provision of about 20 lins. yds. unclimbable wrought-iron fencing, including one pair of iron gates, and one single gate; and (c) 150 to 200 yds. complete of narrow gauge rails, for the U.D.C. G. H. Connor, Engineer and Surveyor.

AUGUST 5.—Cookstown.—DRAINAGE.—Drainage works required for 18 ex-Servicemen's cottages in the Townland of Tullagh, for the Government of Northern Ireland. Secretary, Ministry of Finance, 15, Donegall-square West.

AUGUST 6.—Hebburn.—SEWERS.—Relaying sewers in back Cuthbert and William-street, back Wood and Elm-street, and other streets in the district, for the U.D.C. H. Paterson, Surveyor.

AUGUST 7.—Wealdstone.—IMPROVEMENTS.—Resurfacing and improvement works to the footpaths in the High-street and in fourteen other roads, for the U.D.C. H. Walker, Surveyor. Deposit £1.

AUGUST 8.—Barry.—PATHS.—Forming and surfacing of promenade and paths, Whitmore Bay, Barry Island, and the parade extension, for the U.D.C. E. R. Hinch-cliff, architect. Deposit £2 2s.

AUGUST 8.—Carmarthenshire (Eastern Division).—WIDENING.—Road widening and improvements at Felinfoel, on the Llanelly to Llandilo-road, for the C.C. G. Henry, County Surveyor, Llandilo. Deposit £2 2s.

AUGUST 8.—Cowbridge.—EXTENSION.—Extension of the new road scheme at Red Hill, Llanharry, for the R.D.C. G. E. Morris, Surveyor. Deposit £2 2s.

AUGUST 8.—Fixby.—PAVING.—Paving with granite setts on reinforced concrete of a portion of the Halifax and Huddersfield main road at Fixby, for the West Riding C.C. West Riding Surveyor, County Hall, Wakefield. Deposit £1.

AUGUST 8.—Settle.—RECONSTRUCTION.—In mastic asphalt on a concrete foundation of the Keighley and Kendal main road at Duke-street, for the West Riding C.C. West Riding Surveyor, County Hall, Wakefield. Deposit £1.

AUGUST 8.—Wigan.—SEWERS.—Streets and sewers on the Bottling Wood housing site, for the C.B. R. B. Donald, Borough and Water Engineer. Deposit £2 2s.

AUGUST 8.—York.—ROADS.—Construction of road-work on the Tang Hall housing estate, comprising the making-up, levelling, kerbing, and construction of carriageway in reinforced concrete; footpaths in tarmacadam, &c. F. W. Spurr, City Engineer. Deposit £2 2s.

AUGUST 10.—Cannock.—SEWERS.—Laying of 1,272 lins. yds. of 9 in. sewers, and sewage disposal works, comprising the construction of screening chamber, sedimentation and storm-water tanks, filters, humus tanks, and sludge beds, and other works at Cannock Wood, for the U.D.C. R. Blanchard, Engineer and Surveyor.

AUGUST 10.—Darton.—MAINS.—Laying and jointing of about 1,262 yds. of 4 in. and 460 yds. of 3 in. cast-iron water mains and fittings, for purposes of supplying water to 250 houses now in course of erection, for the U.D.C. P. Wilkinson, Waterworks Manager, Council Offices, Darton, near Barnsley.

AUGUST 11.—Belfast.—ROADS.—For (1) laying about 15,600 sq. yds. of reinforced concrete roadway, 8 in. in thickness, in Holywood-road, from Sydenham Station-road to City boundary; (2) supplying and laying about 4,500 sq. yds. of 9 in. by 4 in. by 3 in. creosoted deal paving in Royal-avenue, Donegall-square West, and College-square East; and (3) supplying and erecting about 638 ft. of corrugated iron fencing, inclusive of three gates, 10 ft. in width, at River-terrace, for the C.B. City Surveyor.

AUGUST 11.—Litherland.—SEWER.—30 in. diameter reinforced concrete pipe sewer from Wilson's-lane to St. Philip's Church, and for a 12 in. diameter glazed stoneware pipe sewer along Orrell-road, together with all necessary manholes, for the U.D.C. Geo. Ponsford, Engineer and Surveyor.

AUGUST 11.—Salford.—PAVING.—Paving and completing of one passage with stone setts, for the B.C. Borough Engineer, Town Hall, Salford.

AUGUST 14.—Sedgley.—RECONSTRUCTION.—Of so much of the Dudley and Wolverhampton main road as lies between Springhead and the Dudley boundary, a length of about 3 miles, for the U.D.C. F. W. Turton, Surveyor.

AUGUST 18.—St. Austell.—ROAD.—Construction of a two-course concrete road at Victoria-road, for the U.D.C. E. D. Groves, Surveyor. Deposit £2 2s.

AUGUST 24.—Catherington.—MAINS.—Providing and laying about 4,100 lins. yds. of 6 in. cast-iron water mains, also 4,850 yds. of 4 in. and 2,700 yds. of 3 in. ditto, with hydrants, sluice valves and fittings, also for the construction of two concrete reservoirs and a pumping station, for the R.D.C. G. C. Vernon-Inkpen, engineer, 40, Commercial-road, Portsmouth. Deposit £10 10s.

(Continued on page 201.)

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ABERSTYCHAN.—The U.D.C. has decided to build new council offices, at an estimated cost of £4,000.

ABERTILLY.—At an estimated cost of £13,500, the U.D.C. is to make extensions of the gas works.—The Council is to erect 100 houses on the Sufryd, Crumlin, site.

AMMANFORD.—The U.D.C. has received Ministry sanction to the expenditure of £47,257 on a district scheme of drainage.

BARNBY-SANDALL.—The Committee of the Don Valley Conservative Association have secured a site at Barnby Dun for the erection of club premises.

BEXHILL.—The T.C. passed plans; Science and art block, "St. Ives" Elmstead-road, by G. H. Gray, for Miss Kyrke-Penson; 12 cottages off Maple-walk, by Tubbs & Messer, for the Right Hon. Earl de La Warr.

BLACKPOOL.—The Parochial Council of Holy Trinity Church, South Shore, are proposing to erect a Memorial Hall, Sunday School, and Vestries. The plans have been prepared by Mr. A. A. C. Moore, architect, 19, Abingdon-street.

BRADFORD.—The E.C. are to obtain plans for a school clinic on the site near the Lower Grange housing estate.—Having had a report on the condition of the low level conduit from Barton to Gilstead, the Corporation propose to replace the original stone culvert with steel tubes, at a cost of £6,000.—Eight acres at Woodhall Estate are to be used as playing fields for the Technical College.—Tenders are being invited for the erection of 166 houses on the Lower Grange estate.

BUCKINGHAMSHIRE.—The C.C. are discussing with local authorities the provision of new accommodation for mental defectives.

BURNLEY.—The Housing Committee have accepted tenders for the erection of 24 additional houses on the Palace House site.—Under the Rural Council's scheme for assisting private enterprise, 49 houses have been approved for subsidy.—It is proposed to seek approval for the building of 30 more houses.

BURY.—The Borough Engineer has been instructed to prepare a sketch plan providing the following accommodation which the Sub-committee consider desirable, namely, one plunge bath, 20 slipper baths, a washhouse to accommodate 20 persons.—A scheme has been submitted for the building of houses in the borough on various sites, and recommending the building of 150 houses.—At the Sewage, Paving and Streets Committee meeting plans submitted for the erection of over 70 houses in different parts of the borough were approved.

CHADDERTON.—The parishioners of Denton-lane Church are to go forward with a scheme for the speedy erection of a new permanent church.—The D.C. are proposing to erect new baths at Whitegate.—The Surveyor has been instructed to prepare rough plans to include the following: Ladies' and men's swimming baths, private baths, public washhouses (30 stalls), superintendent's house.

CHELTENHAM.—The Corporation have approved of designs for sixty houses, to be erected by Mr. Drew, under his fourth contract.

COVENTRY.—The E.C. recommended that application be made for sanction to a supplemental loan of £2,174 in respect of extensions at Barr's Hill Secondary School.—Land at Whitley is to be scheduled for a site for a public abattoir.—A site in Albany-road is to be allocated for a new school.

CROMPTON.—The E.C. have approved of the scheme for the conversion of Crompton House into a central school. Mr. R. Martin, the diocesan architect, has prepared the plans.

CROYDON.—The C.B. has recommended the Town Clerk to apply to the M.H. for approval to the raising of a loan for £7,072, the estimated cost of 12 cottages at the Mental Hospital.—The Council are to erect 152 houses on the Waddon estate, by direct labour, at an estimated cost of £77,489.—A sub-station is to be built at Mitcham-road cemetery, for the C.B.—Sanction has been received from the M.H. for the borrowing of £60,671 for the erection of houses on the Waddon housing estate.—Plans passed: Scratchley Bros., 13 garages, Kitchener-road; Barney & Sons, showroom, &c., Brighton-road, Purley; J. A. Dartnall, 13 houses and shops, and four houses, London- and Warwick-roads; Scratchley Bros., 16 houses, South Norwood-hill; F. W. Milton, 25 houses, Green-lane; W. J. Ingram, 46 houses, Green-lane and Maryland-road.

DARLINGTON.—The R.D.C. has approved plans submitted by Mr. A. Lax for the erection of 22 houses at Morton Palms.

DEWSBURY.—The Eastborough Working Men's Club Committee are proposing to erect new premises. Messrs. Newbold & Hartley, architects, of Wakefield, have the scheme in hand.

EASTCOTE.—A scheme which includes a school for infants, evening technical and handicraft classes, new and enlarged village club, and a village hall to accommodate 250 people is now being proposed. The cost of the scheme is £2,500.

EGHAM.—The U.D.C. decided to proceed with a scheme for the erection of 100 houses during the next two years.

GLAMORGAN.—The County E.C. is to erect new schools at Measmarchog (250 scholars); Hendreforgan (350); Abergwynfi (800); Abercragan (additional 200); Blaengarw (additional 100 scholars).—

The Glamorgan Territorial Association is to build two new drill halls, one at Gorseinon and the other at Clydach.

GREAT HARWOOD.—The U.D.C. has received sanction from the M.H. to the erection of a further twenty houses.

HALE.—Mrs. A. E. Bowker proposes to erect 12 houses on a site at Ashley-road and South Downs-road. Mr. J. E. Schunck, of Low Mere, has a scheme in preparation for the erection of 24 houses on a site at Hale Barns.

HARPENDEN.—The U.D.C. has accepted a tender of £1,052 for the construction of a public convenience on the Common near the Fountain. Application is to be made to the M.H. for sanction to a loan of £1,100 to cover the cost of the work.

HARTSHILL (STAFFS).—Mr. J. Grant, 14 houses, Voxall-avenue.

HILL END.—The Hertfordshire C.C. have decided to erect, on Hill End Mental Hospital estate, at an estimated cost of £120,000, an institution for the treatment of mental defectives.

HILLINGDON.—The Middlesex C.C. has received permission and sanction to borrow the money for the erection of an elementary school.

HUDDESFIELD.—The T.C. passed the plans submitted by the borough architect for alterations and additions to the late Huddersfield Vicarage for conversion into a maternity home for twenty beds.

LLANDILO.—The U.D.C. is to borrow £10,000 for the purpose of erecting fifty houses.

LONDON.—The L.C.C. recommend that the estimate of expenditure on capital account of £400,000, submitted by the Finance Committee in respect of the acquisition of property required for the widening of the Strand between George-court and Villiers-street, be approved.—The L.C.C. recommend that the estimate of expenditure on capital account of £16,835, submitted by the Finance Committee in respect of the erection of an extension of Archer House and another block of dwellings on an adjoining site on the Whitmore estate, be approved.

LONDON (CITY).—The Corporation are to spend £81,990 on the re-building of Snow-hill police station.

LONDON (HACKNEY).—The L.C.C. recommend the borrowing by the B.C. of £4,788 for housing purposes.

LONDON (ISLINGTON).—The governors of the Northern Polytechnic have prepared a scheme for extensions, estimated to cost £73,000.

LONDON (POPULAR).—The B.C. are seeking sanction for a scheme of extensions at the generating station, to cost £37,000 for buildings and plant.—The Housing Committee recommend the acquisition of a site in Glengall-road on which sixty-four houses and flats can be erected.—Extensions at the Bow depot are to be carried out, at a cost of £3,600.—The L.C.C. recommend the borrowing by the B.C. of £7,400 for housing purposes.

LONDON (WOOLWICH).—The L.C.C. recommend the borrowing by the B.C. of £62,317 for housing purposes.

LONGTON (STAFFS).—The Wesleyan Trustees are to erect a Sunday school at Adderley Green.

LURGAN.—The U.D.C. are to apply for a loan of £10,000 for the purpose of erecting working men's houses.

MARYLEBONE.—The B.C. have prepared a scheme for widening Park-road, at a cost of £98,000.—Messrs. Muir, Biggs & Co., have a scheme for buildings on a site in front of Hereford-gardens.

MOSLEY.—The U.D.C., who are erecting 24 houses by direct labour, propose to increase the number to 72 houses.

Housing Made Profitable TO FIRST-CLASS BUILDING CONTRACTORS IN THE UNITED KINGDOM & IRELAND

A well-known firm of Housing Specialists are prepared to negotiate with substantial building firms in all districts who are willing to estimate for, and undertake the erection in defined areas of houses in advertisers' Patented System of Poured Reinforced Concrete Construction, approved by the Ministry of Health.

Amongst numerous other advantages secured, a substantial saving in cost is effected.

**A FIRST-CLASS COMMERCIAL
PROPOSITION IS OFFERED**
Apply The Universal Housing Co. Ltd.
RICKMANSWORTH, HERTS.

NEWBURY.—The Corporation have now purchased a housing site at St. George's-road, and tenders are to be invited for the erection of 32 houses.

NEWPORT (I.O.W.).—The Corporation have arranged to acquire a housing site at Elm-grove, at a cost of £13,300.

NORWICH.—The T.C. has agreed that a further 100 ft. of quay heading be constructed at Riverside, in accordance with the City Engineer's plan, at an estimated cost of £900.—The Housing Committee recommended the erection of 1,000 further houses.

ORSETT.—The M.H. has forwarded sanction to the R.D.C. to erect a further 200 houses.

PRESTON.—The B.S. has submitted a plan showing the proposed lay-out of the Delaware-street housing site, on which it is proposed by the Corporation to erect 100 houses.

RAWMARSH.—The U.D.C. has decided that application be made to the M.H. for sanction to borrow £47,807 10s. for the erection of 100 houses.

RAWTENSTALL.—The T.C. has decided to invite tenders for the erection of another 66 houses.

ROCHDALE.—Proposals for the provision of conveniences and lavatories to be erected on land near Wellington Bridge have been approved.—Sanction has been received from the M.H. for 50 additional houses and to the borrowing of money for the purchase of Clarke's-lane housing site.—Plans of 17 subsidy houses have been approved.

ROTHERHAM.—The R.D.C. has decided to submit a scheme to the Ministry, asking for sanction to build 50 houses at Thurcroft.—The Council resolved to put in hand immediately the erection of houses in the following parishes: Aston-cum-Aughton, 30; Brinsworth, 58; Catcliffe, 24; Loughton, 20; Treeton, 30; Wickersley, 24; Ravenfield, 30.

ROYTON.—The E.C. approved draft plans of the proposed central school at High Barns. The school is planned to accommodate 412 scholars.

SEAHAM HARBOUR.—The U.D.C. Surveyor is preparing plans for a new housing scheme.—Inquiries are being made in connection with a suggestion for the provision of a public abattoir.

SEDFIELD.—The R.D.C. has resolved to seek permission from the M.H. to erect a further 300 houses.

SHEWINGTON.—The P.C. approved the plans for the proposed new Council school at Broad-o'-th'-Lane.

STIRLING.—A sum of £50,000 has been raised for the Stirling New Infirmary scheme.

SUSSEX.—A scheme for a joint orthopaedic institution is to be prepared by the local authorities of Brighton, Bexhill, Hastings, Eastbourne, Chichester, Worthing, and Horsham.

SUTTON COLDFIELD.—The General Purposes and Estates Committee of the Municipal Charities are proposing to erect ten new almshouses.

TADCASTER.—The R.D.C. propose to invite tenders for 320 houses, at an estimated cost of £450 per house.

TROWBRIDGE.—Wilts C.C. are to erect a new elementary school for 200 children.—The U.D.C. are negotiating for additional housing land at Charlotte-street.—The Housing Committee are considering a reconstruction scheme and a sub-committee are to make a general survey of the town.—The Committee are considering the possibility of acquiring the vacant Congree parsonage and an unoccupied warehouse at the Hive, for converting into flats.—The T.C. passed plans: Workshops, &c., at Newtown, for E. Loxley.

UXBRIDGE.—A committee are to select sites for the erection of public conveniences.—The Council are being asked to acquire sites in or out of the district for a housing scheme.

WALSALL.—A new site has been acquired for the proposed new Church of St. Patrick's in lieu of site purchased previously at the corner of Blue-lane and Stafford-street.

WANDSWORTH.—The Council are to erect 19 houses in Gateside-road, Balham, and 201 houses on Bell estate, Balham; 169 non-parlour type houses on the Furzedown estate and 40 on the Southfields estate, for the B.C.—The Highways Committee propose to borrow £27,187 to defray the costs of widening roads.

WARRINGTON.—The Electricity Committee have instructed their architect, Mr. S. F. Silcock, to prepare designs and obtain tenders for a sub-station to be erected on land at Thelwall.—The B.G. propose to purchase a plot of land in Lovely-lane from the Corporation for extension of the hospital. The area is approximately 7 acres, and the cost is £10,000.—It is proposed to erect new mortuary buildings to the plans of Messrs. William & Segar Owen, architects, of Palmyre-square Chambers. Tenders are to be invited.

WELWYN.—The R.D.C. decided to grant a loan of £17,500 for 39 houses to be erected by Country Homes Ltd.; a loan of £25,340 for 50 houses to be erected by the Welwyn Public Utility Society, Ltd.; and a loan of £31,792 for 59 houses to be built by Moatwood Houses, Ltd., at the Garden City.

FIRES.

HINCKLEY.—Messrs. G. Tomlin's premises were totally destroyed by fire. The damage is estimated at approximately £75,000.

WIGTON.—A large fire occurred at Brookside Tannery. The damage is estimated at several thousands.

Ministry of Health Annual Report.

The Sixth Annual Report of the Ministry of Health (Cmd. 2,450, price 3s. 6d. net) for the year ended March 31 last, will shortly be published. It deals with the more important business of the Department during the year, under the main heads of Public Health, including Housing and Town-planning, Local Government and Local Finance, administration of the Poor Law, and administration of the National Health Insurance Acts.

* See also our List of Contracts, Competitions, etc.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.			£ s. d.		
Best Stocks			4	3	6
Second Hard Stocks			3	18	6
Per 1,000, Delivered at London Goods Stations.			£ s. d.		
Flettons	2 13 3	Best Blue			
King's Cross	2 13 3	Pressed Staffs	9	5	0
Do. grooved for plaster	2 15 3	Do. Bullnose	9	15	0
Do. Bullnose	3 8 3	Blue Wire Cuts	7	5	0
Best Stourbridge Fire brick—					
2 1/2 in.	8 11 0	3 in.	10	3	0
GLAZED BRICKS—			£ s. d.		
Best White		D'ble Str'ch'rs	30	10	0
Ivory, and		D'ble Headers	27	10	0
Salt Glazed		One Side and			
Stretchers	2 0 0	Two Ends	31	10	0
Headers	21 10 0	one End	32	10	0
Quoins		Splays and			
Bullnose and 4 1/2 in		Squints	30	0	0
Flats	28 10 0				
Second Quality, £1 per 1,000 less than best.					
Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.					

BREEZE CONCRETE SLABS.

Delivered London

2 in. per yd. super		3 in. per yd. super		£ s. d.	
2 1/2 in.	2 4	3 in.	2 9		
			3 6		

Thames Ballast	10 6	per yd.			
Pit Sand	13 9				
Thames Sand	14 6				
Best Washed Sand	14 6				
1 in. Shingle for Ferro-Concrete	12 9				
3 in. "Broken Brick"	11 6				
Pan Breeze	7 6				

Per ton delivered in London area in full van loads.

Best Portland Cement. British Standard Specification. Test £2 18 0 to £3 3 6

51s. alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above.

Super Cement (Waterproof).

Roman Cement.

Parian Cement.

Keene's Cement, White.

Plaster, Coarse, Pink.

" Fine White.

Sirapite, Coarse.

" Finish.

Grey Stone Lime.

Chalk Lime.

Best Ground Blue Lias Lime.

Hair.

Granite Chippings.

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carried. pd.

Stourbridge Fireclay in sacks 35s. 0d. per ton at rly. dpt.

STONE.

BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, S.W.R., per ft. cube.

Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube.

PORTLAND STONE—

Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube.

Do. do. delivered on road wagons at above stations, per ft. cube.

White basebed, 3d. per ft. cube extra.

NOTE.—1d. per ft. cube extra for every foot over 20 ft. average, and 1d. beyond 30 ft.

LITTON-WOOD STONE—

Delivered at any Goods Station, London.

Small random blocks, up to 10 ft. cube. P. ft. cb.

Random blocks from 10 ft. and over.

Sawn two sides.

Sawn three or four sides.

YORK STONE, BLUE—Robin Hood Quality.

Delivered at any Goods Station, London.

6 in. sawn two sides landings to sizes (under 30 ft. super).

6 in. rubbed two sides ditto.

3 in. sawn two sides slabs (random sizes).

2 in. to 2 1/2 in. sawn one side slabs (random sizes).

1 1/2 in. to 2 in. ditto, ditto.

HARD YORK—

Delivered at any Goods Station, London.

Scrapped random blocks.

6 in. sawn two sides landing to sizes (under 40 ft. super).

6 in. rubbed two sides ditto.

4 in. sawn two sides slabs (random sizes).

3 in. ditto ditto.

2 in. self-faced random flags.

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube.—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 x 11	23 0	3 x 6	23 0
4 x 9	23 0	3 x 11	23 0
4 x 8	26 0	2 x 11	23 0
4 x 7	25 0	3 x 9	25 0
4 x 6	24 0	2 1/2 x 9	25 0
3 x 5	22 0	3 x 4 1/2	23 0
3 x 4	22 0	3 x 4	23 0
2 1/2 x 7	22 0	3 x 4	23 0

PLANED BOARDS.

1 x 11	£32 0	1 x 9	30 0
--------	-------	-------	------

PLAIN EDGE FLOORING.

Inches.	per sq. ft.	Inches.	per sq. ft.
1 1/2	21/-	1 1/2	32/6
1 1/4	23/-	1 1/4	37/6
1 1/2	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq. ft.	Inches.	per sq. ft.
1 1/2	25/-	1 1/2	16/6
1 1/4	32/6	1 1/4	20/-
1 1/2	37/6	1 1/2	25/-

BATTENS.

1 1/2 x 2	2 6 per 100 ft.
-----------	-----------------

SAWN LATHS.

Per bundle	0 2 4
------------	-------

1" AND UP THICK.

Dry Austrian Wainscot, per ft. cube	0 16 0 to 0 13 0
-------------------------------------	------------------

Dry American and/or Japanese Figured Oak, ft. cube	0 15 0
--	--------

Dry American and/or Japanese Plain Oak, ft. cube	0 11 0 to 0 13 0
--	------------------

Dry sq. edged Honduras Mahogany, ft. cube	0 16 0 to 0 18 0
---	------------------

Dry Log cut Honduras Mahogany, ft. cube	0 18 0 to 1 1 0
---	-----------------

Dry Cuba Mahogany, ft. cube	1 4 0 to 1 10 0
-----------------------------	-----------------

Dry Teak, ft. cube	0 13 0 to 0 15 0
--------------------	------------------

Dry American Whitewood, ft. cube	0 11 0 to 0 14 0
----------------------------------	------------------

Best Scotch glue, per cwt.	4 10 0 to —
----------------------------	-------------

Liquid Glue, per cwt.	4 7 0 to 5 10 0
-----------------------	-----------------

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

24 by 12	£ s. d.	18 by 10	£ s. d.
----------	---------	----------	---------

24 by 12	37 12 6	18 by 10	21 2 6
----------	---------	----------	--------

22 by 12	34 0 0	18 by 9	18 12 6
----------	--------	---------	---------

22 by 11	31 5 0	16 by 10	17 12 6
----------	--------	----------	---------

20 by 12	29 15 0	16 by 8	13 15 0
----------	---------	---------	---------

20 by 10	25 12 6		
----------	---------	--	--

TILES.

Best machine-made tiles from Broseley or Staffordshire district.

Ditto hand-made ditto	5 12 6
-----------------------	--------

Ornamental ditto	5 17 6
------------------	--------

Hip and valley tiles	0 9 6
----------------------	-------

(per dozen)	Machine-made	0 9 0
-------------	--------------	-------

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

R.S. Joists, cut and fitted	13 10 0
-----------------------------	---------

Plain Compound Girders	15 10 0
------------------------	---------

Stanchions	17 10 0
------------	---------

In Roof Work	20 10 0
--------------	---------

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
-----------	---------	-----------	---------

1/2 in.	16 10 0	1/2 in. to 1 1/2 in.	13 10 0
---------	---------	----------------------	---------

1 in.	14 10 0	1 in. to 2 1/2 in.	13 0 0
-------	---------	--------------------	--------

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2 1/2 per cent. less above gross discounts, carriage forward if sent from London Stocks.)

Tubes.	Fittings.	Flanges.
--------	-----------	----------

Black Gas	55%	47 1/2%	50%	57 1/2%	60%
-----------	-----	---------	-----	---------	-----

Blue Water	50%	42 1/2%	45%	52 1/2%	55%
------------	-----	---------	-----	---------	-----

Red Steam	45%	37 1/2%	40%	47 1/2%	50%
-----------	-----	---------	-----	---------	-----

Galv'd Gas	40%	37 1/2%	40%	47 1/2%	50%
------------	-----	---------	-----	---------	-----

" Water	33 1/2%	32 1/2%	35%	42 1/2%	45%
---------	---------	---------	-----	---------	-----

" Steam	27 1/2%	27 1/2%	30%	37 1/2%	40%
---------	---------	---------	-----	---------	-----

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft.	Angles and	Stops
------------------	------------	-------

3 in.	1 1/2	1 1/2
-------	-------	-------

3 1/2 in.	1 1/2	1 1/2
-----------	-------	-------

4 in.	1 5/8	1 5/8
-------	-------	-------

4 1/2 in.	1 5/8	1 5/8
-----------	-------	-------

5 in.	1 9/16	1 9/16
-------	--------	--------

O.G. GUTTERS.

3 in.	1 7/8	1 3/4
-------	-------	-------

3 1/2 in.	1 7/8	1 3/4
-----------	-------	-------

4 in.	1 7/8	1 3/4
-------	-------	-------

4 1/2 in.	1 10/16	1 6/8
-----------	---------	-------

5 in.	2 3/8	1 9/16
-------	-------	--------

RAIN-WATER PIPES, &c.

Bends, stock Branches, angles, stock angles.

Per yd. in 6 ft.	Pipe.
------------------	-------

2 in. plain	1 9/16
-------------	--------

2 1/2 in.	1 11/16
-----------	---------

3 in.	2 1/4
-------	-------

3 1/2 in.	2 1/4
-----------	-------

4 in.	3 3/8
-------	-------

L.C.C. COATED SOIL PIPES—London Prices, ex Works.

Per yd. in 6 ft.	Pipe.
------------------	-------

2 in. in yd. in 6 ft. plain	2 11
-----------------------------	------

2 1/2 in.	2 3
-----------	-----

3 in.	4 1
-------	-----

3 1/2 in.	4 5 1/2
-----------	---------

4 in.	4 11 1/2
-------	----------

4 1/2 in.	4 11 1/2
-----------	----------

5 in.	4 11 1/2
-------	----------

5 1/2 in.	4 11 1/2
-----------	----------

6 in.	4 11 1/2
-------	----------

6 1/2 in.	4 11 1/2
-----------	----------

7 in.	4 11 1/2
-------	----------

7 1/2 in.	4 11 1/2
-----------	----------

8 in.	4 11 1/2
-------	----------

8 1/2 in.	4 11 1/2
-----------	----------

9 in.	4 11 1/2
-------	----------

9 1/2 in.	4 11 1/2
-----------	----------

10 in.	4 11 1/2
--------	----------

10 1/2 in.	4 11 1/2
------------	----------

11 in.	4 11 1/2
--------	----------

11 1/2 in.	4 11 1/2
------------	----------

12 in.	4 11 1/2
--------	----------

12 1/2 in.	4 11 1/2
------------	----------

13 in.	4 11 1/2
--------	----------

13 1/2 in.	4 11 1/2
------------	----------

14 in.	4 11 1/2
--------	----------

14 1/2 in.	4 11 1/2
------------	----------

15 in.	4 11 1/2
--------	----------

15 1/2 in.	4 11 1/2
------------	----------

16 in.	4 11 1/2
--------	----------

16 1/2 in.	4 11 1/2
------------	----------

17 in.	4 11 1/2
--------	----------

17 1/2 in.	4 11 1/2
------------	----------

18 in.	4 11 1/2
--------	----------

18 1/2 in.	4 11 1/2
------------	----------

19 in.	4 11 1/2
--------	----------

19 1/2 in.	4 11 1/2
------------	----------

</

PRICES CURRENT OF MATERIALS (contd.)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

Per Ft.	Per Ft.
15 oz. fourths ... 3½d.	32 oz. fourths ... 8½d.
16 " thirds ... 4½d.	32 " thirds ... 10½d.
21 " fourths ... 4½d.	Obscured Sheet, 15 oz. 4d.
21 " thirds ... 5½d.	21 " 5½d.
26 " fourths ... 5½d.	Fluted 15oz. 6½d., 21oz. 9½d.
26 " thirds ... 7½d.	En'led 15oz. 5½d., 21oz. 7½d.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

Per Ft.
1 Rolled plate ... 4½d.
1 Rough rolled ... 5½d.
1 Rough rolled ... 5½d.
Figured Rolled, Baltic, Oceanic, Arctic, Stip-polyte, and small and large Flemish white... 6½d.
Ditto, tinted ... 6d.
1 Rolled Sheet ... 6d.
1 White Rolled Cathedral ... 5½d.
1 Tinted do. ... 7½d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

Pergallon.	Outside	Inside
Oak Varnish ... 2 s. d.	0 14 0	0 13 0
Fine ditto ...	0 13 0	0 13 0
Fine Copal ...	0 13 0	0 13 0
Pale Copal ...	1 0 0	1 0 0
Best Copal Carriage ...	1 4 0	1 4 0
Best Ditto ...	1 12 0	1 12 0
Floor Varnish ...	0 13 0	0 13 0
Fine Pale Paper ...	0 13 0	0 13 0
Fine Copal Cabinet ...	1 2 6	1 2 6
Fine Copal Flattening ...	1 0 6	1 0 6
Hard Drying Oak ...	0 13 0	0 13 0
Fine Hard Drying Oak ...	0 13 0	0 13 0
Fine Copal Varnish ...	1 0 0	1 0 0
Pale ditto ...	1 2 0	1 2 0
Best ditto ...	1 12 0	1 12 0
Best Japan Gold Size ...	0 12 6	0 12 6
Best Black Japan ...	0 10 6	0 10 6
Oak and Mahogany Stain (water) ...	0 12 0	0 12 0
Brnswick Black ...	0 7 6	0 7 6
Berlin Black ...	0 14 6	0 14 6
Knottling (patent) ...	1 5 0	1 5 0
French and Brush Polish ...	0 17 0	0 17 0
Liquid Dryers in Terebinte ...	0 9 0	0 9 0
Cuirass Black Enamel ...	0 7 0	0 7 0

CONTRACTS, COMPETITIONS, ETC.

(Continued from page 198.)

AUGUST 25.—Devon.—ROADS.—Construction of new by-pass roads at Buckfastleigh and South Brent Mill, to include bridges and culverts, for the C.C. A. Warren, County Surveyor, Avenue-road, Newton Abbot. Deposit £10 10s.

AUGUST 31.—Somerset.—RECONSTRUCTION.—Of the trunk Bristol-Exeter road, for the C.C. Edward Stead, County Surveyor, 49, High-street, Weston-super-Mare. Deposit £5.

Competitions.

(See Competition News, page 172.)

Auction Sales, Tenders, etc.

AUGUST 11.—Derbyshire.—Offers invited before 1 a.m. for the purchase of the remainder (33 occupied modern houses, &c.) of Langwith housing estate, by the Commissioners H.M.O.W. Contracts Branch, King Charles-street, S.W.1. Deposit £2 2s. (cheques payable to the Commissioners).

*AUGUST 18.—Wandsworth, S.W.—F. H. Clark will sell, without reserve, on site, Central Stores Depot, Tewards-road, Wandsworth, S.W., Government surplus timber and building materials. Auctioneers, Railway Wharf, York-road, Wandsworth, S.W.18.

Public Appointments.

*AUGUST 5.—Cheshunt.—Clerk of Works required by the Council to act under the direction of the Surveyor by the Council. Engineer and Surveyor, Manor House, Cheshunt, Herts.

AUGUST 10.—Cape Town.—LECTURER AND ORGANISER.—Senior lecturer and organiser in the building Trades Department of the Cape Technical College. Chalmers, Guthrie & Co., Ltd., 9, Idol-lane, London, E.C.3.

*AUGUST 12.—Dorset.—Architectural Assistant.—Required in the County Architect's Department. Applicants must be thoroughly experienced in the various branches. Clerk of the County Council, County Offices, Dorchester.

*AUGUST 15.—India.—Foreman, Drawing Office, required by the Government of India, for the Rifle Factory, Ishapore (18 miles north of Calcutta). Secretary, High Commissioner for India, 42, Grosvenor-gardens, London, S.W.1.

*AUGUST 15.—Ipswich.—Draughtsman (temporary) required in the Department of Surveyor of County Buildings. Surveyor of County Buildings, County Hall, Ipswich.

AUGUST 22.—Croydon.—Architect required to superintend the erection of an elementary school within the borough to accommodate 800 scholars. Clerk to the Education Committee, Katherine-street, Croydon.

*AUGUST 29.—Norwich.—Estate Surveyor in the City Engineer's Office required by the City Council. City Engineer, Guildhall, Norwich.

*NO DATE.—London, W.C.2.—Architectural Assistants (temporary posts) required by the Air Ministry. Application Forms from the Secretary (S.1 437), Air Ministry, Adastral House, Kingsway, W.C.2.

JUBILEE OF A WELL-KNOWN FIRM OF BUILDERS' MERCHANTS

As we briefly announced last week, Messrs. Nicholls & Clarke, Ltd., the well-known firm of builders' merchants, of Shoreditch, are just now celebrating the jubilee of their establishment. Fifty years ago Mr. Nicholls, senr., who is now in his 84th year, and happily still able to take an active share in the work of management, joined with Mr. Clarke, as partner, in founding what has since developed into one of the largest and most flourishing businesses of its kind. The original warehouse in Shoreditch still exists, but now forms only a small section of the extensive warehouse, showroom and office premises which, by the taking over of adjoining sites from time to time, have grown up around it and now occupy, as a single block, a big frontage in Shoreditch and practically the whole west side of Blossom-street to the rear. It is estimated that the floor space which the firm now possesses is fifty times as great as it was originally, and evidence shows that the business has doubled itself within the past ten years.

To set forth in detail the manifold activities of the firm would probably occupy several pages of *The Builder*, but it will convey a clear idea of the extent of the firm's business if we state that the only basic building materials not dealt in are lime, cement and bricks. Everything else is to be found in these great warehouses stored in prodigious quantities, for it is a first principle of the firm to have plentiful stocks on hand ready for immediate distribution.

As the visitor passes through the narrow passageways of these tightly packed warehouses, it seems inconceivable that the building trade should ever run short of materials. Here you will find great stores of lead, colours and varnishes with, near by, enormous tanks of oil and turpentine; there, huge stocks of stoves, ranges, iron castings, rainwater and sanitary goods; elsewhere, immense reserves of sheet, wired and figured glass, or tons of nails in sacks. There is no waste of space, every inch of room is economised. For instance, on one floor there are five or six hundred baths stored on the "nesting" principle—that is, one inside the other. Messrs. Nicholls & Clarke are not merely merchants, they actually manufacture many of the materials they handle—paints, for instance, and leaded lights. They make up the tile surrounds of fireplaces, turning out as many as fifteen or twenty a day. They possess also a well-equipped sanitary engineering workshop, with about a dozen lathes in operation.

The Shoreditch headquarters includes, besides offices and sales counters, an extensive series of showrooms, where everything may be viewed conveniently and in comfort—sanitary and mantel suites, stoves, ranges, ironmongery, wallpapers—and so forth. The wallpaper showroom may be specially mentioned for its excellent equipment of up-to-date display panels.

The firm's business has been increasing from the day it was founded. As the freeholds of surrounding property have become available they have been regularly acquired, and as a result of this far-sighted policy, the business to-day is one of the most conveniently organised to be found in London. For instance, the stabling and van sheds are on the opposite side of Blossom-street, only a few yards from the loading banks of the warehouse. These banks accommodate eight or nine vans or motor lorries at a time. One of the most recent additions to headquarters is a considerable space rented from the railway company and used for the storage of rainwater goods, pipes, &c., but the need for expansion still presses. In addition to their premises in Shoreditch, Messrs. Nicholls & Clarke possess

a railway siding and stores at Spitalfields, for heavy iron goods and stoneware, while at Park Wharf, Old Ford, they have a long canal frontage with good accommodation for barges. Here also are situated their paint works, glass bevelling and silversing works, extensive garages for their fleet of motor lorries, and engineering workshops.

With a record of success behind them such as we have briefly indicated, it is apparent that the firm may confidently look forward to another fifty years of expansion, usefulness and prosperity.

TRADE NEWS

Change of Address.

Messrs. Sydney Friday & Sons, wainscot oak importers, have transferred their head offices from the City to their new wharf on the River Lea, where a substantial block of offices has been erected. The address is Oak Wharf, Ravensdale-road, Stamford Hill, N.16. Telephone, Clissold 6254.

Vickers-Spearing Boiler Co.

We are informed that Messrs. Vickers, Ltd., have now acquired the whole interest in the Vickers-Spearing Boiler Co. Mr. A. H. Spearing has resigned his position as Managing-Director, and is no longer connected with the company, which will be carried on under the name of "Vickers-Spearing Boiler Co., Ltd.," as before. We understand that this change also gives Messrs. Vickers, Ltd., the control of Messrs. Tinkers, Ltd., Daisyfield Boiler Works, Hyde, near Manchester.

An Automatic Burglar Alarm.

The modern burglar grows more and more scientific in his nefarious trade, and more and more scientific become the devices invented to foil his activities. Given time, however, the modern technical burglar will attempt to break through any kind of mechanical protection, and hence security engineers, custodians of securities, bullion and valuables now realise that, no matter how efficient their protective devices, it is better to remove any possibility of an attack being made upon them by keeping the burglar outside the premises. The automatic burglar alarm overcomes the hitherto dangerous element of time, because the alarm is raised the moment that he begins operations, and no burglar can continue to work while the alarm bells are ringing in the premises and on the streets.

The system of the Automatic Burglar Alarm Co., Ltd., of 7, Finsbury-square, London, E.C.2, is one that has general applications. It can be adapted to bank strong-room doors, to the wall of strong-rooms, to the surfaces of strong-room doors, to isolated banks as a day alarm, to lock-up shops, to town and country residences, to doors, windows, floors, partitions, and so forth. Some special points concerning it are that it is keyless, automatic in action, and cannot be inadvertently left in the unset position; it is fool- and tamper-proof, any interference with the inside wiring being indicated at once; it cannot be "shorted out," "bridged," or the current diverted; it cannot be silenced except by an authorised person; it cannot be switched off from the inside of the building. The alarm rings if any part of the building that is protected is entered, if any of the wires are cut or touched together, or if the battery is disconnected or completely destroyed. If a bell is tampered with the remaining bells begin to ring.

We may add that premiums are halved where the Alarm is installed, and that burglaries are definitely prevented by its use.

Messrs. G. H. Carter, Ltd., builders, decorators and squash racquet court specialists, have recently opened an office at Evelyn House, Oxford-street. Phone. Museum 8654.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.			s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	0	0
Add if in clay	" "	1	0	0
Add for every additional depth of 6 ft.	" "	0	6	0
Banking and strutting to trenches	per foot super	0	5	0
Do. to sides of excavation, including shoring	" "	1	0	0
CONCRETOR.				
Portland cement concrete in foundation 1 to 6	per yard cube	32	0	0
Add if in underpinning in short lengths	" "	7	0	0
Add if in floors 6 in. thick	" "	3	3	0
Add if in beams	" "	3	9	0
Add if aggregate 1: 2: 4	" "	10	0	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2	6	0
BRICKLAYER.				
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	" "	7	10	0
Add if in Staffordshire blues	" "	22	0	0
Add if in Portland cement and sand	" "	1	10	0

FACINGS.			s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.			s.	d.
New flat struck or weathered joint	"	0	0	3

ARCHES.			s.	d.
Extra only to the price of ordinary brickwork:—				
Fair external in half brick rings	"	0	0	10
Arched in stocks	"	0	1	9
Rubbed and gauged jointed in putty camber or segmental	"	0	6	0

SUNDRIES.			s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	"	0	1	0
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.			s.	d.
Half-inch horizontal damp course	per yard sup.	4	3	0
Three-quarter-inch vertical damp course	"	8	6	0
¾ inch on flats in two thicknesses	"	6	3	0
Angle fillet	per foot run	0	3	0
Skirting and fillet 6 in. high	"	1	2	0

MASON.			s.	d.
York stone templates fixed	per foot cube	13	0	0
York stone sills fixed	"	22	0	0
Bath stone and all labour fixed	"	10	6	0
Portland stone fixed	"	20	0	0

SLATER.			s.	d.
Welsh 16 in. x 8 in. 3 in. lap, including nails	per square	72	9	0
Do. 20 in. x 10 in. Do. Do.	"	80	9	0
Do. 24 in. x 12 in. Do. Do.	"	90	0	0

CARPENTER AND JOINER.			s.	d.
Fir framed in plates	per foot cube	5	0	0
Do. joists	"	5	6	0
Do. roofs, floors and partitions	"	6	0	0
Do. trusses	"	8	6	0

FLOORING.			s.	d.
Deal rough close boarding	per sq.	35/6	40/-	45/-
Flat centering for concrete floor, including struts or hangers	"	50	0	0
Do. to beams	per ft. sup.	1	0	0
Centres for arches	"	1	6	0
Gutter boards and bearers	"	1	0	0

SASHES AND FRAMES.			s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10	0
Two Do. Do.	"	2	1	0
Add for fitting and fixing	"	0	3	0
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lues and weights; average size	"	3	9	0
DOORS.			s.	d.
Two-panel square framed	per ft. sup.	2/1	2/4	2/6
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.			s.	d.
FRAMES.			s.	d.
Deal wrot moulded and rebated	per foot cube	1" 1½" 1½"	1½" 1½"	1½"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	"	1/4	1/6	1/9
Add if cross tongued	"	2d.	2d.	2d.

STAIRCASES.			s.	d.
Deal treads and risers in and including rough brackets	"	1" 1½" 1½"	2" 2½"	2½"
Deal strings wrot on both sides and framed	"	1/8	2/	2/8

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).			s.	d.
Housings for steps and risers	each	0	11	0
Deal balusters, 1 in. x 1½ in.	per ft. run.	0	9	0
Mahogany handrail; average 3 in. x 3 in.	"	6	0	0
Add if ramped	"	11	10	0
Add if wreathed	"	23	9	0

FOUNDER AND SMITH.			s.	d.
6 in. barrel bolts	8½d.	Rim locks	2/-	2/6
Sash fasteners	11½d.	Mortice locks	4/6	4/6
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	19/-	4/3
Cupboard locks	1/5			

RAIN-WATER GOODS.			s.	d.
Half-round plain rebated joints .. ft. run	3" 4" 5" 6"	1/6 1/9 2/- 2/6	2/6 3/3	3/3
Ogee Do. Do.	"	1/9 2/- 2/6 3/3	3/3 3/3	3/3
Rain-water pipes with ears	"	1/9 2/7 2/6 3/3	3/3 3/3	3/3
Extra for shoes and bends	each	4/4 5/11 3/7 4/-	4/3 4/3	4/3
Do. stopped ends	"	1/11 2/4½ 3/10 4/3	4/3 4/3	4/3
Do. nozzles for inlets	"	2/2 2/7 3/10 4/3	4/3 4/3	4/3

PLUMBER.			s.	d.
Milled lead and laying in flashings and gutters	per cwt.	60	0	0
Do. Do. in flats	"	59	0	0
Extra labour and solder in coated cesspools	each	6	9	0
Weld joint	per ft. run.	0	6	0
Soldered seam	"	1	6	0
Copper nailing	"	0	6	0

DRAWN LEAD.			s.	d.
Drawn lead waste per ft. run	1/2 1/9 2/0 3/4 4/0	1/2 1/9 2/0 3/4 4/0	4/0 4/0	4/0
Do. service	1/8 2/2 2/7 3/10 4/0	1/8 2/2 2/7 3/10 4/0	4/0 4/0	4/0
Do. soil	"	"	"	"
Bends in lead pipe	each	1/2 1/8 2/1 2/10 3/6	3/6 3/6	3/6
Soldered stop ends	"	1/2 1/8 2/1 2/10 3/6	3/6 3/6	3/6
Red lead joints	"	11d. 1/- 1/3 1/11 2/4	2/4 2/4	2/4
Wiped soldered joints	"	2/10 3/8 4/- 4/11 6/8	6/8 6/8	6/8
Lead traps and cleaning screws	"	14/7 19/6	19/6 19/6	19/6
Bib cocks and joints	"	6/4 9/7 15/4 41/-	41/- 41/-	41/-
Stop cocks and joints	"	15/4 17/2 25/8 64/-	64/- 64/-	64/-

PLASTERER.			s.	d.
Render, float and set in lime and hair	per yard sup.	2	4	0
Do. Do. Sirapite	"	2	7	0
Do. Do. Keen's	"	3	7	0
Add sawn lathing	"	1	7	0
Add metal lathing	"	2	6	0
Portland cement screed	"	2	2	0
Do. plain face	"	3	3	0
Mouldings in plaster	per 1 girth	0	12	0
One-and-a-half granolithic pavings	per yard sup.	6	8	0

GLAZIER.			s.	d.
21 oz. sheet plain	per foot sup.	0	8	0
26 oz. Do.	"	1	0	0
Obscured sheet	"	1	0	0
½ in. rolled plate	"	0	9	0
½ in. rough rolled or cast plate	"	0	10	0
½ in. wired cast plate	"	1	4	0

PAINTER.			s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9	0
Knottling and priming	"	0	7	0
Plain painting 1 coat	"	1	2	0
Do. 2 coats	"	1	9	0
Do. 3 coats	"	2	4	0
Do. 4 coats	"	2	3	0
Graining	"	1	0	0
Varnishing twice	"	0	2	0
Sizing	"	0	7	0
Flattening	"	1	1	0
Enamel	"	0	6	0
Wax polishing	per foot sup.	1	2	0
French polishing	"	1	2	0
Preparing for and hanging paper	per piece 2-1/2 ft.	2	7	0

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright. Prices include both materials and labour.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.
• Denotes accepted. † Denotes provisionally accepted.
‡ Denotes recommended for acceptance.
§ Denotes accepted subject to modifications.

ALFORD.—School, for the Aberdeenshire E.C. Mr. Bennett Mitchell, architect, 1, West Craibstone-reet, Bon-Accord-square, Aberdeen :—
tason and Concrete Walling—*Chas. McDonald & Sons, Dyce.
carpenter Work—*Robert Robertson, Torphins.
later Work—*George Farquhar, Aberdeen.
phalt Work—*Jas. Scott & Son, Ltd., Aberdeen.
aster and Cement Works—*Paul McPherson, Inverurie.
lumber Work—*Andrew McRobb, Aberdeen.
ainter and Glazier Work—*G. R. Maitland, Alford.
eading Work—*A. L. Peacock & Co., Dundee.
ecavator and Drainage Works—*Geo. Duncan & Sons, Inverurie.
ANDOVER.—Electricity generating station. Mr. W. N. Ledbury, L.R.I.B.A., architect, Trowbridge, Wilts :—
W. E. Chivers & Sons, Devizes £3,771
Bourne & Jenkinson, Andover 3,590
Bell & Co., Andover 3,390
*F. Beale & Sons, Andover 3,355
ASHTED.—Alterations and additions to the build-
ing at Ashted Park, for the City of London Corpora-
tion :—
Fairhead & Sons, Ltd. £11,190
Parker & Son 10,879
Garrett & Son 10,149
W. H. Brown 10,111
H. H. & F. Roll 9,895
Taylor & Sons 9,663
†Copley Bros., Ltd. 9,436
BEDFORD.—War Memorial Hall at Bedford
school, for the Governors. Messrs. O. P. Milne &
hipps, architects, 64, Wigmore-street, W. 1 :—
*S. Foster, Bedford.
BRADFORD.—Extensions to Odsal electricity
station, for the T.C. :—
*Thos. Obank & Son, Ltd.
BRANCASTER.—Additions, alterations, repairs,
c., at Stathe House, for Mr. A. B. Lake. Mr. J. Owen
cond, Lic.R.I.B.A., architect, 29, Castle Meadow,
orwich :—
Gill & Son, Norwich £2,340 0 0
Anderson & Son, Norwich 2,297 0 0
Carter, Drayton, Norwich 2,197 0 0
Shanks, Hunstanton 2,158 16 9
*Bullen, Cromer 1,995 0 0
BRISTOL.—Sports pavilion at Horfield Common,
for the C.C. :—
H. C. Wakefield £2,991
BRISTOL.—Erection of Hillfields Park Council
school, for the E.C. :—
*Builder's work—C. T. Tucker .. £6,295 7 6
*Plumber's work—A. & J. Tutchner 370 0 0
*Heating apparatus—Spry & Hol-
man 198 18 0
CHELMSFORD.—Two pairs of cottages at Great
ighs, for the R.D.C. :—
*F. H. Stewart per house £345
CHELMSFORD.—Two pairs of cottages at Boreham,
for the R.D.C. :—
*Baker & Sons £1,550
CHELTENHAM.—Re-slating library roof, for the
C. :—
*E. Eager & Co. £430 10
CHICHESTER.—Six houses, Adelaide-road, for the
C. :—
*W. Lambert £2,467 10
DOVER.—Alterations at Barton-road School, for
E.C. :—
G. Lewis & Sons, Ltd. £429
DUBLIN.—Erection of a hall and annexe to the
mises, 36, Parnell-square, for the National Teachers'
b. Mr. A. O'Connor, architect, Ulster Bank
ambers, 3 and 4, Lower O'Connell-street. Quan-
ties by Mr. James Mackey, 58, Dame-street :—
M. O'Callaghan £1,767 15 7
Clifton & Cooper 1,608 16 8
McNally & Co. 1,544 0 0
P. J. Fearon & Co. 1,535 7 11
J. J. Flanagan 1,460 0 0
F. P. MacMahon 1,460 0 0
J. Brennan & Son 1,450 0 0
J. Keegan & Sons 1,418 19 2
J. P. Donnelly 1,409 0 0
John Murphy 1,400 0 0
J. Pemberton & Son 1,350 0 0
*Bernard Mitchell 1,328 0 0
(All of Dublin.)
EALING.—Electrical distributing station, offices,
workshops, for the Corporation :—
Henry Knight, Tottenham .. £23,048 0 0
T. Millman, Ltd., Ealing 27,390 0 0
Joseph Dorey & Co., Brentford 27,203 0 0
Perry Bros., Ealing 25,904 13 11
C. Miskin & Son, St. Albans .. 25,597 0 0
E. F. Johnson, Southall 25,393 0 0
A. & B. Hanson, Southall 24,615 0 0
*W. J. Dickens, Ealing 24,290 0 0

FEATHERSTONE.—102 Houses at Purston, for
the U.D.C. :—
*Harold Hirst, Birkenshaw, near
Bradford £43,300
FINCHLEY.—New wing at Christ's College, for
the Middlesex C.C. Mr. H. G. Crothall, F.R.I.B.A.,
County Architect :—
Patman & Fotheringham £39,237
Dorey & Co., Ltd. 36,633
C. Miskin & Sons, Ltd. 35,997
Leslie & Co., Ltd. 35,979
H. Knight & Son 35,619
G. Godson & Sons, Ltd. 33,355
W. Lawrence & Son, Ltd. 33,276
G. Bollom & Sons, Ltd. 33,160
A. Monk 33,060
†W. J. Maddison, Ltd. 32,925
(All of London.)
FINCHLEY.—Hall and alterations to Woodhouse
Secondary School, for the Middlesex C.C. Mr. H. G.
Crothall, F.R.I.B.A., County Architect :—
H. Knight & Son £10,812 0 0
Leslie & Co., Ltd. 10,776 0 0
F. Cottrell, Ltd. 9,985 10 0
Patman & Fotheringham 9,921 0 0
Arthur Porter, Ltd. 9,875 0 0
C. Miskin & Sons, Ltd. 9,663 0 0
W. Lawrence & Son, Ltd. 9,555 0 0
Stevens & Sons 9,486 0 0
G. Godson & Sons, Ltd. 9,395 0 0
W. J. Maddison, Ltd. 9,297 0 0
A. Monk 9,290 0 0
†Turner & Payne 9,233 4 4
(All of London.)
GOLCAR.—For (1) ferro-concrete raft foundations
and floors, (2) steel-frame building, and (3) brick filling
to steel-framed and sundry retaining walls, for the
U.D.C. Messrs. Dawson & Manfield, engineers,
Lloyd's Bank Buildings, 53, King-street, Manchester :—
(1.)
Reinforced Building Co. £677 0 0
Graham & Sons 651 17 6
Bolton & Hayes 478 0 0
Wimpeny & Co. 474 19 0
†Abraham Graham 472 0 0
(2.)
Skipwith, Jones & Lomax, Ltd. 372 17 6
Redpath Brown 350 0 0
Harry Peers & Co. 346 0 0
Ed. Wood 343 0 0
D. T. Brown 342 0 0
Powell & Crossley 340 7 6
Fred. Fox, Ltd. 330 0 0
Booth & Sons 326 13 0
Brownlie & Murray 326 0 0
Barnforth Garside & Co. 316 10 0
Searle & Co., Ltd. 305 8 0
Lambourne 305 0 0
Chapman Oset 233 10 0
†Colne Valley Engineering Co. .. 280 0 0
(3.)
Abraham Graham & Sons 786 4 4
Abraham Graham 770 0 0
†Wimpeny & Co. 755 5 10
GRAVESEND.—Re-decorating the Town Hall, for
the T.C. :—
Allen & Sons £180 10
HAREFIELD.—New Infants' Block, at the Council
School, for the Middlesex C.C. Mr. H. G. Crothall,
F.R.I.B.A., County Architect :—
W. H. Gaze & Sons, Kingston .. £8,725
W. J. Page, Northwood 8,650
C. Miskin & Sons, Ltd., London 8,400
G. Godson & Sons, Ltd., London 8,350
H. Knight & Son, Tottenham .. 8,248
W. Lawrence & Son, London 8,181
G. Bollom & Sons, Ltd., Acton .. 8,148
A. Monk, Edmonton 8,047
Y. J. Lovell & Sons, Gerrard's Cross 7,939
†W. S. Try, Cowley 7,830
ISLEWORTH.—Extensions to the County School,
for the Middlesex C.C. Mr. H. G. Crothall, F.R.I.B.A.,
County Architect :—
H. Knight & Son, Tottenham £9,691
W. H. Gaze & Sons, Ltd., Kingston 9,563
W. Lawrence & Son, Ltd., Finsbury-
square 9,468
Dorey & Co., Ltd., Brentford 9,400
G. Godson & Sons, Ltd., Kilburn-lane 9,273
A. Monk, Edmonton 9,160
W. Lacey, Hounslow 8,962
Ferris Bros., Acton 8,678
G. Bollom & Sons, Ltd., Acton .. 8,353
†G. Challis, Brentford 8,223
JARROW.—100 houses, for the T.C. :—
*S. Craig & Sons : £720 per pair.
LEEDS.—Sub-station, for the T.C. :—
*S. J. Flockton, at Quarry Mount £464 18 8
*J. Ferguson & Son, Ltd., at Arm-
ley 480 0 0
LEEDS.—Six Phormium houses, on the Wythe
Estate, for the T.C. :—
*Phormium Co., Ltd. : £535 per house.
LEEDS.—Adaptation of 40, Park-lane, for office
accommodation, for the T.C. :—
*Screes—J. Tomlinson & Son ... £1,977 0
*Heating—W. Miller 1,337 10
LEEDS.—Reinforced concrete columns and roof
at Moortown reservoir extension, for the T.C. :—
*Matthews & Mumby, Ltd. £7,830
LEICESTER.—Extensions at sewage works, for the
C.C. :—
*Wm. Moss & Son, Ltd.,
Loughborough £130,514 4 8

LEICESTER.—Erection of forty firemen's houses
at the Central Station, for the C.C. :—
*J. Chapman & Sons, Ltd. £31,000 15
LEICESTER.—Administrative block, engine room,
&c., at central fire station, for the C.C. :—
*Clark & Garrett £33,816
LONDON.—Renovations at the offices at the
Lambeth Hospital, Kennington, for the Lambeth
B.G. :—
Rice & Son £2,514 0 0
G. Brittain & Sons, Ltd. 2,434 0 0
P. C. Houghton 2,270 15 0
J. Parsons 2,246 0 0
L. & W. Whitehead, Ltd. 1,908 0 0
F. Kinnaird 1,830 0 0
W. Ball & Sons (Highbury),
Ltd. 1,818 0 0
H. Greenwood & Son, Ltd. 1,747 2 0
Holliday & Greenwood, Ltd. 1,728 0 0
H. Bragg & Sons, Ltd. 1,675 0 0
*C. & R. Harding 1,549 9 10
All of London.
LONDON.—For (a) Two underground electric sub-
stations, and (b) a workshop, for the Hammersmith
B.C. :—
(A)
Hervey & Olson, Aldburgh £967 12 0
Wagstaff & Sons, Holborn 675 0 0
*F. G. Cressy, Ltd., Chiswick. ... 563 0 0
(B)
Hervey & Olson, Aldburgh 1,495 3 8
Wagstaff & Sons, Holborn 765 0 0
*F. G. Cressy, Ltd., Chiswick. ... 740 0 0
LONDON.—Alterations to the Goods Station,
Paddington, for the G.W.R. Engineer, Paddington
Station, W. 2 :—
*Cleveland Bridge & Engineering Co., Ltd.,
Darlington.
LONDON.—Repairs and decorations at the Town
Hall, for the St. Marylebone B.C. :—
†Druce & Co., London £289
LONDON.—Extensions at Poplar Library, for the
Poplar B.C. :—
*W. Simms £3,556
LONDON.—Underground convenience at the
southern end of Clifton-hill, for the Deptford B.C. :—
T. D. Leng £4,965
Geo. Jennings, Ltd. 4,822
J. Mowlem & Co., Ltd. 4,057
B. Finch & Co., Ltd. 4,067
W. Mills & Sons, Ltd. 3,995
†Edwards Construction Co., Ltd. ... 3,992
(All of London.)
Borough Surveyor's estimate, £4,050.
LONDON.—Rebuilding Snow-hill police station, for
the City Corporation :—
†Mowlem & Co. £81,990
LONDON.—Carrying out the work connected with
the classrooms and extensions at the City of London
Schools, for the Corporation :—
F. G. Minter £14,997
Holland & Hannen and Cubitts, Ltd. 14,250
A. Vigor, Ltd. 14,050
Mowlem & Co. 13,503
Dove Bros., Ltd. 13,492
Andrews & Andrews 13,300
Holloway Bros. 12,893
Trollope & Colls, Ltd. 12,569
G. E. Wallis & Sons, Ltd. 11,789
W. F. Blay, Ltd. 11,507
†The Trafalgar Properties, Ltd., pro-
prietors of the General Building
Company 11,399
MANCHESTER.—Seven-story office block in Deans-
gate, for Messrs. Gardner's, Dickinson-street, Mr. A.
Parker, architect, 9, Albert-square :—
*C. H. Norton & Son, Ltd., Chorlton-on-
Medlock.
MIDDLESBROUGH.—Presbytery Church at
Haverton-hill. Mr. J. W. Thompson, architect, 20
Bigg Market, Newcastle-on-Tyne :—
*Mr. F. McNeil, Haverton Hill.
NEWPORT.—For (a) disconnecting chamber at St.
Julian's-road, and (b) additions to Llanarth-street
generating station, for the T.C. :—
(A)
J. H. Williams & Co., Newport.. £276 5 4
(B)
John Charles & Sons, Ltd.,
Newport 1,534 7 2
NEWTON-LE-WILLOWS.—Extensions to the
Parish Church of Emmanuel at Wargrave, for the
rector, the Rev. E. B. Whitley. Messrs. Brierley &
Rutherford, architects, York :—
*Webster & Winstanley, Wigan £6,500
PLYMOUTH.—Alterations at 40, Portland-square,
for the C.B. Borough Surveyor :—
*Pearn Bros. £2,090
PONTEFRAC.—Alterations to branch premises at
Horbury-road, for the Pontefract Co-operative Society.
Messrs. Hustler & Taylor, architects :—
*A. Askam.
RAWMARSH.—100 houses, for the U.D.C. :—
*G. Ramsden, 19 houses, £435 each.
*R. Alt & Co., 19 houses, £470 each.
*A. J. Fugh, 21 houses, £477 each.
*J. Jacques, 19 houses, £484 10s. each.
*W. Thomasson & Co., 22 houses, £495 each.

RIPON.—Twelve houses, for the T.C. :—

J. Waddington & Son, Borough-bridge	£7,350 0
A. Trees, Ripon	6,999 11
D. Oakley, Northallerton	6,920 0
Randle & Co., Sunderland	6,750 0
*Robinson Bros., Darlington	6,320 0

ROMFORD.—Alterations at the Children's Hospital, for the B.G. :—

*Myall Bros., Ilford

RUSHDEN.—Conveniences in Newton-road, for the U.D.C. Mr. W. B. Madin, engineer & surveyor :—

W. Packwood & Son, Rushden ..	£1,599 0
A. Sanders, Rushden	1,584 12
H. Wilmott, Rushden	1,505 0
*R. Marriott, Rushden	1,396 10
Surveyor's estimate	1,500 0

SKELMANTHORPE.—Shop at Lower Cumberworth, for the Co-operative Society. Mr. P. N. Brown, architect and surveyor, Hollowgate, Holmfirth :—

*Contractor—Edwin Allott, Skelmanthorpe.
 *Joiners—J. Wray & Sons, Scossett.
 *Plumber—J. W. Thornton, Skelmanthorpe.
 *Slaters—Pickles Bros., Leeds.
 *Painters—J. Quarumby & Son, Holmfirth.

SMETHWICK.—War memorial, for the T.C. :—

*Hayes & Sons, Smethwick

SMETHWICK.—Taking down and refixing of the ornamental railing at Cape Hill, for the T.C. :—

*W. Jackson

SOLIHULL.—For three pairs of non-parlour type houses at Lapworth Hill, Lapworth, for the B.D.C. Messrs. Ewen, Harper Bros. & Co., architects, Ruskin Chambers, 191, Corporation-street, Birmingham :—

C. J. Grove & Sons, Ltd., Knowle ..	£2,989
John T. Harris, Ltd., Sparkhill, Birmingham	2,990
Bragg Bros., Ltd., Solihull	2,988
E. Thompson & Co., Ltd., Sparkhill ..	2,946
*Harry B. Tarleton, Redditch	2,869

STAMFORD.—Alterations and additions to the Infirmary, for the Joint Committee. Messrs. Traylen & Lenton, architects, 16, Broad-street. Quantities by architects :—

Clarke & Belton, Stamford	£9,383
R. S. Jellings, Peterborough	8,850
*E. Bowman & Sons, Stamford	8,600
John Cracknell, Ltd., Peterborough ..	8,490

STOKE.—Railway sidings at the Gas Works, for the T.C. :—

*Thos. Summerson & Sons, Ltd., Darlington

STOKE AND WOLSTANTON.—Plumbing work in connection with the installation of baths and sinks at the institution, London-road, near Newcastle, for the B.G. Mr. A. R. Piercy, L.R.I.B.A., architect. Quantities by the architect :—

L. J. Colclough, Hanley	£200 0 0
Leon M. Rowe, Tunstall	197 17 0
P. J. Penson, Hartshill	175 0 0
Cartwright, Bickley & Co., Hanley	146 0 0
S. Peake & Son, Stoke-on-Trent	133 8 9
A. Gibson, Cobridge	123 13 0
H. W. Brundrett, Tunstall	110 0 0

TORRY.—Intermediate school, for the Aberdeen E.C. Mr. J. A. O. Allen, F.R.I.B.A., architect, 25, Union-terrace, Aberdeen :—

*H. Beattie & Son, Aberdeen

TYNEMOUTH.—Strengthening the wharf at the eastern end of the Protection Jetty, for the T.C. :—

*Purdie Lumsden & Co., Ltd. ..

WALLINGFORD.—Two pairs of houses at Brightwell for the B.D.C. Messrs. J. G. T. West & Son, architects, The Knowl, Abingdon, Berks :—

Brasher & Son, Wallingford, Berks.	£2,389 10 4
G. W. King, Lechlade, Glos.	2,195 0 0
Boshers, Ltd., Chelsey, Berks.	1,998 15 0
†Blake Bros., Didcot, Berks.	1,900 0 0

WATERFOOT.—Sunday School at Newchurch, for the Wesleyan Trustees. Mr. A. Brocklehurst, architect, St. James's-chambers :—

*Phineas Drake & Son, Haslingden

J. J. ETRIDGE, J^r & Co. Ltd.

SLATING AND TILING

SLATE MERCHANTS
CONTRACTORS.

Inspections and Reports made on
OLD OR FAULTY ROOFS
 in any part of the country.

Telephone: Bishopsgate 1944/5, or write,
Bethnal Green Slate Works,
 BETHNAL GREEN, LONDON, E.

WILLESDEN.—Caretaker's cottage at the Secondary school, Uffington-road, for the Middlesex C.C. Mr. H. G. Crothall, F.R.I.B.A., County Architect :—

R. Hewett, Ltd., Acton	£1,106 5
Ferris Bros., Acton	953 0
A. Monk, Edmonton	930 0
H. Knight & Son, Tottenham	899 0
Y. J. Lovell & Sons, Gerrard's Cross ..	890 0
†W. S. Try, Cowley	850 0

YSTRADGYNLAIS.—New vestry and renovating Sardinia Chapel, Ystradgynlais, for the Trustees :—

*R. J. Andrews, Ystradgynlais

HIGH-CLASS FLOORINGS

of every description in

WOOD BLOCKS. PARQUETRY
SEASONED T. & G. WAINSCOT OAK
TEAK AND MAPLE.
FACTORY AND ROADWAY PAVING

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASANT
WANDSWORTH, S.W.18.
 (Phones : Putney 1700 & 2457)

FITZPATRICK & SON

Masons and Paviors,

455, OLD FORD ROAD, BOW, E.3

Phone: EAST 4908.

Granite Setts and Kerb (redressed and second-hand), York Paving Spur Stones, Granite Chippings, and Granolithic and Sett Paving.

School & Hospital Stoves

MAKERS OF

WRIGHT'S IMPROVED and also SHORLAND PATENT
WARM AIR VENTILATING PATTERNS.

GEO. WRIGHT (LONDON) LIMITED
 10, Newman St., Oxford St., London, W.1
 Burton Weir Works, Rotherham.

OGILVIE & CO.,

Telephone OLIVISOLD 1880.
 Many years connected
 with the late Firm of
 W. H. LASCELLES & Co.
 of Bunhill Row.

Mildmay Works, Mildmay Avenue, Islington, N

EXPERTS IN HIGH-CLASS JOINERY.

ALTERATIONS AND DECORATIONS. NOTES: FREE

Telegrams: 'Frolic, Liverpool' Phone 228 Bank

E. B. BURGESS & CO.
 6, CASTLE ST., LIVERPOOL.
WOOD BLOCK FLOORING
AND PARQUETRY.

J. GLIKSTEN & SON

LIMITED

Specialities in

SEASONED

HARDWOODS

MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.

REGISTERED OFFICE AND WHARF

CARPENTERS RD.
STRATFORD
LONDON E.15

Telephone :
 EAST 3771
 (5 lines)

Telegrams
 GLIKSTEN 'PHONE
 LONDON

Wheatly & Co.,

SPRINGFIELD TILERIES, NEWCASTLE, STAFFS.

'Phone : Newcastle, Staffs, 101.
 'Grams : "Wheatly, Trent Vale."

Estd. Over 50 Years.
 Brand: TRITON.

SPECIALITIES.

Rustic, Sand Faced and Hand Pressed Tiles in Blue, Blue Brindled, Red, Light Brindled and Dark Brindled Colours. Extensive stocks held of many varieties of Flooring Quarries, Ridge Tiles, Garden Edging Tiles, Air Bricks, Blue Bricks, Copings, etc., etc.

Price List and Catalogue, or Illustrated Brochure of Roofing Tiles free on demand.

N.B.—ALL our products are Hand-made by the Plastic Process.

HOWELL J. WILLIAMS

Ltd.

Builders

High-Class Building

and
Joinery Work

11/17, BERMONDSEY STREET,

Telephone: LONDON BRIDGE, S.E.1
 HOP 202

Builders of very many well-known Banks, Office and Business premises. Our works especially convenient for City Building and Sitings.

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VOL. CXXIX.—No. 4,305

AUGUST 7, 1925

REORGANISATION

DURING the period which has elapsed since the end of the war the regular work of the R.I.B.A. has increased very greatly in amount and in scope, and the recent amalgamation with the Society of Architects, which at once abolished the duplicated work which was being carried out, has, of course, considerably augmented the responsibilities of an Institute now representing architects of Great Britain. The new Charter and By-laws have largely increased the size of the Council and the membership is drawn, to a much larger extent than before the war, from outside the London area. The Council now numbers 67 members in place of 42, and of these about 45 per cent. have to make a special journey to London to attend meetings. Attendance at fortnightly Council meetings involves a heavy loss of time on the part of non-London members.

It is felt by the Council of the Institute that the existing machinery for carrying on the work of the R.I.B.A. is becoming overstrained. The old method under which a Council, consisting mainly of architects living in the London area, met once a fortnight and was the sole executive authority, is becoming unworkable under the new conditions. The Council forms a narrow funnel through which all matters involving executive decisions, however trifling, must necessarily pass. The time of the Council is much occupied with small matters of routine detail, and it is difficult to find time for the full discussion of really important matters of policy and principle which really affect the future of architecture. The time appears to have come for finding a means of simplifying the work of the Council and endeavouring to save the time of its members by eliminating all unnecessary work and allowing the Council more time to concentrate on the more important questions of general policy.

With this object in view it has been decided that in future the Council shall meet once a month during the Session and that the Selection and General Purposes Committee shall be constituted with enlarged powers as an Executive Committee consisting of the President, the Hon. Secretary, the Chairmen of the four Standing Committees, the Chairman of the Board of Architectural Education, the Chairman of the Finance and House Committee, the Chairman of the Allied Societies' Conference, the Chairman of the Registration Committee, and two non-London Members of the Council.

The Executive Committee will meet at least fortnightly from the beginning of October to the end of July. It will receive on behalf of the Council the reports of all Committees, except those of the Board of Architectural Education, deal with any matters in these reports that call for immediate action, and report before the Council with or without comment the reports received from Committees. It will have executive power to deal summarily with all matters of routine not affecting general policy or finance and all business requiring urgent attention before the next meeting of the Council, and will report to the Council for ratification any action taken since the last Council meeting.

The Board of Architectural Education will be enlarged and made more widely representative, and will meet four times a year, and the large number of existing Committees of the Board will be reconstituted as three Committees—Schools, Examinations, and Prizes and Scholarships—with executive powers to deal with all routine matters, but making recommen-

dations to the Board on all matters of principle or policy. Members of the Council will retain their present power of bringing any matter directly before the Council by giving notice to the Secretary.

The Executive Committee has been constituted forthwith as follows:—The President, the Hon. Secretary, the Chairman of the Art Standing Committee, the Chairman of the Literature Standing Committee, the Chairman of the Practice Standing Committee, the Chairman of the Science Standing Committee, the Chairman of the Finance and House Committee, the Chairman of the Board of Architectural Education, the Chairman of the Allied Societies' Conference, and two non-London members, Mr. H. T. Buckland (Birmingham) and Mr. Francis Jones (Manchester).

These changes will without doubt be appreciated by all those who have had experience of Committee or Council work for private or public bodies, for although there are institutions whose Committee or Council work is carried on in the most business-like manner and with commendable expedition, there are others, work on the Councils of which may be unduly delayed by one or two loquacious members who are not properly controlled by the chair, and even with firm rule a Council is often too large to be fully efficient. It is for this reason that the usual procedure in connection with a public body or an important society is for the detail work to be done in committee and for the Council to confirm or reject the reports and recommendations of these committees; but these committees in no sense possess executive powers. This, of course, will still be the general procedure with the Institute; but while the whole Council will still be fully responsible for general policy and finance, the Executive Committee will have power to deal summarily with all matters of routine and all business requiring urgent attention before the next meeting of the Council, and their decisions will come before the next meeting of the Council for ratification. This procedure should work well, but it may be found very difficult in practice to rescind decisions already made—unless, of course, no result follows the decisions of the Executive until the whole Council have confirmed their decision, and if this is to be the procedure, then the so-called Executive will be nothing more than a superior committee. Much depends on the wisdom of this Executive Council and whether or not they act as a sort of Soviet Government. As we saw during the war, a small executive body within the Cabinet tended to become an increasingly autocratic body; but there is nothing except the fallibility of mankind why such a government should not make for the greatest efficiency. Still, the fact remains that when a Cabinet or Council give executive powers to a committee elected within their ranks, the Cabinet, even when they reserve to themselves the power to confirm or reject the decisions of their executive, find in practice that they have really delegated their power to another body. That the Executive Committee of the R.I.B.A. will have large powers will be realised from the above statement, and we have no doubt they will use them wisely, and that they will leave for the consideration of the whole Council any issues which are likely to be contentious. While the Institute is represented on the Council by the able and conscientious men who are year by year chosen by the electorate, wise decisions will be made by the Executive Committee for the good of the profession as a whole, and the Council itself will rarely, if ever, find themselves at variance with the action taken on their behalf.

NOTES.

The Manchester Art Gallery.

It is unfortunate that this controversy should not yet have subsided; the agitation now takes the form of demanding a new competition, but those who suggest this do not perhaps realise that there may be some difficulty in persuading architects to spend more time and money on preparing designs which, even if they should win the competition, might be liable to a repetition of the treatment of subsequent rejection. The principle that the umpire's or assessor's judgment must be final is universally recognised, whether we are dealing with cricket or the children's corner in a newspaper, but the justice of an award will always be questioned where the conditions have been violated in the accepted design. If the idea gets abroad that the first premium is liable to be withdrawn after it has been duly awarded, the whole competition system must fall to the ground—unless, of course, a definite charge of unfairness can be maintained.

Competition Conditions.

TROUBLE usually seems to arise through conditions that are ambiguous and that are far too much detailed. Surely, if a town wants a museum, all it need do is to give the site, and particulars of what the museum is to accommodate, and leave the competitors to settle the problem in their own way in a rough preliminary or eliminating competition. The whole process of inviting and answering questions seems unnecessary and tiresome, since the answers given frequently invalidate the work done to date by other competitors. If competitions are to retain confidence, either with the public or with architects, the waste of labour will have to be eliminated, the conditions pared down to the bare bone, and then, above all, the assessors' decision must be accepted. We cannot prevent laymen from writing letters of criticism, nor can we expect the full support of the profession unless the whole spirit of the agreement between the promoters and the competitors is adhered to.

Architecture and the League of Nations.

WITH the object of bringing together students from many different countries in order to study international problems and in particular to discuss differences of outlook and to exchange ideas, the International Universities League of Nations Federation has organised a series of summer courses at Geneva. These courses, which began on July 13, and end on September 5, comprise not only the technical aspects of international law, economics and administration, but in many cases are devoted to studies of the culture and institutions of the various nations. Archi-

itecture is given a place, it is interesting to observe, as one of the liberal subjects of the syllabus. A course on "English Architectural Traditions and their Relation to the Architectural Traditions of Europe" is to be given by Professor Lionel Budden, of Liverpool University. Other lecturers who have been invited to deliver courses on a variety of subjects are Dr. R. W. Livingstone, the Vice-Chancellor of Queen's University, Belfast, Mr. Desmond Fitzgerald, Minister of External Affairs, Irish Free State, Sir Michael Sadler, Master of University College, Oxford, and late Vice-Chancellor of Leeds University, Mr. W. S. Culbertson, Vice-Chairman of the United States Tariff Commission, and other well-known publicists and scholars, American, European and British. Amongst the English contingents of students attending the courses this month are a number of architectural undergraduates.

The Perception of Beauty.

MR. ERNEST EDWARD SMITH writes from Cromer:—"In your issue of May 8 were some strictures on 'the average builder's undiluted ignorance of the earliest and most childish funda-

mentals among architectural principles. As 'the average builder' is not a hypersensitive person you will not have been inundated with indignant rejoinders! have no intention of tilting at you for speaking the truth. But what is to be done? How can 'the average builder' be educated and taught to appreciate even the elements of architecture? You cannot send him to school or even induce him to employ a draughtsman with taste and skill to design his buildings. He is often an uneducated man with business capacity who has started 'on his own' and gradually working up a connection founds a prosperous business. He can carry out contracts and work to drawing. It is when he launches out with a pencil and T-square his deficiency becomes apparent. How is it to be remedied? It looks a hopeless proposition, and we must wait until a younger generation is more thoroughly trained to appreciate what is beautiful in line and colour." We might have uttered strictures similar to the above on many architects. The love of beauty in line and colour is born in some, and an instinct for its expression is also part of the birthright of many. Much may be done by education, association, and training.



Wall Panels in the Adam Room at Wembley.

Painted by MR. A. C. CONRADE.

ing to develop what already exists if only in embryo, but this initial spirit cannot be created by either books or training.

Norwich City Development. WE have already referred to the town-planning matters which have lately occupied the attention of the Norwich City Council. Mr. George J. Skipper's suggestion for a new roadway formation ought to be carefully and fully considered, and the total outlay would, we feel sure, be well justified. It is doubtless difficult for our town and city councils adequately to envisage the future, but it is assuredly their duty to do so, and the duty should be performed even if it leads to some apparent disregard of present interests. The monopoly of privileges and advantages which has grown up around us in every direction ought to be broken down whenever it is likely to impede future progress. If a cattle market or a pickle factory has been long established in the centre of a town the value of property which is largely owing to their proximity ought to be of small account compared with the ultimate benefit of the whole town. Some day, perhaps, we shall wake up to the anomaly of a Covent Garden in the centre of London, but it is possible that before this fortunate awakening takes place the City of Norwich may have a better future assured for it when better roadways and wiser allocation of markets have been provided.

Norwich Castle. IN addition to the proposed new motor road, Norwich is confronted with another problem of some importance. New extension buildings of the Shirehall are proposed on a site to which there have been advanced serious objections, amongst which is the obstruction of a fine view of the Castle. It is difficult, in the absence of detailed information, to form a right opinion, but any interference with a fine view of an historical building like Norwich Castle is to be deprecated, and we can well understand the existence of strong local opposition.

Separation of Buildings. A CORRESPONDENT informs us that in some two-story dwellings which are being erected by the London County Council there are blocks in which houses, having separate entrances, are divided only by a half-brick wall carried up to the ceiling of the top story. Our correspondent suggests that there is danger of fire passing from one house to another through the roof, and asks whether, in such cases, there should not be a proper party wall between the houses. That adjoining buildings must be separated by party walls is a familiar rule under the London Building Act, but the question is, whether the dwellings mentioned are separate buildings or tene-

The Dog Nuisance. THE Hampstead Borough Council has done well in issuing posters asking the public to co-operate in abating the nuisance arising from dogs fouling the pavements. It is perfectly easy to train dogs to respect the footpath, and when we are more nearly civilised we shall certainly find by-laws against this nuisance universally in force. In the interests of the dogs themselves it would be desirable to prohibit the keeping of dogs altogether in districts where adequate exercise is impossible. The cat nuisance is even worse, and the present state of affairs in which thousands of stray and starving cats are allowed to keep the inhabitants of our towns awake is really intolerable. People who pretend to be



Peacock "Bird Fountain."

By MISS MALVINA HOFFMANN (to whose work reference was recently made in these columns).

ments in one building? If the latter, and if there are means of communication through trap doors in the ceiling, the arrangement may conform to the letter of the law, but can hardly be deemed expedient or desirable.

too tender-hearted to kill superfluous kittens, throw them out on the pavement to eke out a wretched and precarious existence. The restriction of superfluous animals in towns might well be the aim of the R.S.P.C.A.

Window Restoration. A VERY interesting old window is being preserved to us by the skill of Messrs. Clayton & Bell, who have nearly completed the strengthening and repair of the Susanna window from the St. Edmundsbury Cathedral church. Though there is no complete coherent design there are some passages of charming colour and we are fortunate in the execution of its repair by the capable artistry of Messrs. Clayton & Bell. During its exhibition at their studios in Clifford-street, there were also shown some good pieces of old Dutch painted glass and some fine examples of mediæval heraldic tiles discovered a few weeks ago in the "Radnorshire Arms," Presteign.

GENERAL NEWS

Strand Widening.

The London County Council are endeavouring to obtain powers to acquire property on the south side of the Strand, the value of which is estimated at £400,000.

Limehouse Fields Lay-out.

Messrs. Barnes & Davidge have been appointed architects for the lay-out of the Limehouse Fields Unhealthy Area.

Repairs to the Tower.

Mr. B. Peto, in the House of Commons last week, asked the Under Secretary of State for the Home Department, as representing the First Commissioner of Works, whether, seeing that the reparation work at the Tower of London and Farleigh Castle in the past six years had cost, respectively, £153,207 and £7,572, and the total expenditure on the repair of ancient monuments and historic buildings during these six years had been £950,680, and that further works were being commenced, in view of the urgent need for public economy and houses, he would postpone any further work of repair of ancient buildings for the present.

Mr. Locker-Lampson said that the First Commissioner considered that it would be a profound mistake to postpone necessary works of repair to ancient monuments and historic buildings, in which the public took a great and growing interest. The figures quoted in the question covered the whole expenditure on monuments and historic buildings, including the cost of caretaking. The figures for the Tower of London included the wages of the Yeomen Warders as well as the cost of the police who were employed there until 1923. Against the expenditure must be set the receipts from admission fees amounting last year to over £28,700.

A Stone of St. Paul's for America.

A stone of the dimensions of a 3 ft. cube, which formed part of the south pediment of

St. Paul's Cathedral and was one of those displaced in the course of the recent repairs, has been presented to the American School of Journalism attached to the University of Missouri.

St. Martin's Spire.

It has been discovered that the spire of St. Martin's Church, Ludgate Hill, is not vertical. It inclines slightly towards the roadway, but there is said to be no danger of its falling, for the masonry of the church and solid square tower on which the spire stands are apparently as upright as when they were first put in position.

Edinburgh City Architect's Retirement.

Mr. James A. Williamson, Edinburgh City Architect, has retired after 45 years' service with the city. He was appointed City Architect in 1908, and has since been responsible for the Central Fire Station, and other big Corporation buildings.

Mersey Tunnel.

The new tunnel for general traffic under the River Mersey, between Lancashire and Cheshire will begin about 1 mile from the river bank on each side, with a gradual slope downwards until under the river bed it will be just over half a mile in length on the level. It is expected to take five years to complete, at a cost of about £5,000,000.

French Prix de Rome.

M. Alfred Audoul has been awarded the French Prix de Rome for Architecture.

Alfred Gilbert's "Eros."

The plaster cast from which the bronze of Alfred Gilbert's "Eros" was taken has been discovered recently stowed away in the Maida Vale house with its large studio where, onwards from the early nineties, the sculptor lived and worked. The existence of this study from the life is apparently unrecorded.

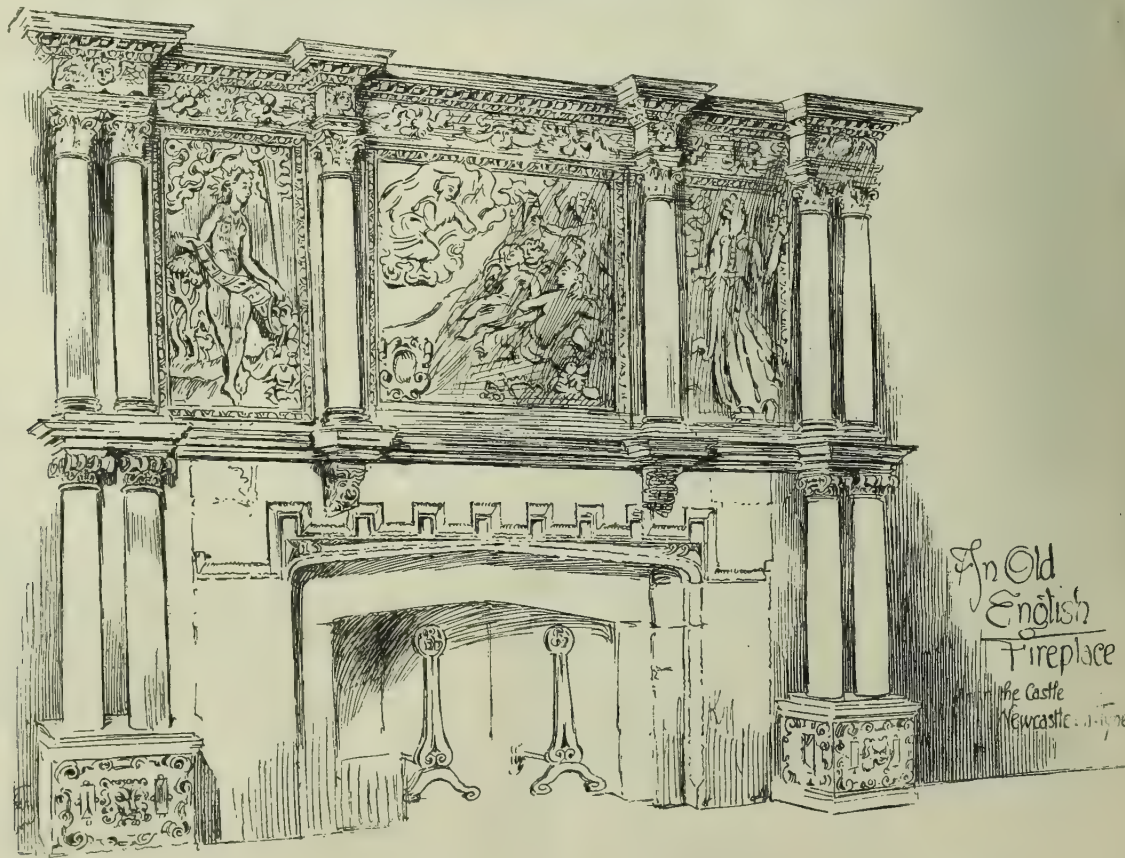
COMPETITION NEWS

College Buildings, Liverpool.

The governing body of the Liverpool College invite designs for proposed new buildings for the College on a site at Mossley Hill. The assessor is Sir Giles Gilbert Scott, R.A. Premiums of £500, £300, and £200 are offered. Conditions of competition and a plan of the site can be obtained from Mr. J. H. Lintern, Secretary, Liverpool College, Sefton Park road, Liverpool, on and after September 1, on payment of a deposit of £2 2s. Designs have to be sent in by January 1, 1926

	Particulars published in "Builder."	Sending in date.
Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply parties., 35, Old Queen-street, S.W.1		April 24 .. Dec. 31
Copenhagen Bridge. Three premiums, highest 15,000 kroner. Apply C. Eng.'s Office, Town Hall, Copenhagen. Dep. 100 kroner		April 24 .. Sept. 1
Newcastle Fire and Police Station. Premiums: £500, £300, £100. Mr. P. S. Worthington, F.R.I.B.A., Assessor ..		June 12 .. Oct. 8
Drammen Bridge (Drammenselven). Premiums: 10,000 Norwegian crns., 8,000, 6,000. Apply Gov. Eng., Drammen ..		May 29 .. Oct. 1
*Warwickshire Hospital Extension. Designs to be judged by Architect approved by Coventry S.A.		May 29 .. Aug. 10
Wolverhampton Hospital. Premiums: £200, £150, £110. Mr. T. R. Milburn, F.R.I.B.A., Assessor		May 22 .. Sept. 5
Town Hall, Johannesburg. Apply 35, Old Queen-street, S.W.1		July 24 .. No date
Reconstruction of Mosque of Amrou, Cairo. Premiums: £E.2,500, 1,000, 500. Apply Sous-Secrétaire d'Etat au Ministère des Wakfs, Cairo ..		July 31 .. No date
War Memorial, Pontardulais, to cost up to £600. Apply Mr. H. M. Gibbon, Aberdare House, Pontardulais, Glam... ..		— .. Aug. 28

*NOTE.—Competitions when "warned" or "vetoed" by the R.I.B.A., are starred.



From a sketch by Mr. T. RAFFLES DAVISON.



The Adam Room in the British Empire Exhibition, Wembley.

MR. ARTHUR T. BOLTON, F.S.A., F.R.I.B.A., Honorary Architect.

THE RAILWAY CENTENARY

THE Railway Centenary has an especial interest for architects, and for close on eighty years the subject has been dealt with in *The Builder*. The construction of roads, canals, and railways by the Victorians formed not the least part of industrial development in the last century. In the sphere of railroad construction, such works as tunnels, viaducts and stations, have been endowed with a monumental character which has lifted them above the plane of utility. There is an air of permanence about the best features of railway practice which contrasts favourably with the stupendous monuments of antiquity. It is somewhat surprising that of late years so little attention has been given by architects and the public to objects of construction with which most people are familiar.

It is almost impossible to state when railroads were first invented, but old authorities mention "Wayleaves on the Transit of Coal." Lord Keeper Guildford, who was upon the Northern Circuit in 1676, describes the manner of carrying coals on wagons which ran on rails of timber from the colliery to the road. There are numerous references to the wooden railroads of the coal districts, which were in use in the eighteenth century. A further improvement was the adoption of iron, which enabled double the load to be drawn by horse traction. The iron road first appeared at Colebrook Dale, in Shropshire, about the year 1767. But it is conjectured that as early as 1716 malleable iron was used in the North of England in the form of plate rails secured to timber parallels. The rail as it is now known first came into use in 1776, being used for minerals belonging to the Duke of Norfolk near Sheffield. At the close of the eighteenth century, stone blocks supporting the rails were introduced. It is interesting to read that the first public railway company was instituted at Loughborough in the year 1789, but this scheme did not mature. There was Trevithick's Circular Railway, in Euston-square, in 1808, which was intended to attract public attention in London; and the railroad from Plymouth to Dartmoor fostered by Sir Thomas Tyrwhitt. It was not, however, until the Stockton and Darlington railway was completed and opened in 1825 that a railway within the correct meaning of the term was used for passenger and goods traffic. Then followed the line from Liverpool to Manchester, with its tunnels, the Sankey Viaduct, the Kenyon excavation, and the track floated on Chatt Moss. In London, the earliest railway was the line to Greenwich, followed in 1837 by the Birmingham line from Euston-square. About this time the Great Western Railway was projected from London to Bristol and from thence to Exeter. It was an era of prophecy and speculation, public opinion being divided between the skill of engineers and admiration for the acumen of the railroad kings.

We are accustomed in these days to assume that the locomotive engine came into being with the "Rocket," and most people imagine that the Stockton and Darlington Railway was the first of its kind in the world. Investigation shows that George Stephenson and his contemporaries, far from inventing a steam machine, merely improved on several existing ideas. There was a railway actually working in Wales in 1804. It is, perhaps, strange to consider that the greatest engineer of the early nineteenth century came from Cornwall and not Northumberland. There are some who would give the credit of the steam locomotive to a French engineer of the name of Cugnot, who is reputed to have placed a locomotive on the road in 1770. We must not ignore the claims of Watt and Murdoch. Trevithick's high-pressure Cornish boiler was working in 1797, and at this time he made the model locomotive which is to be seen in South Kensington Museum. Two years before Trafalgar was fought, Trevithick had brought a road locomotive to London, and had driven it along Oxford-street, where it came to an untimely end by crashing into a

shop. A year later, he was at work on what might be termed the first railway in the world at Merthyr Tydvil; and in the same year he built and despatched a locomotive to Newcastle-on-Tyne. The celebrated "Catch Me Who Can," which Rowlandson sketched, exciting the spectators who thronged to see it clanking round the track which became Euston-square, was virtually a prototype of Stephenson's "Rocket." Both from a novelty were developed a mechanically-propelled road carriage and the locomotive which drew the first train along the sixteen miles of the Stockton and Darlington Railway. Architects, while interested in the development of the steam engine, are more concerned with the formation of the railways with their concomitant features of structural and monumental importance. It is interesting to observe that a century ago architecture and engineering were more closely allied than is the case to-day. New problems had to be faced, calling for skill and ingenuity, for the public were critical regarding the appearance of stations, viaducts and tunnel fronts. There was no precedent for such works, the viaducts alone bearing some resemblance to the aqueducts across the Roman Campagna. The railroad engineer not only surveyed the proposed route, but he furnished designs for works, which, properly considered, could have been devised by architects. It not infrequently happened that architects were commissioned to furnish designs for such features, but it can be stated that the railroad era witnessed the divorcement of architecture from certain aspects of civil engineering well within the province of building. John Rennie, the son of the builder of Waterloo Bridge, was, perhaps, the most gifted of Victorian civil engineers. He was one of the few of his time who could, within certain limitations, compete with architects. In the first half of the nineteenth century tradition in building, in part a legacy from the late eighteenth century, was still strong enough to call for good manners, even in the case of structures intended solely for utility. This explains the humane proportions which were consistently observed in works which even to-day appear novel. The directors of the London and Birmingham Railway showed foresight in commissioning Hardwick to design Euston Station, the first part of which included a Doric entrance and lodges, and the platform shelters. Hardwick became the company's architect. He it was who kept his eye on the engineer's drawings for various works on the road, and it is possible that he gave a suggestion for the south and north front of the tunnel at Primrose-hill. The fine series of pencil drawings by Bourne, which can be seen at Euston Station to-day, almost Piranesian in their eloquence show the consistency which modified this early railway enterprise. Hardwick must have had a busy time as the line neared completion. He used the Doric order for the London gateway, and with Classical precision selected Ionic for the gateway at Birmingham. The line was completed in 1837 as far as Denbigh Hall (the name of an inn on the Watling-street), and from thence passengers journeyed to Rugby by coach. Finally the whole line was opened for through traffic, and a few years later was extended to meet the Grand Junction Railway running from Birmingham to Liverpool, Lancaster and Carlisle. In 1847 the London and Birmingham Railway, which, like Aaron's rod, had swallowed up its rivals, in a north-westerly direction, was the Royal Mail route to the north; the Midland line came as far south as Leicester—passengers to York from London journeying from Euston-square to Birmingham and Derby. Travelling by rail was no longer a novelty. Euston was one of the show places of London, and in consequence of the demand made by the travelling public further additions were made to the station.

In 1847 we find Hardwick ignoring the earlier disposition of the terminus, and adding

the Great Hall, the domed booking halls, the board room and offices and at the same time building the Clearing House in Seymour-street. London now had two great railway systems, namely, the London & North Western, and the Great Western. It was Hardwick who designed the hotel at Paddington, but Brunel devised the crinoline roof of iron and glass, and superintended the bridges over the Thames and the embellishments of the Box Tunnel. While these works were on, Mocatta was busy with the buildings at London Bridge. In 1850 a direct line was projected between London and York to connect with the North Eastern system, and to provide an East Coast route to Scotland. This line was opened in 1854, when Cubitt astonished London with his unique treatment of the terminus of King's Cross. The Great Northern line like the London & North Western and Great Western, is remarkable for the classical character of its stations and tunnel fronts. There is the York-road tunnel, the North and South Welwyn, the viaduct at Welwyn, and the tunnel at Gonerby. The Midland Railway which, by 1855, had been brought as far south as Bedford, was carried on a single line to Hitchin, the Midland trains proceeding to King's Cross. Hardwick, in the meantime, was in great demand as a railway architect. He is found acting as adviser to the South Eastern Railway Co. at Dover and other places. At this time we find Sir William Tite, who was both architect and member of Parliament, designing railway stations in England and France. In architectural circles there was becoming apparent a revolution against the employment of Egyptian and classical motives for features of railroad construction—a change of taste occasioned by the publication of Pugin's contrasts. The Eastern Counties Railway, which had been projected early in the 'forties, had its terminus at Bishopsgate, where the buildings were of timber construction. There are several classical stations on this line, such as the example at Roydon and the Italianate station at Cambridge, designed by Sancton Wood. With the fashion set by Brunel at Paddington, and followed by Cubitt at King's Cross, opinion now centred upon the curvilinear form of train shed, but it is significant of the propriety of Hardwick's original design for the shelters at Euston that the latter are now in general use. In 1866 it was decided to bring the Midland Railway through South Bedfordshire and Hertfordshire to London, passing through the northern heights at Hampstead and ending between King's Cross and Euston. The Gothic revival at this time was at its zenith, and Sir Gilbert Scott found congenial employment in elaborating the details of St. Pancras station. It is possible that he was in close consultation with the engineer who designed the spacious iron and glass roof, which is constructed on the cantilever principle. Of the characteristics of railway architecture which are allied to building it can be said that Classic is the dominant note of the North Western line from Euston to Holyhead, and in like manner from Chester to the north, with the exception of the Gothic stations of Lancaster and Carlisle. The Midland Railway in its older portions has claims to Classic status. There is the circular Round House at Leicester the delightful hotel at Derby, and the Central Station at Manchester. From Bedford to London the characteristics are Gothic. Perhaps Sir Gilbert Scott had in mind the churches he was repairing, and wished to give Londoners a vision of Gothic splendour which could be obtained by those who preferred the Midland route. The engineers, however, true to railway practice, preferred Classic for the tunnel front. The last railway to enter London was the Great Central, which from Aylesbury runs parallel with the old Metropolitan. In course of time the Eastern Counties became the Great Eastern. Numerous small companies of cross-country importance were bought up by the great systems, and finally the railways which had a definite place both by reason of nomenclature as well as peculiarities of design in buildings and rolling stock have been

re-grouped. We shall soon be able to state a man's age by hearing him refer to railways by their old names.

Having sketched an outline of English railroad history, it remains to write of the architecture and the lessons to be learnt from the study of works which have the merit of being unique in design and proportion. Brunel's bridge at Saltash, completed in 1859, has no claim to beauty. The timber viaducts of Cornwall disappeared with the broad gauge, but the stations of Menheniot, St. Germans and Liskeard evidence the fact that design was considered by the old engineers with pleasing results. There is the tubular bridge across the Menai Straits with its pylons and crouching lions. There is the suspension bridge of Conway which composes so well with the mediæval Castle. There are the mechanic's houses at Tring, the station at Reading, the Round House at Chalk Farm, and the bridge at Denbigh Hall, as well as the high level bridge at Newcastle to prove the Victorian engineers to have been men of ability. Who has not enjoyed the sight of the railway stations at Dublin, of which the Broadstone, by Mulvany, is the most convincing, or the ornate station at Kingsbridge, by Sancton Wood. Such features have an air of solidity which, apart from architectural embellishment, commands respect. There are such railway hotels as the one at King's Cross, or the fine building at Galway. It is, however, that rare instinct for construction which distinguishes the line of the railroad, such as the viaducts, the bridges, and vast embankments. We may have an affection for the station at Huddersfield, or the façades at London-road, Manchester. We are enthralled by Dobson's loggia at Newcastle, but the Royal Border Bridge at Berwick and fleeting glimpses of impressive tunnel entrances prepare us for the intricate weavings of steel lattice spans or the marvel of the Forth Bridge. America has shown how the railway station can take on the character of a Roman Bath

or become a Hall of the Cæsars. By comparison the English stations are Liliputian in scale, but it must not be forgotten that England was the pioneer in such matters, and that we are still privileged to enjoy early railroad enterprise. Familiarity has made us contemptuous of works which eighty years ago were regarded as marvels of science. Few there are who bestow more than a passing thought on the conventional scenery of the iron road which carries them on their travels. It is somewhat curious that the steam engine and the railroad which our forbears envisioned as suppressing road travel for all time should now be approaching the stage of obsolescence. There is much food for reflection on the part of architects regarding the permanence and structural qualities of the buildings referred to in this article. They are interesting as showing a compromise brought about between eighteenth century tradition and Victorian invention. For over eighty years the majority of these buildings have been described in the pages of *The Builder* with all matters relative to their construction and cost, as well as accounts of accidents and disasters attendant on the days of experiment. There is material for many books, as well as examples of structural design which embody the first principles of architecture. It is towards the best of such works that attention is directed. Perhaps the antiquary of the future will devote his time to compiling a comprehensive account of railroad travel with the same zest that has been given to the history of coaching by others.

Examination for the R.I.B.A. Diploma in Town Planning.

The questions set at the recent examination for the R.I.B.A. Diploma in Town Planning are obtainable at the R.I.B.A., 9, Conduit-street, W.1, price 6d. per set.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

The Manchester Art Gallery Competition.

SIR,—Surely Mr. Adams' letter, published in your last issue is the inversion of wisdom and justice. Not a few are of the opposite opinion as to the merits of the selected design.

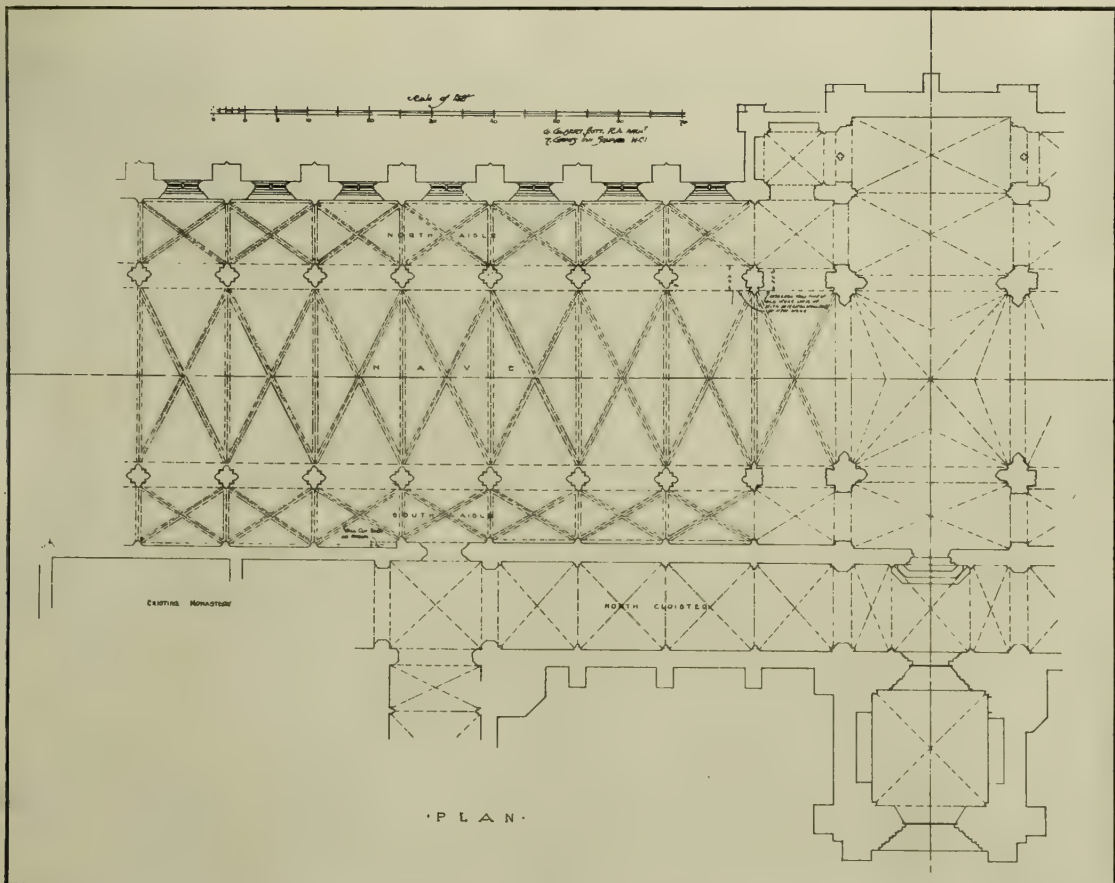
It is not necessary—indeed it is wrong—to suggest fraud when "self-misdirection" (as in the case of the judicial bench appeals) meets the case.

A. HENTHORN STOTT.

Manchester.

SIR,—I should like to support the view taken by Mr. Maurice B. Adams. No doubt it is very galling, after having attempted to fill conditions in good faith, to find that the winning architect has ignored some of them—even vital ones; but surely what we all wish is that the best design should win, not that one less meritorious should be selected in order slavishly to keep to rule. It would be absurd to foist an inferior building on to the public with such an excuse, and an assessor who did so would be more culpable than the toleration of broken conditions could make him. It seems to me that conditions generally are far too complicated. A simple statement of cost, site and accommodation, with a photograph of its vicinity, seems all that is required. The complicated and iron conditions sometimes made now really mean that the competitors are making the assessors' design and not their own.

I fear such letters as have appeared lately in the lay press by disappointed competitors must do great harm to the profession. I think most independent architects who thoroughly examined



Downside Abbey, near Bath: Plan of New Nave. SIR GILES GILBERT SCOTT, R.A., Architect.

the drawings submitted, would support the assessors by evidence if it were required. In my opinion, the award, so far as the winning design was concerned, was made conscientiously and courageously in the best interests of architecture and the public who are finding the money.

Manchester.

J. HEMEROW.

Architectural Competitions.

SIR,—Some of your correspondents appear to hold the view that, so long as an assessor selects a fine design, it is the duty of each and all to accept his award in silence, notwithstanding the fact that hard-and-fast conditions have been flagrantly broken.

The climax is reached when Mr. Maurice B. Adams, an architect and journalist of great experience, states that if a competition produces a fine design any protest by competitors is deplorable. If such protests are mere quibbles, Mr. Adams is right, but he is laying down a most extraordinary doctrine if he means that competitors have no right to protest when important conditions, materially influencing the planning, are broken, and they realise that weary weeks of work have been wasted by adherence to the rules. Mr. Adams does not seem to realise that an architectural competition is, first and foremost, a plain business transaction between the promoters and the contestants, with an assessor appointed to see that, as far as is humanly possible, all those interested get an absolutely fair run for their money.

If the promoters, or their assessor, lay down hard-and-fast rules, and subsequently find that one of the designs submitted, by ignoring them, proves they have made a grievous blunder in so doing, that certainly does not give their assessor the right to select it. By so doing he commits a direct breach of contract, and in the interests of everybody concerned it is surely quite time the Institute took a hand to prevent such happenings.

In recent years there have been more instances than one of the winning design breaking conditions that were an obvious handicap to those adhering to them, and in each case the "Answers to Questions" have, moreover, refused any relaxation with regard to the point at issue.

This is a most unsatisfactory state of affairs, and if the Institute, instead of censuring protestants, would censure assessors who do not "play cricket," or, better still, see they do not get a second chance of ignoring drastic regulations, foolishly laid down at the outset, it would at least be a step, if only a step, in the right direction.

JUSTITIA.

Right of Light.

SIR,—With reference to the article on "Right of Light," in your last week's issue, I am particularly interested in the *résumé* given of the case, *Wills v. May*, in that I was called in on behalf of the plaintiff to give evidence as to the potential value of the site.

The important point allowed by the findings of the Court was that, although the two openings actually interfered with by the defendant were quite small, yet their position prevented the defendant building within a certain distance—thus allowing any future buildings erected on the plaintiff's land a very considerable amount of light from the side in addition to the front.

It was argued that the deprivation of this side light reduced the annual rental value of these potential buildings, and the amount of damages was assessed on this basis. Although it was proved that the damage would not be realised by the plaintiff until the termination of an existing lease (a period of fourteen years from the time of the hearing), the Court held that the plaintiff was entitled to an immediate payment of such a sum as invested for the period of the unexpired lease would produce the full amount of the damages.

HUGH MACINTOSH, L.R.I.B.A.

LEADING CONTENTS. PAGE

REORGANISATION	205
NOTES	206
GENERAL NEWS	208
COMPETITION NEWS	208
RAILWAY CENTENARY	210
CORRESPONDENCE	211
PHILIP WEBB AND HIS WORK.—VIII.....	220
THE WEEK IN PARLIAMENT.....	223
ARCHITECTS' AND BUILDERS' INQUIRY BUREAU	223
THE BUILDING TRADE	224
EDUCATION IN BUILDING	225
AN AMERICAN STEEL HOUSE.....	226
BOOK REVIEWS	226
NEW BUILDINGS IN LONDON.....	227
CONTRACTS, COMPETITIONS, ETC.....	229
PROPOSED NEW BUILDINGS AND OTHER WORKS	231
NEW COMPANIES.....	233
NEW BUILDINGS IN SCOTLAND.....	233
TENDERS	235

ILLUSTRATIONS

Downside Abbey.

We illustrate this week some working drawings of the new nave of Downside Abbey, near Bath, designed by Sir Gilbert Scott, R.A. Photographs of the interior of the nave were reproduced in our last issue, when a short description of the work was also given.

Manchester Art Gallery Competition.

The fourth premiated design in this competition, by Messrs. Warman & Sinning, is illustrated this week. The winning design, by Mr. Ernest Berry Webber, was published in our issues for June 12 and 19 (a special criticism of the competition appearing in the latter issue), the second premiated design, by Messrs. E. Maxwell Fry and G. L. Owen, in our issue for June 26, and the third premiated design, by Messrs. A. W. S. & Kenneth M. B. Cross, in our issue for July 24.

Competition for Development of Lands and Fortifications at Valetta and Floriana, Malta.

The conditions of this international competition (in which, as we have already announced, the scheme submitted by Messrs. James Burford, A.R.I.B.A., and S. Rowland Pierce, has been awarded first place) required the inclusion of the following principal works:—(a) The lay-out of streets, gates, squares and the allotment of sites for the erection of high-class grouped dwellings and detached villas where suitable, on the lines of modern garden suburban development, also workmen's dwellings and industrial and other buildings; (b) the improvement of the main approach to Valetta from Floriana and of the surroundings of Porta Reale; (c) the assignment of a convenient site for a first-class modern hotel, to accommodate 200 guests, with possibility for extension, with provision for a garden, recreation grounds, garages, &c.; (d) site for the erection of new Courts of Justice, such site to be as near as possible to Porta Reale; the new Courts Building to provide accommodation for the following: Superior Courts, Courts of Judicial Police; Court for Juvenile Offenders; Prisoners' Lock-up; the Government Notary's Office, Public Registry and Notarial Archives Offices of the Order; Offices for Legal Practitioners. (Detailed requirements were set out in a special Schedule.) Certain of the main bastions of Valetta and Floriana were required to be kept intact or to be opened up to give effect to improvements of the gates, &c., whilst an indication was given that other fortifications on account of their historical interest should be preserved as far as possible.

All military properties were required to be

left intact, with adequate accesses thereto from new or existing roads. Competitors were allowed to contemplate the acquisition by the Government of private property where necessary to give effect to their schemes. The winning scheme is illustrated in this issue.

The assessors were Mr. Edward P. Warren, F.S.A., F.R.I.B.A., and Professor Patrick Abercrombie, M.A., A.R.I.B.A.

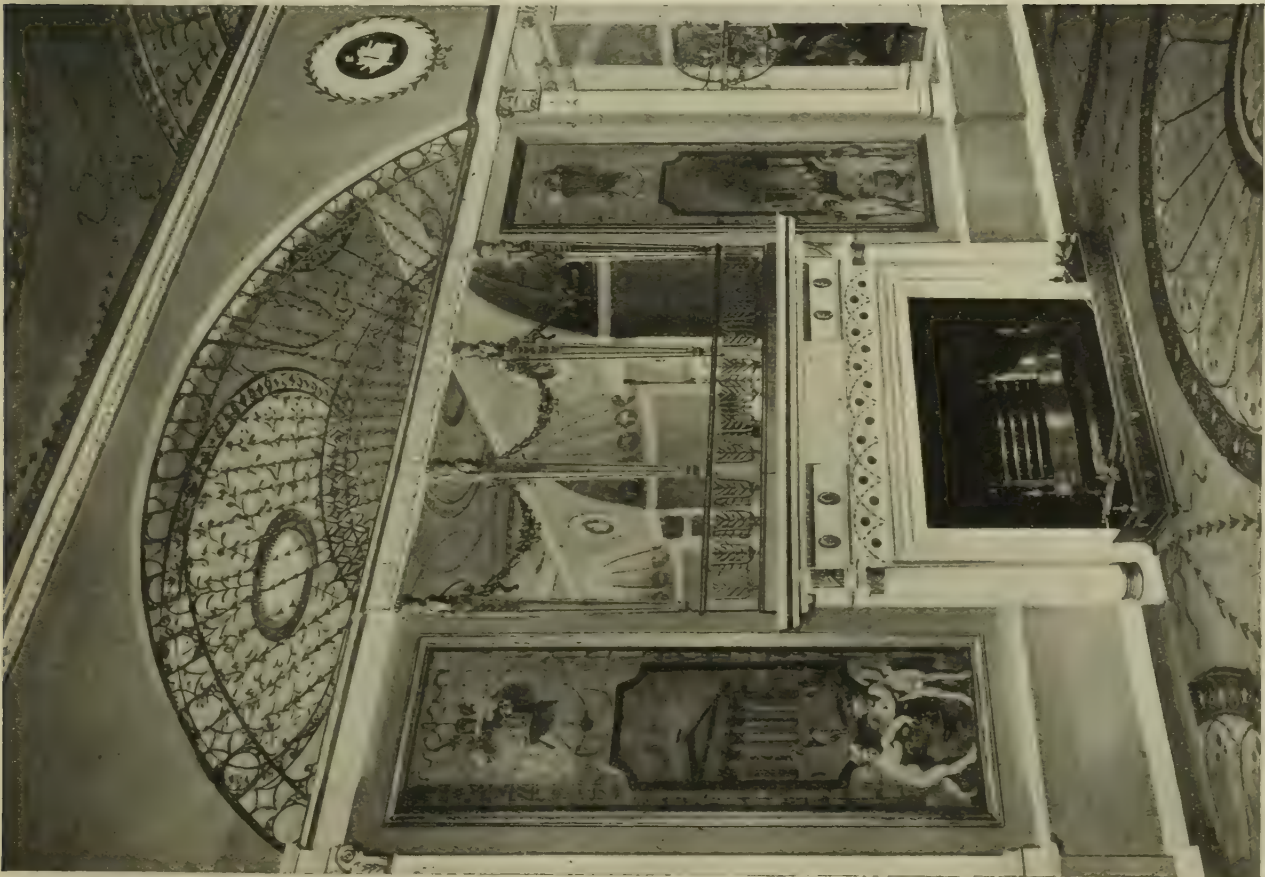
The Adam Room at Wembley.

THE Adam Room at this year's Wembley Exhibition is designed to give an idea of the interior architecture of Robert Adam (1728-1792) at a date as near as may be to the mid-point of his great career. The Adam Room is not a copy of any particular interior, but represents the way in which a room of the fixed dimensions of 24 ft. width by 36 ft. length and 15 ft. height may be treated in accordance with his ideas of proportion, decoration, and colour. The figures in the room represent Dr. Johnson, David Garrick, Fanny Burney, Mrs. Thrale, and Boswell. They have been made by Louis Tussaud & Co., and the valuable costumes have been lent by Tom Heslewood & Co. These are historical, having been made for some of Henry Irving's sumptuous productions. The wigs have been lent by Birts; the furniture by Harris, of New Oxford-street, and china and glass by Messrs. Powell & Son & Wedgwood, Ltd.

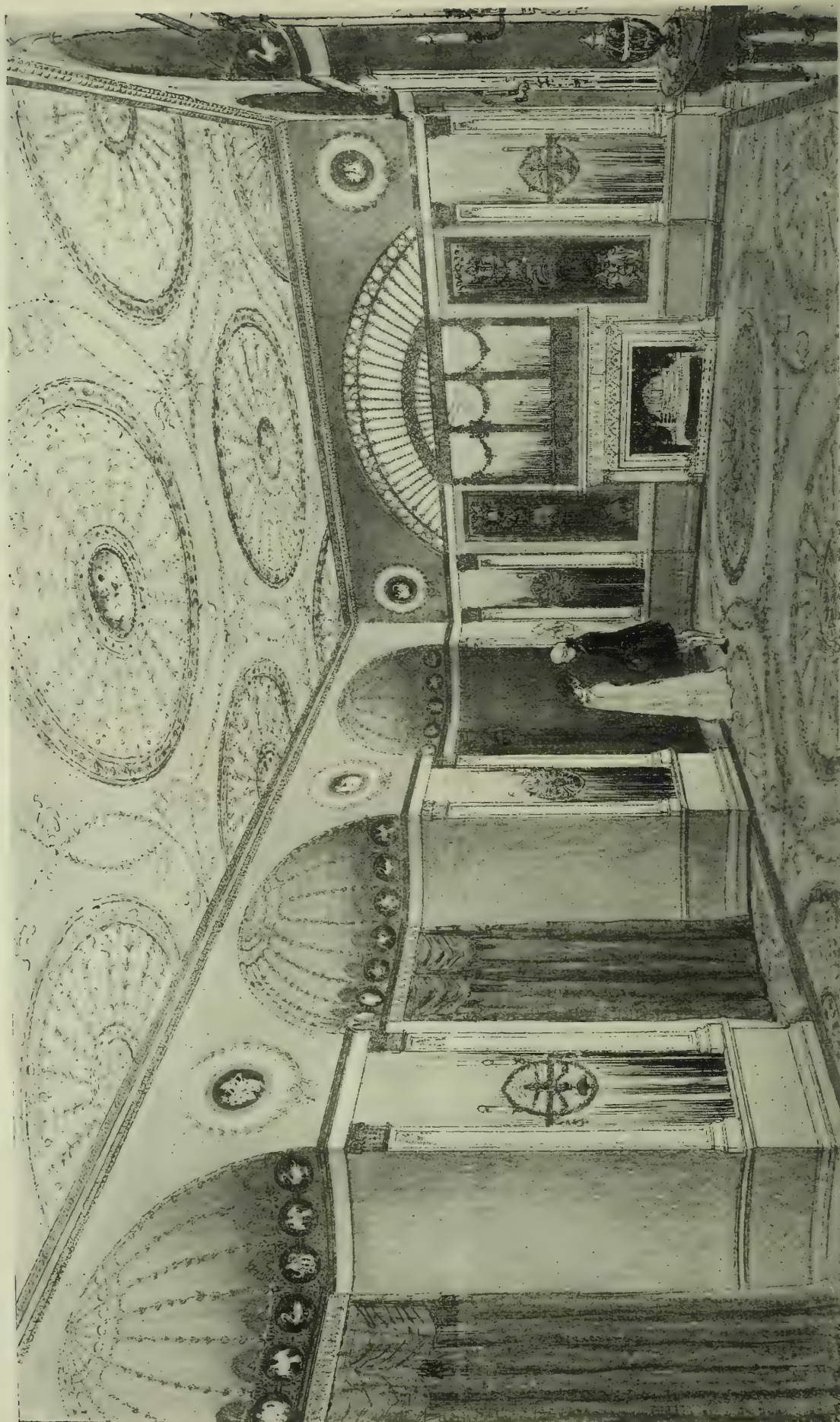
The room itself has been entirely constructed by Mr. Laurence Turner from the architect's detail drawings. The only features which are actual reproductions are the three medallions on the ceiling, from examples in Sir John Soane's Museum, the small medallions on the walls and the cornice, which are from an Adam house in Portland-place, and the bas-relief on the mantelpiece tablet. Everything else has been specially modelled from the drawings. The carpet has been woven, from the architect's full-size coloured repeat, on handlooms at Wilton by the Wilton Royal Carpet Factory, who have a tradition of two hundred years of making carpets of this character. The five panels on the walls, giving an idea of the tapestries that were used in Adam houses, have been painted by Mr. Alfred C. Conrade. Five of the masterpieces of Robert Adam are represented, i.e., the Adelphi Terrace (over-door panel), the Bridge of Syon, the Portico at Osterley, the Record Office, Edinburgh, and the Fête Pavilion of 1774 at Epsom. The mirrors on the walls and in the lunettes have been supplied by Messrs. Pilkington. The Verde Antique marble slabs for the two console tables have been lent by Messrs. Burke & Co. of Rathbone-place, and the legs and ornaments of the framework in cast iron and white metal have been made from the architect's details by Messrs. Thos. Elsley, of Great Titchfield-street, who have also lent the steel gate and fender. The vases have been lent by Wedgwoods. The honorary architect is Mr. Arthur T. Bolton F.S.A., F.R.I.B.A., of Lincoln's Inn Fields.

Books Received.

LECTURES ON BUILDING MATERIALS. (London Builders' Merchants' Alliance, Ltd.) Price, 5s.
KETTRIDGE'S TECHNICAL DICTIONARY (French-English.) By J. O. Kettridge. (London George Routledge & Sons, Ltd.) Price 50s. net.
ELEMENTS OF FORM AND DESIGN IN CLASSICAL ARCHITECTURE. By Arthur Stratton. (London B. T. Batsford, Ltd.) Price, 28s. net.
THE ANGLO-AMERICAN YEAR BOOK, 1925 (London: American Chamber of Commerce Inc., Aldwych House, W.C. 2.) Price, 15s. net.
ARCHITECTURAL PRACTICE AND PROCEDURE. By Hamilton H. Turner. (London: B. T. Batsford, Ltd.) Price, 15s. net.
TIME, TASTE AND FURNITURE. By John Gloag. (London: Grant Richards, Ltd) Price, 12s. 6d. net.
THE CALCULATIONS FOR STEEL-FRAME STRUCTURES. By Walter Cyril Cocking. (London Scott, Greenwood & Son.) Price 10s. 6d. net.



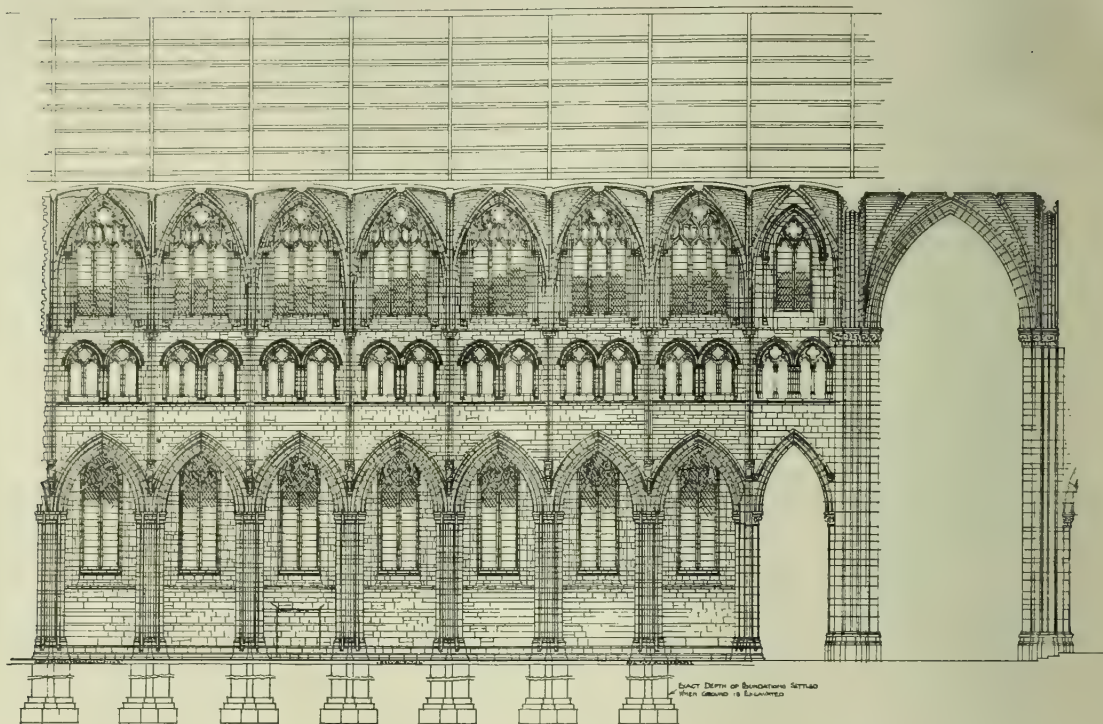
The Adam Room in the British Empire Exhibition, Wembley.
MR. ARTHUR T. BOLTON, F.S.A., F.R.I.B.A., Honorary Architect.



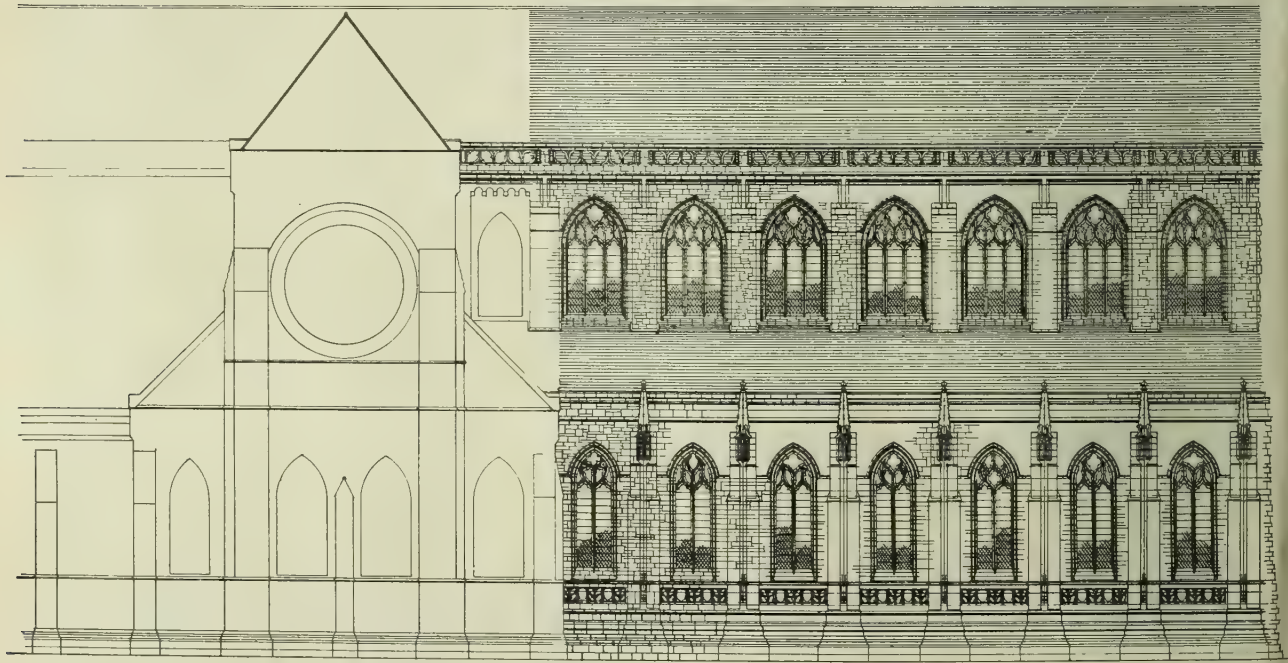
The Adam Room in the British Empire Exhibition, Wembley.

Mr. ARTHUR T. BOLTON, F.S.A., F.R.I.B.A., Honorary Architect.

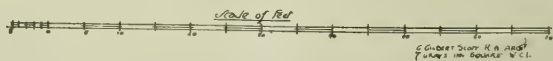
From a Drawing by Mr. T. Raffles Davison.



LONG SECTION LOOKING NORTH



NORTH ELEVATION



Downside Abbey, near Bath : Longitudinal Section and North Elevation of New Nave.

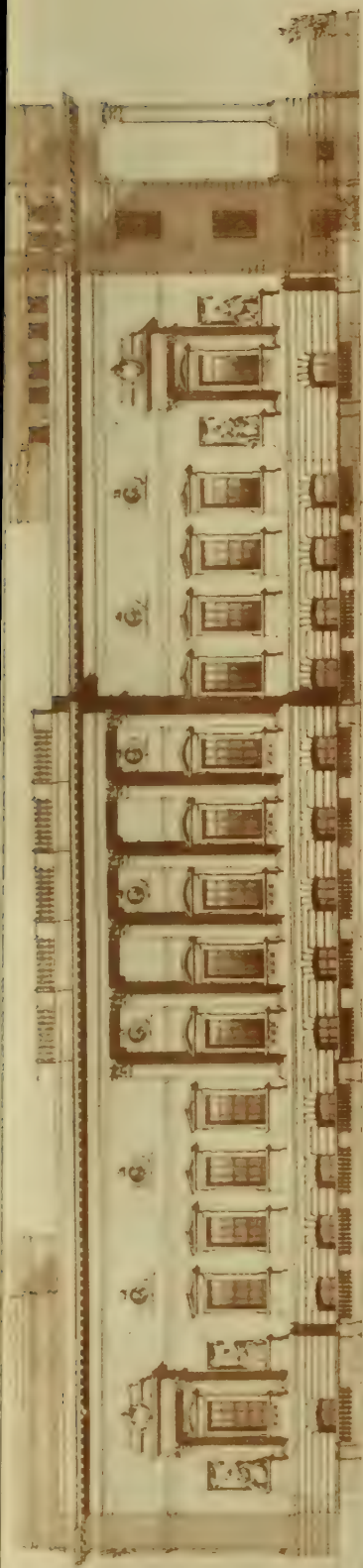
SIR GILES GILBERT SCOTT, R.A., Architect.



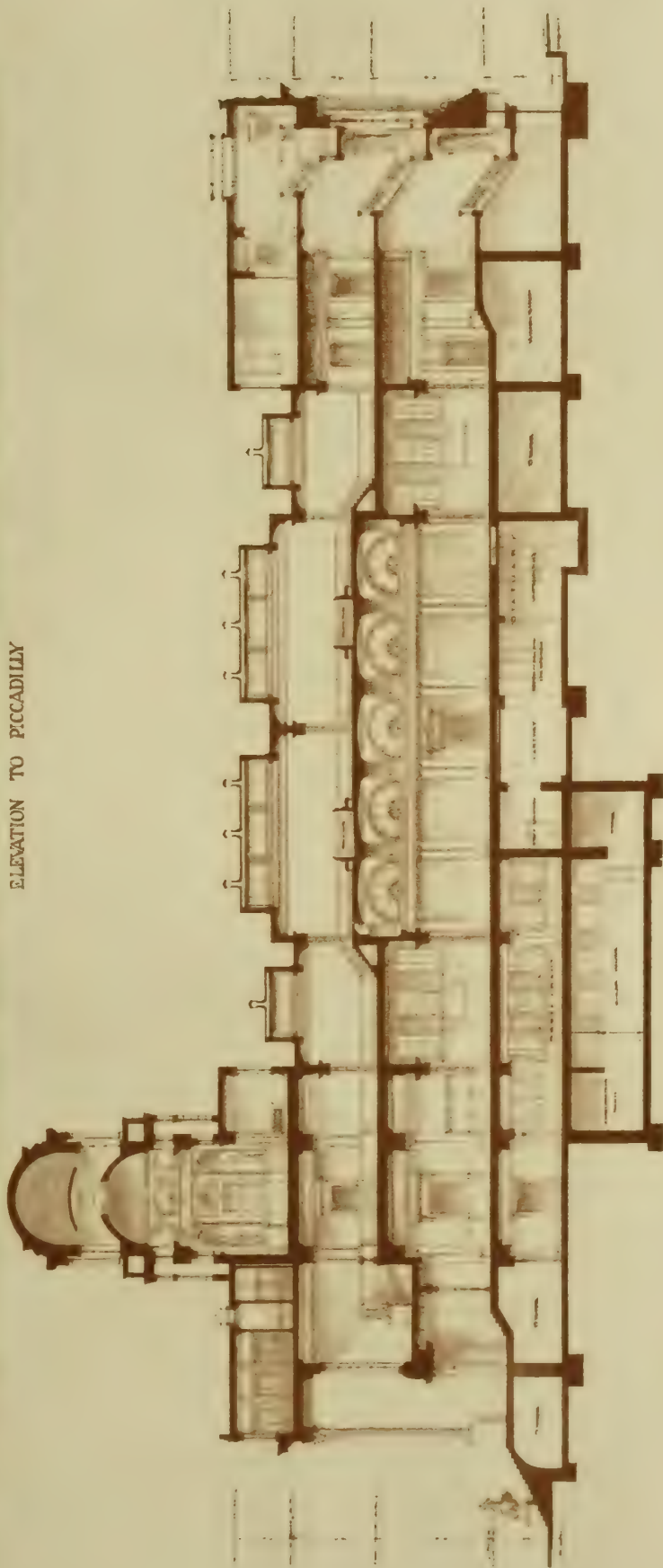


ELEVATION TO OPEN SPACE.

ELEVATION TO PORTLAND ST.

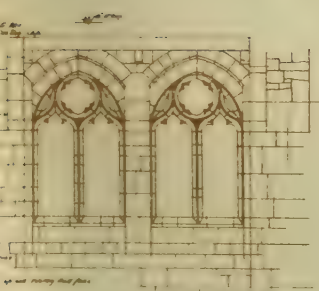
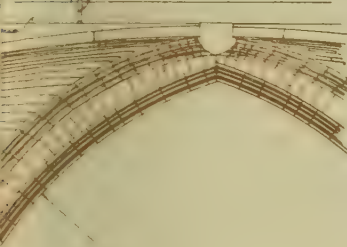


ELEVATION TO PICCADILLY

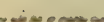


LONGITUDINAL SECTION

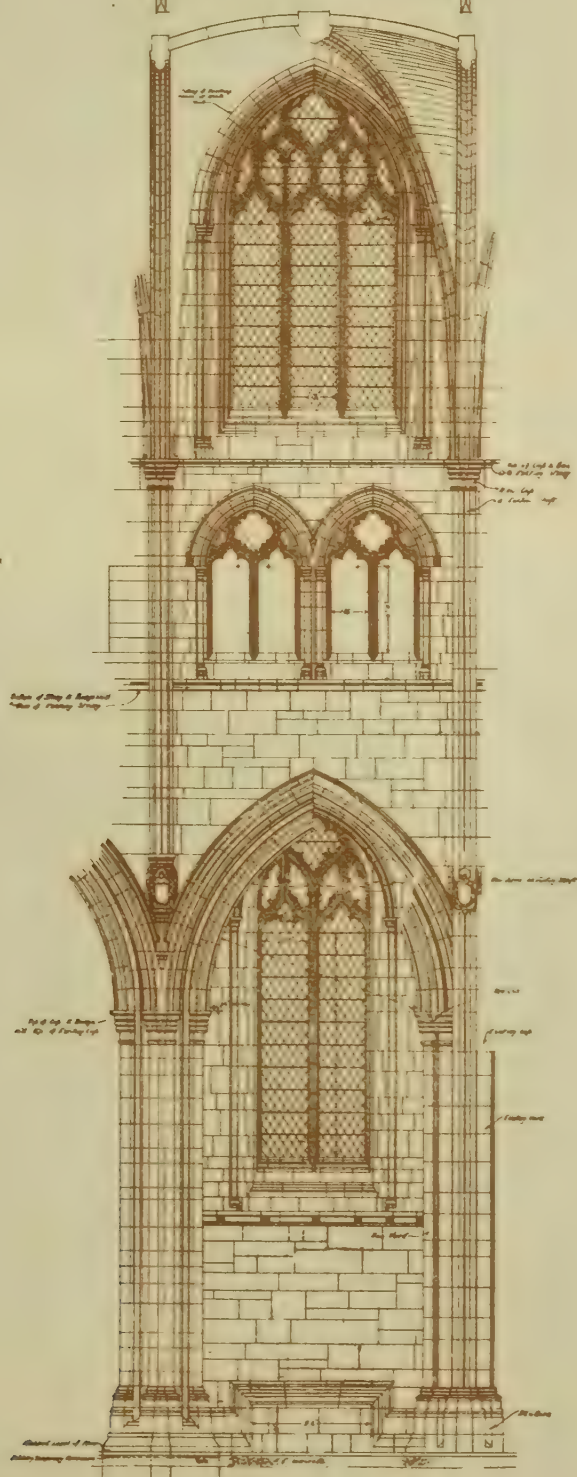
MANCHESTER ART GALLERY COMPETITION: FOURTH PREMIATED DESIGN.
BY MESSRS. W. WARMAN & W. G. SINNING.

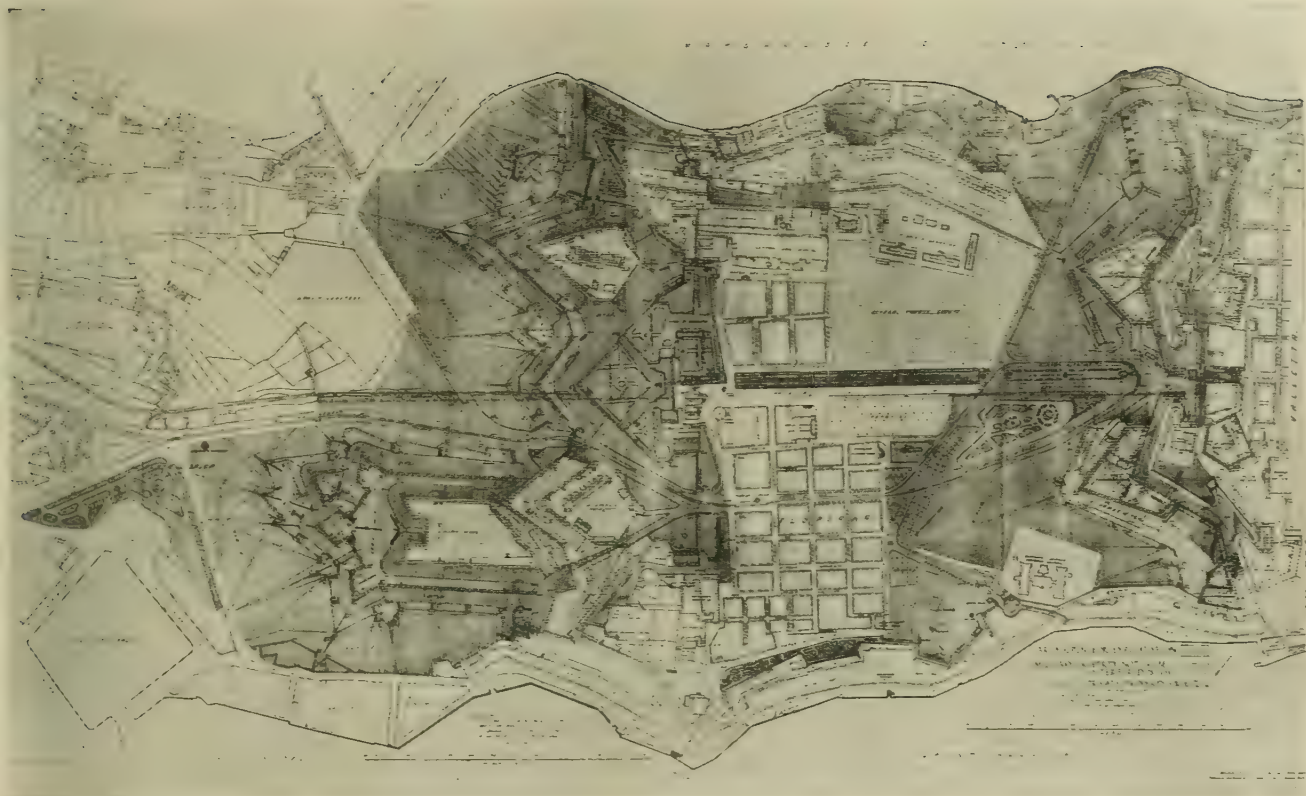


Dana's Character of Performance



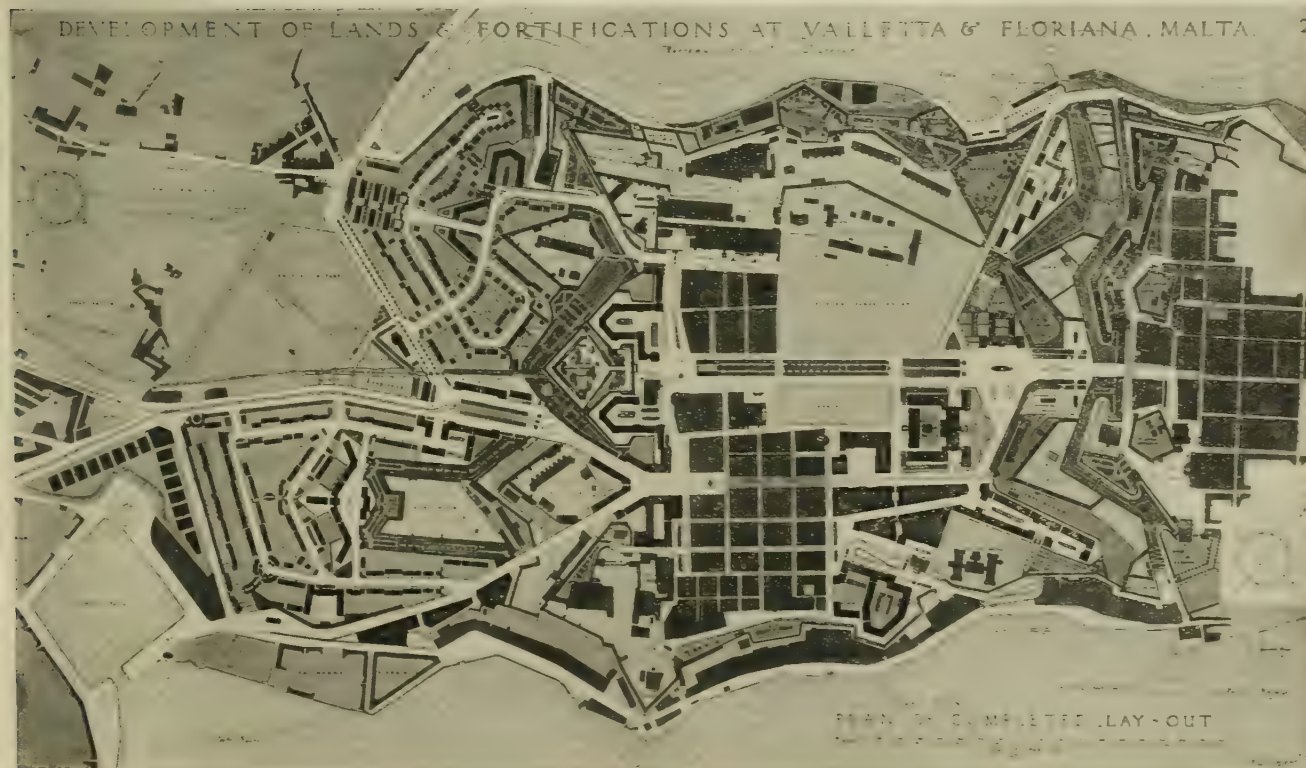
A technical drawing of a rectangular frame. It consists of two vertical bars and two horizontal bars. At each of the four corners, there is a cross-section symbol, which is a small square with an 'X' inside, indicating a specific material or joint. The drawing is a line drawing on a light background.





AREA FOR EXPLOITATION.

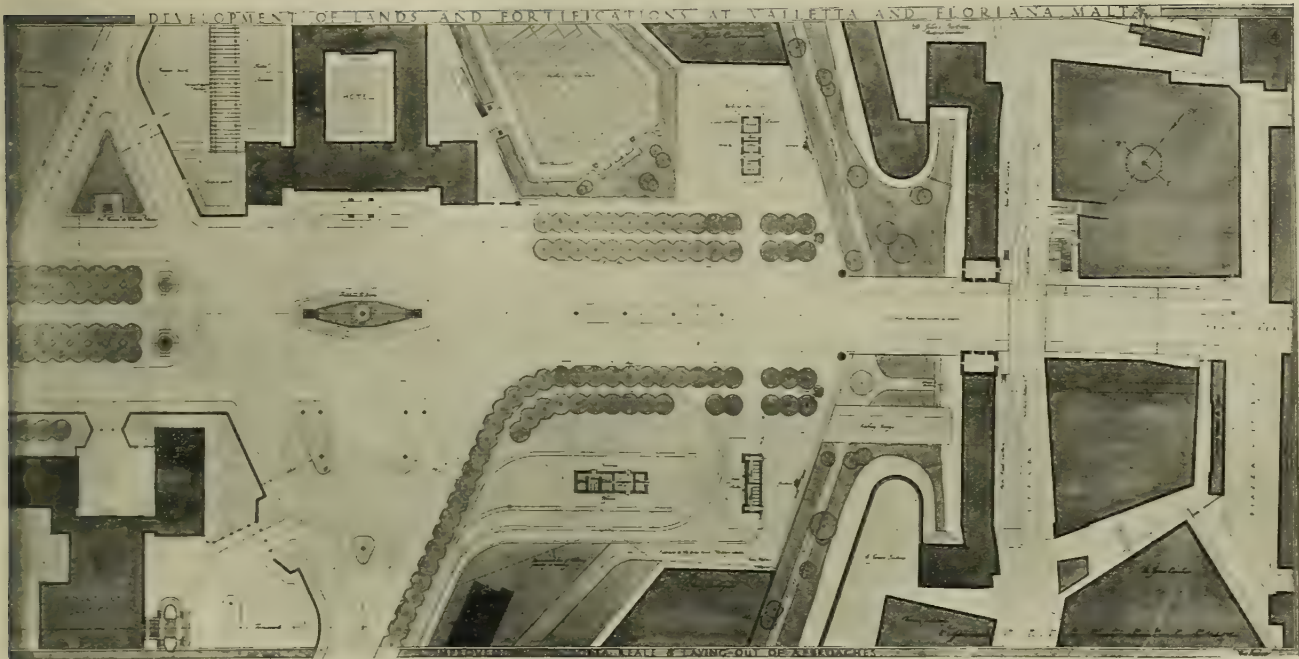
Areas open to exploitation are shown in a dark tone with vertical hatching; military properties which could not be interfered with and to which free access had to be maintained are marked by horizontal hatching; private property is shown white.



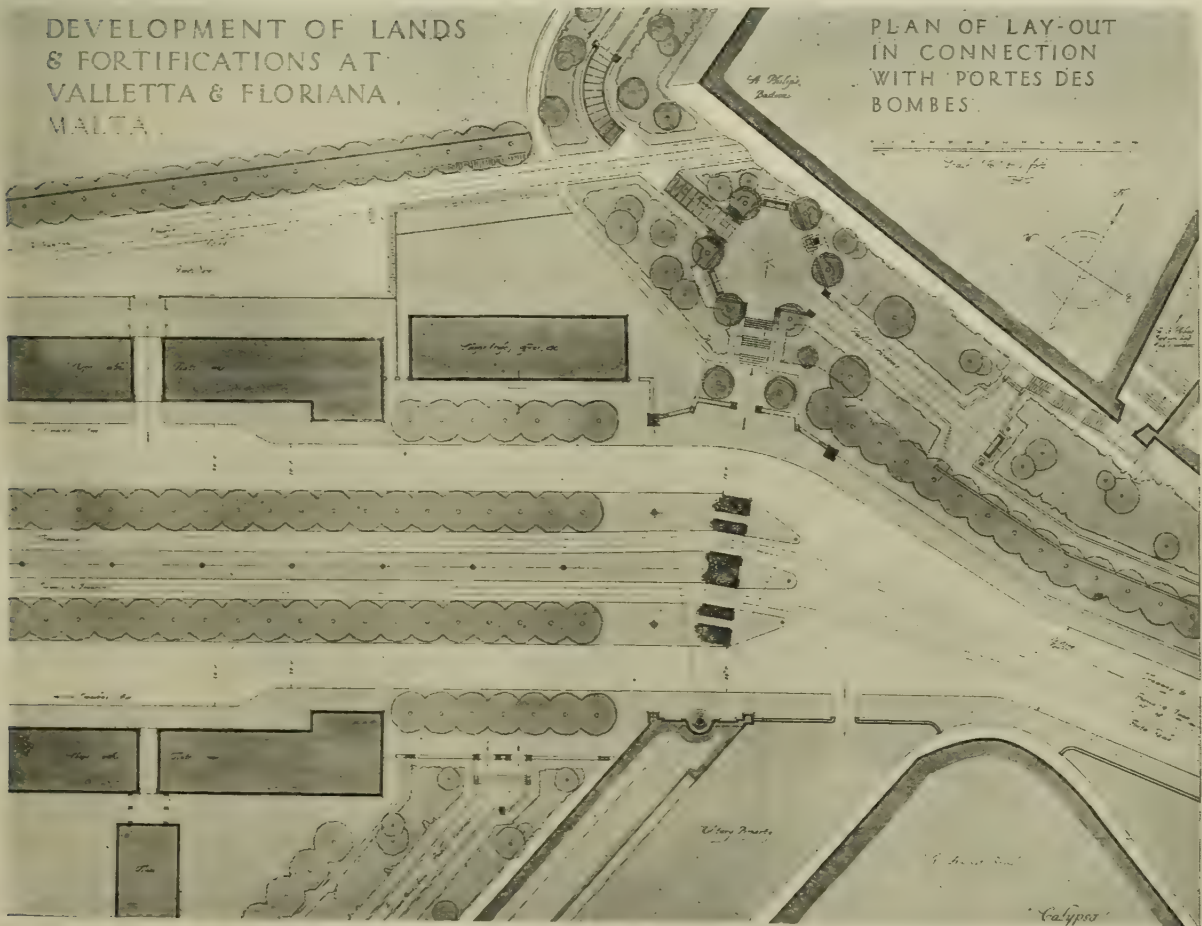
COMPLETED LAY-OUT.

Competition for Development of Lands and Fortifications, Valetta and Floriana, Malta : Winning Design.

By MESSRS. JAMES BURFORD, A.R.I.B.A., and S. ROWLAND PIERCE.



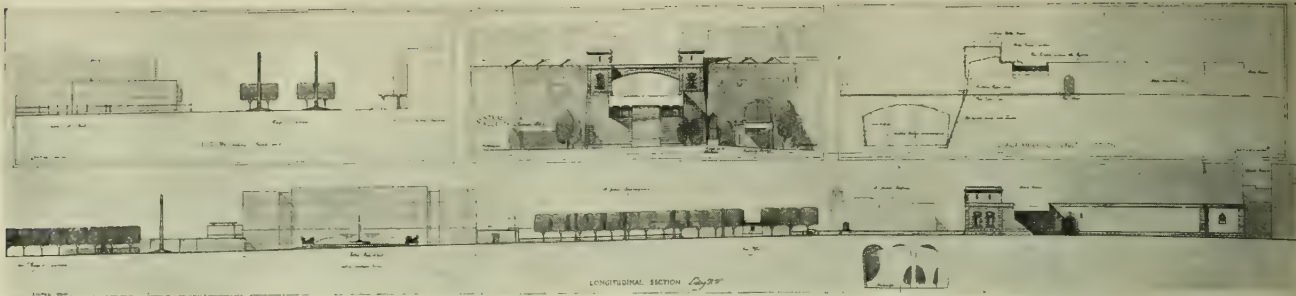
IMPROVEMENTS TO PORTA REALE AND LAY-OUT OF APPROACHES.



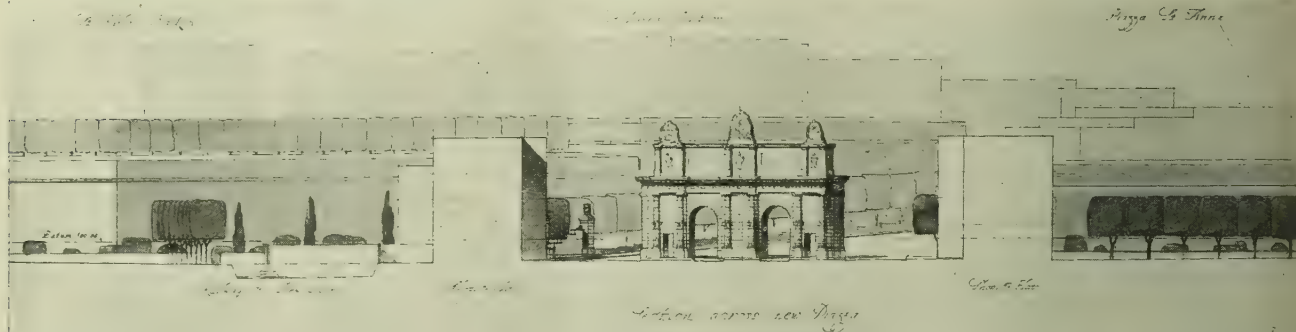
PRESERVATION OF PORTES DES BOMBES AND FORMATION OF A NEW PIAZZA.

Competition for Development of Lands and Fortifications, Valetta and Floriana, Malta : Winning Design.

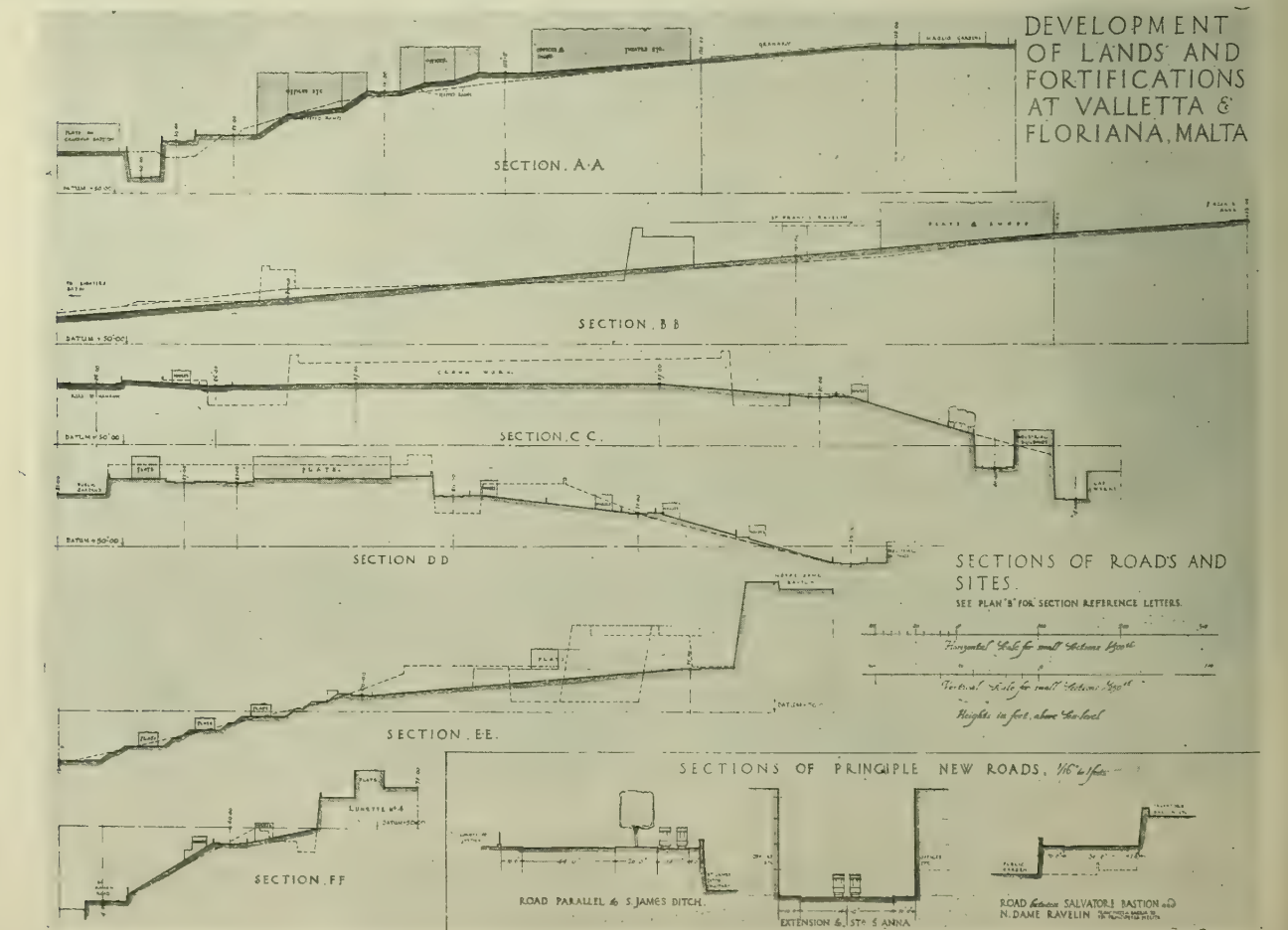
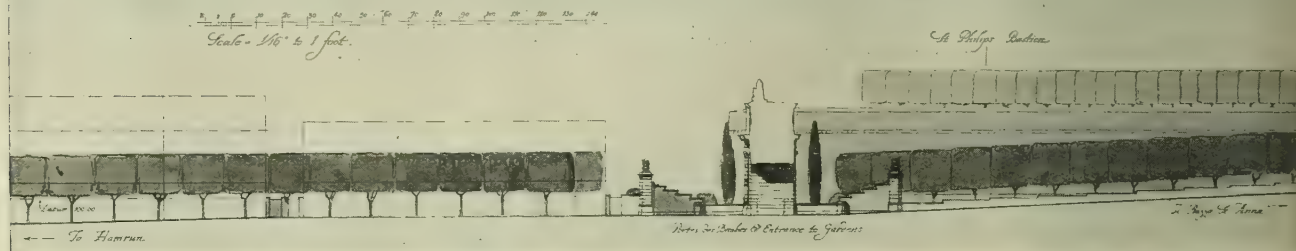
By MESSRS. JAMES BURFORD, A.R.I.B.A., & S. ROWLAND PIERCE.



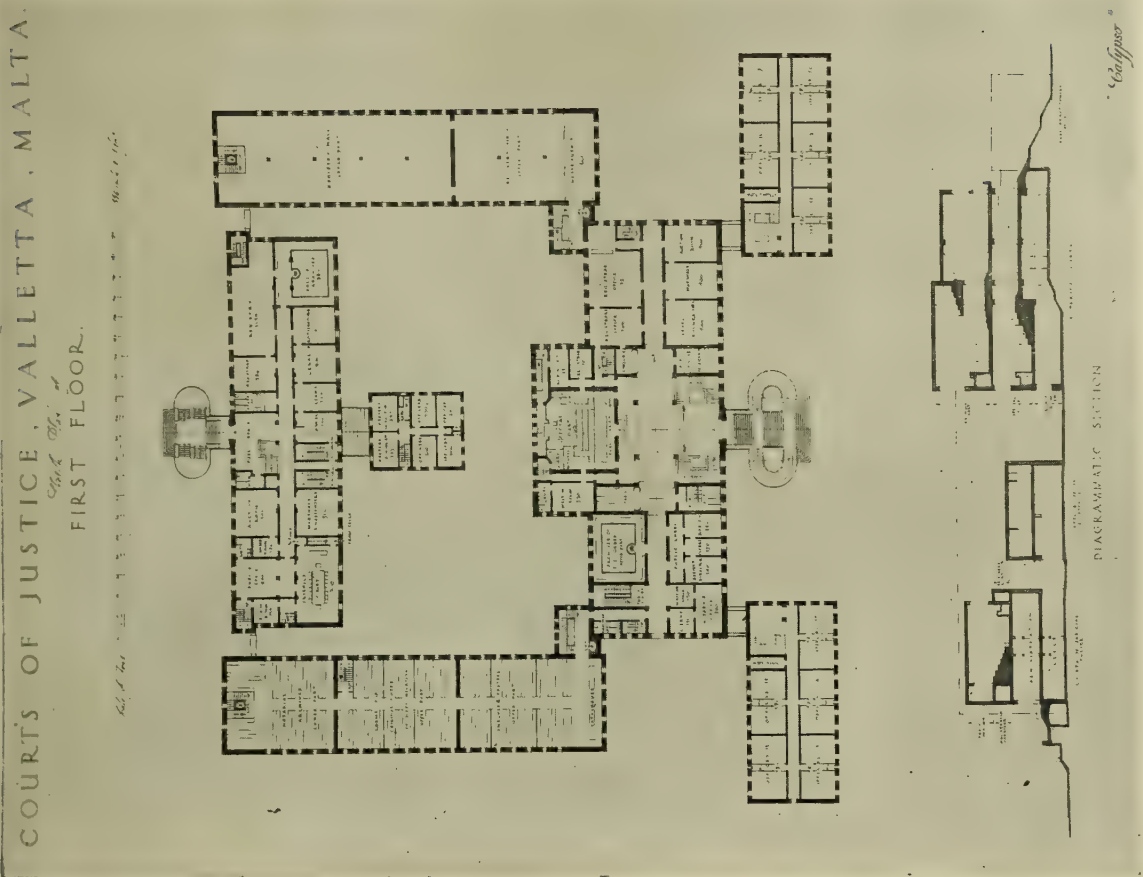
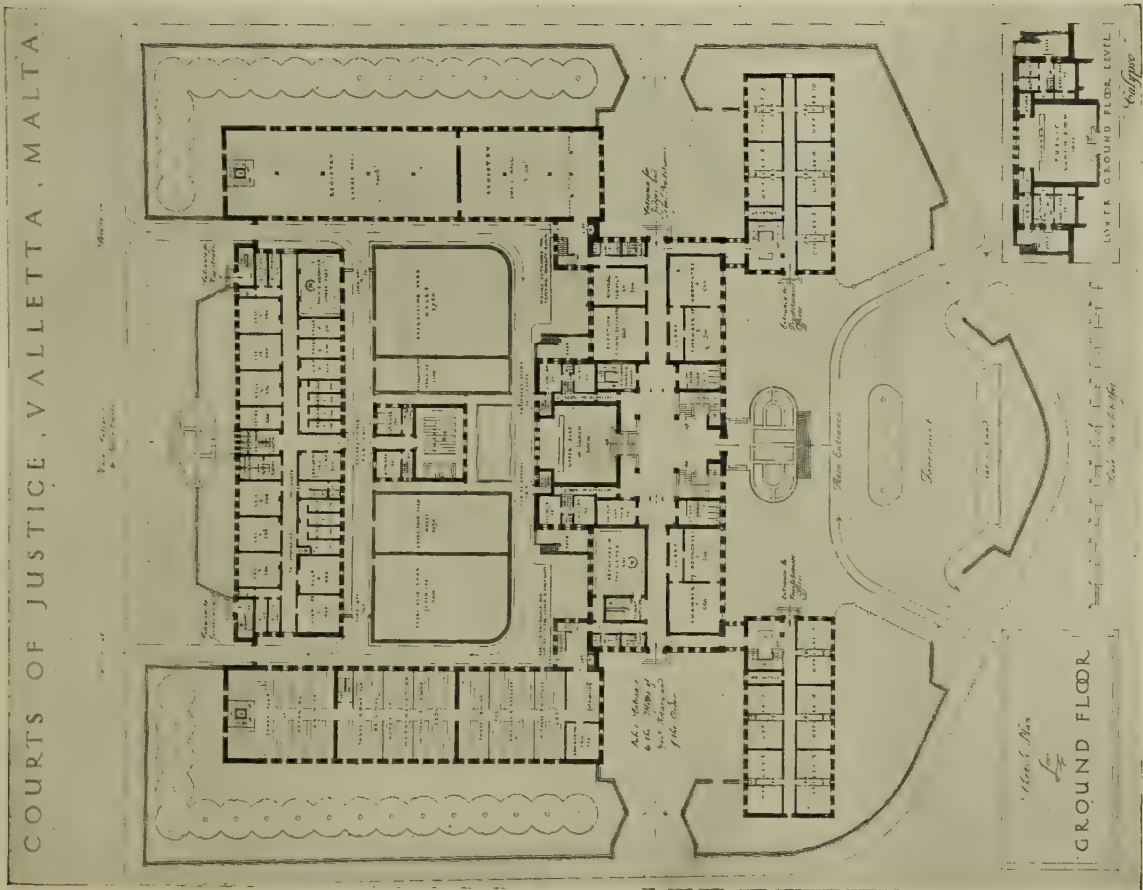
IMPROVEMENTS TO PORTA REALE AND LAY-OUT OF APPROACHES.



LAY-OUT IN CONNECTION WITH PORTES DES BOMBES.

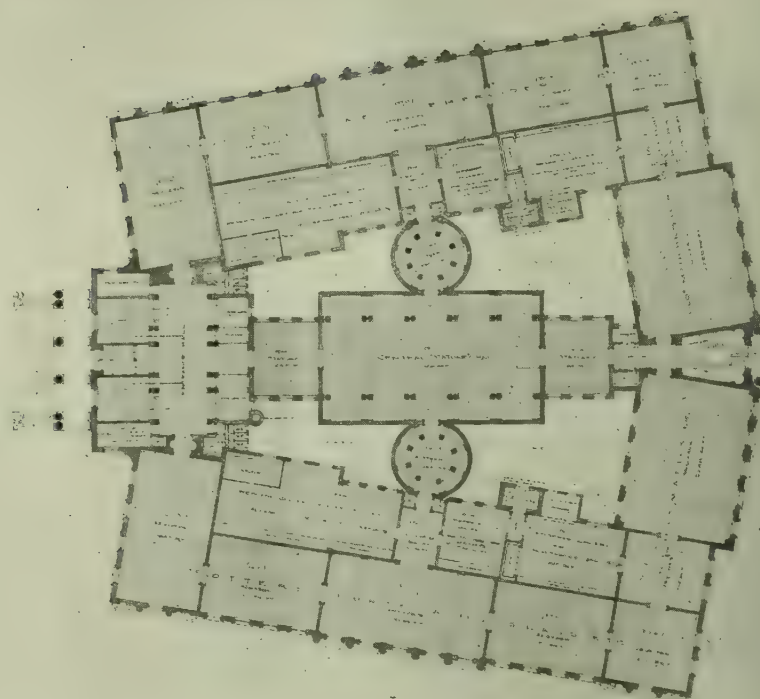


Competition for Development of Lands and Fortifications, Valetta and Floriana, Malta : Winning Design.
By MESSRS. JAMES BURFORD, A.R.I.B.A., & S. ROWLAND PIERCE.



Competition for Development of Lands and Fortifications, Valetta and Floriana, Malta : Plans of Courts of Justice, Winning Design.

By MESSRS. JAMES BURFORD, A.R.I.B.A., & S. ROWLAND PIERCE.



FLOOR PLAN



BASEMENT PLAN

Manchester Art Gallery Competition: Fourth Premiated Design.

BY MESSRS. W. WARMAN & W. G. SINNING.

THE TOUCHSTONE OF ARCHITECTURE*

UNDER this title Sir Reginald Blomfield has collected eleven of his addresses and essays on architecture and kindred subjects. Some of the addresses to various societies date back to 1912, and the fact that they read as well to-day is a sure indication that the ideas expressed are not ephemeral, but are the result of a clear and carefully-balanced judgment. From a literary point of view we personally prefer the pure essay, as literature, to the address as it appears in book form. That these addresses stand the test as well as they do is a tribute to the author's fine literary craftsmanship, and with the exception, perhaps, of some of the Earl of Oxford and Asquith's addresses, we can think of no contemporary writer whose addresses read better than these in this collection.

The first two addresses deal with art training and teaching in relation to the artist, the amateur, the craftsman, or the State, and some interesting issues are raised. The Royal Institute address on "Famous Men" deserves to be recorded here in permanent form, and the address on "The Outlook of Architecture" revives our memories of the friendly strife carried on between the author and that clever critic, the late Mr. March Phillipps. An interesting point to us is the suggestion that "the rise of Gothic architecture is a tremendous example of atavism, a throwback," but we are not certain about this, taken in conjunction with an earlier suggestion that "Romanesque architecture was the last thin echo of the classical tradition, rather than the voice before the dawn of mediæval art." If there is a connection between Classical and Romanesque architecture we had always assumed (carelessly, perhaps) that the connection between Romanesque and Gothic architecture was accepted as being a fairly logical development. The whole theory of atavism in art is intensely interesting, particularly to those in search of origins to support or justify an architectural credo. Surely nothing finer has been written in the way of art criticism—particularly criticism of painting—than that contained in "The Tangled Skein." Sandwiched amongst the addresses are essays on Greek architecture, and Christopher Wren. They are fine examples of the carefully-prepared written essay, and undoubtedly they will remain as distinct contributions to the literature of architecture.

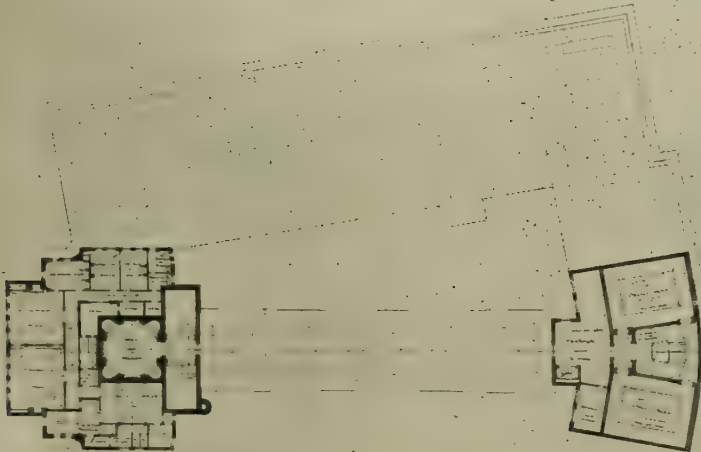
The development of Greek architecture, and an examination of the spirit underlying it, are carefully analysed. We confess we have the feeling that the aim and outlook of the Greeks was limited; that the vocabulary or language was limited; and that the manifestations of life to be interpreted into architecture were limited. Perfection of beauty was there undoubtedly, but we feel we would like to hear from the author how the Greeks would have interpreted our complicated form of civilisation, or, failing that, how we ought to interpret our inheritance from the Greeks. Abstract beauty, the æsthetic appeal, the utilitarian appeal, and the purely utilitarian appeal, are idioms of expression, but super-cinemas designed in Neo-Grec meet us everywhere. In fairness it ought to be said that some of the questions relating to technique and abstract beauty reveal themselves in the subsequent essay on Wren. Very rightly, we think, the significant fact has been stressed that Wren did not receive any specific training in architecture, yet we fully share the belief that Wren was, "on the whole, the greatest architect known to history." The sound, balanced judgment and resource of Wren, despite the faultiness of his architectural technique, leads to some interesting conclusions by the author upon the training of architects and the importance of general education in relation to specialised training.

"The Touchstone of Architecture" covers a wide range of subjects which have all been approached from the point of view of architecture, and within the reasonable bounds of a book review we can only indicate the range and scope of a very excellent book, and a welcome addition to the literature of architecture.

* By Sir Reginald Blomfield, R.A., M.A. (Oxford University Press.) Price 7s. 6d. net.



FIRST FLOOR PLAN



SECOND FLOOR PLAN

Manchester Art Gallery Competition : Fourth Premiated Design.

By MISSRS. W. WARMAN & W. G. SINNING.

PHILIP WEBB AND HIS WORK—VIII

By W. R. LETHABY.

VIII.—WEBB AND OUR HISTORIC MONUMENTS.

It is sad to think that our children's children will not be able to see a single genuine ancient building in Europe.—W. Morris, 1878.

In 1845 Ruskin, aged 26, wrote from Pisa to his father: "The wretches have put scaffolding up round the Baptistry, and are putting modern work of the coarsest kind instead of the old decayed marble. I do believe I shall live to see the ruin of everything good and great in the world, and have nothing left to hope for but the fires of judgment to shrivel up the cursed idiocy of mankind." In 1848, writing from Abbeville: "... All the houses more fantastic, more exquisite than ever; alas! not all, for there is not a street without fatal marks of restoration. . . . I seem born to mourn over what I cannot save." Again in 1848-9 he wrote in *Seven Lamps*: "Do not let us talk of restoration. The thing is a lie from beginning to end."*

Ruskin's understanding of what was implied by the word restoration passed with the *Seven Lamps* to Morris, who in 1855, writing of a visit to Ely, says: "It is so horribly spoilt with well-meant restorations, as they facetiously call them." In the same year, writing from France describing the church of Dreux, he tells of "a transept very elaborately carved once, now very forlorn and battered, but *Deo gratias* not yet restored" (Mackail, I., p. 75). Morris said of the cathedral of Amiens that it was not only the most beautiful, but "the kindest and most loving of all buildings"; of Rouen he recalled "what a wonder of glory that was to me when I first came upon the front of the cathedral rising above the flower market." No other man ever loved old buildings as Ruskin and Morris did—except Webb.

Our fathers have laboured, and we have entered into their labours to alter and destroy. The churches where the forefathers of the villages sleep have been made smart with flashy brass, glass and tiles, and our cathedrals have been bedizened. Loyalty to the ancient things of the land became part of Webb's central soul-self—his religion.

Probably without a drawing oneself up to think, "it might be so"; it will be impossible to imagine this deep reverence for building as a primary art and near necessity of life. An old house or church is a human nest built with hearts even more than hands—the hearts of ancient men in the land. The destruction of a living building was a sort of murder. "You see, it's my grandmother," Webb would say. The operations of restorers he once called "ruthless refinements of cruelty by make-believers." Architecture was a folk art, having a common tradition behind individual whims and wills, and shaped by the very nature of things—a revelation of humanity.

It was not only the cathedrals and great things which Webb revered: the unconscious folk art of the land touched him even more. Of a Sussex church he notes: "Saw the old church had been a magnificent one of the homely kind; interesting beyond expression, but bedevilled in purely unconscious devilry."

If England were a little land, and its treasure of old buildings limited, every loss involved the writing off of a percentage from the stock. This yearly destruction of a diminished store cannot long go on. When Webb first looked round, the proportion of old buildings to new was probably something like 90 per cent.; now the proportion must be the other way about.

Beyond the downright loss by destruction a

* In January, 1855, the President of the Society of Antiquaries referred to some proposals which Mr. Ruskin had made to the Society to establish a committee for the preservation of ancient monuments. He was prepared, under conditions, to subscribe £25 a year.

specially specious attack labelled "Restoration" was in his time developed and worked up to fury. By this means an old building could be tricked out to appear like a new thing provided by contract from the best London shops—a Saxon or Norman church might be made to look as if it had been gone over by machinery, and the people loved to have it so.

It is impossible to give any notion of the violence and stupidities which were done in the name of "restoration." The crude idea seems to have been born of the root absurdity that art was shape and not substance; our ancient buildings were appearances of what was called "style." When the architect had learned what his text books taught of the styles he could then provide thirteenth- or fourteenth-century "features" at pleasure, and even correct the authentic old ones. Professional reports would run: "The Tudor roof is incongruous with the Early English chancel arch, and it should be replaced by a thirteenth-century roof of steep pitch." At Canterbury a wonderful twelfth-century tower was destroyed to put in its place a nineteenth-century "fifteenth-century" erection. At St. Albans eleventh-century and fifteenth-century work were both destroyed to satisfy the whims of a lawyer-lord. It never struck any one that antiquity is being old. The beautiful word "Restoration" covered all up, and it must be confessed that we find we can do much the same things under the titles of repair or improvement.

The bandying of catchwords seems to have prevented the experts from seeing that a name was not the same as a thing, that you could not have an ancient building put up to-morrow, that age and authenticity are essentials of historical art, and that weathering and the evidence of age are necessary for our reverence. What we call a pyramid might be built at any time, but it would not be the Pyramid. What architects still to-day go on calling a "Gothic window" can be supplied by any stonemason, only it is not Gothic.

A practice of producing professional office-made versions of the art of any century which passed as the art itself was at full blast when the much-hated, much-revered Society for the Protection of Ancient Buildings was founded by Morris, Webb and Faulkner.

The formation of a society to oppose the thoughtless destruction of our antiquities seems to have occurred to Morris in 1876—that is exactly fifty years ago—and it was actually founded in April, 1877. In his account of the Society, Dr. Mackail quotes the greater part of the preliminary statement issued by the Society; the rest is given here.† "It is said

† The whole is printed in the Annual Report, 1917, with a valuable index of the buildings considered by the Society.

to say that in this manner most of the bigger Minsters, and a vast number of more humble buildings, both in England and on the Continent, have been dealt with, by men of talent often, and worthy of better employment, but deaf to the claims of poetry and history in the highest sense of the words. For what is left we plead before our architects themselves before the official guardians of buildings, and before the public generally, and we pray them to remember how much is gone of the religion, thought, and manners of time past, never by almost universal consent to be restored; and to consider whether it be possible to restore to those buildings the living spirit, which, it cannot be too often repeated, was an inseparable part of that religion and thought, and those past manners."

The first annual meeting was held June 21, 1878. Among the original members of the large committee were Carlyle, Ruskin, James Bryce, Sir John Lubbock, Lord Houghton, Aldis Wright, Leslie Stephen, Mark Pattison, Coventry Patmore, Ingram Bywater, Charles Keene, Holman Hunt, Burce-Jones. Two members at least, Mr. F. A. White and Mr. J. P. Heseltine, still remember these far-off days. The nucleus of the Society was formed by Morris, Webb and Faulkner; the committee meetings were for some time held in the Oxford-street showroom. Mr. White remembers this, and that he was rather frightened of Morris. Morris was the sole secretary for a year or so, and the address of the Society was at the works, 26, Queen's-square. Webb, as a trained architect with a special turn for the details of building procedure, necessarily did much to shape the Society. "That the Society has become established is largely due to Webb's pioneer inflexibility."

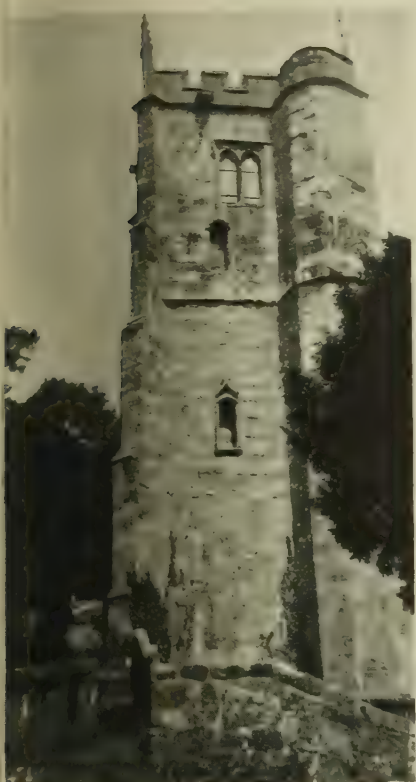
A few sentences may be quoted from the first annual report, which was certainly written by Morris, the originator and secretary of the Society. "The Committee cannot but regret, considering how widely-spread and rapid has been the destruction and falsification of our ancient monuments during the last twenty years, that some such society as this was not long ago called into existence; a society with the principal aim of guarding the life and soul of these monuments, so to speak, and not their bodies merely; a society that might have impressed upon the public the duty of preserving jealously the very gifts that our forefathers left us, and not merely their sites and names. . . ."

A letter received from Mr. Thomas Carlyle which was read at the meeting will be quoted here for its own sake and because it applies to the same violence towards our City churches of which we hear to-day.

"I can have but little hope that any word of mine can help you in your good work of trying to save the Wren churches in the City from destruction; but my clear feeling is, that it would be a sordid, nay, sinful, piece of barbarism to do other than religiously preserve



Forthampton, near Tewkesbury.



Tower of East Knoyle Church.

style, the growth of our own times, but connected with all history. . . . I believe that then the little grey, weather-beaten building, built by ignorant men, torn by violent ones, patched by blunderers, that has outlived so many hopes and fears, of mankind and yet looks friendly and familiar to them—I believe that they will honour it the more for the many minds and hands of men that have dealt with it, and they will religiously guard it as a holy symbol of all the triumphs and tribulations of art—of art, the constant companion and expression of the life and inspiration of the world."

Mr. Thackeray Turner, the second secretary, answers an inquiry for memories of the early days of the Society: "Turning my thoughts to the S.P.A.B., the first thing that impresses me is the regularity of Webb's and William Morris's attendance. One thing I noticed was that Webb never questioned anything said by Morris; whereas Morris would question Webb's views. When Morris was present it was always he who first spoke about a case and proposed what we should do, but when he was not there Webb took this position. On one occasion, disagreeing with what he wanted to do, the discussion was put off till the next meeting, when Morris was present. When he had heard both sides he said he considered I was right. The next morning Webb walks into the office and said: "You were quite right in disagreeing and in upholding your own views." He, a busy man, had left his work and come all the way down from Gray's Inn to Buckingham-street to do what most men would say was a distasteful thing. I think it impressed me more than any of his acts, although it seemed to me a very great kindness, the way in which he constantly came to see me when I was ill in St. Thomas's Hospital. I suppose few men had a kinder heart than Philip Webb. George Wardle was a very regular attendant at the committee meetings. Webb seldom visited buildings for the Society, but he showed keen interest in my notes." Mr. Turner adds: "I used to show him my designs and call upon him, when we had most interesting talks about building materials and construction. His knowledge on these subjects was wonderful."

Morris, in the early years, visited buildings for the Society—which perhaps was hardly tactful! At one cathedral, on having some commercial work of stalls shown to him, in pride he burst out: "Why, I could carve them better with my teeth." A Canon of . . . on pointing out 'improvements' he wanted in the Cathedral, was answered: "The place is not good enough for you." After a painful visit to . . . Church, which was being skinned alive, he rushed to the window of the inn shaking his fist as the parson passed by.

Webb, too, felt the wrong of it all, and in a letter before me, written after his retirement, he speaks of the ruthlessness of but a small part of the English folk deciding on what the mass of the people are to lose. . . . "It is monstrous to take away their birthright of beauty without so much as the 'by your leave' of the railway porter." Morris wrote in 1881: "As to Anti-Scrape I have little comfort . . . the destruction is not far from being complete already. . . . Certainly to take the trouble it is needful that a man should be touched with a real love of the earth—a worship of it—no less."

In 1889 Webb wrote to Sir Hugh Bell in regard to a question concerning the 'restoration' of York Minster. . . . "Hundreds of thousands of pounds have been expended on the Cathedrals, the full half of which money has been mischievously used . . . in applying incongruous decoration, wholly unfitted to the grave and wonderfully beautiful remains of our dignified art, when the fabrics called for the application of the whole of the money. . . . It is but little understood amongst architects how serious a matter it is merely to repair and solidify an ancient building, which so often is just in a state of equilibrium in

many of its parts, and requiring attentive watching as each stone is lifted or additional weight laid on. . . . It should never be forgotten that dealing with an ancient structure, in the way of sustaining and repairing it is a wholly different matter to building a new one: 'new wine put into old bottles' is a faithful warning."

On a discussion with an architect in regard to putting new figures in old niches, he wrote:

" . . . The other item in your letter is a serious one, and I am considerably disappointed, there is no doubt about that; for it seems to me to be not so much a difference of opinion which we can allow for, as loose reasoning on your part, and the flower-pot illustration is not illustrious. However, if you will nail your colours to the mast we must grin and bear it without malice and go a tip-toe over the pimples. . . . Forgive me for this grumbling, but rage must rule me.—Yours truly though grimly, " PHILIP WEBB."

" To the Committee of the Ruskin Memorial (Westminster Abbey) Fund.

" Gentlemen,—On first learning that a proposal would be made to place a memorial in the Abbey Church of Westminster of John Ruskin the suggestion seemed to me as of the mere restlessness of rather thoughtless people, and that it would surely die away from want of the consent of those most intimate with the life-long efforts of one of England's most faithful teachers. Not only did he show the way with unequalled literary force how ancient buildings should be guarded from mutilation and unseemly addition, but he was in close touch with other able men who also denounced the modern practice of so using such relics set up when the arts were part and parcel of the sincerity in the outward expression of religion. William Morris, who with equal knowledge laid bare the falsity with which works of ancient art were being defaced from ignorance of their inestimable value, spent a large part of his life striving to stay the ever-growing mischief of such processes of degradation as that of loading the surface of their incomparable walls with the incongruities of this age. It would be quite contrary to all I have gathered from the teaching of such men to in any way allow that my name should be used in furtherance of such a scheme as that put before me. We can in no way add honour to the name of John Ruskin, but surely we may avoid as far as possible the lowering of our own in the eyes of our descendants. It is with regret that necessity forces me to write in this way in answer to your appeal, but personal regard for members of your committee would be no excuse for my hesitation at such a moment."

Webb wrote several reports on old buildings for the Society. Among his papers are some notes on those along the Thames, which make part of the background of Morris's "News from Nowhere," and these may be quoted here as suggesting what the two friends saw in the humbler old buildings of England.*

" Great Coxwell Barn, Berkshire," said by J. H. Parker in his "Architectural Topography of England" to be 'Decorated,' but possibly of the end of the thirteenth century. In Murray's Handbook (1860) it is said to measure 148 by 40 ft., with walls 4 ft. thick. W. M. held that the barn was attached to Faringdon Abbey. This noble barn had great hold on W. M.'s imagination. Before I had seen it, and having seen many mediæval barns, I laughingly scorned his determination that it was the most wonderfully beautiful example in England. When at last he exultingly carried me to it (almost tremblingly for fear of my judgment) I was obliged to agree with him that it was unapproachable in its dignity. I clearly understood in this case as in others that his insight and judgment were unfailingly right. The barn surely touched him in this way: one turned up a narrow lane off the high

* Part of these notes printed in Morris's life are here omitted.

these churches as precious heirlooms; many of them specimens of noble architecture, the like of which we have no prospect of ever being able to produce in England again." The report proceeded, commenting on this letter:

"We do find it strange indeed that the richest country and city in the world grudges to the arts the few feet of ground that these ancient monuments occupy. . . . These buildings are nearly all doomed, and are coming down, church after church. . . . We have met with a tendency to saddle on us an undue regard for certain forms of art. We desire to declare emphatically that the Society neither has the will nor the power to enter into any "battle of the styles," and it counts amongst its members persons of every shade of artistic opinion. Our enemies are the enemies of the works of all styles alike."

"In the past years protests have been written in about forty instances of contemplated restoration or destruction. Members of the Committee have reported after personal visits in many cases. The Committee has printed a form for giving a description of a church. By this means it hopes to get a complete list of unrestored churches. Mr. Coventry Patmore has suggested the publishing of a pamphlet to be made up from the materials so collected, and has offered £10 towards a fund for the purpose. The Committee has information of 749 quite unrestored churches in England and Wales." Of the churches in south-east England: "The county of Surrey has suffered most; Essex (a county of small churches) has perhaps suffered least; and Norfolk may be set beside it." A sub-committee met in October, 1878, to report on the best way of transacting the business of the Society. In November an office was engaged at 9, Buckingham-street, Strand, and Mr. T. Newman Marks became secretary for a few years.

In the subsequent Reports are several papers and speeches by Morris, and I must quote, from a speech of 1879, a passage on how any ancient building which survives present dangers may be regarded in a better future. "The workman of to-day is no artist; it is the hope of my life that this may one day be changed; that popular art may grow again in our midst; that we may have an architectural

road, when the ridge of the mighty roof (no exaggeration) rose foot by foot over the grassy bank till one got over the top of the knoll, when its whole impressiveness was clearly seen, so large in its lines as to make one draw breath sharply with wonder. There it was, dominating the farmhouse adjoining, and with nothing but the simple fields of Berkshire about them. Its magnitude, nice precision of building and dainty parts of pure architecture, all done in handsome freestone, made it as beautiful as a cathedral, but with no ostentation of building whatever: a perfectly suitable barn, and nothing else. The workmen who set it up did it well once and for all time, if only the modern British devil will but let it alone. If I saw what it all meant in the quiet Berkshire landscape and its clear history of the builders and their craft, how much more must he have seen into and round it? This building and all of its like, were infinite delight to him. The inside of the barn, with its forest of orderly-set oak timbers, answered perfectly to the outside. I need hardly say my sympathy disarmed him, and he never again twitted me with my scepticism. Perhaps I have said more than was necessary about the impression made on me, but it seemed—I knowing my man so well—it might throw some useful light on his aptitude in the clear perception of the essence of such things.*

"I was never inside the church, though I well remember W. M.'s amusement at the name on the brass. In Parker's topography (as aforesaid) there is the following notice of the brass in the church: "There are two brasses, *circa* 1500, one to William Morys somtym fermer of Cokyswell." Parker gives it in the modern form of black letter, but he does not mention what the other brass was, which is the way of these historians—they leave off when they should go on, and go on when they should leave off.

"New Bridge" over the Thames, between Kingstone Bagpuse on the Berkshire and Witney on the Oxfordshire side, and about half a mile south of Standlake. So far as my memory serves, I set the bridge down as being of the 13th century. Radcot bridge, higher up the river and carrying the Faringdon and Burford road (the place of the battle in 1387), with which I was more familiar, I thought was of the 14th century.

"As to my visit to 'Kelmscott' the first time, I find some difficulty in separating it from the many others. Of course, the house and surroundings came home to me at once, and doubtless in much the same way, allowing for the weaker vessel, as they did to W. M.

"There can be no doubt that the house and its surroundings, and the village and the characteristic parts of the two counties divided by the river, were a great gain to W. M. as a retiring place, in which he could gather himself together from the degrading external influences of modern life, for here the round of the day in each season was free from artificiality. . . .

"Each inevitable new element of change had tenfold brutal force in its vulgarisation from the collected purity and simplicity on which it was settling down. Even the little church, which should have been protected [if only] by neglect, suffered notwithstanding all his efforts under the torture of stupid mis-handling.

"Though necessarily in a feeble way to that in which it laid hold of W. M. when first alighting on this fragment of country the effect was the same in quality to me. No one sees more surely than I the great literary gain

to 'News from Nowhere' which could not have been written to its pitch of verity without the impressive reality of that piece of almost unsullied countryside on the banks of the Thames. To both of us the pulling down of the noisome chimney-stack over the water at Buscot, attached to the beet-sugar speculation there, gave great satisfaction, and we drank to a reformation of manners in the future. Alas! the drinking was not sufficient in quantity."

The order of the Committee meetings of the Society was, and is, to meet at 5 o'clock on Thursday afternoons and work through a series of 'cases in progress,' receiving reports of visits to buildings threatened or attacked, and deciding on further action. After a time it settled on one's mind that every day something was being subtracted from the limited stock of authentic historical buildings in England and that nothing much could be done. After the meetings, about 7 o'clock, a group consisting usually of Webb, frequently of Morris, and of some younger members, Walker, Cockerell, Gimson, and others, would go across the Strand to Gatti's for a simple meal, where we were welcomed by a kindly old waiter from Bellinzona whom we identified as "Ticino." Here talk flowed.

I will now try to set down the main points in the body of belief held by the S.P.A.B. as expounded by the founders.

Ancient works of art are valuable national possessions; they hold intellectual and spiritual values which are necessary to fine types of life. Old buildings are, as Morris said, "wonderful treasures all the more priceless in this age of the world, when the newly invented story of living history is the chief joy of so many lives." The England that we love is the England of old towns, tilled fields, little rivers, farms, churches and cottages. If by violently marring the fair country and vulgarising the shy old buildings we obtain so much less to love, what shall it profit? Without an England to love we cannot remain stout of heart and enduring. Civilisation cannot be had merely as a word—it rests on foundations.

To some minds antiquity itself has a claim on their reverence and the marks of age are guarantees of authenticity; when once assurance is gone an ancient work of art is practically destroyed. To paint and sell sham Raphaels is forgery, and it should be recognised that to design and execute sham parts of buildings in association with the real thing is a fraud. Where an ancient building has inferior or less ancient parts, such parts are at least older than anything we can order to be done, and they are little disturbing, for we easily recognise them for what they are. It is wise to carry all forward together; there is one beauty of homogeneity and another beauty of complex accretion. To maintain continuity is the only proper policy. A building ceases to be ancient in the degree in which it is renewed and additions are made to it. If, however, additions must (as we say) be made, they should be as unobtrusive as possible and frankly modern. Minor repairs which are workmanlike and obviously protective may almost give additional pleasure. The best repair is a sort of building surgery which aims at conservation. A building properly cared for will be all the more lovely because it bears the evidence that it is understood and valued. Such principles open up a whole new art of building conservation. A well-done unaffectedly modern piece of building cannot be offensive, and a study of old art should teach that every manner of building belonged to its own day only. Right understanding of the ancient would make us modern and produce a form of building art proper for to-day.

Such being the theory it was Webb's part to work out the practice of preservation, and this he did with ingenuity and infinite patience. When the effort is directed towards conservation much becomes immediately plain in underpinning weak walls, drawing away water, and the like. The main difficulty was how to deal with obviously weak and fractured walls

without pulling down and rebuilding. The Webb accomplished by mining into a patch of the wall on the inside and filling with strong new work, then by forming another hole next to the filled part the work could be extended by degrees in a band throughout a wall. In this way chains of blue brick in cement stonewas steel may be inserted into a shaky wall. Demonstrations were given of the admirable results to be obtained by frankly obvious supports, splittings, and neat-handed patchings. In dealing with superficial decay in stonework (and stone in smoky city atmosphere actually rots away), it was found that the application of coats of limewash was most effective in tending to heal the disease without injuring the surface. Even the broken colour 'striking through' the new skin after a week or two. It appears that in our damp, smoky atmosphere stone needs a protective surface, and limewashing has been customary from ancient times. Experiments with lime wash for this purpose were made at some repairs at Eltham Palace on the advice of the Society about thirty years ago.

The Society for many years had for secretaries Mr. Thackeray Turner, and in later days several younger architects came fully to know and to be able to apply Webb's ideas as to the repair of old structures, so that a body of tradition has been gathered which is comparable to expert practice in the care of old pictures. Indeed, Webb's method of interpinning may have been suggested to him by the practice of relining paintings.

Webb steadily attended the weekly meetings of the Society until he left London in 1900. This work became another of his loyalties, and nothing preventable was allowed to interfere with his presence. In the fifty years of his existence about a thousand buildings have been considered by the Society, many of them many times. Still the annual wastage is frightening. I remember Morris saying: "It looks as if they will see what we mean just as the last old building is destroyed." Yet it is all so plain, so needful.

ROYAL INSTITUTE OF BRITISH ARCHITECTS

The Soane Medallion and the Tite Prize : Final Competitions.

As the result of the preliminary competition for the Soane Medallion and the Tite Prize, the following have been selected to take part in the final competitions:—

The Soane Medallion.—Miss E. Scott, A.A.A.; Mr W. Percik, A.A.; Miss A. M. Hargrove, London University; Mr S. Lloyd-Thomson, London University Architectural Atelier; Mr A. D. Connell, London University Architectural Atelier; Mr T. Theo. Wills, Liverpool University; Mr H. L. Barton, Liverpool University; Mr Leslie R. Hiscock, A.A.

The Tite Prize.—Mr K. E. F. Gardiner, A.A.; Miss L. F. M. Payne, London University; Mr Robert G. Heal, Liverpool University; Mr E. F. Davies, Liverpool University; Mr A. Calvaley Cotton, Liverpool University; Mr E. B. Alexander, Manchester University; Mr G. Alan Burnett, Leeds School of Art; Mr J. Chippindale, Leeds School of Art; Mr J. Murray Ashford, Birmingham School of Architecture; Mr D. G. Walton, Birmingham School of Architecture; Mr S. H. Smith, Northern Polytechnic; Miss M. Harvey, Northern Polytechnic; Mr I. Schultz, Northern Polytechnic; Mr V. Banks.

Registration as Probationer R.I.B.A.

The Board of Architectural Education calls special attention to the fact that, except in very special cases a Headmaster's Certificate will not be accepted after October 1, 1925, and no one will be registered as a probationer of the R.I.B.A. unless that person has passed one of the recognised examinations in the required subjects. A list of the examinations recognised may be obtained free at the R.I.B.A.

* The Barn has long been famous as is shown in some verses by T. Baskerville in a topographical MS. at the British Museum, c. 1681:—

And here's a Barn built brave and high
So big and great it doth appear,
Scarce a bigger in any Shire,
Excepting Cholswell mighty hulk
May be said to be the bigger bulk,
The Barn for length is little less
Than 63 yards I guess,
With pillars and rafters all of main tree,
No saw touched them as you may see.

THE WEEK IN PARLIAMENT

WESTMINSTER, Wednesday.

Houses Built.

Mr. N. Chamberlain informed Mr. Lansbury that the numbers of houses completed since the Armistice up to July 1 under the various subsidy schemes were as follows:—

1. Housing, Town-planning, etc., Act, 1919, and Housing (Additional Powers) Act, 1919:	
(a) By local authorities and public utility societies	172,794
(b) By private builders	39,186
2. Housing, etc., Act, 1923:	
(a) By local authorities	23,943
(b) By private enterprise	65,484
3. Housing (Financial Provisions) Act, 1924:	
(a) By local authorities	6,246
(b) By private enterprise	36
Total	307,689

The numbers of houses completed under the Act of 1923 since the date of the passing of the Act of 1924 are as follows:—

(a) Local authorities' schemes	16,380
(b) Private enterprise schemes	51,095
Total	67,475

Information was not available as to the rateable value of these houses.

With regard to houses erected by private enterprise without subsidy, returns were obtained half-yearly to March and September, and figures were only available for the past 2½ years. During that period the following houses had been entered on the rate books:—

*Not exceeding £26 rateable value... ..	117,587
*Exceeding £26 but not £52 rateable value... ..	37,934
*Exceeding £52 but not £78 rateable value... ..	5,045
Total	160,566

*Read £35, £35-£70, and £70-£105 for London.

The 1923 and 1924 Acts.

Mr. N. Chamberlain informed Mr. T. Thomson that on July 1, the numbers of houses completed under the Housing Act of 1923 were 23,943 by local authorities and 65,484 by private enterprise. The corresponding figures under the Act of 1924 were 6,246 and 36 respectively. The numbers of houses in course of construction under the Housing Act of 1923 were 11,214 by local authorities and 31,593 by private enterprise. The corresponding figures under the Act of 1924 were 19,196 and 227 respectively. The total number of houses authorised under the Housing Acts of 1923 and 1924 were 219,651 and 68,681 respectively.

Wooden Houses.

Mr. N. Chamberlain informed Mr. Lougher that he had no exact record showing the number of local authorities who were actually building wooden houses. In a case which had recently been before him the houses were of the non-parlour type with three bedrooms, costing about £450, and he was advised that the form of construction was satisfactory.

Building Trade Unemployed.

Mr. Betterton, Parliamentary Secretary to the Ministry of Labour, informed Mr. H. Williams that on June 22 the number of building trade labourers whose unemployment books were lodged at Employment Exchanges in Great Britain was 20,435.

The Surveyors' Institution.

Mr. H. M. Stanley, of Messrs. St. Quintin, Son, & Stanley, has been elected a member of Council of the Surveyors' Institution, in place of the late Mr. Stanley Hicks.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting!—Ed.

Increase in Price of Building.

SIR,—A new building is nearing completion, and the contractor refuses to proceed with a certain variation unless the price of an item in the bills of quantities, which he considers is priced at a low rate, is increased for the additional work necessitated by variations. The R.I.B.A. form of contract with quantities was employed. Is the contractor bound to carry out the variation at contract rates? And in the event of his refusal to do so, can another contractor be employed to do the work and the cost recovered from the original contractor?

LONDON.

Parquetry Warping.

SIR,—In several cases I have noticed that parquetry becomes warped over heating pipe trenches. Can you tell me how best this may be avoided?

PERFECTO.

Hot-water System.

SIR,—In reply to this query, one could ask many questions before deciding on some points; but one can assume the household to be five persons and the height of building two stories. No. 1.—Two tanks are required, one for the cold supply to the independent boiler which should be 250 gallons at least, and another tank of like capacity for the cold services, and I suppose general purposes, as supplying w. w. preventers. No. 2 is partly answered above, and the height between tanks would be 6ft. above the tank supplying the water for the boiler for the cold services. No. 3.—The question is more or less governed by the amount of work the pump can do, and what is the draw of the pump decides where the well should be; the question of size and delivery of suction-pipe is also governed by the pump.

G. W. HARRIS.

Composition of Bronze.

SIR,—I should be glad to be informed what is the composition of modern bronze, and whether old bronze had any different composition, as there appears to be quite a difference in the texture of modern bronze, even when well weathered, and that of old bronzes.

ANTIQUARY.

Insect Nuisance.

[REPLY TO "ANXIOUS."]

SIR,—Formalin is recognised as the most successful destructor of insects of all varieties. If your correspondent would try first thoroughly fumigating the rooms with the strongest formalin fumes, the rooms being thoroughly sealed up during the process, and when opened spray all mouldings and skirtings, I feel sure that he will have greater success. It is very wise to have the rooms re-decorated, and to mix formalin with the distemper on walls and ceilings in the proportion of about 1 in 25. This will preserve the effect for a sufficient period to sicken all insects of their desire to make a home in the neighbourhood. Spraying is not sufficiently drastic in itself, and it leaves many places of refuge unaffected. Fuming can penetrate anywhere where the air can penetrate.

KILLUM.

Velocity of Flow of Drains.

SIR,—Can you tell me of any formula by which the velocity of flow of sewage in any drain can be calculated from the size and fall of the piping?

DESIGNER.

THE RATING AND ASSESSMENT BILL

THE Rating and Assessment Bill is still passing through a moulting season. When the Committee resumed its sittings on July 21 the Minister of Health announced that in view of the shortness of the time available the Government had decided not to proceed with that part of the Bill which dealt with the "Valuation of Railways and Special Properties," but that that portion of the Bill would subsequently be introduced as a separate Bill. This resolution involved the withdrawal of eleven clauses, clause 36 to 46 inclusive. Then as regards clause 57, which applies to London subject to certain modifications the Minister announced that certain changes already made in the Bill had rendered this clause inadequate, and therefore a new clause would be introduced at once which should be so drafted as to provide that the Bill should only apply to London on certain specified points. The Committee then, as reported, appear to have turned to clause 50, "Power of Assessment Committee to require returns," clause 40 in the "draft Bill," and drawn in the same terms except for the omission of the words "or reputed owner, lessee or occupier."

An amendment was introduced into this clause giving the person served with a notice 21 days in which to send the required returns, instead of only 14 days as in the Bill.

At the sitting on July 22, apparently in connection with clause 52 (clause 42 in the "draft Bill" but slightly different), relating to "Evidence of Lists," a new clause was moved by the Member for Newcastle-under-Lyme requiring that a valuation list for the time being in force should be taken as conclusive evidence as to the gross value for compensation whenever any hereditament is acquired compulsorily for public purposes or under Parliamentary powers by any statutory company, but this was ruled outside the scope of the Bill apparently on the obvious ground that rating and taxation are one thing and compensation for compulsory acquisition is entirely different and quite another thing.

A Government amendment was added to the Bill requiring (the report in *The Times* uses the word "requesting") any county valuation committee, assessment committee, or rating authority to obtain from the surveyor of taxes a copy of the annual values for the purposes of income-tax.

Clause 59 in the Bill, "Compensation to existing officers," was the subject of discussion, many amendments being moved; but it was carried unamended; and to clause 63 an amendment was moved to sub-section (4) which allows members of assessment committees travelling and subsistence expenses incurred in attending conferences held by county valuation committees, to include payment for loss of time for ordinary employment. From the discussion as reported it appears that by this was meant to those in receipt of wages; but it is unnecessary to discuss this as the amendment was defeated, but a Government amendment granting some expenses to all members of the valuation committee was carried. The report available does not state the character of those expenses, but presumably they were travelling and maintenance expenses. At the termination of the proceedings for the week clauses up to clause 66 had been considered. This is certainly not a Bill to be rushed through in a hurry, and it would, in our opinion, have been far more satisfactory if this legislation had been deferred until more Parliamentary time was available, and it could have been considered by a Committee of the whole House. The highly controversial character of the legislation is shown by the losses it has sustained, to use a military metaphor, not in a general engagement in the field but in outpost skirmishes.

THE BUILDING TRADE.

SOME OBSERVATIONS ON THE RIGHT TO LIGHT AND THE LAW RELATING THERETO.—XIV

EVIDENCES OF OBSTRUCTION.

In our sixth article we mentioned that in *Colls v. Home and Colonial Stores* (1904 A.C. 179) it had been laid down by some of the Law Lords that the test of 45 degrees of light being left was not the absolute test as to whether an obstruction would create an actionable nuisance (see per Lord Davey), although as was laid down by Lord Selbourne in *City of London Brewery v. Tennant* (1873 9 App. Cas. 212), it may properly be used as *prima facie* evidence. This rule has been applied in certain building Acts, for instance, in the Metropolis Management Amendment Act, 1862, but in cases turning on prescriptive right it has no hard and fast application, and in former articles we have explained what is the test now applied. In this connection, however, we may refer to a very recent case, *Semon (Charles) & Company, Ltd., v. Bradford Corporation* (1922, 2 Ch. 737; *The Builder*, June 23, 1922), a case we noted in our second article on the question of a claim for an extraordinary amount of light for a special purpose, because evidence of an unusual and novel character was given in that case by Mr. P. J. Waldram, who recently read a paper on the Natural and Artificial Lighting of Buildings before the Royal Institute of British Architects, which was reported in our issue for April 24, 1924.

In that case the plaintiffs were owners of a warehouse in Bradford which was erected in 1876 by their predecessors in accordance with plans approved by the defendants. The plaintiffs, in their business of wool merchants, required a strong north light for examining and matching cloth, and it was established by the evidence that the building was exceptionally well lighted and that the plaintiffs had enjoyed free and uninterrupted access of light from the horizon to the B street front for more than twenty years before the issue of the writ. There were 36 windows on the several floors facing this street, which was forty-five feet wide. The defendants proposed erecting a building 73 ft. above the level of this street, and the plaintiffs complained that this would obstruct the light to 18 of their easternmost windows. The new building would be continuous with the plaintiff's premises for a distance of 21 ft. 9 in. along the street directly opposite the two most eastern windows on the ground and upper floors of the plaintiff's warehouse, and it was conceded by the defendants that some obstruction would result to four of these windows on the ground and first floors, and it was given in evidence that the direct light cut off would vary from 33 to 48 per cent. These four most easterly windows were the only windows dealt with in the judgment. The ground-floor windows had thick hammered glass in them, and all the windows had iron grilles. The learned Judge, in commenting on the evidence for the plaintiffs, is reported as having said it was based solely on the quantum of light intercepted, and no consideration was given to the light which survived. In our sixth article we showed that what has to be considered is whether the plaintiff has been deprived of so much light as to constitute an actionable nuisance, but that it is impossible not to consider how much light is left (see per Lord Lindley in *Colls v. Home and Colonial Stores*). The Court then observed that even if the plaintiffs had made out a *prima facie* case, it was rebutted by the evidence of the defendants, and the learned Judge referred to the evidence given by Mr. P. J. Waldram, who had stated that it had recently been established that the ratio of light at any given point in a room to the sill light was constant, the sill light being the light available at the outside sill of the window from an unob-

structed horizon, this percentage of light being termed "the daylight factor." He had stated that in the case of public elementary schools there was a consensus of expert opinion that in a room where young children worked if the worst-lighted desk received 1 per cent. of the sill light the room was adequately lighted. For adult clerical work a room was adequately lighted so long as the worst-lighted working point in the room did not fall below 0.4 per cent. of the sill light, the light being measured at 3 ft. above the floor. The Court then said that applying this test to the ground floor in question Mr. Waldram's evidence had been that if the defendant's building were erected as proposed, but ordinary glass was substituted for the hammered glass, the "daylight factor" would be 1.5 or 1.6 per cent., and the lighting of the ground floor would be distinctly above the average and quite adequate for the requirements of ordinary people carrying on a business of this kind; in fact, it would be an unusually well-lighted ground floor. As to the first floor, the "daylight factor" would at the worst-lighted point be 0.8 per cent., and at another point 1.54 per cent. On this evidence the Court held that the plaintiffs had not discharged the burden of establishing an actionable nuisance, as the warehouse would remain in the enjoyment of an unusually large amount of light having regard to its locality, which was in the centre of the business part of Bradford.

Expert Evidence.

In *Cheney v. Piccadilly Hotel Company* (*The Builder*, December 14, 1907) the Court commented upon what the Judge termed the elasticity of the opinion of experts under the strain of advocacy, and intimated that in cases of ordinary difficulty only one expert witness on each side would be allowed on taxation. We do not think this rule has been applied, and, as we have shown in the above case, the expert evidence was of great assistance to the Court, but the expense attending the trial of such questions is an important consideration, and the unrestrained calling of expert evidence may lead to the longest purse succeeding through the weight of expert evidence. *Semon v. Bradford Corporation* is reported as having occupied ten days in the hearing, and in this connection we may refer to some observations made by Lord Macnaghten in *Colls v. Home and Colonial Stores* (1904, A.C. 179), which were put forward by him as practical suggestions but not as made with authority. He observed that in the times when such cases were tried by jury, the jury sometimes viewed the premises, and he referred to *Back v. Stacey* (1826, 2 C. & P. 465), where the judge had instructed the jury they were to judge rather from their own ocular observation than from the testimony of any witnesses, however respectable, and he went on to say although a judge who exercises the functions of both judge and jury could not be expected to view the buildings himself, even if he considered himself an expert in such matters, it was surprising why the Court did not more frequently avail itself of the power it possessed of calling in a competent adviser to report upon the question to the Court.

Judges, of course, can view the premises or the place in question in any action, and have frequently done so in various matters the subject of litigation, or call in assessors as, for instance, in patent actions, but the above suggestion does not appear to have been acted upon, at any rate at all generally, and the assistance of the Court by assessors would not meet with the approval of parties, except, of course, in Admiralty cases, where the nautical assessors form part of the Court to advise the court

upon nautical questions, for in such cases as relate to Light parties in order to ascertain their own case have to take expert advice in the earliest stages and act entirely according to their experts' advice on the particular facts and they rely upon their experts to present these facts to the Court. The degree of obscurity is a question of fact in each case, not a scientific question or a nautical question on which the Court itself needs technical assistance, and the parties might as well select an experienced surveyor (the expert suggested by Lord Macnaghten) to act as arbitrator, as come before a court which would be assisted on a question of fact by an assessor.

The suggestion coming from such a source must be treated very seriously, but we imagine it has not been acted upon for the reasons we have stated above, for we think it would inevitably result in the parties ceasing to have access to the Courts and being driven to arbitration.

Evidence of Agreement.

Although the case really bears upon the enjoyment of Light under agreement, a subject we dealt with in our third article, we may refer to *Ruscoe v. Groundsell* (*The Builder*, November 7, 1903) here.

The appellant was the owner of two cottages with windows overlooking land of the respondent which until 1891 had been an open yard. In that year the respondent had erected a shed in the yard in close proximity to the appellant's windows, and the appellant had brought an action in respect of the obstruction to his light. The respondent as a defence pleaded that there was an agreement in writing which prevented the appellant acquiring a prescriptive right under section 3 of the Prescription Act. The agreement relied upon was a tablet in the respondent's wall inscribed "1816. This stone is placed by John Atkin to perpetuate John Musgrave's right to build within nine inches of this and any other building." The Court of first instance held that this constituted an agreement which prevented the appellant from acquiring a right to light, but the Court of Appeal reversed this judgment on the ground that the inscription on the tablet was not sufficiently explicit to constitute an "agreement expressly made or given for that purpose" under section 3. It might only refer to the boundary and not to a reservation of a right to light.

The fact that in this case the Court of first instance held this unsigned tablet a sufficient agreement, draws attention to the question whether such agreements must be signed. In our third article we drew attention to the case *Bewley (not Bowley as there printed) v. Atkinson* (1879, 13 Ch. Div. 283), where it was held signature by a person enjoying the light by virtue of the agreement was sufficient, and in *Easton v. Isted* (1903, 1 Ch. 405), where the agreement related to a skylight to what had originally been a conservatory, the consent contained in an agreement only signed by the person claiming the right was held a bar to his claim. There seems no direct decision on the point, but, as Mr. Coombe points out in his treatise on the "Law of Light," the words in section 3 "enjoyed by some consent or agreement expressly made or given for that purpose by deed or writing" seem to imply the formality of execution in the one case and signature in the other.

Housing Schemes and Compensation for Light Easement.

Lastly, we may note the case in *re Harvey and London County Council* (1909 1 Ch. 528), which was excluded from want of space from our observations under the heading of "damages."

In that case the London County Council had obtained a provisional order under the Housing of the Working Classes Act, 1890, which was confirmed under a special Act, authorising them to carry out an improvement scheme for

certain areas in their district. The scheme empowered them to acquire compulsorily certain lands, to pull down the buildings thereon and to erect new buildings on the site. In pursuance of this scheme the Council pulled down certain buildings in Leather-lane, Holborn, and erected new buildings. These new buildings abutted at one end on No. 49, which was not included in the scheme and which was in the occupation of a Mrs. Harvey, a yearly tenant, who carried on business there. No. 49 had ancient lights on the side and rear, which were interfered with by the new buildings. Mrs. Harvey served a notice on the Council alleging that they had taken a part of her premises and an easement of light appurtenant thereto, and claimed £1,350 for the damage she had sustained. The matter went to arbitration, and before the arbitrator evidence was tendered by the administratrix of Mrs. Harvey (she having died in the interval) to show that the lettable value of the premises for the purposes of her business had been depreciated, including the average annual profits from the business prior to 1906, this evidence being directed to showing that the trade and goodwill had been affected. This evidence was not admitted by the arbitrator, and on a special case stated, the Court held that the evidence tendered on behalf of the claimant was inadmissible, and that in determining the compensation to be paid by the Council for any loss sustained by reason of the provision of the Housing Act owing to the interference with the easement of light the arbitrator had rightly held that he could not take into consideration the loss of trade or diminution in value of the goodwill.

Change of Address.

The address of the Builders' Materials Central Committee is now 215, Upper Thames-street, London, E.C.4. Telephone, Central 7076.

Lifting a Big Roof.

An interesting feat of engineering has just been completed by Mr. S. E. Moss, of Southend-on-Sea, at the Isolation Hospital, Grove-road, Chadwell Heath. Mr. Moss contracted to remove a roof over the nurses' quarter, build the brickwork 3 ft. 6 in. higher, and refix the roof, which is 180 ft. long with a span of 31 ft., and weighs about 100 tons. He decided, however, to raise the roof intact. The whole operation of lifting was carried out in one week with the aid of seventy-two lifting jacks.

Trocoll Sports Club.

Messrs. Trollope & Colls, Ltd., held their third annual sports meeting on their sports ground at Grange-lane, Dulwich, on Saturday, July 25, when about one thousand employees and their friends attended. There were also present the directors of the firm, Mr. Wallace Elliot, Mr. A. B. H. Colls, Mr. C. J. Trollope, Mr. C. C. Trollope, Mr. Fabian Trollope, Mr. E. J. Brown (of the London Master Builders' Association), Mr. J. Murray (of the Building Operatives' Society), and Mr. J. H. Thomas, M.P. The prizes were presented by Mrs. A. B. H. Colls. The lay-out of the ground in connection with the meeting was under the supervision of Mr. Hurst (Works Manager at Camberwell), who was ably assisted by a band of voluntary workers composed of employees from Camberwell. The Trocoll Orchestral Band, under the direction of Mr. A. J. Houghton, played selections during the afternoon, and dance music in the evening. The sports programme included several field events and an open relay race between Messrs. A. Vigor, Ltd., J. Mowlem & Co., Ltd., F. G. Minter, Ltd., F. & H. F. Higgs, Ltd., Holland & Hannen and Cubitts, Ltd., and Trollope & Colls, Ltd. The Championship Cup, which was presented by Messrs. Nicholls & Clarke, Ltd., to commemorate their jubilee and the fact that Messrs. Colls & Son were their first customers, was won by R. J. Clarke, of Coleman-street Branch, with an aggregate of 10 points. Mr. C. J. Trollope officiated as starter, and Mr. J. W. Horswell (Camberwell) carried out the secretarial duties.

EDUCATION IN BUILDING

Board of Education Refresher Courses.

UNDER the ægis of the Board of Education, comprehensive refresher courses of instruction for teachers of building subjects have been recently held in London. The teachers, some ninety in number, came from all parts of the country. They were quartered at Westminster Training College, and were allowed maintenance by the Board of Education during a fortnight's instruction—from July 20 to August 1. The programme of arrangements was a very full one, embracing conferences, lectures, demonstrations, and practical work in the field. There was also an exhibition at Westminster Training College of reference and text-books relating to building and building crafts.

The courses were organised by Mr. Hugh Davies, H.M.I., and during the fortnight, the following lectures were given: "Building Design," by Mr. T. P. Bennett, F.R.I.B.A.; "Building Mathematics," by Mr. F. E. Drury, M.Sc.; "Building Construction," by Mr. W. R. Jaggard, F.R.I.B.A.; "Builders' Estimating," by Mr. J. R. Barns, F.I.O.B.; "Building Practice," by Mr. L. Allen-Gerrard, F.I.O.B.; "Building Geometry," by Mr. J. F. Dowsett; "Building Science," by Mr. F. E. Drury, M.Sc.; "Surveying and Levelling," by Mr. A. E. Holbrow, A.R.I.B.A.; "Science of Plumbing and Sanitation," by Mr. A. Everett, B.Sc.; "Painting and Decorating," by Mr. H. Davis Richter, R.I., and Mr. A. R. H. Jackson, A.R.C.A. (craft instructor, Mr. Leonard Drinkwater); "Plumbing in History," by Mr. Martin S. Briggs, H.M.I., F.R.I.B.A.; "The Use of the Lantern," by Mr. W. W. F. Pullen, H.M.I.; "The Preservation of Ancient Buildings," by Sir Frank Baines, C.V.O.; "The Government Programme of Building Research," by Dr. R. E. Stradling; "Laboratory Procedure," by Mr. W. W. F. Pullen, H.M.I. For teachers of building and plumbing a number of special lectures were arranged, including "The Relation Between Technical Teaching and Apprenticeship Training," by Mr. Reeves Charlesworth; "The Preparation of a Lecture," by Mr. H. Blackburn, B.Sc.; "Recent Developments in Hot Water Heating," by Mr. R. W. Cairns, M.R.San.I., and Mr. R. W. Rowell, M.R.San.I.; and "Laboratory Procedure," by Mr. W. W. F. Pullen, H.M.I. For teachers of painting and decorating a number of special arrangements were also made, including a lecture by Sir Lawrence Weaver, K.B.E.; "The Development of French Furniture of the Seventeenth and Eighteenth Centuries in its Relation to Adam Work in England," by Mr. H. P. Shapland, A.R.I.B.A.; "Wall Papers: Their History, Production, and Use in Decoration," by Mr. H. C. Dowling, F.R.S.A.; and "The Teaching of Lettering," by Mr. Will Mellor.

Among other arrangements were visits to junior technical schools in London, including the L.C.C. School of Building and the Northern Polytechnic. Visits were also paid to the British Oxygen Co.'s works at Wembley; to the Victoria and Albert Museum; to Messrs. Naylor Bros., paint and varnish manufacturers, Slough; to the British Empire Exhibition; to building works in London; and to the London County Hall. There was a demonstration of acetylene welding arranged by the British Acetylene and Welding Association, at the works of Messrs. Allen-Liversidge, Ltd., Poplar; a practical demonstration of "Copper Pipe Work," arranged by the Copper and Brass Extended Uses Council; and a special demonstration of the use of the Aerograph for spray painting in connection with plain and decorative work. There was also a conversation at the Painters' Hall (reported in our last issue); and, by invitation of the Board of Architectural Education of the R.I.B.A., a conference was held at 9, Conduit-street, when papers on "The Teaching of Building Construction" were read by Professor Beresford Pite, F.R.I.B.A., and Mr. Martin S. Briggs, H.M.I.,

F.R.I.B.A. Much of the necessary demonstration work in connection with the courses was carried out at the Regent-street Polytechnic, on account of its fine technical equipment. The survey work in the field was all done at Greenford Green, near Harrow, under the direction of Mr. A. E. Holbrow, A.R.I.B.A.

These courses of instruction form part of the progressive educational policy in relation to the building trade which is being carried out by the Board of Education. The teachers who take these courses are selected from recognised schools from all parts of the country. Not more than half the number attending recently were full-time teachers of building subjects. The advantages of these refresher courses are manifold. Men come from comparatively remote parts of the country, and for a fortnight have the advantage of hearing lectures by experts on all phases of building work, handle the latest technical equipment and apparatus, examine new materials, witness practical demonstrations of new processes, inspect important works in progress, exchange ideas with fellow teachers, and come into personal touch with some of the best brains of the building industry. The result is an all-round tuning-up of knowledge and of teaching technique which has beneficial reactions throughout the whole country. Even so, it is widely recognised that these courses are at best but an attempt to set our educational house in order. A high authority on technical education, in conversation with a representative of *The Builder* lately expressed the view that the time has come for a complete overhauling of our present methods of training men for the building trade. The apprenticeship system, he said, was perfectly adapted to mediæval conditions, but it was extremely doubtful whether it was equally well suited to modern industrial conditions and requirements. Owing to the growth of the financial type of building enterprise, controlled by men who had no real interest in building except a financial one, it was becoming very difficult for youths to acquire an intimate knowledge of and skill in their craft by the apprenticeship system alone. This criticism, of course, was quite a general one; it was fully realised that there are numbers of firms the heads of which are practical builders interested in building for its own sake, and not merely as a means of making money. For all that, our informant was convinced that the present system was too haphazard to be properly efficient. He pointed to the great number of small builders carrying on business all over the country, many of them quite inefficiently. He thought that the time was coming when numbers of such small men would have to amalgamate if they were to become efficient and provide a satisfactory training for building trade workers. As an instance of successful combination, he mentioned the case of the "Garsubil" (Garden Suburb Builders), who carry on widespread building operations on properly organised lines, and provide a completely efficient technical training for their workers. He believed that the only way to raise the standard of building craftsmanship was to develop a system of full-time courses of technical instruction in the schools. Those building firms which had sent their young employees to the schools had found that the policy amply repaid them, for such men showed a remarkable improvement in efficiency and in course of time became valuable members of the technical staff. The Board of Education, he believed, was doing the best that could be done under existing conditions, but until there was a wider appreciation of the possibilities of intensive training, it would be optimistic to look for any great improvement in the technical efficiency of building trade workers. The refresher courses for teachers of building subjects such as had been recently held in London did a great deal of good by their pervasive influence, but the ultimate aim ought to be the general establishment of full-time courses in the technical schools with full-time teachers. He was hopeful that building trade employers would see the desirability of such a reform and help to bring it about.

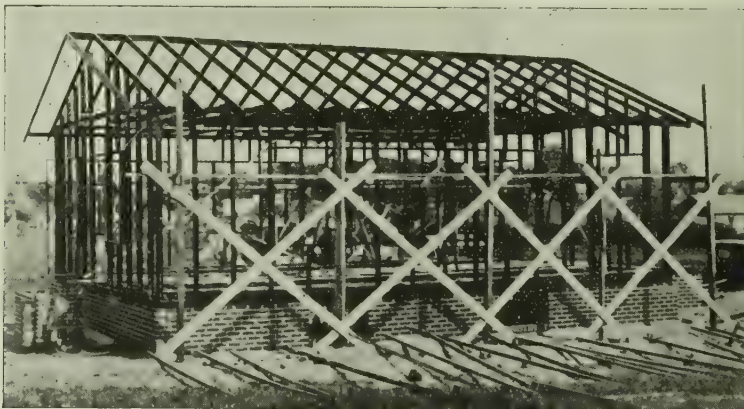
AN AMERICAN STEEL HOUSE

IN the United States, as in this country, experiments are being made in building houses with a steel framework. Messrs. C. H. Dexheimer & Sons, of Toledo, Ohio, are now building a fireproof, steel-framed bungalow. The outside dimensions of their bungalow are 24 ft. 4 in. by 34 ft. 4 in., with an 8 in. hollow tile wall to the first floor joists. On this are set the steel floor joists, steel studs and rafters, rigidly bolted together. Oak floors are used throughout with birch trim in the living room and dining-room and pine in the bedrooms. The roof covering consists of wood sheathing on steel rafters covered with asphalt shingles. This house was built at an approximate cost of 4,000 dols., including all plumbing, heating and electrical work. If desired the cost could be considerably reduced by omitting the fireplace, hardwood floors and trim, and building in quantity lots. The cost is based on the purchase of all material in small lots.

This system of construction is not limited to any one size or type of residence. It is simply a case of using steel in exactly the same manner as wood is used to form the framework of the building. The system is absolutely flexible. It can be used in any size or type of house, either brick or stucco exterior. The floor joists are the ordinary type of steel joists, manufactured by the Truscon Steel Company, sometimes known

making a complete fireproof structure throughout. This type of framework is speedy and economical. For a bungalow of this size the frame can be erected in about two days with four labourers all ready for other trades. It is very simple to erect for a man who is experienced in handling steel work, although any man can be taught to do the assembling.

In Ohio the cost of the fireproof bungalow is practically the same as the frame structure. This, of course, depends entirely on the price of materials and labour conditions. It is claimed that in a comparison with a frame structure the depreciation and upkeep on a building of this type is practically nothing, so that in the long run there is no question but that the fireproof bungalow is by far the most economical. Due to the fact that the steel frame is absolutely rigid, and that there is no wood in it to warp or shrink, the possibility of any cracking in exterior or interior walls is said to be absolutely eliminated. The hollow walls and floors form a perfect insulation against heat and cold, and the house is absolutely vermin-proof. There is another very important point to be considered. On account of the depletion of the forests, lumber prices seem destined to go higher and higher. It is believed in America that the time is not far off when it will become an economic necessity to eliminate the rough lumber on the ordinary house. The elimination of this lumber would release an enormous amount of lumber for other uses where substitutes cannot be used to advantage.



An American Steel-Frame House.

as metal lumber and used extensively in schools, apartment buildings, &c. The size and spacing of these joists depend on the manufacturers' tables of safe loads. The exterior walls consist of 4 in. channel studs, spaced approximately 24 in. on centres, covered with a rib metal lath weighing 3½ lb. to the yard. This lath is covered on the outside with waterproofed cement plaster to a thickness of about 2 in. and back plastered. The interior walls are 4 in. steel studs with metal lath and plaster. Metal lath is used throughout. The floors are 2 in. concrete, reinforced with 4 lb. rib metal lath, covered with finished wood floor nailed to wood sleepers attached to the steel joists.

The floor construction can be varied without any additional cost by applying the wood floor directly to the top of the steel joists and attaching the lath to the underside of the joists, which is then plastered, so as to form a plastered ceiling throughout the basement. Either type of floor is fire-safe and dust-proof, eliminating the possibility of any fire starting in the basement spreading to the other parts of the building. In erecting the steel frame, exactly the same procedure is followed as with a wood frame. All material is purchased out to length; studs, rafters and joists are punched on the job with a small hand punch and all connections are bolted, making a complete and rigid frame. The windows used are the steel casement type,

WORKMEN'S COMPENSATION

The House of Lords in two cases, Glasgow Iron and Steel Company v. Dickson and Coltness Iron Company v. Dagleish (*The Times*, July 24), had to consider a point under the Workmen's Compensation Act, 1923, which is as follows:—Section 1 of the Act of 1923, which came into force January 1, 1924, repeals the two War Additions Acts of 1917 and 1919, but contains a proviso "that the addition provided for in the said Acts shall continue to apply to a weekly payment payable to a workman under the Workmen's Compensation Act, 1906 (hereinafter referred to as the principal Act) or under any enactment superseded by that Act in respect of total incapacity arising from an accident which occurred on or before the said December 31 so long as the workman remains totally incapacitated, and the addition shall for all purposes be treated as if it were part of the weekly payment."

In the cases in question the accident had happened before December 31, 1923, and total incapacity had resulted; but the facts in the first appeal covered the second appeal, so we only give the facts relating to the first of the two cases. The incapacity lasted from September 14, 1922, to November 18, 1923. Then the man had become fit for light work, but

total incapacity from the accident recurred on February 23, 1924. The question was, therefore, whether the proviso enabled the war addition to be given, for if not, the new scales provided in the Act not being applicable, the workman could only claim compensation as originally provided in the principal Act without War Additions.

The scales provided in the Act of 1923 do not apply because they are contained in sections 2 to 4 in the early part of the Act, and section 30 provides that the provisions of sections 2 to 10 shall not apply where the accident happened before the commencement of this Act.

It was contended that the effect of the proviso was that by reason of the words "so long as the workman remains totally incapacitated" it only applied to a workman who on December 31 was actually receiving compensation for total incapacity, but the House of Lords, affirming the First Division of the Scotch Court of Session, held that the men were entitled to the War Additions. From the judgment of Lord Durham as reported, it was held that the word "remains" which was especially relied upon in argument, did not involve any interruption at all to the incapacity.

BOOK REVIEWS

Land and Engineering Surveying. By G. L. LESTON. 24th Edition. 1925. (London: Crosby Lockwood & Son.) 3s. 6d.

THIS is a new edition of the well-known book written by T. Baker, C.E., which has been in use as a text-book by those preparing for the profession of land surveying. The fact that this is the 24th edition is the best possible testimony to its worth, and the new edition will be welcomed by the profession. It may be worth while to remind our readers of its scope. Chain surveying for small estates, the survey of towns, the determination of heights and distances, levelling, and the simpler work required in railway surveying, including the setting out of circular curves. Some problems arising out of the sale of land in which it is necessary to set out in various ways any given acreage from an estate, are dealt with in detail. Geodetic problems are not mentioned, and considering the size and price of the book it is obvious that a great many things must be omitted. But it is a work that has helped many, and we think it will continue to be invaluable for the class of surveyor for whom it has been written.

Building Mathematics. By R. W. M. GIBBS. B.A., B.Sc. 1925. (London: Blackie & Son, Ltd.) 4s. nett.

THIS is one of the many books on mathematics which have been written in order to facilitate the application of arithmetic to technical problems. An introductory section deals with the simpler operations involving the use of algebraical symbols, the use of trigonometrical formulæ of the simplest character. Afterwards, the method of dealing with the problems arising out of the measurement of brickwork, arches, beams, and girders is considered, and some tables to facilitate the work are given. Answers are given to the questions set (on almost every page), and these will be valuable to the student in verifying his work. These answers are, however, said to be "approximate... only to the degree of accuracy justified by the data." This may be a stumbling block to some, and in our experience it is wiser to ask for the results of any computation to the nearest cubic foot, or such other unit as may be desirable, when the exact figure is an unnecessary refinement. The idea of any computation must be to obtain either an estimate with some degree of exactness, and the idea of approximations should always be very carefully explained to students, so that no encouragement in slovenly work is possible.

NEW BUILDINGS IN LONDON.

Barnes.—A new cabinetmaking factory, etc., is to be erected in Station-road, Barnes, W., for Messrs. John Barker & Co., Ltd., Kensington High-street, W.8. Plans by Mr. H. L. Cabuche, F.R.I.B.A., the company's architect.

Barnsbury Park.—A new synagogue is to be erected in Barnsbury Park, N., to accommodate about 500 persons. Plans by Mr. Charles Living, jun., 75, The Grove, Stratford, E.15.

Bethnal Green.—A block of tenement dwellings, to be known as Freemantle House, is to be erected on the Collingwood Housing Estate, for the L.C.C. The contractors are Messrs. Bowley Bros., Ltd., Tottenham, whose tender amounted to £24,000. The architect is Mr. G. Topham Forrest, F.R.I.B.A.

Blomfield-street.—Work is in hand on the foundations of the large office building to be erected at the corner of Blomfield-street and New Broad-street, E.C.2. The contractors are Messrs. Walter Lawrence & Sons, 19, Finsbury-square, E.C.2. The architects are Messrs. M. E. and O. H. Collins, 115, Old Broad-street, E.C.2.

Bushey.—Arrangements for the building of the new Masonic boys' school are expected to be completed by the end of 1925. The architects are Messrs. Davis & Emanuel and H. C. Smart, 73a, Queen Victoria-street, E.C.4. The cost is estimated at £250,000.

Canning Town.—The Employment Exchange is to be enlarged and a new building erected on an adjoining site. Plans have been prepared by H.M. Office of Works, Storey's Gate, S.W.1.

Coleman-street.—An office building is being erected on a site in Coleman-street, E.C.2, at the junction of Basinghall-avenue. The contractors are Messrs. G. E. Wallis & Son, Ltd., Broadmead House, Panton-street, W.1. The architects are Messrs. Robert Angel & Curtis, 133, Regent-street, W.1.

Dartford.—Messrs. Hopkins & Sons, Station Approach, Dartford, are erecting a new bakery and stores for the Dartford Co-operative Society, Ltd. The architect is Mr. L. G. Ekins, F.R.I.B.A., Co-operative Wholesale Society, 99, Leman-street, E.1.

Edmonton.—Alterations and additions are to be made to the Edmonton Empire in New-road, N.9. Plans have been prepared by Mr. Cecil Masey, 19, Devereux-court, Strand, W.C.2.

Erith.—A contract for the building of 100 houses on the Losney Farm site has been placed with Messrs. G. H. Gunning & Sons, Ltd., Bank Chambers, High-street, Erith. Plans have been prepared by Mr. H. Hind, Town Hall, Erith.

Eltham.—The "White Hart" public house in High-street is to be rebuilt by Messrs. Style & Winch, Ltd. Plans by Mr. Nowell Parr, 42, Cranley-gardens, South Kensington, S.W.

Enfield.—A new church hall for St. Stephen's Church is being erected. The contractors are Messrs. W. H. T. Kelland & Sons, Ltd., 43, Manor-road, N.19. The architects are Messrs. Geo. Baines & Son, F.R.I.B.A., 121, Victoria-street, S.W.1.

Greenwich.—The contract for the new administrative offices and board-room for the Greenwich Board of Guardians has been placed with Messrs. J. Elliman & Son, Ltd., 102, Bromley-road, Beckenham, Kent, at £14,143. Plans for a new nurses' home have been prepared by Messrs. W. H. Pite, Son & Fairweather, 12, Carteret-street, S.W.1.

Islington.—A new factory is to be erected at Nos. 233-5, Liverpool-road, N., for Messrs. Bina & Barrey, propeller pencil manufacturers. Plans have been prepared by Mr. Frank Nash, Lic. R.I.B.A., 6, New-square, Lincoln's Inn, W.C.

Kensington.—A housing scheme consisting of 30 flats and five cottages is to be carried

out. The contractors are Messrs. Hill & Gurr, of Bromley, Kent. The architects are Messrs. A. & J. Soutar, 8, King William-street, Strand, W.C. The quantity surveyor is Mr. E. J. Fairchild, 10, Adam-street, Adelphi, W.C.

Kingston.—The 1924-5 building programme of the Kingston Education Committee includes the erection of the new Tiffin Boys' School. Messrs. Jarvis & Richards, 60, Tufton-street, S.W.1, are the architects.

Letchworth.—A block of office and business premises is to be erected on a site in Works-road. Plans by Messrs. Robert Bennett and Milsom Bidwell, of Leys-avenue, Letchworth.

Lewisham.—A housing scheme embracing 50 dwellings is being carried out by Mr. A. J. Glock, M.I.Struct.E. 24, Victoria-street, S.W.1, in Lewisham. Another scheme in Brightling-road and Bexhill-road concerns about 400 houses of which 70 are now in course of erection.

Long Acre.—It is proposed to rebuild Nos. 87-91, Long Acre, W.C.2, as additional accommodation for Odham's Press, Ltd. The architects are Messrs. Francis Chambers & Sons, 11a, College Hill, E.C.4.

Mildmay Park.—Destroyed by fire last year, the St. Jude's Church Schools, N., are to be reinstated, a contract having been placed with Messrs. Bull & Esdaile, Ltd., 30, Stannary-street, S.E.11. Mr. Charles Waymouth, F.R.I.B.A., 104 High Holborn, W.C., is the architect.

Mill Hill.—Building land on the Stonefield estate has been sold at £500 per acre for development. The surveyors are Messrs. Knight, Frank & Rutley, Hanover-square, W.1.

Morden.—Large rolling-stock accommodation is to be provided at Morden, the new Clapham to Morden tube terminus, holding about 250 cars. Plans have been prepared by

Mr. S. A. Heaps, architect to the London Underground Railways, Broadway, S.W.1. The work is being carried out by the company's staff.

North Finchley.—A new hall is to be built at the Albert-road School to plans by Mr. P. T. Harrison, 9, The Hawthorns, Regents' Park-road, Finchley, N.3.

Norton Folgate.—The Anglo-American Oil Co., Ltd., of Queen Anne's Gate, S.W.1, have agreed to purchase an area of 2,950 sq. ft. with a frontage in Norton Folgate for an extension of their petrol service station. The company's chief engineer is Mr. J. T. Johnstone.

Oxford-street.—Demolition of part of the old buildings has been commenced in connection with the new emporium to be built in Oxford-street, W.1, for Messrs. Bourn & Hollingsworth, Ltd., drapers. The general contractors are Messrs. F. G. Minter, Ltd., Ferry Works, Putney, S.W.; the steelwork will be erected by Messrs. Dorman Long & Co., Ltd., 4, Central Buildings, Westminster, S.W.1. The architects are Messrs. Slater & Moberly, 46, Berners-street, W.1.

Piccadilly.—Arrangements have now been completed for the building of the Park-lane Hotel in Piccadilly, W.1. The architects are Messrs. Henry Tanner, 3, Hanover-square, W.1. The quantity surveyors are Messrs. Pease & Tanner, 46, Lincoln's Inn Fields, W.C.

Preston-road.—A new sports pavilion, to cost about £7,000, is to be erected at Preston-road, W., for the Selfridge Club. The contractors are Messrs. R. Schooley & Son, 5, Market-street, E.C.2. The architects are Messrs. Duke & Simpson 358, Strand, W.C.2.

Regent-street.—Work will probably start at the end of the year on the pulling down of the old premises in Regent-street, W.1, of the Goldsmiths' & Silversmiths' Company. The architect for the new building is Mr. Sydney

COMPARISON OF PRICES OF BUILDING MATERIALS IN JANUARY, 1925, WITH CURRENT PRICES.

Material.	Jan, 1925. £ s. d.	Aug. 1 £ s. d.	Rise. %	Fall. %
Bricks—				
Best Stocks	4 3 6	4 3 6	—	—
Flettons	2 13 3	2 13 3	—	—
Glazed	23 0 0	22 0 0	—	4.35
Thames Ballast	0 10 6	0 10 6	—	—
Thames Sand	0 14 6	0 14 6	—	—
Shingle (¾ in.)	0 12 9	0 12 9	—	—
Portland Cement	2 18 0	2 18 0	—	—
Ground Blue Lias Lime	2 4 6	2 4 6	—	—
Grey Stone Lime	2 11 9	2 11 9	—	—
Bath Stone	0 2 9½	0 2 9½	—	—
Portland Stone	0 4 4	0 4 4	—	—
Good Sound Building Timber—				
4 in. x 11 in.	32 0 0	32 0 0	—	—
3 in. x 11 in.	28 0 0	28 0 0	—	—
2 in. x 11 in.	28 0 0	28 0 0	—	—
3 in. x 9 in.	25 0 0	25 0 0	—	—
3 in. x 7 in.	23 0 0	23 0 0	—	—
3 in. x 4 in.	24 0 0	23 0 0	—	4.16
Slates—				
24 in. x 12 in.	37 12 6	37 12 6	—	—
22 in. x 12 in.	34 0 0	34 0 0	—	—
20 in. x 10 in.	25 12 6	25 12 6	—	—
18 in. x 10 in.	17 12 6	17 12 6	—	—
16 in. x 8 in.	13 15 0	13 15 0	—	—
R.S. Joists	13 10 0	13 10 0	—	—
Iron—				
Common Bars	13 10 0	13 10 0	—	—
Mild Steel Bars	12 0 0	12 0 0	—	—
Steel Bars	12 10 0	11 0 0	—	12.00
Cut Nails	20 10 0	20 0 0	—	2.44
Sheet Lead	54 0 0	46 10 0	4.50	—
Glass—				
15 oz. Sheet	0 0 3½	0 0 3½	—	7.4
21 oz. Sheet	0 0 5	0 0 4½	—	7.50
26 oz. Sheet	0 0 6	0 0 5½	—	4.17
Raw Linseed Oil	0 4 5	0 3 10	—	11.54
Turpentine	0 5 4	0 5 9	—	4.17
Ground English White Lead	62 10 0	56 15 0	1.79	—
White Lead Paint	84 15 0	77 15 0	1.30	—
Red Lead	57 0 0	53 0 0	—	7.02

V. North, F.R.I.B.A. (Messrs. North, Robin & Wilsdon), 35-39, Maddox-street, W.1.

Regent-street.—Work is now in progress on the site of Nos. 252-262, Regent-street, W.1, where the large "Regent Arcade" is to be built to the designs of Mr. S. Gordon Jeeves, 16, Hanover-square, W.1. The contractors are Messrs. Kirk & Randall, Ltd., 146, Grosvenor-road S.W.1. The quantities have been prepared by Mr. W. H. Webber, 33, Farnival-street, E.C.4.

Regent-street.—It is proposed to let on building lease the large site known as No. 16, Regent-street and 7, Market-place, W.1. The surveyor is Mr. John Murray, F.S.I., 11, Suffolk-street, Pall Mall, S.W.1.

Ruislip.—A new school is to be erected to plans by Mr. H. G. Crothall, F.R.I.B.A., Middlesex County Hall, Westminster, S.W.1. The contractors are Messrs. Y. J. Lovell & Sons, Gerrard's Cross.

Sanderstead.—Funds are now being raised for the building of the proposed new church of St. Mary, the first portion of which is estimated to cost £9,800. Messrs. Greenaway & Newberry, Parliament Mansions, Victoria-street, S.W.1, architects.

Sidmouth.—The committee of the Victoria Cottage Hospital have decided to build an entirely new hospital, costing about £15,000. The architect is Mr. Leslie T. Moore, F.R.I.B.A., 3, Raymond Buildings, Gray's Inn, W.C.1.

Surbiton.—A large detached house is to be built at Surbiton for Mr. A. Robertson. Plans by Mr. E. Laud Pierce, 119, Victoria-street, S.W.1.

Stonebridge Park.—An early start is to be made on the erection of the first portion of the buildings at Tokington, which include a new church, mission hall and vicarage. The architect is Mr. G. Percy Pratt, 174, High-street, Acton, W.3.

Wandsworth-road.—Messrs. Triggs & Co., 1a, Mackay-road, Clapham, S.W., are the contractors for alterations and additions to premises for Mr. A. Norman, tailor. The architect is Mr. G. Percy Pratt, 174, High-street, Acton, W.3.

West Ham.—Plans have been prepared by Mr. R. C. Turner Gordon, 304, Romford-road, West Ham, for alterations and additions to shops and showrooms in Woodgrange-road, West Ham, E., for Messrs. L. W. Spratt & Sons, drapers, Forest Gate.

Westminster.—The contract for the extension of the National Library for the Blind, Tufton-street, S.W.1, in Great Smith-street, S.W.1, has been placed with Messrs. Higgs & Hill, Ltd., Crown Works, South Lambeth-road, W.1. Mr. Sydney Tatchell, F.R.I.B.A., Bank Chambers, 32, Strand, W.C., architect.

Willenden.—Large works and compressing stations are to be erected on the North Circular road by Messrs. Allen, Liversidge, Ltd., acetylene manufacturers, of Victoria-street, S.W.1. The buildings and layout have been prepared by Messrs. Heron-Rogers & Pettitt, 181, Queen Victoria-street, E.C.4.

The L.C.C. has granted permission for the erection of the following:—Ten terrace houses in Gerda-road, New Eltham, by Mr. Kenneth Dalgleish; four detached and ten semi-detached houses in Coniston-road, Lewisham, by Messrs. Reynolds & Co.; 100 houses at Charlton Park by the Greenwich Metropolitan Borough Council; two semi-detached bungalows in Glenlea-road, Well Hall, Eltham, by Mr. W. Childs; seven houses in Kidbrook Park-road, by Mr. A. Mitchell Torrance; 14 semi-detached houses in a new road between Well Hall-road and Archery-road, Eltham, by Mr. H. Bower; a permanent pavilion on ground at Beckenham-hill, by Mr. A. V. Booker; four bungalows on the west side of Glenesk-road and south of Dunvegan-gardens, Woolwich, by Messrs. J. G. Francombe & Co.; Nos. 15 and 16, Croft-villas, Green-lane, Eltham, by H. G. Allbon; bungalow at corner of Glenesk-road and Bexley-road, Eltham, by Mr. W. Childs; detached house in Shooters Hill-road, by Mr. W. C. Teasdale. The committee have also approved the extension of the existing hall of St. Luke's church, Eltham, by Mr. J. J. Taylor.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Bricklayers.	C'p'ters. Joiners.	Plas- terers.	Slaters.	Plum- bers.	Painters.	Labourers.
Aberdare.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Accrington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Altrincham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Ashton-under-Lyne.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barnsley.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barrow-in-Furness.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barry.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bath.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bedford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Birkenhead.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Birmingham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bishop Auckland.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Blackburn.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Blackpool.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bolton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bournemouth.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bradford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Brentwood.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bridgwater.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Brighton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bristol.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Burnley.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Burton-on-Trent.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bury.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Cambridge.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Cardiff.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chatham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chelmsford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Cheltenham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chesterfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Colchester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Coventry.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Crewe.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Darlington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Derby.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Doncaster.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Dudley.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Durham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
E. Glam.(Mon. Val.).....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Eastbourne.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Exeter.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Folkestone.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Glooucester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Grantham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Grays.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Grimsby.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Great Yarmouth.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Guildford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hallifax.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Harrogate.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hartlepool.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hastings.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hereford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Huddersfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hull.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Ipswich.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Launceston.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leamington Spa.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leeds.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leicester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Lichfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Lincoln.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Liverpool.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Llanelli.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
London (12 m. radius).....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
London (12-15 m. radius).....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Loughborough.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Luton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Maldstone.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Manchester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Mansfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Merthyr Tydfil.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Middlesbrough.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Newcastle-on-Tyne.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Newport Mon.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Northampton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Norwich.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Nottingham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Oakham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Oldham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Oxford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Plymouth.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Pontypidd.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Portsmouth.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Preston.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Reading.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Rochdale.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Rochester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Rugby.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
St. Albans.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
St. Helens.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Scarborough.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Sheffield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Shrewsbury.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Southampton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Southend-on-Sea.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Southport.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
South Shields.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stockport.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stockton-on-Tees.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stoke-on-Trent.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stroud.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Sunderland.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Swansea.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Swindon.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Taunton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Torquay.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Tunbridge Wells.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Wakefield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Walsall.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Warrington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
West Bromwich.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Wigan.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Windsor.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Wolverhampton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Worcester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
York.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2

(For rates of wages in the Building Trade in Scotland, see page 232.)

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

AUGUST 10.—Belfast.—BUILDING.—For (1) erection of school at Everton; (2) additions to school at Rosetta; (3) additions to school at Skegnet; (4) heating Strand school, for the C.B. Education Architect, College-square. Deposit £2 s. each.

AUGUST 10.—Belfast.—HOUSE.—Erection of Medical Superintendent's residence at Purdyshurn. Plans, &c., from the architects, Messrs. Tulloch & Fitzsimons, 21, Castle-place, Belfast; and bills of quantities obtained from Messrs. McCarthy & Lilburn, Scottish Provident Buildings, Belfast. Deposit £2 s.

AUGUST 10.—Blackwood.—EXTENSION.—To Saint Margaret's Church, Blackwood (Mon). A. F. Webb, L.R.I.B.A., architect, Tredegar-chambers. Deposit £2 s.

AUGUST 10.—Blackwood.—INSTITUTE.—First portion of the Blackwood and District Workmen's Institute at Blackwood, Mon, for the Committee of the Blackwood Miners' Welfare Council. D. J. Thomas and A. F. Webb, L.R.I.B.A., architects. Deposit £2 s.

AUGUST 10.—Bridlington.—HOUSES.—Fifty-eight non-parlour type and 30 parlour type houses on the Posthill housing estate, for the T.C. Borough Engineer and Surveyor. Deposit £2 s.

AUGUST 10.—Chelmsford.—COTTAGES.—For (a) two pairs of cottages at Little Leighs; (b) two pairs of cottages at Little Baddow; (c) two pairs of cottages at Rettendon, for the R.D.C. J. Dewhurst, Engineer and Surveyor, Council Offices, Waterloo-lane.

AUGUST 10.—Clutton.—HOUSES.—Ten houses at Farrington Gurney, for the R.D.C. W. T. Hawker, Architect, Council Houses, Temple Cloud, near Bristol.

AUGUST 10.—Clutton.—HOUSES.—Twenty-two houses at Paulton, for the R.D.C. W. T. Hawker, Architect, Council Houses, Temple Cloud, near Bristol. Deposit £3 s.

AUGUST 10.—Dublin.—REPAIRS.—Repairs to cottages in Thomastown R.D. Scheme No. 6. Chief Clerk, Irish Sailors' and Soldiers' Land Trust, 30, Lower Fitzwilliam-street. Deposit £1 s.

AUGUST 10.—Dumbarton.—LODGE.—Erection of the East Gate Lodge, Auchentorrie Estate, Bowling, for the C.C. Joseph Weekes, County Architect, 88, College-street, Dumbarton.

AUGUST 10.—Edinburgh.—HOSTELS.—Excavator, mason, brick and drainage works of two hostels and subsidiary buildings to be erected at Craigmillar Park. Mr. Frank Wood, architect, 64, George-street, Edinburgh.

AUGUST 10.—Enniskillen.—HOUSES.—Two, and alternatively seven, houses at Sedan-terrace. James Donnelly, M.R.I.A.I., architect. R. J. Lyons, Willoughby-place, Enniskillen.

AUGUST 10.—Forehoe.—COTTAGES.—Five pairs cottages at Brock site, for the R.D.C. Wm. Partridge Smith, Clerk, Vicar-street, Wymondham. Deposit £1.

AUGUST 10.—Kingsbridge.—HOUSES.—Eighteen houses at Rack Park, for the U.D.C. J. Hole, architect. Deposit £2 s.

AUGUST 10.—Sherburn-in-Elmet.—ALTERATIONS.—Extensions and alterations to the Small-pox Hospital, also for the cleaning down, painting, and alterations to the existing buildings, for the Committee. Geo. A. Bromet, Clerk to the Hospital Authorities, Sherburn.

AUGUST 10.—Thorne.—HOUSES.—Seventy houses on the housing site at Ellison-street, for the R.D.C. F. Turner, architect, Carlisle-street, Goole. Deposit £2 s.

AUGUST 11.—Bolton.—HOUSE.—Residence for the Medical Superintendent of the Townsley Hospital in Wash-lane for the B.G. John Ward, architect, 24, Mawdsley-street. Deposit £1 s.

AUGUST 11.—Dundrum.—RESTORATION.—Of Dundrum ex-R.I.C. barracks, co. Dublin, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath (Dublin). Deposit £1.

AUGUST 11.—Ferndale (Rhondda).—POST OFFICE.—Erection of a post office at Ferndale (Rhondda, Glam). Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 s. (cheques payable to the Commissioners).

AUGUST 11.—Glasgow.—BUILDING.—Erection of Elder Park Child Welfare Clinic, Govan. Office of Public Works, City Chambers, 64, Cochrane-street, Glasgow.

AUGUST 12.—Aberkenfig.—ALTERATIONS.—To premises of the Aberkenfig Conservative Club. J. Allen, Secretary.

AUGUST 12.—Burgess Hill.—HOUSES.—Thirty-seven houses in a new road between Church-road and London-road, Burgess Hill, for the U.D.C. E. F. Farrington, Surveyor, Council Offices, 20, Church-road. Deposit £2 s.

AUGUST 12.—Croydon.—TELEPHONE EXCHANGE.—Erection of a telephone exchange. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 s. (cheques payable to the Commissioners).

AUGUST 12.—East Grinstead.—COTTAGES.—Erection of 38 cottages of various types on two sites, for the R.D.C. Ernest A. Chilton, Architect, Town Hall Chambers, Uckfield, Sussex. Deposit £2 s.

AUGUST 12.—Manchester.—ELECTRIC LIGHTING.—Providing and fixing complete electric lighting installations at the Harpurhey High School for Girls, Church-lane, Harpurhey, for the T.C. P. M. Heath, Town Clerk.

AUGUST 12.—Swallowston.—ADDITIONS.—Additions and alterations to the administrative block at Swallowston, for the South Rotherham and Kiveton Park District Isolation Hospital Committee. J. Haslam, architect and surveyor, Ryton Chambers, Workshop. Deposit £2 s.

AUGUST 12.—Thedwastre.—COTTAGES.—Six at Walsham-le-Willows, and two at Beyton, for the R.D.C. Hunt & Coates, architects, 51A, Abbeygate-street, Bury St. Edmunds.

AUGUST 13.—London, W.—INTERNAL PAINTING at the Post Office Savings Bank, Blythe-road, Kensington, W., for the Commissioners, H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 s. (cheques payable to the Commissioners).

AUGUST 13.—South Dublin.—PAINTING.—External painting to cottages in the South Dublin R.D. Scheme No. 143—in accordance with the specification prepared by the Engineer, Irish Sailors' and Soldiers' Land Trust, 30, Lower Fitzwilliam-street, Dublin. Deposit 10s.

AUGUST 15.—Carmarthen.—FACTORY.—Erection of offices and factory on the site at Rhyd-y-Gors. Milk Foods, Ltd., Greenwood Buildings, West Canal Wharf, Cardiff.

AUGUST 15.—Goole.—HOUSES.—Eight non-parlour type houses at Snaith and West Cowick, for the R.D.C. R. Plewes, surveyor. Deposit £1 s.

AUGUST 15.—Doncaster.—MORTUARY.—Erection of mortuary buildings in the Guild Hall Yard, for the B.C. R. E. Ford, Assoc.M.Inst.C.E., 3, Priory-place, Doncaster.

AUGUST 15.—Lerryn.—INSTITUTE.—Erection of a village institute. Capt. E. H. House, Mixton House, Lerryn, near Lostwithiel.

AUGUST 15.—London, N.W.9.—HOUSES.—Construction of 12 houses at Buck-lane and two houses at Barnhill-road, Kingsbury, N.W.9, for the Kingsbury U.D.C. Surveyor, Council Offices, Kingsbury-road, The Hyde, N.W.9. Deposit £3 s.

AUGUST 15.—Melton.—LIGHTING.—Public lighting of the parish of Melton, for the P.C. R. Bentham, Clerk.

AUGUST 15.—Newport.—FOUNDATIONS.—Construction of ferro-concrete foundations for a 10,000 k.w. turbo-alternator and condensing plant, for the C.B. A. Nichols Moore, Borough Electrical and Tramways Engineer. Deposit £2 s.

AUGUST 15.—Wimbledon, S.W.19.—FLOORING.—Supply and fixing of new flooring of pitch pine, for the Scarlet Fever Ward of the Isolation Hospital in Gap-road, for the Corporation. Borough Surveyor, Town Hall, Wimbledon.

AUGUST 17.—Bootle.—PAINTING.—Cleaning and painting the exterior wood and iron-work of the Town Hall, Municipal Offices, Public Library, Police buildings, Weigh Office, and Weights and Measures offices; cleaning, painting, and decorating work required to the interior of (a) the ladies' swimming bath, and (b) the Superintendent's house, Balliol-road Baths, both for the B.C. Borough Engineer's Office, Town Hall.

AUGUST 17.—Dublin.—PAINTING.—External painting to cottages in the Rathdown No. 1 R.D. Scheme No. 154. Chief Clerk, Irish Sailors' and Soldiers' Land Trust, 30, Lower Fitzwilliam-street, Dublin. Deposit 10s.

AUGUST 17.—Swindon.—HOUSES.—Erection of 96 houses on Hurst Housing Estate, for the Corporation. Borough Surveyor, 34, Regent-circus, Swindon.

AUGUST 18.—Angel-street.—PAINTING.—The General Post Office. H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 s. (cheques payable to the Commissioners of H.M. Works).

AUGUST 18.—Birkenhead.—ALTERATIONS.—Structural alterations to the premises, "Manor Grange", Egerton-road, for the B.G. E. Kirby & Sons, architects, 5, Cook-street, Liverpool.

AUGUST 18.—Godstone (Surrey).—HOUSES.—Erection of sixteen Class "A" houses, and eight Class "B" houses at Tyler's Green site, Godstone, for the R.D.C. Council's Surveyor, Lloyds Bank-chambers, Oxted. Deposit £3 s.

AUGUST 18.—Hailsham (Sussex).—HOUSES.—Erection and completion of sixteen houses in blocks of four in South-road, for the R.D.C. The Engineer, 17, London-road, Hailsham. Deposit £1 s.

AUGUST 18.—London.—PAINTING.—Painting, &c., at the General Post Office, North, Angel-street, E.C. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 s. (cheques payable to the Commissioners of H.M. Works).

AUGUST 18.—Wealdstone.—HOUSES.—Erection and completion of the whole or any portion of 126 parlour-type houses in various sized blocks. Surveyor to the Council, Council Offices, Peel-road, Wealdstone. Deposit £2 s.

AUGUST 20.—Dublin.—RESTORATION.—Restoration of roofing, slating, &c., of the Central Main Block of the Hibernian Military School, Phoenix Park. J. J. Healy, Secretary, Oifig Oibreacht Poblí (Office of Public Works), Baile Atha Cliath (Dublin).

AUGUST 22.—Crayford (Kent).—WORKING-CLASS DWELLINGS.—Designs, specifications, and prices from builders and firms specialising in concrete and other

recognised forms of construction, in connection with the provision of 50 working-class dwellings, for the U.D.C. Engineer and Surveyor, Council Offices, Crayford. Deposit £1 s.

AUGUST 25.—Wigan.—SCHOOL.—To accommodate 768 scholars, at Whalley, for the C.B. R. B. Donald, Borough and Water Engineer. Deposit £2 s.

AUGUST 26.—London.—LIGHTING, &c.—The M.A.B. invite separate tenders for (a) Installation of additional electric lighting in wards of the North-Eastern Fever Hospital, St. Anne's-road, Tottenham; (b) installation of three washing machines in the laundry at Caterham Mental Hospital, near Caterham, Surrey; (c) installation of four washing machines at the South-Western Fever Hospital, Landor-road, Stockwell, S.W.9. Mr. T. Cooper, M.Inst.C.E., M.I.Mech.E., Engineer-in-Chief, Office of the Board, Victoria-embankment, E.C.4. Deposit £1 each.

AUGUST 27.—Middleton.—HOUSES.—Erection of 52 houses in various blocks. The Borough Engineer and Surveyor, Town Hall, Middleton, Lancs. Deposit £2 s.

AUGUST 28.—Swansea.—ALTERATIONS AND ENLARGEMENTS.—Alterations and enlargements to the existing Municipal Secondary School for Boys, the creation of a new Municipal Secondary School for girls, new gymnasium, and other works, &c., in Dynevor place, and De la Beche-street, Swansea, for the County Borough Council, Borough Architect, 3, Prospect-place, Swansea. Deposit £5 s.

AUGUST 29.—Oswestry.—HOUSES.—Erection of 26 non-parlour type houses on the Llwyn Estate, for the Borough Council. P. Ridge, A.R.I.B.A., Bailey-street, Oswestry. Deposit £1 s.

AUGUST 29.—Kingston-upon-Thames.—HOUSES.—Erection of 50 non-parlour type houses and 20 parlour type houses, for the Corporation. Borough Surveyor, Municipal Offices, Kingston-upon-Thames. Deposit £1 s.

AUGUST 29.—Watford.—HOUSES.—The Corporation invite tenders for the erection of houses on their Wiggan-hall Housing Estate, Watford, as follows: Section 2, 74 houses (40 "A" type and 34 "B" type); Section 3, 48 houses (26 "C" type and 22 "D" type); total, 122. The total number of houses is divided into the following contracts, viz.: Contract No. 1, 26 houses (2 "A" type and 24 "B" type); Contract No. 2, 24 houses (22 "A" type and 2 "B" type); Contract No. 3, 26 houses (16 "A" type and 8 "B" type); Contract No. 4, 26 houses ("C" type); Contract No. 5, 22 houses ("D" type). (Builders may tender for one or more contracts.) W. W. Newman, A.M.Inst.C.E., Borough Engineer. Deposit, £2 s.

SEPTEMBER 4.—Merthyr Tydfil.—HOUSES.—Erection of six pairs of one-storied brick houses at Cellifellag, Merthyr Tydfil. Alternative tenders for concrete-slab houses will be considered. Borough Architect, Town Hall.

SEPTEMBER 5.—Torquay.—NEW SCHOOL.—Erection of a new school for 600 children at Westhill, in the Borough of Torquay. Geo. H. Widdows, Architect, County Offices, St. Mary's Gate, Derby, or the Clerk, Education Offices, Town Hall, Torquay. Deposit £1 s.

SEPTEMBER 15.—London, E.C.1.—SANITARY CONVENIENCE.—Certain work in connection with the erection of the new underground sanitary conveniences, and renewals of existing sanitary work, &c., at the Institution, Shepherdess-walk, City-road, N.1, for the Guardians of the Poor of the Holborn Union. Clerk to the Guardians, Administrative Offices, 53, Clerkenwell-road, E.C.1. Deposit £1 s.

NO DATE.—Ullerskelf.—HALL.—Parish hall, for the U.D.C. A. Thompson, architect, Saxton, Tadcaster.

MATERIALS, etc.

AUGUST 10.—Batley.—PIPES.—400 tons of cast-iron pipes and special castings, 18 in. diameter, for the Corporation. G. H. Hill & Sons (Manchester), Civil Engineers, 40, Kennedy-street, Manchester. Deposit £1 s.

AUGUST 10.—South Africa.—TRUSSES.—Sixty-three steel roof trusses, 53 ft. 9 in. clear span, 68 verandah brackets, 5 ft. 9 in. projection, steel angle and steel tee pultrins, for the Port Elizabeth T.C. Department of Overseas Trade, 35, Old Queen-street, London, S.W.1.

AUGUST 12.—Edinburgh.—PIPES.—482 tons of cast-iron pipes, from 3 in. to 6 in. in diameter, cast in dry sand. Messrs. J. & A. Leslie & Reid, C.E., 29, Waterloo-place.

AUGUST 12.—Manchester.—RAILINGS.—Supplying and fixing of wrought-iron railings and gates at the Peacock-street Municipal school, Gorton, for the T.C. P. M. Heath, Town Clerk. Deposit £1 s.

AUGUST 14.—London.—BALLAST WAGONS.—1, Four-wheel steel ballast wagons, 40 c. (metre gauge); 2, bogie water tank wagons (metre gauge); 3, carriage underframes with steel bodies and four-wheel bogies (metre gauge); 4, steel cranked fishplates; 5, galvanised fencing plates; 6, points and crossings, &c.; 7, pressed steel sleepers; 8, water cranes; 9, foundry coke. Company's Offices, 91, Petty France, Westminster S.W.1. (Write for particulars re charges).

AUGUST 17.—Middlesbrough.—MATERIALS.—Annealed scoriae (broken) bricks, castings, concrete flags and kerbs, pitch and tar, sanitary pipes, gulleys, junctions, &c., slag (broken), tarred whinstone and slag, timber, whinstone and granite (broken), whinstone and granite setts, and kerbs, and sand, for the C.B. S. E. Burgess, Borough Engineer.

AUGUST 26.—Bournemouth.—RAILS.—600 tons rails, for the C.B. I. Bulfin, General Manager. Deposit £2 s.

AUGUST 26.—Ilkley.—FENCING.—About 1,900 lin. yards of creosoted (under pressure) wood fencing. J. M. Gameson, Chartered Civil Engineer, Surveyor, Town Hall, Ilkley.

SEPTEMBER 11.—Durban.—MATERIALS.—Steel, cast-iron pipes and specials, and sluice and air valves, for the T.C. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

ENGINEERING, IRON AND STEEL.

AUGUST 10.—Ilminster.—WELL.—Construction of intake works in connection with the water supply, including the sinking of a borehole and well, and about 300 yds. of trenches and drains, and other works incidental thereto. A. P. I. Cotterell & Son, engineers, 17, Old Queen-street, Westminster, S.W.1. Deposit £3 3s.

AUGUST 10.—Kilkenny.—TANK.—Concrete tank at County Sanatorium, for the C.C. T. Drew, Secretary to Committee, Court House, Kilkenny.

AUGUST 11.—Burnley.—GASWORKS.—Work and materials required in the supply and erection of the steel stage floors in retort house on the site of the new gas works at Old Hall. J. H. Clegg, F.C.S., Gas Engineer and Manager, Gas Works, Burnley.

AUGUST 11.—South Africa.—SLUICE GATES.—Two sluice gates, gearing superstructure, &c., for the Bulawayo T.C. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

AUGUST 14.—Inverness.—BRIDGE.—Dulnan Bridge, Kinveach-road, widening, partial reconstruction, surfacing, from Lagvie to Kinveach, 3½ miles, for the C.C. The D.C. are prepared to receive tenders for the above works, which will consist of widening, and partial boxing, also quarrying, breaking, applying, rolling, grouting, &c., of about 4,000 cubic yards of metal. Robert L. Shinnie, District Clerk, Kiggassie. Deposit £2 2s.

AUGUST 14.—Sandy Point.—COAST PROTECTION.—Construction of three groynes and other work on the foreshore of the Sandy Point Estate, Hayling Island, Hants, for the Trustees of Lord Mayor Treloar Cripples Hospital. Apply 44, St. George's-square, Westminster, S.W.1.

AUGUST 15.—Inverness.—RECONSTRUCTION.—Of the Findhorn and Spey bridges, for the C.C. Chief Engineer, Inverness—Perth road, 98-102, Academy street, Inverness. Deposit £5 5s.

AUGUST 15.—Skipton.—WIDENING.—Widening of the West Approach to the Holme Canal Bridge, which carries the Keighley and Kendal main road over the waterway of the Leeds and Liverpool Canal Co., near Gargrave, Skipton, for the West Riding C.C. West Riding Surveyor, County Hall, Wakefield. Deposit £1.

AUGUST 17.—Horsham.—BOREHOLE.—Sinking of a new borehole at Whites Bridge, Magpie-lane, for the U.D.C. C. G. Atkinson, surveyor. Deposit £2 2s.

AUGUST 19.—Louth.—RECONSTRUCTION.—Removal of five existing bridges and the construction of five reinforced concrete road bridges over the Louth Canal, Lincolnshire, for the R.D.C. John H. Haiste, consulting engineer, Union Bank Chambers, Trinity House-lane, Hull. Deposit £1 1s.

AUGUST 20.—Lancashire.—CULVERT.—For the diversion of a length of the Lancaster, Pilling and Blackpool road, and the construction of a culvert in masonry at Carr Bridge, for the C.C. W. H. Schofield, County Surveyor and Bridgeman, County Offices, Preston.

AUGUST 20.—Manchester.—SUB-STATION.—Supply, delivery, and erection of constructional steelwork at their Burnage sub-station, for the T.C. S. L. Pearce, Manager, Electricity Department, Town Hall. Deposit £1 1s.

AUGUST 26.—Bournemouth.—RECONSTRUCTION.—Of the permanent way, for the C.B. I. Bulfin, General Manager, Tramways Offices, Wootton-gardens. Deposit £2 2s.

ROAD, SEWERAGE, AND WATER WORKS

AUGUST 10.—Cannock.—SEWERS.—Laying of 1,272 in. yds. of 9 in. sewers, and sewage disposal works, comprising the construction of screening chamber, sedimentation, and storm-water tanks, filters, humus tanks, and sludge beds, and other works at Cannock Wood, for the U.D.C. R. Blanchard, Engineer and Surveyor.

AUGUST 10.—Coulson.—FENCING.—Supply and erection of approximately 2,000 yards close chestnut fencing, abutting on Farthing Downs, Coulson, for the U.D.C. Mr. R. Chart, Surveyor, 69, Brighton-road, Purley.

AUGUST 10.—Dartton.—MAINS.—Laying and jointing of about 1,262 yds. of 4 in. and 460 yds. of 3 in. cast-iron water mains and fittings, for purposes of supplying water to 250 houses now in course of erection, for the U.D.C. P. Wilkinson, Waterworks Manager, Council Offices, Darton, near Barnsley.

AUGUST 10.—Edinburgh.—SEWER.—Construction of a new sewer, for the City Council. Burgh Engineer, City Chambers, Edinburgh.

AUGUST 11.—Belfast.—ROADS.—For (1) laying about 15,600 sq. yds. of reinforced concrete roadway, 8 in. in thickness, in Hollywood-road, from Sydenham Station-road to City boundary; (2) supplying and laying about 4,500 sq. yds. of 9 in. by 4½ in. by 3 in. creosoted deal paving in Royal-avenue, Donegall-square West, and College-square East; and (3) supplying and erecting about 638 ft. of corrugated iron fencing, inclusive of three gates, 10 ft. in width, at River-terrace, for the C.B. City Surveyor.

AUGUST 11.—Litherland.—SEWER.—30 in. diameter reinforced concrete pipe sewer from Wilson's-lane to St. Philip's Church, and for a 12 in. diameter glazed stoneware pipe sewer along Orrell-road, together with all necessary manholes, for the U.D.C. Geo. Ponsford, Engineer and Surveyor.

AUGUST 11.—Salford.—PAVING.—Paving and completing of one passage with stone setts, for the B.C. Borough Engineer, Town Hall, Salford.

AUGUST 12.—Dublin.—PAVING.—Paving of Dawson-street in granitic mastic asphalt on a 7 in. reinforced concrete foundation (approximate area 2,600 yards super); and of St. Stephen's Green, North, in 4 in. creosoted deal blocks on a concrete floating (approximate area 3,600 yards super), for the C.C. City Hall. Deposit 5s. each.

AUGUST 12.—Leeds.—PAVING.—Paving, tar-macadamising, kerbing, flagging, and laying of tar-paved footpaths in the following private streets:—Cowper-grove, Cowper-road, Darfield-road, Oakwood Boundary-

road (part), Bulmer-street (part), Carr Cross-street (part), Park-avenue, Crossgates (part), Highways and Permanent Way Engineer, 1, Swinegate, Leeds. Deposit £1 1s.

AUGUST 12.—Leeds.—ROADS.—The Corporation invite tenders for: A, Paving and concreting &c. (labour only), of portion of highways in Gelderd-road Stanningley-road, York-road; B, paving and concreting &c. (labour only), of portions of tramways track in Stanningley-road, Otley-road; C, paving and concreting, &c. (labour only), in the construction of a new tramway track in Hunslet Moor-road; D, two-coat asphalt macadam surfacing (labour and materials) in Stanningley-road; E, single-coat asphalt macadam surfacing (labour and materials) in Gelderd-road. Highways and Permanent Way Engineer, at 1, Swinegate, Leeds. Deposit £1 1s.

AUGUST 12.—Porthcawl.—SEWERS.—Construction of certain lengths of stoneware, cast-iron and concrete tube sewers of 9 in., 15 in., 18 in. and 21 in. diameter, with the necessary manholes and other appurtenances, of a total length of 2,150 yards, for the U.D.C. John Taylor & Sons, Civil Engineers, Westminster. Surveyor, Council Offices, Porthcawl. Deposit £5.

AUGUST 14.—Cosely.—RECONSTRUCTION.—The Cosely U.D.C. invite tenders for the reconstruction of 1 mile of Dudley and Wolverhampton main road. The work includes supplying and laying a bitumen carpet on a concrete foundation. G. E. Mitchell, surveyor, Cosely.

AUGUST 14.—Sedgley.—RECONSTRUCTION.—Of so much of the Dudley and Wolverhampton main road as lies between Springhead and the Dudley boundary, a length of about 3 miles, for the U.D.C. F. W. Turton, Surveyor.

AUGUST 15.—Bilston.—SEWER.—The laying of a 9 in. earthenware pipe sewer (about 750 yards) in Moseley-road, Bilston, together with about 250 yards of 6 in. branch sewers and the construction of two adjoining roads, about 3,000 square yards, for the U.D.C. W. G. Lofthouse, A.R.I.B.A., Town Hall, Bilston. Deposit £2 2s.

AUGUST 15.—Kingsbury.—MAKING-UP.—Of the following:—Goldsmith-lane, Roe-lane, Shortcroft, Scudamore-lane, Roe-end, for the U.D.C. R. C. N. Newport, Surveyor, Council Offices, Kingsbury-road, The Hyde, N.W.9. Deposit £2 2s.

AUGUST 17.—Baintree.—SEWERS.—Providing and laying about 650 feet of 9 in. stoneware pipe sewer (average depth 20 ft.), and about 600 ft. of 6 in. stoneware pipe sewer (average depth 6 ft.), together with the construction of manholes and other contingent work. H. H. Nankivell, Surveyor, Vestry Hall, Baintree.

AUGUST 17.—Hendon.—SEWER.—Laying of about 420 yards of 12 in. and 860 yards of 9 in. pipe sewer and surface water drain, together with manholes and other works in connection therewith, in Hale and Selvaeg-lanes, Mill Hill, within their district. A. O. Knight, Engineer and Surveyor, Town Hall, Hendon, N.W.4. Deposit £5 5s.

AUGUST 18.—St. Austell.—ROAD.—Construction of a two-course concrete road at Victoria-road, for the U.D.C. E. D. Groves, Surveyor. Deposit £2 2s.

AUGUST 18.—Tiptree.—PIPES.—Seventy yards of 4 in. stoneware pipes, and all works incidental thereto, for the B.G.

AUGUST 18.—Wealdstone.—ROADS AND SEWERS.—Construction of three roads with the necessary 7 in. sewers and manholes, complete. Mr. H. Walker, Surveyor of the Council, Council Offices, Peel-road, Wealdstone. Deposit £1 1s.

AUGUST 19.—Letchworth.—DRAINAGE.—Extension of their main drainage system, for the U.D.C. Messrs. Howard Humphreys & Sons, 28, Victoria-street, Westminster. Deposit £2 2s.

AUGUST 19.—Prestwich.—SEWERS.—Construction of approximately 440 yards of 15 in. and 9 in. sewers along Bury New-road, including manholes and other works, for the U.D.C. F. H. Ashton, Clerk, Town Hall, Prestwich, Lancashire. Deposit £1 1s.

AUGUST 20.—Preston.—ROAD.—Diversion of a length of the Lancaster, Pilling and Blackpool road (A.588) and the construction of a culvert in masonry at Carr Bridge, over Wardley's Pool, for the C.C. W. H. Schofield, A.M.I.C.E., County Surveyor and Bridgeman, County Offices, Preston.

AUGUST 20.—Roche.—NEW ROAD.—Sewering, levelling, paving, metalling, flagging, channelling, making good, and lighting Goddington-road. City Surveyor, Guildhall. Deposit £1 1s.

AUGUST 24.—Catherington.—MAINS.—Providing and laying about 4,100 lin. yds. of 6 in. cast-iron water mains, also 4,850 yds. of 4 in. and 2,700 yds. of 3 in. ditto, with hydrants, sluice valves and fittings, also for the construction of two concrete reservoirs and a pumping station, for the R.D.C. G. C. Vernon-Inken, engineer, 40, Commercial-road, Portsmouth. Deposit £10 10s.

AUGUST 24.—Gloucester.—RESURFACING.—Resurfacing with roller-finished asphalt a total length of 949 yards of the Stroud and Painswick roads. City Surveyor.

AUGUST 31.—Nuneaton.—STREET WORKS.—Completion of the street works comprised in the various roads on the Attleborough Housing Estate, for the Town Council. Borough Engineer and Surveyor, Municipal Offices, Nuneaton. Deposit £2 2s.

Competitions.

(See Competition News, page 208.)

Auction Sales, Tenders, etc.

AUGUST 11.—Derbyshire.—Offers invited before 11 a.m. for the purchase of the remainder (33 occupied modern houses, &c.) of Langwith housing estate, by the Commissioners H.M.O.W. Contracts Branch, King Charles-street, S.W.1. Deposit £2 2s. (cheques payable to the Commissioners).

AUGUST 18 & 19.—Wandsworth, S.W.—F. H. Clark will sell, without reserve, on site, Central Stores Depot,

Stewarts-road, Wandsworth, S.W., Government surplus timber and building materials. Auctioneers, Railway Wharf, York-road, Wandsworth, S.W.18.

AUGUST 20.—East Kent.—Worsfold & Hayward will sell, at the Dover Institute, Dover, in one or three lots, freehold property, comprising modern brick buildings intended for the Hanwell Colliery, together with land. Auctioneers, Dover.

AUGUST 25.—Fleet-street, E.C.—J. F. Skelding & Co. will sell, re Bargmans, Ltd. (by order of the Receiver for the Debenture holders) C. W. Stanle (Temple), on the premises, 21, Bride-lane, Ludgate-circus, E.C.4, stock and plant of the above firm of builders and contractors. Auctioneers, 48, Gresham street, Guildhall, E.C.2.

AUGUST 27.—Northwood (Middlesex).—J. Skelding & Co. (in conjunction with W. G. Carter & Co., by order of the administrator of the estate of the late A. E. Wilson, will sell, without reserve, on the premises, 38, The Pavement, Northwood, the complete equipment of woodworking machinery, builder's stock and plant, timber, buildings, and Ford touring car, &c. Auctioneers: J. T. Skelding & Co., 48, Gresham street, Guildhall, E.C.2; W. G. Carter & Co., 39, The Grove, E. 15.

SEPTEMBER 10.—Bucks.—Knight, Frank & Rutley (in conjunction with Hannett, Rafferty & Co.), will sell, in the Mansion, Hedsor, Bourne End (unless previously sold privately), the remaining portions of the freehold residential building estate, Hedsor, including the Mansion. Auctioneers, Knight, Frank & Rutley, 20, Hanover-square, W.1; Hannett, Rafferty & Co., 30, High-street, High Wycombe.

Public Appointments.

AUGUST 10.—Cape Town.—LECTURER AND ORGANISER.—Senior lecturer and organiser in the Building Trades Department of the Cape Technical College. Chalmers, Guthrie & Co., Ltd., 9, Idol-lane, London, E.C.3.

AUGUST 11.—Northfleet.—TEMPORARY HOUSING ASSISTANT.—In the Surveyor's Office, required by the U.D.C. for the construction of about 76 houses on the Northfleet Housing Estate. District Surveyor, Council Offices, High-street, Northfleet.

AUGUST 11.—Portsmouth.—Clerk of Works in connection with the erection of 100 houses on the Portsdown Hill housing site, for the County Borough Council. Town Clerk, the Town Hall, Portsmouth.

AUGUST 12.—Dorset.—Architectural Assistant required in the County Architect's Department. Applicants must be thoroughly experienced in the various branches. Clerk of the County Council, County Offices, Dorchester.

AUGUST 15.—India.—Foreman, Drawing Office required by the Government of India, for the Rifle Factory, Ishapore (18 miles north of Calcutta). Secretary, High Commissioner for India, 42, Grosvenor gardens, London, S.W.1.

AUGUST 15.—Ipswich.—Draughtsman (temporary) required in the Department of Surveyor of County Buildings. Surveyor of County Buildings, County Hall, Ipswich.

AUGUST 17.—Dublin.—Qualified Architect with knowledge of modern housing for the working classes required by the Commissioners of the County Borough of Dublin. Housing Department, Exchange Buildings, Lord Edward-street, Dublin.

AUGUST 19.—Stoke-on-Trent.—Clerk of Works in connection with housing scheme required by the City Council. City Surveyor, Town Hall, Stoke-on-Trent.

AUGUST 20.—Hove.—Assistant required in the Borough Surveyor's Office. Borough Surveyor, Town Hall, Hove, endorsed "Assistant".

AUGUST 20.—London, E.C.4.—Temporary first-class Architectural Draughtsman in the Department of the Engineer-in-Chief for the Metropolitan Asylums Board. The Clerk, Office of the Board, Victoria Embankment, E.C.4.

AUGUST 21.—Perth.—ARCHITECTURAL ASSISTANT (temporary).—Wanted in City Engineer's Office, for housing scheme. City Engineer, 16, Tay-street, Perth.

AUGUST 22.—Croydon.—Architect required to superintend the erection of an elementary school within the borough to accommodate 800 scholars. Clerk to the Education Committee, Katherine-street, Croydon.

AUGUST 24.—Wakefield.—Four Architectural Assistants in the office of the Education Architect required by the West Riding Education Committee. Education Department, County Hall, Wakefield.

AUGUST 24.—Middlesbrough.—TEMPORARY CLERK OF WORKS.—Required by the Education Committee, to superintend the erection of the Marton-grove Council School. Director of Education, Education Office, Middlesbrough.

AUGUST 29.—Norwich.—Estate Surveyor in the City Engineer's Office required by the City Council. City Engineer, Guildhall, Norwich.

AUGUST 31.—London, E.6.—VISITING TEACHER OF BUILDING CONSTRUCTION (Stages 1, 2 and 3).—On three evenings weekly (Mondays, Tuesdays, and Fridays), for the L.C.C. Education Office (T.J.A.) First County Hall, Westminster Bridge, S.E.1. (Stamped addressed foolscap envelope necessary), for form.

SEPTEMBER 5.—Portsmouth.—One permanent General Assistant, and one permanent Architectural Assistant in the Borough Engineer's Department. Borough Engineer, Town Hall, Portsmouth.

SEPTEMBER 25.—Manchester.—Assistant Lecturer in Building Construction in the College of Technology The Registrar, College of Technology, Manchester.

NO DATE.—Derby.—Builder's Assistant required by the Corporation. The Manager, Special Works Dept., Derby Corporation, Eagle-street, Derby.

NO DATE.—Kenya Colony.—Inspector of Works (two) required by the Government of the Kenya Colony for the Engineering Department, Uganda Railway, for a tour of 20 to 30 months' service. Apply at once, Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/13768.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ARMAGH.—The Ministry of Home Affairs, Belfast, have sanctioned an application by Armagh C.C. for a loan of £10,000 for remaking the main thoroughfare from Irish-street to Railway-street.

BARKING TOWN.—The U.D.C. are seeking sanction to borrow £40,000 for the erection of the proposed central school in Wilmington-gardens.—Mr. Charles Gray proposes to erect 60 subsidiary houses in Somerby-road and Sherwood-gardens.—The road at the central school site is to be made up at a cost of £780.—A scheme has been prepared for widening the Jenkins-lane approach to the Barking bye-pass road, at a cost of £1,500.—A scheme for widening Ripple-road is to be submitted to the Ministry of Transport for approval.—Plans passed: Twelve houses, Hulse-avenue, for Mrs. I. Leftley; six houses, Mover's-lane, for Messrs. E. Glenny & Son.

BIRMINGHAM.—The T.C. propose to borrow £43,000 for the purchase of the Garrison Farm and Bordesley Green estates, for the purposes of a central Corporation depot.

BLACKWELL.—Blackwell Bridge is to be reconstructed by the County authorities of Durham and North Riding, at a cost of £102,500, which includes improvements to the road approaches.—The Durham C.C. have prepared a scheme for the reconstruction of County bridges, at a total cost of £206,000.

BRACEBRIDGE HEATH.—The Red Hall estate, comprising the hall and about 5 acres of land at Bracebridge Heath, has been purchased from Mr. Cyril Battle for £2,400 by the Visiting Committee of the Bracewell Mental Hospital.

BRIDGWATER.—The M.H. has consented to the T.C.'s scheme for the erection of 51 houses.—The Highways Committee have been asked to consider a scheme for the construction of another bridge across the main streets.

BRIGHTON.—The T.C. will be asked to sanction the building of 386 houses on the Lewes-road, at a cost of £287,000.—Plans are being prepared for the erection of about 300 bungalows at Devil's Dyke.—The T.C. propose to buy Blaise Castle grounds at £18,500 for a pleasure ground.—The Borough Engineer has prepared a scheme for dealing with the Beershop Field estate, providing for the erection of 382 houses, at a cost of £248,900. Roads and sewers will cost £29,500.—Plans have been passed for the erection of fifteen flats on land in Balfour-road, at a cost of £550 per flat.—The electricity station buildings in North-road are to be enlarged at a cost of about £2,000.—The construction of the first section of the cooling pond at the Southwick electricity works is to be undertaken by direct labour, at an estimated cost of £12,000.—A scheme for improving the public lavatory accommodation is to be carried out at a cost of £8,500.—The Corporation have accepted the offer of Messrs. J. Laing & Son to erect 16 houses in concrete, at a cost of £3,414.

BURY.—Lancashire Standing Joint Committee have prepared a scheme, to cost £32,000, for the provision of a new courthouse and police station at Bury.

CAMBRIDGE.—The T.C. propose to widen roads to the cost of £250,000.

CARDIGANSHIRE.—The B.E. has notified the County E.C. that eleven schools in the county area are defective and require alteration and repair.

CHESTERFIELD.—The E.C. are acquiring a site in Highfield-lane, for the erection of a school.—A sewer is to be constructed from Somersall-lane to the borough boundary, at a cost of £1,522.—Another 100 houses are to be subsidised.—A committee is to deal with the lay-out of land at Highfield Hall estate for recreation purposes.—Plans passed: Bridge over river Rother, for Messrs. R. Hyde & Sons, Ltd.; extension to works, Gort Side-road, for Messrs. Robinson & Sons, Ltd.

CHESTER-LE-STREET.—The U.D.C. is giving consideration to a scheme for the provision of swimming baths for the town, at a cost of £2,000.

CLITHEROE.—The Borough Surveyor is instructed to prepare plans and estimates for the erection of a proposed fire station and garage.

COLCHESTER.—The E.C. recommend the provision of a new elementary school with accommodation for 400 children.

COLERAINE.—The Harbour Board propose to carry out an improvement scheme at the river entrance at an estimated cost of £90,000.

CRAWCROOK.—Durham County Council are arranging for the diversion of the Scotswood-Hexham main road at Crawcrook, at an estimated cost of £14,000.

DEPTFORD.—The Greenwich T.C. propose to demolish the homes of 2,000 people in a slum area at Deptford and build a block of flats on the site.

DINNINGTON.—The West Riding C.C. has granted a sum of £25,500 towards the building and equipment cost of the new Mining and Technical Institute, for which tenders are shortly to be invited.

DONCASTER.—The Doncaster Technical College is to be extended, at an estimated cost of £20,000. Additional accommodation is also to be provided at the Grammar School, at an estimated cost of £2,070.

DUMBARTON.—The Dean of Guild Court has passed plans for the erection of 52 new houses on the Town Council's site at Silvertown.

DURHAM.—The County E.C. has purchased sites at Usworth, Newfield, Stanhope, Blackhall and West Auckland for elementary schools.—They also propose building elementary schools at Fishburn, Hookergate

and Easington. Plans passed: Secondary school at Wellfield.

EGHAM.—The U.D.C. are applying to the Ministry of Housing for approval to build 100 houses a year for the next two years.

ESHER.—The Esher and Ditton R.D.C. has approved the erection of 50 further houses.

FALKIRK.—The Dean of Guild Court has passed plans for the erection of 10 flatted houses for Mr. James C. Callander, Falkirk, at a cost of £5,500; and a block of four flatted houses and a double bungalow for Messrs. Henry Wilson and David A. Tait, Grange-mouth, at a cost of £3,700.

FEATHERSTONE.—It is proposed to invite tenders for the erection of a proposed "Middle" school at Featherstone, with accommodation for 360 pupils.

FULHAM.—Extensions to Fulham Cemetery, Sheen, for the B.C., are to cost £12,500.

GELYGAER.—The U.D.C. proposes, in conjunction with the Bedwelty U.D.C. to erect a new bridge over the Rhymer River at Fleur-de-Lis, on the road to Tirybherm.

GREASBOROUGH.—The U.C. having received the sanction of the Ministry of Health to proceed with the scheme to build a further 32 houses.

GREENOCK.—At the last meeting of the Dean of Guild Court, plans were passed for the erection of 180 dwelling-houses in Sinclair-street, for the Corporation.

HASTINGS.—A scheme has been prepared for the construction of a bathing pool at Seaside-road, the estimated cost being £25,000; the scheme includes seating accommodation for 2,000 spectators by means of balconies.—As a relief work it is proposed to widen Sedlescombe-road, at a cost of £90,000. The Housing Committee recommend a contract with Messrs. Braithwaite & Co., Ltd., for the supply and erection of 50 steel houses, at a cost of £24,337 10s.

HEBBURN.—The U.D.C. propose the erection of an elementary school for 400 children.

HEMSWORTH.—The National Housing Corporation of Great Britain, Ltd., has decided to erect 1,000 houses in the various districts within the R.C.'s area.

HORNSEY.—The T.C. have decided to erect a new elementary school at an estimated cost of £56,500.

HULL.—The Bridges Committee have decided to recommend the City Council to apply for Parliamentary powers to spend £275,000 on the construction of a new North Bridge.

ILFORD.—The E.C. have prepared plans for an open-air school at Bruton-road.—Tenders are to be invited for the construction of a convenience at Eastern avenue, the estimated cost being £1,300.—A drainage scheme for New North-road is to be undertaken, at a cost of £5,000, and tenders are to be invited.—Tenders are to be invited for the erection of 24 maisonettes and 98 non-parlour houses to complete the Horns estate housing scheme.—Plans passed: Bank premises, corner High-road, for Mr. G. Coles; 11 houses, Colombar-road, for Mr. F. B. Harrison; 14 houses, Salisbury-road, for Mr. J. W. Davies; 84 houses, Beehive-lane, and other roads, for Messrs. A. W. Jagers & Sons; 10 houses, Heath View-gardens, for Mr. F. H. Brown.

LAMBETH.—Sanction has been given the B.C. to borrow £160,862 for the erection of 188 houses and 32 flats on the Bloomfield estate.

LANARK.—The District Committee will shortly be in a position to issue forms of tender to contractors for the various works in connection with the erection of a Health Institute at Croft-road, Cambuslang.

LANCASHIRE.—The M.T. are in communication with the various authorities in the district regarding the proposal to construct a new road between Manchester and Liverpool, the estimated cost being three millions. The Ministry are anxious to proceed with the scheme in order to provide employment.

LANCASTER.—A scheme has been prepared by the Lancashire County Council for the construction of a bypass road on the Lancaster-Carnforth main road, at Bolton-le-Sands, at a cost of £43,000.

LANGOLD.—Mr. W. Humble, a director of the Firbeck Colliery, has given a site for a Wesleyan chapel.

LEICESTER.—The Housing and Town-planning Committee report negotiations with the Leicester and District Building Trades Employers' Association for the erection of 400 brick houses, at a cost of £290,831 15s.

—The E.C. will submit a scheme for extensions to the Colleges of Art, at an estimated cost of £47,000, and repairs and extensions to the Overton-road school, at a cost of £8,097.

LEXDEN AND WINSTREE.—The R.C. are applying for sanction to borrow £20,000 for the erection of 46 houses in their areas.

LIVERPOOL.—The C. B. propose to apply to the Ministry of Health for sanction to borrow £29,937 for the erection and furnishing of two sections of the Northway Council Schools, and £2,459 for alterations at the Anfield-road Council School.—A start may be made this autumn on the construction of the arterial road from Liverpool to East Lancashire and into York-shire.

The road will cost nearly £3,000,000, and about £350,000 of this amount will be borne by Liverpool.

LLANELLY.—The borough surveyor has reported to the Council that the remodelling of existing abattoir will cost £15,000, whereas to construct a new one would cost £25,000. Decision as to which scheme is to be adopted is deferred to another meeting.—The Council is to erect new schools at Bigyn and Queen Mary's Walk, and to alter structurally the schools at Stebonheath and Colehill.

LONDON (WESTMINSTER).—Messrs. Ashley & Newman, architects, have prepared plans for the erection of a six-story building comprising 78 flats, and an extension of Jessel House by five flats, for the Easher-street housing scheme of the City Council.—The Congregational Chapel Trustees have agreed to sell the site in Orange-street to the City Council for the erection of the new St. Martin's library.—The L.C.C. have agreed to a scheme of Mr. Gordon Reeves for the formation of a new street to be called Regent Arcade, in connection with the erection of a building at 252-262, Regent-street, 22-25, Argyl-street, and Little Argyl-street.

LONGBENTON.—The U.D.C. has obtained sanction from the M.H. for a loan of £30,000 for the erection of 56 houses on the Glebe estate, Forest Hall.

MALTRBY.—The Higher Education Committee of the C.C. have decided to erect a new secondary school, with accommodation for 300 pupils.

MANCHESTER.—The Corporation are considering a scheme for electricity extensions, at a cost of £420,000. It is proposed to acquire land at Moston for a housing scheme to cost £359,000.—An elementary school is to be erected at Ravenbury-street, Clayton, at a cost of £27,000.—A loan of £25,000 is to be sought for a scheme of improved street lighting.—Wilmislow-road is to be widened, at a cost of £2,820.—The Housing Committee are being asked to consider the possibility of expediting the housing of the people by erecting houses in rows, with 20 houses per acre, if the Ministry of Health will approve.

MARKET HARBOUROUGH.—The U.D.C. have agreed to subsidise a further 30 houses. Plans passed: Four houses, Morley-street, for the Land Society; dairy, Farndon-road, for Co-operative Society; extension of workshops, Caxton-street, for Messrs. J. Haddon & Co.

MARLEYBONE.—The B.C. have prepared a £98,000 scheme for the widening Park-road.

NEWMAN.—The M.H. has approved the erection of 100 of the 200 proposed houses for the U.D.C.

NORMANTON (YORKS).—Subject to an agreement being arrived at between the Governors and the County Council, extensions are to be carried out at the Normanton Grammar School, at an estimated cost of £20,000.

NOTTINGHAM.—The County E.C. has purchased sites at Bldworth, Ollerton and Edwinstowe for elementary schools. Plans passed: Technical school at Mansfield.

OLDBURY.—The D.C. propose to build 100 houses per year for the next three years.

PLYMOUTH.—The Housing Committee have decided that the 24 flats at Pottery Quay should be undertaken by the Borough Surveyor, at a cost of £11,592.—Plans passed: Erection of a refreshment pavilion at the Hoe, at a cost of £2,800.

PRESTON.—The T.C. propose to erect 100 houses on the Delaware-street site to house the people dispossessed by the demolition of the Marsh-lane insanitary area.

REDCLIFF.—The B.E. have passed plans for the erection of the proposed Church Central School for boys.

RETFORD.—The governors of the Retford Grammar School have decided to proceed with extensions at a cost of £8,500.

ROCHDALE.—The T.C. is recommended to provide public sanitary conveniences, with offices above, near the Wellington Bridge, at an estimated cost of £7,000.

RUGBY.—The U.C. have decided to erect 100 houses on the Eastlands Estate, provided the sanction of the Ministry of Health can be obtained, at an estimated cost of £68,116.

ST. PANCRAS.—The B.C. have accepted the offer of the Imperial War Graves Commission to supply and fix, free of charge, a War Cross in Finchley Cemetery. Mr. A. J. Thomas, F.R.I.B.A., Hon. Architect.

SHEFFIELD.—The United Methodistists of Sheffield have purchased the house and grounds known as Shire, in Psalter-lane, as a site for a new church.

SKEDBY.—The Skegby R.D.C. have a scheme for sewerage and sewage disposal works to cost £17,800.

SMETHWICK.—Plans have been prepared for the development of the Slatch estate, providing for the erection of 114 houses. The Corporation have decided to invite tenders for the erection of these houses, and also for the erection of 88 on the site in Hamilton-road.

SOUTH SHIELDS.—A war memorial cross is to be erected at the corner of Westoe-road and Horsley Hill-road by the War Memorial Committee.

STRATFORD-ON-AVON.—The R.D.C. propose to erect 84 new houses.

SWINTON.—The Swinton U.C. have received the sanction of the M.H. to the borrowing of £1,390 for the purchase of the Slade Fields for housing purposes, and at their meeting decided to take the necessary steps.

TIVERTON.—The R.C. have approved a scheme of 104 houses for their area.

TRECEFFEL.—Cardigan county surveyor reports that the Ministry of Transport has suggested certain alterations in the plans of the Treceffell Bridge, the total expenditure now being £6,500.—The C.C. propose to erect a new bridge at Llechryd.

TYNEMOUTH.—The Corporation are acquiring Nos. 19 and 20, Howard-street, at a cost of £2,500, for adaptation as municipal offices.—The Cleansing Committee are considering a site for the construction of a wharf for the refuse disposal scheme.—The M.H. have sanctioned a loan of £1,439 for the reconstruction of the sea banks.—A loan of £7,150 is to be raised for the purchase of property for the extension of Hotspur-street.—The Borough Engineer has prepared a scheme for a roadway at the edge of the cliffs.—The M.H. have approved of the scheme for a block of tenements at Bell-street, in connection with the slum clearance scheme.—The Housing Committee have decided to endeavour to erect 356 more houses.—The T.C. proposed a scheme, as outlined by the surveyor, for a bathing pool, a public shelter, 78 dressing boxes, a café, and a roof garden.

WORKSOP.—The provision of an advanced mining centre at Worksop is in contemplation by the Notts County E.C. A provisional grant of £9,800 has been made by the Miners' Welfare Committee.

WYCOMBE.—The T.C. has accepted a tender of £41,523 for the erection of 90 houses.

WYKE (BRADFORD).—The Shirley Manor estate is being laid out for a housing scheme.

* See also our List of Contracts, Competitions, etc.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames, up to London Bridge.	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6
Per 1,000, Delivered at London Goods Stations.	
Flettons, at 2 s. d.	
King's Cross 2 13 3	Best Blue
Do. grooved for	Pressed Staffs 9 5 0
plaster 2 15 3	Do. Bullnose .. 9 15 0
Do. Bullnose .. 3 8 3	Blue Wire Cuts 7 5 0
Best Stourbridge Fire brick—	
2½ in. 8 11 0	3 in. 10 3 0
GLAZED BRICKS—	
Best White	D'ble Str'ch'rs 30 10 0
Ivory, and	D'ble Headers 27 10 0
Salt Glazed	One Side and
Stretchers .. 22 0 0	two Ends .. 31 10 0
Headers .. 21 10 0	Two Sides and
Quoins, Bull-	one End .. 32 10 0
nose and 4 in	S plays and
Flats .. 23 10 0	Squints .. 30 0 0
Second Quality, £1 per 1,000 less than best. Cream	
and buff, £2 extra over white. Other colours, Hard	
Glaze, £5 10s. extra over white.	

BREEZE CONCRETE SLABS.

2 in. per yd. super	s. d.	3 in. per yd. super	s. d.
2½ in. "	2 4	4 in. "	3 6
Thames Ballast	10 6 per yd.		
Pit Sand	13 9 "		
Thames Sand	14 6 "		
Best Washed Sand	14 6 "		
½ in. Shingle for Ferro-			
Concrete	12 9 "		
½ in. Broken Brick	14 0 "		
Pan Breeze	7 6 "		
Per ton delivered in London area in full van loads.			
Best Portland Cement, British			
Standard Specification, Test £2 18 0 to £3 3 6			
5ls. alongside at Vauxhall in 80-ton lots.			
Ferrocrete per ton extra on above	0 10 0		
Super Cement (Waterproof)	4 8 0		
Roman Cement	8 15 0		
Parian Cement	5 15 0		
Keene's Cement, White	5 15 0		
" Pink	5 10 0		
Plaster, Coarse, Pink	3 0 0		
" White	3 12 6		
" Fine	5 12 0		
Sirapite, Coarse	3 9 0		
" Finish	3 17 0		
Grey Stone Lime	2 11 9		
Chalk Lime	2 4 6		
Best Ground Blue Lias Lime	17 0 0		
Hair	1 12 0		
Granite Chippings	1 12 0		
NOTE.—Sacks are charged 1s. 9d. each and credited			
1s. 6d. if returned in good condition within three			
months, carr. pd.			
Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.			

STONE.

BATH STONE—delivered in railway trucks at	s. d.
Westbourne Park, Paddington, G.W.R., or	
South Lambeth, G.W.R., per ft. cube	2 9½
Do. do. delivered in railway trucks at Nine	
Elms, L. & S.W.R., per ft. cube	2 11½
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft.	
average, delivered in railway trucks at	
Nine Elms, L. & S.W.R., South Lambeth	
Station, G.W.R., and Westbourne Park,	
Paddington, G.W.R., per ft. cube	4 4
Do. do. delivered on road wagons at above	
stations, per ft. cube	4 5
White basebed, 3d. per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every foot over	
20 ft. average, and ½d. beyond 30 ft.	
HORTON-WOOD STONE—	
Delivered at any Goods Station, London.	
Small random blocks, up to 10 ft. cube, P. ft. cb.	7 0
Random blocks from 10 ft. and over	17 0
Sawn two sides	27 0
Sawn three or four sides	32 0
YORK STONE, BLUE—Robin Hood Quality.	
Delivered at any Goods Station, London.	
6 in. sawn two sides landings to sizes (under	
30 ft. super.)	5 6
6 in. rubbed two sides, ditto	6 0
3 in. sawn two sides slabs (random sizes) ..	2 3½
2 in. to 2½ in. sawn one side slabs (random	
sizes)	1 6½
1½ in. to 2 in. ditto, ditto	1 4
HARD YORK—	
Delivered at any Goods Station, London.	
Scrapped random blocks	6 3
6 in. sawn two sides landing to sizes (under	
40 ft. super.)	5 1½
6 in. rubbed two sides ditto	6 1½
4 in. sawn two sides slabs (random sizes) ..	2 10
3 in. ditto	2 1½
2 in. self-faced random flags .. Per yd. super	9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL

Inches.	per stan.	Inches.	per stan.
4 × 11	£32 0	3 × 6	£23 0
4 × 9	28 0	3 × 11	28 0
4 × 8	26 0	2 × 11	28 0
4 × 7	25 0	3 × 9	25 0
3 × 8	24 0	2½ × 9	25 0
3 × 7	23 0	3 × 4½	23 0
2½ × 7	22 0	3 × 4	23 0
1 × 11	£32 0	1 × 9	30 0

PLANED BOARDS.

1 × 11	£32 0	1 × 9	30 0
--------------	-------	-------------	------

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	21/-	1½	32/3
1	23/-	1¾	37/3
1½	25/-		
TONGUED AND		MATCHINGS (BEST).	
GROOVED FLOORING.			
Inches.	per sq.	Inches.	per sq.
1	25/-	¾	16/6
1½	32/6	1	20/-
1¾	37/6	1½	25/-
BATTENS.			
¾ × 2	s. d.	2 per 100 ft.	

SAWN LATHS.

Per bundle	0 2 4
1" AND UP THICK.	
Dry Austrian Wainscoat, per	
ft. cube	0 16 0 to 0 18 0
Dry American and/or Jap-	
anese Figured Oak, ft. cube	0 15 0
Dry American and/or Jap-	
anese Plain Oak, ft. cube	0 11 0 to 0 13 0
Dry sq. edged Honduras	
Mahogany, ft. cube	0 16 0 to 0 18 0
Dry Log cut Honduras	
Mahogany, ft. cube	0 18 0 to 1 1 0
Dry Cuba Mahogany, ft. cube	1 4 0 to 1 10 0
Dry Teak, ft. cube	0 13 0 to 0 15 0
Dry American Whitewood,	
ft. cube	0 11 0 to 0 14 0
Best Scotch glue, per cwt. ...	4 10 0 to
Liquid Glue, per cwt.	4 7 0 to 5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

24 by 12	£ s. d.	18 by 10	£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

Best machine-made tiles from Brosley or	£ s. d.
Staffordshire district	5 12 6
Ditto hand-made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (Hand-made	0 9 6
(per dozen) (Machine-made)	0 8 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON.	£ s. d.
R.S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.

To London Station, per ton.	£ s. d.
Diameter. 1½ in. to 2 in.	13 10 0
2 in. to 2½ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS.—(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

Tubes.	Fittings.	Flanges.
Sizes	Under	Over
1½" to 6"	under	1½" to 6"
Black Gas .. 55%	47½%	50%
Blue Water .. 50%	42½%	45%
Red Steel .. 45%	37½%	40%
Galv'd Gas .. 40%	32½%	35%
" Water .. 33½%	27½%	30%
" Steam .. 27½%	22½%	25%

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft.	Gutters.	Nozzles.	Ends.
3 in.	1/2½	1/2½	3/4d.
3½ in.	1/4	1/2½	3/4d.
4 in.	1/5	1/2½	3/4d.
4½ in.	1/6½	1/4	4½d.
5 in.	1/9	1/5½	5½d.

O.G. GUTTERS.

3 in.	1/7	1/3½	3/4d.
3½ in.	1/7½	1/4	3/4d.
4 in.	1/8½	1/4½	3/4d.
4½ in.	1/10½	1/6½	4½d.
5 in.	2/3	1/9½	5½d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock	Branches
2 in. plain	1/9½	angles 1/2½	stock angles 1/8½
2½ in. "	1/11½	1/4	2/0½
3 in. "	2/4½	1/8	2/6
3½ in. "	2/10	2/-	2/10½
	2/2	2/4½	3/6

L.C.C. COATED SOIL PIPES—London Prices, ex Works.

		Pipe.		Bends, stock angles.		Branches, stock angles.	
		s.	d.	s.	d.	s.	d.
2	in. per yd. in 6fts. plain	2	11	..	2 3	..	2 9
2½	in.	3	5	..	2 6	..	3 5

L.C.C. COATED DRAIN PIPES—London Prices, ex Works.

3½ in.	"	.. 4	5½	.. 3	5	.. 4	8
4 in.	"	.. 4	11½	.. 3	9½	.. 5	5
L.C.C. COATED DRAIN PIPES—London Prices ex Works							
Bends, stock Branches							
Pipe, angles. stock angles							

IRON—

Common Bars	£ s. d.	£ s. d.
Staffordshire Crown Bars—	13 10 0	to 14 10 0
good merchant quality	14 5 0	.. 15 5 0

Staffordshire "Marked" £ s. d.

Mild Steel Bars	18 10 0	.. 18 10 0
Steel Bars, Ferro-Concrete	11 0 0	.. 12 0 0
quality, basis price	16 0 0	.. 17 0 0
Hoop iron, Galvanised	31 0 0	.. 32 0 0

Soft "Steel Sheets, Black—

Ordinary sizes to 20 g.	14 10 0	.. 15 10 0
" " 24 g.	15 10 0	.. 16 10 0
" " 26 g.	17 10 0	.. 18 10 0

Sheets Flat Best Soft Steel, C.R. & C.A. quality—

Ordinary sizes, 6 ft. by	19 10 0	.. 21 10 0
2 ft. to 3 ft. to 20 g.		
Ordinary sizes, 6 ft. by	21 10 0	.. 22 10 0
2 ft. to 3 ft. to 22 g.		
and 24 g.	23 10 0	.. 25 10 0

Flat and Galvanised Corrugated Sheets—

Ordinary sizes, 6 ft. to	19 0 0	.. 20 0 0
9 ft. to 22 g.	19 10 0	.. 20 10 0
Ordinary sizes, 6 ft. to	22 10 0	.. 23 10 0
9 ft. to 26 g.		

Sheets Galvanised Flat, Best quality—

Best Soft Steel Sheets,	22 10 0	.. 23 10 0
6 ft. by 2 ft. to 3 ft. to		
20 g. and thicker	24 10 0	.. 26 10 0
Best Soft Steel Sheets,	26 0 0	.. 27 0 0
22 g. and 24 g.	20 0 0	.. 21 10 0

Cut Nails, 3 in. to 6 in. (under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	47 10 0
Pipe in coils	49 0 0
Soil Pipe	51 0 0
Compo pipe	52 0 0
NOTE.—Country delivery, 30s. per ton extra; lots under	
3 cwt., 3s. per cwt. extra, and over 3 cwt. and under 5	
cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.	
Old lead, ex London area, } 33 0 0	
at Mills	
Do., ex country, carriage } 34 0 0	
forward	

COPPER.

Seamless Copper tubes (basis)	per lb.	£ s. d.
Strong sheet	2 1	
Thin	2 4	
Copper nails	2 3	
Copper wire	2 4	

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

1 in. 1 in. 1 in. 1 in. 2 in.	
29/- 45/- 76/- 153/- 246/- 510/- per doz.	

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

1 in. 1 in. 1 in. 1 in. 2 in.	
41/6 62/- 92/- 174/- 300/- 588/- per doz.	

NEW RIVER PATTERN SCREW DOWN MAIN FERRULES.

1 in. 1 in. 1 in. 1 in. 2 in.	
39/6 60/- 116/6 per doz.	

DOUBLE NUT BOILER SCREWS.

1 in. 1 in. 1 in. 1 in. 2 in.	
7/6 11/- 17/- 29/- 36/- 63/- per doz.	

BRASS SLEEVES.

1 in. 2 in. 3 in. 3 in. 4 in.	
10/- 12/- 20/- 24/- 31/- per doz.	

NEW RIVER PATTERN CROYDON BALL VALVES, S.F.

1 in. 1 in. 1 in. 1 in. 2 in.	
35/- 56/- 98/- 162/- 228/- per doz.	

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

1 in. 1 in. 2 in. 3 in.	
8 lbs. P. traps .. 33/- 41/- 56/- 101/- per doz.	
8 lbs. S traps .. 35/- 45/- 66/- 126/-	
TIN—English Ingots, 2/6 per lb. SOLDIER—Plumbers'	
1/2, Timmen's 1/4, Blowpipe 1/5 per lb.	

PAINTS, &c.

Raw Linseed Oil, in pipes	per gallon	0 3
" " in barrels		0 3 1
" " in drums		0 4
Bolled " in barrels		0 4
" " in drums		0 4
Turpentine in barrels		0 5
" in drums (10 gall.)		0 6
Genuine Ground English White Lead, per ton	56 15	0
(In not less than 5 cwt. casks.)		
GENUINE WHITE LEAD PAINT—		
"Father Thames," "Nine Elms,"		
"Park," "Suprenaus," "St. Paul's,"		
"Spedol," "Polacco" and other best		
brands (in 14 lb. tins) not less than		
5 cwt. lots.	per ton delivered	77 15
Red Lead, Dry (packages extra)	per ton	63 0
Best Linseed Oil Putty	per cwt.	0 15
Filocol		0 15
Size. XD Quality	per cwt.	0 3

PRICES CURRENT OF MATERIALS (contd.)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
15 oz. fourths ..	3½d.	32 oz. fourths ..	5½d.
15 " thirds ..	4½d.	32 " thirds ..	10½d.
21 " fourths ..	4½d.	Obscured Sheet, 15 oz.	4d.
21 " thirds ..	5½d.	" 21 " ..	5½d.
26 " fourths ..	5½d.	Fluted 15oz. 5½d., 21oz. 9½d.	
26 " thirds ..	7½d.	En'led 15oz. 5½d., 21 oz. 7½d.	

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
1 Rolled plate ..	4½d.
1 Rough rolled ..	5½d.
1 Rough rolled ..	5½d.
1 Figured Rolled, Baltic, Oceanic, Arctic, Stip-polyte, and small and large Flemish white ..	6½d.
1 Ditto, tinted ..	9d.
1 Rolled Sheet ..	6d.
1 White Rolled Cathedral ..	5½d.
1 Tinted do. ..	7½d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

	Per gallon.
Oak Varnish ..	Ontalde 0 14 0
Fine ditto ..	ditto 0 16 0
Fine Copal ..	ditto 0 18 0
Pale Copal ..	ditto 1 0 0
Pale Copal Carriage ..	ditto 1 4 0
Best Ditto ..	ditto 1 12 0
Floor Varnish ..	Inside 0 18 0
Fine Pale Paper ..	ditto 0 18 0
Fine Copal Cabinet ..	ditto 1 2 6
Fine Copal Flatting ..	ditto 1 0 6
Hard Drying Oak ..	ditto 0 18 0
Fine Hard Drying Oak ..	ditto 0 19 0
Fine Copal Varnish ..	ditto 1 2 0
Pale ditto ..	ditto 1 12 0
Best ditto ..	ditto 0 12 6
Best Japan Gold Size ..	0 10 0
Best Black Japan ..	0 12 0
Oak and Mahogany Stain (water) ..	0 7 6
Brunswick Black ..	0 14 6
Berlin Black ..	1 5 0
Knottig (patent) ..	0 17 0
French and Brush Polish ..	0 9 0
Liquid Dryers in Terebine ..	0 7 0
Cuirass Black Enamel ..	0 7 0

TRADE ITEMS

It is acknowledged that satisfactory and effective "tinning" of metals where stress takes place, particularly in tinning and re-tinning of bearings preparatory to re-metalling, has always been difficult to obtain, this being due to the fact that the penetration of the tin into the basic metal is imperfect and not constant, hence the anti-friction metal frequently cracks owing to the layer of tin peeling from the bearing. The cleansing properties of

Soldo are, it is claimed, such that the labour involved in cleaning, preparatory to tinning, is eliminated, however rusty, corroded or oily the metals may be. Soldo contains no acid, and the metals tinned remain permanently so. The following is the conclusion of a report by the National Physical Laboratory on the properties of the Soldo tinning compound: "Effective tinning of severely rusted steel and rusty cast iron has also been accomplished by means of Soldo, the rust being removed and interpenetration between tin and steel or iron obtained, illustrating in a marked manner the cleansing properties of the compound."

We have received a copy of "The Blue Circle," the first issue of the quarterly house magazine of The Cement Marketing Co., Ltd., and Associated Companies, of Portland House, Tophill Street, Westminster. Brightly, agreeably, and withal informatively written, it is very attractively produced. Though essentially a house magazine, it contains many features that give it a much greater interest than this class of literature usually possesses; articles such as "Concrete at Wembley" and "Early Days of Portland Cement" will certainly (as the editor hopes) "interest builders and merchants," if they do not make even a wider appeal. For the firm's staff there are several features of special interest, including a page of personalia, a sports' section, and a snapshot competition. Some quotations from "The Blue Circle" of a hundred years ago provide an opportunity for some sly comment that is agreeably savoured by the Attic salt of wit. Felicitations!

Glasgow.—VARIOUS.—The Dean of Guild Court has passed the following plans:—Electricity sub-station at Nithsdale-road and Fleurs avenue, for Corporation; tennis pavilion at Crossloan-road, at Hamilton-street, for Trustees of the Roman Catholic Archdiocese of Glasgow, per Bruce & Hay, architects, 261, West George-street; houses at Possil, for the Corporation; picture house at Lorne-street and Brand-street, Govan, for G. H. Kemp & Son, 204, Here-road, Leicester, per plans by J. Fairweather, 182, Tron-gate; six double villas at Courthill-avenue, Cathcart, for Aitken, jun.; 130 houses at King's Park, Mount Florida, for McTaggart & Mickel, Ltd., per Jas. Taylor, architect, 166, Buchanan-street.

BUSINESSES FOR SALE & WANTED.

Six lines or under 4s. 6d., each additional line 6d.

FOR DISPOSAL.—COUNTRY BUILDERS' MERCHANT'S BUSINESS; no opp.; same hands 30 years; owner retiring; genuine; first class opening; real live young man or helper for two young partners or father and son.—Apply, **MESSES. RAWLENCE & SQUAREY**, Estate Agents, Salisbury, Wilt.

FOR SALE.—Good BUILDER'S BUSINESS. Turnover over £7,000. Established over 20 years. Residence, Workshops, Rolling Stock, etc. District developing rapidly. The present proprietor would remain for one year to introduce purchaser to clients.—Box 310, Office of "The Builder."

BUILDERS', DECORATORS' and UNDERTAKERS' BUSINESS FOR SALE, with Freehold House and Workshops, Plant and Goodwill. Essex. Established 1846. Turnover £11,000 per annum. For disposal through ill-health.—Particulars from **OWNER**, Box 306, Office of "The Builder."

FOR SALE.—KENT. Immediate possession, centrally situated in thriving town. Old-established **BUILDER'S and CONTRACTOR'S BUSINESS**, Cabinet, Upholstering, Bedding and Undertaking. Good work in hand. Large Yard, Office, Timber Sheds and Workshop over, fitted with four double Benches. Also Private House at a low rental for the whole, £55. For all the Stock-in-Trade, Fixtures, Fittings, Utensils, Van, Barrow, Planks, Poles, Drilling and Carding Machines, Ladders, Tools, etc. In fact the equipment sufficient to carry on the above Trade. Reasons for selling, son going abroad. Price £485.—Apply, **BUTCHER**, Valuer, Benenden, Kent.

Blue Printing and Modern Plan Copying.

By **B. J. HALL, M.I.Mech.E.**
The first section of the book outlines the capabilities of the various processes and the precautions to be observed. The second describes the various types of plant now in use, and the last section deals with the lay-out of photo-printing rooms and methods of working. The book is written for (1) those who have plans to be copied; (2) those who install plant for copying; and (3) those engaged in the work of reproduction. Only methods which have proved successful are included.

In demy 8vo, 144 pp., with 62 figures. 6s. net (postage 4d.).
Obtainable from the Book Dept., **THE BUILDER, Ltd.**, Catherine-street, Aldwych, London, W.C.2.

MANUFACTURERS OF

FLOORING BLOCKS

IN
YELLOW DEAL, PITCH PINE, OAK, Etc.

FOR PRICES WRITE—
VIGERS BROS. 165 Fenchurch St.,
E.C.3

Telephone: AVENUE 8172-3-4

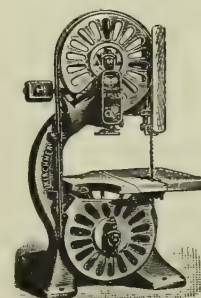
BUILDING TRADE WAGES IN SCOTLAND.*

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters. Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Brick-layers' teters' Labourers.
Aberdeen ..	1/8	1/8½	1/8	1/8	1/8	1/8	1/7	1/0½
Airdrie ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Alexandria ..	1/8	1/8	1/8	1/8	1/8	1/8	1/2½ to 1/3½	1/1½
Arbroath ..	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/3
Ayr ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/2 to 1/3
Bathgate ..	1/8	1/8	1/8	1/8½	1/8	1/8	1/7	10d. to 1/-
Blairstown ..	1/7	1/7	1/7	1/7½	1/7	1/7	1/6	1/3
Bo'ness ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3 to 1/3½
Coatbridge ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3½
Dumbarton ..	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/6½	1/2
Dumfries ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3
Dundee ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3½
Dunfermline ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3½
Edinburgh ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3½
Falkirk ..	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2
Fort William ..	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Glasgow ..	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Greenock ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3½
Hamilton ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3 to 1/3½
Hawick ..	1/7	1/7	1/7	1/7½	1/7	1/7	1/7	1/3½
Helensburgh ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3½
Inverness ..	1/5	—	1/5	1/4	1/5	1/5	1/4	1/- to 1/2
Kilmarnock ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3½
Kirkcaldy ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3½
Kirkwall ..	1/5	1/5	1/4	1/5	1/5	1/5	1/4	1/3½
Leamington ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3½
Leith ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3½
Litherwell ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3½
Perth ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3½
Stirling ..	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3½
Strathgairn (Eastern District) ..	1/8½ to 1/10	1/8½ to 1/10	1/8	1/9	1/8	1/8	1/6½	1/3½
Wishaw ..	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3½

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 228.

KIRCHNER WOOD-WORKING MACHINES in STOCK



Spindles
Band Saws
Circular Saws
Planers
Thicknessers
Tenoning
Machines
etc., etc.

4,000 DIFFERENT MODELS AVAILABLE

Write for full details:—

Agents for London and the South,

R. S. THACKER & CO.,

Dept. A.

107, Newington Causeway, LONDON, S.E.1

Agents for Midlands and North of England

ROBERT KELLY & SONS, LTD

Dept. A.

86, Miller Street MANCHESTER.



CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

Digging and throwing or wheeling and filling carts and carting away to shoot—6 ft. deep	per yard cube	s. d.
Add if in clay	" "	1 0
Add for every additional depth of 6 ft.	" "	0 6
Planking and strutting to trenches	per foot super	0 5
Do to sides of excavation, including shoring	" "	1 0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	32 0
Add if in underpinning in short lengths	" "	7 0
Add if in floors 6 in. thick	" "	3 3
Add if in beams	" "	3 9
Add if aggregate 1, 2, 4	" "	10 0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2 6

BRICKLAYER.

Reduced brickwork in lime mortar and Fletton bricks	per rod	£ s. d.
Add if in stocks	" "	7 10 0
Add if in Staffordshire blues	" "	22 0 0
Add if in Portland cement and sand	" "	1 10 0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0 0 1½
--	---------------	--------

POINTING.

Neat flat struck or weathered joint	" "	0 0 3
-------------------------------------	-----	-------

ARCHES.

Extra only to the price of ordinary brickwork:—		
Fair external in half brick rings	" "	0 0 10
Axed in stocks	" "	0 1 9
Rubbed and gauged jointed in putty camber or segmental	" "	0 6 0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0 1 0
Setting ordinary register grates and stoves	each	1 0 0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	" "	4 15 0

ASPHALTER.

Half-inch horizontal damp course	per yard sup.	s. d.
Three-quarter-inch vertical damp course	" "	4 3
¾ inch on flats in two thicknesses	" "	8 6
Angle fillet	per foot run	6 3
Skirting and fillet 6 in. high	" "	0 3
	" "	1 2

MASON.

York stone templates fixed	per foot cube	13 0
York stone sills fixed	" "	22 0
Bath stone and all labour fixed	" "	10 6
Portland stone fixed	" "	20 0

SLATER.

Welsh 16 in. x 8 in. 3 in. lap, including nails	per square	72 9
Do. 20 in. x 10 in. Do. Do.	" "	80 9
Do. 24 in. x 12 in. Do. Do.	" "	90 0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5 0
Do. joists	" "	5 6
Do. roofs, floors and partitions	" "	6 0
Do. trusses	" "	8 6

Deal rough close boarding	per sq.	¾" 35/6 1" 40/- 1½" 45/- 2" 72/-
Flat centering for concrete floor, including struts or hangers	" "	s. d. 50 0
Do. to beams	per ft. sup.	1 0
Centres for arches	" "	1 6
Gutter boards and bearers	" "	1 0

FLOORING.

Deal-edges shot	per sq.	¾" 44/6 1" 53/- 1½" 60/6 2" 65/-
Do. tongued and grooved	" "	49/- 57/6
Do. matchings	" "	45/- 51/-
Moulded skirting, including backings and grounds	per ft. sup.	1/6 1/9 2/0 2/6

SASHES AND FRAMES.

One-and-a-half moulded sashes or casements	per foot super	s. d. 1 10
Two Do. Do. Do.	" "	2 1
Add for fitting and fixing	" "	0 3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3 9

DOORS.

Two-panel square framed	per ft. sup.	1½" 2/1 1½" 2/4 2" 2/8
Four-panel Do.	" "	2/5 2/8 2/11
Two-panel moulded both sides	" "	2/8 3/2 3/5
Four-panel Do.	" "	2/11 3/2 3/5

CARPENTER AND JOINER—continued.

FRAMES.

Deal wrot moulded and rebated	per foot cube	s. d. 14 0
Plain deal jamb linings framed	per ft. sup.	1" 1/7 1½" 1/8 1" 1/4 1/6 2d. 2d.
Deal shelves and bearers	" "	1/4 1/6 2d.
Add if cross tongued	" "	2d.

STAIRCASES.

Deal treads and risers in and including rough brackets	1" 2/1 1½" 2/4 1½" 2/9 2" —
Deal strings wrot on both sides and framed	1/8 2/ 2/2 2/8

Housings for steps and risers	each	0 1
Deal balusters, 1 in. x 1½ in.	per ft. run	0 6
Mahogany handrail; average 3 in. x 3 in.	" "	11 10
Add if ramped	" "	23 9
Add if wreathed	" "	23 9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/
Sash fasteners	11½d.	Mortice locks	4/
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	10
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

Rolled steel joists	per cwt.	s. d. 18
Plain compound girders	" "	19
Do. stanchions	" "	21
In roof work	" "	27

RAIN-WATER GOODS.

Half-round plain rebated joints	ft. run	3" 1/6 4" 1/9 5" 2/- 6" 2/
Ogee Do. Do.	" "	1/9 2/- 2/6 3/
Rain-water pipes with ears	" "	1/9 2/7
Extra for shoes and bends	each	4/4 5/11
Do. stopped ends	" "	1/11 2/4 3/7 4/
Do. nozzles for inlets	" "	2/2 2/7 3/10 4/

PLUMBER.

Milled lead and laying in flashings and gutters	per cwt.	s. d. 60
Do. Do. in flats	" "	59
Extra labour and solder in coated cesspools	each	6
Weld joint	per ft. run	0 1
Soldered seam	" "	0 1
Copper nailing	" "	0 1

Drawn lead waste	per ft. run	1½" 1/2 1½" 1/9 2" 2/0 2½" 3/4 3" 4/0
Do. service	" "	1/8 2/2 2/7 3/10
Do. soil	" "	1/8 2/2 2/7 3/10
Bends in lead pipe	each	1/2 1/8 2/1 2/10 3/3 3/8
Soldered stop ends	" "	1/2 1/8 2/1 2/10 3/3 3/8
Red lead joints	" "	11d. 1/- 1/3 1/11 2/4 4/
Wiped soldered joints	" "	2/10 3/6 4/- 4/11 6/6 9/
Lead traps and cleaning screws	" "	14/7 19/6
Bib cocks and joints	" "	6/4 9/7 15/4 41/-
Stop cocks and joints	" "	15/4 17/2 25/8 64/-

PLASTERER.

Render, float and set in lime and hair	per yard sup.	s. d. 2
Do. Do. Sirapite	" "	2
Do. Do. Keen's	" "	3
Add sawn lathing	" "	1
Add metal lathing	" "	2
Portland cement screed	" "	2
Do. plain face	" "	3
Mouldings in plaster	per l girth	0 6
One-and-a-half granolithic pavings	per yard sup.	5 6

GLAZIER.

21 oz. sheet plain	per foot sup.	0 8
26 oz. Do.	" "	1 0
Obscured sheet	" "	1 1
¾ in. rolled plate	" "	0 9
½ in. rough rolled or cast plate	" "	0 10
½ in. wired cast plate	" "	1 4

PAINTER.

Preparing and distempering, 2 coats	per yard sup.	0 9
Knotting and priming	" "	0 7
Plain painting 1 coat	" "	0 8
Do. 2 coats	" "	1 2
Do. 3 coats	" "	1 9
Do. 4 coats	" "	2 4
Graining	" "	2 4
Varnishing twice	" "	1 9
Sizing	" "	0 3
Flattening	" "	0 3
Enamel	" "	1
Wax polishing	per foot sup.	0 1
French polishing	" "	1
Preparing for and hanging paper	per piece 2/- to 4/-	

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright. Prices include both materials and labour.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes accepted. † Denotes provisionally accepted.
‡ Denotes recommended for acceptance.
§ Denotes accepted subject to modifications.

BARKING TOWN.—Erection of five houses in Abbey-road, for the U.D.C.:—
*A. W. Jagers & Son £2,611

BEDFORD.—Repairs, decorations, painting, &c., to the Harpur Trust Schools, for the Governors of the Harpur Trust. Mr. George P. Allen, F.R.I.B.A., architect and surveyor, 81, High-street:—
*Bedford School—H. S. Manning.. £296 13
*Girls' Modern School—S. Foster, Ltd. 99 0
*Girls' High School—J. Perkins & Son 198 17

BEDFORD.—New railings and other work in connection with enclosing the land at Elstow, for the E.C. Mr. George P. Allen, F.R.I.B.A., architect and surveyor, 81, High-street:—
J. Corby & Son £797 0 0
H. Bowler 763 0 0
S. Foster, Ltd. 762 0 0
*C. A. White 705 6 6
(All of Bedford.)

BEDFORD.—Alterations and additions to 86 and 88, High-street, for Mr. F. R. Hockliffe. Mr. George P. Allen, F.R.I.B.A., architect and surveyor, 81, High-street:—
*S. Foster, Ltd. £380

BELPER.—For the extensions of the sewerage disposal works at Mapperley, constructing filter bed, andundry repair work:—
*Joseph Payne, Crich.

BIRMINGHAM.—Council school at Alston-road, Bordesley Green, for the E.C.:—
Mason:—
*T. Elvins & Son £27,691 0

Heating Installation—
†The Brightside Foundry and Engineering Co. 1,874 0
Electric Lighting—
*Lewis & Hall 580 10

BIRMINGHAM.—School at Witton Lodge, for the E.C.:—
Mason:—
*W. Sapcote & Sons, Ltd. £25,888

Heating Installation—
†The Brightside Foundry and Engineering Co., Ltd. 2,233
Electric Lighting—
*G. Lea, and Co. 734

BLACKROD.—For twenty houses on Manchester-road and Station-road, for the U.D.C. Mr. W. Bradley, M.S.A., architect, 8, Acresfield, Bolton:—
*Jolly Bros., 5, Sterling-road, Wigan.

BRIGHTON.—Erection of 16 concrete houses, for the T.C.:—
*J. Laing & Son, Ltd. £7,648

BRIGHTON.—Laying water mains from Ditchling Reservoir, for the T.C.:—
*Geo. Stow & Co. £4,519 7

BROWNIE.—Reconstruction of old Brownie Bridge, for the Durham C.C.:—
†Sir Robert McAlpine & Sons £14,000

BURSLEM.—Garage, for Stoke T.C.:—
*Cousens & Allport, Burslem. £840

BURY.—Fourteen houses for the Pilsworth and Unsworth Garden City, Ltd. Mr. J. D. Mould, F.R.I.B.A., architect:—
*J. Smith & Sons.

CARDIFF.—Female officers' block at 42, Cowbridge-road, for the B.G. Messrs. Willmott & Smith, architects, 4, Park-place:—
F. J. Thomas £7,790
J. E. Evans & Co., ... 7,405
W. Symonds & Son 7,395
John Gibson, Ltd. 7,150
D. Davies & Sons 7,057
Tucker Bros. 6,992
Knox & Wells, Ltd. 6,800
*Watts & Gale 6,215
(All at Cardiff.)

CARLISLE.—Buildings in connection with the new electricity works at Willow Holme, for the Corporation Electricity Committee:—
*Durham & Vevers, East Boldon .. £18,230

CALVERLEY.—For (a) Twenty non-parlour, and (b) ten parlour type houses, on the Brookfield estate, or the U.D.C. Mr. W. H. Hinton, surveyor:—
*W. J. Turnbull, Leeds (parlour type) .. £545
*W. J. Turnbull, Leeds (non-parlour type) 463

CALVERLEY.—For erection of 30 houses (20 sculery and 10 parlour type), for the U.D.C.:—
*W. J. & R. Kendall, Ltd.

CALVERLEY.—For various street works, for the U.D.C.:—
*R. Naylor & Sons, Gillington £1,785

CARLTON.—Four parlour-type and 12 houses on the Conway-road site, for the U.D.C. Mr. J. A. West, A.R.I.B.A., surveyor, Manor-road:—
*R. Hustwayte, Sherwood, Notts—
Four parlour houses £1,812
Four living room houses 1,748
*J. Green—Eight living room houses. . . 3,467

CHESTER.—New additional premises for Messrs. R. E. Jones, Ltd. Mr. Ogilvie Campbell, L.R.I.B.A., architect:—
General Contractors—
*Moston, Browne, Ltd., Cow-lane Bridge.
Steelwork—
*J. Parkes & Son, Northwich.

CHESTER.—New laundry block at the Poor Law Institution, Hoole-lane, for the B.G. Messrs. J. H. Davies & Sons, architects, 14, Newgate-street:—
Huxley & Co., Chester £3,360
Fleming & Co., Neston 3,359
Warrington & Sons, Ellesmere Port .. 3,262
Vernon & Son, Chester 3,250
McLellan Bros., Chester 3,234
Morton Browne, Ltd., Chester 3,220
†E. Pritchard, Chester 3,086

CHESTERFIELD.—Erection of 16 "A 3" and 21 "A 2" type houses, for the T.C.:—
*George Webber, Chesterfield £16,467 10

COULSDON.—Revised scheme for 92 houses, Chipstead Valley-road, for the U.D.C.:—
*H. Bacon & Son, of Coulsdon £44,918 8 8

COVENTRY.—Repairs at Coventry County Hall, for the Warwickshire C.C.:—
†F. G. Plumb £525 7 6

CUMBERLAND.—Muncaster Mill, Bootle-road, widening scheme:—
*Wm. Prescott & Sons, Durham .. £20,655

DAGENHAM.—Shop and house for Mr. G. A. Tilly, Parrish Estate, Dagenham. Mr. E. Meredith, A.R.I.B.A., 7, Goodmayes-road, Goodmayes, Essex:—
Baker, Hammond & Faver, Ltd., Rainham £1,925
J. Eaton & Sons, Chelmsford 1,596
*H. E. Jerram 1,427

DERBY.—For the erection of Upper Stonelow Bridge and the Lower Saltersitch Bridge, for the T.C.:—
*Lehame, Mackenzie & Shand, Darley Dale.

FARSLEY.—Alterations at Frances-street elementary Council schools, for the E.C.:—
*Fisher & Lumby.

GLASGOW.—Erection of schoolhouse at Robroyston Hospital, for the T.C.:—
*J. Morrison & Sons (Glasgow), Ltd. . £2,967

GLASGOW.—Construction of operating theatre at Robroyston Hospital, for the T.C.:—
*Mathew Henderson, Ltd. .. £8,440 0 1

GLASGOW.—Painter work at Shawlands housing scheme, for the T.C.:—
*A. & G. Laird £2,394 17 11

HANLEY.—Four all-electric houses, for Stoke T.C.:—
*Exors. of H. Wardle, Langport.... £1,390

HODSOCK.—Erection of school for 744 and teachers' house at Langald, for the Notts E.C.:—
*Greenwoods (Mansfield), Ltd. £21,792

HUDDERSFIELD.—Additional buildings for the Bent Lay Silk Mills Co., Ltd., at Crossland Moor. Messrs. Lumb & Kaye, architects, Milnesbridge:—
Masons—*Graham & Jessop.
Joiners—*J. Brooke & Sons.
Slaters—*Sheridan & O'Hara.
Steelwork—*A. Pulman & Son, Ltd.
Patent Glazing—*W. H. Heywood & Co.
(All of Huddersfield.)

HULL.—Enlargement of the Cottingham Waterworks, for the C.B.:—
Arnold & Son, Ltd., Doncaster £310,210 10 0
Francois Cementation Co., Ltd., Doncaster 221,074 0 0
Kearton & Partners, Wolverhampton 168,928 16 8
Crawford Bros., Sheffield 157,299 8 4
*A. C. Potter & Co., Grantham 136,859 0 0

HULL.—100 Houses on East Hill site, for the C.B.:—
†A. E. Jones, Ltd., Hull. £20,050

ILFORD.—Widening Cranbrook-road and High-street, for the U.D.C.:—
*D. T. Jackson £31,200 5 3

ILFORD.—Erection of 12 houses at Perth-road, for the U.D.C.:—
*Wm. Simms, Stepney £8,500

KERESLEY.—Extension at elementary school, for the Warwickshire E.C.:—
*Humphreys, Ltd. £7,697
*Couzens & Akers (heating) 447

LANCASHIRE.—Construction of bridges on the Garstang by-pass road, for the C.C.:—
*Morrison & Sons, Liverpool—
Kirkland Bridge £9,097 6 2
*J. Byrom, Ltd., Bury—Bridge over Lancaster Canal 6,022 0 0
*J. M. Firth, Todmorden—Bridge over railway 6,114 11 0

LIVERPOOL.—Seventeen houses and gatekeeper's lodge at Speke-road, Garston, for Messrs. Bryant & May's, Ltd., Mr. Colin S. Brothers, A.R.I.B.A., architect, Liverpool:—
*J. J. Blackburn, Worsley.

LONDON.—For alterations to the "Morpeth Castle" public house, and adjoining premises in Cadogan-terrace, Victoria Park, for Messrs. Truman, Hanbury, Buxton & Co., Ltd. Mr. A. E. Sewell, architect, 91, Brick-lane, E.1. Quantities by Mr. W. Gilbert, 74, Broad-street-avenue, E.C.2.:—
Perry & Co. £13,681
John Barker 12,976
Courtney & Fairbairn 12,933
Fairhead & Son 12,820
Knight & Son 12,641
Snewin Bros. 12,590
W. Harper, Ltd. 11,942
*H. V. Clogg 11,847

LUTON.—Sewage machinery, for the T.C.:—
*S. S. Stott & Co., Haslingden £2,343

MANCHESTER.—Shops and offices for the Motor House Co., Deansgate and Camp-street. Mr. J. Knight, F.S.A., architect, 5, Cross-street:—
Brickwork—*J. Byroms, Ltd., Bury.
Steelwork—*Lambourne & Co., Ltd., Openshaw.

MANCHESTER.—Workshops for the Blind at "Heyesleigh," Montague-road, Old Trafford. Mr. G. Westcott, architect, 13, Bridge-street:—
*A. Hodgkinson, Greenhays. £33,000

MANCHESTER.—Additions to works of Messrs. Ward & Goldstone, Ltd., Frederick-road, Pendleton. Messrs. Pye & Bennett, architects, 2, Booth-street:—
*C. L. Dale, Ltd., Hulme.

MINWORTH.—Erection of school, for the Warwickshire E.C.:—
*Isaac Langley £6,635
*Newell & Nesbitt (heating) 365

MONMOUTHSHIRE.—Improvement of the main Newport-Cardiff road, for the County Roads Committee:—
Messrs. Leadbetter, Newport £38,000

MORLEY.—Fifty-two houses, for the T.C.:—
*J. Clegg & Sons, Morley.

NORTH BRANCEPETH.—Remodelling Council school, for the Durham County E.C.:—
*T. Coates, Durham £368

NOTTINGHAM.—For the erection of stables and wagon sheds, &c., for the Nottingham Co-operative Society:—
*H. Bowles, Nottingham.

NOTTINGHAM.—For the erection of new bakery for the Nottingham Co-operative Society:—
*General contractors—J. G. Short & Sons, Nottingham.
*Ovee builders—Baker Perkins, Ltd., Peterborough.
*River wall—H. Arnold & Sons, Ltd., Doncaster.

PLYMOUTH.—External and internal painting of houses at Lambhay-hill and 46, New-street, for the C.B. Mr. J. Wibberley, Borough Engineer:—
*S. W. Cameron

PLYMOUTH.—Two blocks of houses at Pottery Quay and three bungalows, at Elphinstone Barracks, for the C.B. Mr. J. Wibberley, Borough Surveyor and Engineer:—
Elphinstone Barracks.—Work being executed by direct labour, under the supervision of the Borough Engineer.
Pottery Quay.—No tender accepted. Referred back by Council for further consideration.

PONTARDAWE.—Sixteen houses at Trebanos, for the R.D.C. Mr. E. D. Jones, architect:—
Lewis & Thomas, Pontardawe £9,328 9 1
J. Richardson, Trebanos ... 9,265 19 9
Thomas Bros., Pontardawe .. 9,049 14 6
David Davies, Alltwn 8,941 19 1
D. Morgan, Trebanos 8,907 10 0
John Morgan, Neath 8,890 18 10
*D. Evans & Sons, Glanmanan 8,872 18 0

PONTARDAWE.—Ten parlour type houses on the Hodgson-road site, Godregraig, for the R.D.C. Mr. E. D. Jones, architect:—
W. E. Jones, Ystalyfera £5,716 10 0
Lewis & Thomas, Pontardawe 5,655 17 3
D. J. Jones, Godregraig, ... 5,593 0 0
*William Morgan, Ystradgynlais 5,490 0 0

RAWMARSH.—100 Houses:—
*G. Ramsden—19 houses each £435 0
*R. Alt & Co.—19 houses " 470 0
*A. J. Pugh—21 houses " 477 0
*J. Jacques—19 houses " 484 10
*W. Thomason & Co. " 495 0

RICHMOND (Yorks).—100 Houses for the R.D.C.:—
*J. F. Banbridge, Redcar. £16,680

SILKS WORTH.—Alterations at school and erection of new departments, for the Durham County E.C.:—
*G. W. Lazenby & Co., Ltd., Ferry-hill £5,445 12

SOUTH SHIELDS.—The R.D.C. has accepted tenders for the erection of 154 houses as follows:—
86 houses at Boldon Colliery—
*H. M. Nowell, Stockton £33,715 2 8
33 houses at West Boldon—
*Jos. B. Wilson, East Boldon 15,610 0 0
30 houses at Whitburn—
*Wm. D. Allison, Whitburn. . 12,457 15 0
The total outlay will be £61,782 17s. 8d.

SATISFACTION GUARANTEED.

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VOL. CXXIX.—No. 4,306

AUGUST 14, 1925

THE REPORT OF THE MINISTER OF HEALTH

THE most noteworthy feature of the Sixth Report of the Ministry of Health which has just been issued is the statement it contains as regards Housing, that a rate of construction appears now to have been reached which provides not merely for the normal increase in population but also in some degree for overtaking arrears. That this result is not achieved without cost is shown by the figures relating to subsidies, for during the year under review, 1924-5, £7,863,846 was paid under the Act of 1919 and £97,875 under the Acts of 1923 and 1924. The Report states that on March 31, 1925, approval had been granted for the erection of 239,354 houses under the Acts of 1923 and 1924, and of this number 99,620 were to be provided by local authorities, 132,464 by private enterprise, and 7,270 by public utility societies, and of these houses approved 72,907 had been completed and 54,131 were under construction at the date mentioned. But at the same date 211,614 had been completed under the Act of 1919, making the total number of houses erected with State assistance since the war 284,521.

The Report states that there has been a considerable increase in house building by private enterprise without financial assistance, and adding these houses to those erected with assistance in the year 1924-5 a total is given of 135,000 erected during that year. For comparison we give the figures which we published in our Leading Article September 26th, 1924. The houses authorised up to September 3rd, 1924, were: to be erected by local authorities 55,286, and by private enterprise 103,233. The Report states that the average cost in March, 1925, of houses erected by the local authorities under the Acts was £439 for a non-parlour house, an increase of £23 over the average cost in March, 1924, and £489 for a parlour house, an increase of £30 over the same average.

The amounts paid in subsidies for the year were £7,863,846 under the 1919 Acts, and £97,875 under the 1923 and 1924 Acts. The loans made to local authorities for the purchase of houses and to builders, the Report states, shows a notable increase. The amount sanctioned was £7,349,726, which is nearly double the amount sanctioned from the passing of the Small Dwellings Acquisition Act in 1899 to the commencement of the year under review. We gather from the summary of the Report contained in *The Times*, July 29, that the above sum was apportioned as follows—Under the Small Dwellings Acquisition Act £4,658,367, and under section 5 of the Housing Act, 1923, £2,691,359, a total of £7,349,726.

We think these figures are very significant as regards the Small Dwellings Acquisition Act. This Act remained a dead letter for many years, in fact until about the year 1919 few persons knew of its existence, but the amendment in this Act effected by the Housing Act 1923 has greatly increased its usefulness, as is proved by the above figures. Until it was so amended it was only available to enable a resident occupying a house to obtain an advance for its purchase, but the Housing Act 1923 enabled advances under the Act to be obtained by persons intending to

construct a house and also removed many restrictions, and the Act cannot be made too well known. We are publishing an article on this Act.

In addition to the advances mentioned above, the Report states that the London County Council sanctioned loans to metropolitan boroughs to the amount of £116,830, and themselves made advances amounting to £163,530. The above figures relating to Housing show a steady advance upon lines which are becoming better understood, and hence more efficient. There are many people who still require reminding that "Rome was not built in a day," commonplace as that remark may seem, but the reminder is the more necessary as these persons show their impatience by constant appeals for fresh legislation. Now, fresh legislation is always a disturbing element, and should only be resorted to when real occasion arises and after remedial measures already passed have been thoroughly tested and found wanting.

A child makes a more satisfactory and healthy tea in its own nursery than it does on a visit to the confectioner, distracted by many, and often unhealthy, temptations. The Housing nursery is now well supplied, and confectionery supplied by Parliament yearly would only prove a disturbing and undesirable element.

With reference to unhealthy areas, it appears that between 1919 and March 31, 1925, 66 local authorities had submitted 82 schemes for the improvement of insanitary areas, and of these schemes 43, involving the demolition of 5,323 houses and other buildings had been confirmed on March 31, 1924, and 27 schemes, involving the demolition of 3,750 houses and other buildings had been confirmed during the year under review. The Report states (what will be learned with much satisfaction by architects as much as by town-planners themselves) that a growing interest in Town Planning is recorded and that the local authorities have been appealed to to proceed more quickly.

Anyone traversing the country now that building activity has been resumed would wish that some ideas of Town Planning—using that expression in a wider sense than its ordinary meaning—could go hand-in-hand with the development of building land. On some of the lesser building estates buildings are erected in a haphazard method, one house spoiling the amenities of the next, no building line being fixed, and each purchaser or lessee of a plot doing as he likes with it, often to the destruction of the earlier erected houses. Town-Planning principles should really precede development, but they are lagging behind, and much of the countryside is suffering in consequence, though it is gratifying to note that Regional schemes have been and are continuing to be prepared in many parts of the country.

There is much other matter of interest in the Report, but in this brief notice we are confining our observations to Housing and kindred matters. We notice, however, that it is stated that there has been a tendency generally towards a reduction in rates, but an increase in assessable values. The proportion between the two is a matter of interest upon which no information appears to be given. The overburdened ratepayer, seeing a reduced rate declared, may find himself offering up thanks prematurely, for the next assessment may more than wipe out any real relief, and even then leave him worse off than he was before.

[The Report is published by H.M. Stationery Office, from any of whose branches it may be obtained price 3s. 6d.]

NOTES.

Waterloo Bridge.

MR. WALTER SICKERT in a recent letter to *The Times* observes that nine inarticulate

Londoners out of every ten know in their hearts that the question of Waterloo Bridge is one for engineers. "It is more important," he continues, "that the traffic of London should be carried on and, incidentally, that South-East London should not be flooded, than that Waterloo Bridge should be cockered up on the chance of my desiring to do a mediocre water-colour of a scene that has already been often and supremely done in its prime." Of course, if all these dire calamities were likely to happen, and our only compensation were a "mediocre water-colour drawing" by Mr. Sickert, we should decide, however reluctantly, to dispense with the drawing. But most people, including the great majority of "inarticulate Londoners," do not want Waterloo Bridge to be preserved on the off-chance of Mr. Sickert wishing to sketch it; they want it to remain because it is a great national monument; because (with a certain amount of underpinning) it can be made whole again; and finally, because it is a thing of beauty and therefore, as Keats did not forget to remind us, "a joy for ever."

The Protection of Ancient Buildings.

THE annual appearance of the Report of the Society for the Protection of Ancient Buildings should keep the public keenly alive to the value of the Society's work in helping to preserve the beauty and historic interest of our ancient structures. Even where everybody is agreed as to the necessity for restoration there is room for a wide difference in the ways it may be done. It is obvious enough, in an example here given from the Society's report, that restoration has been carried out in such a way that

something of the old charm of the original work has disappeared. We are inclined to ask whether it was better to leave the porch substantially as it was instead of putting in new buttresses, label mould, &c.; tone and texture appear to have been sadly discounted. If the subjects in this year's report are of less interest than in many former ones, the reference shows that the advice of the Society is often acted upon to the benefit of our heritage from the past. We can only hope that Lord Crawford's urgent appeal for pecuniary support will touch the sympathies of many who realise the value of our old buildings and bridges which give a charm to the landscape in these islands, which can hardly be greater the world over. Only the other day we saw an old Tudor gable and a delightful old pump which look as though they would not be long before they are nothing but the shadow of a memory, and that only to a very few people.



Broughton Church, Before Repair.

Ancient Monuments and Historic Buildings.

A CORRESPONDENT writes:—"There are well authenticated rumours that Mr. Winston Churchill is contemplating a raid upon the sums now being expended in the repair of Ancient Monuments and Historic Buildings. Architects will certainly regret if any necessary work is in consequence not carried out, for certainly the Ancient Monuments Department of the Office of Works have carried out most useful work during the past six years in preserving the Tower of London, Melrose Abbey, Jedburgh Abbey, Dryburgh Abbey, and many castles and old ecclesiastical buildings. Already researches at Richborough Castle that were bringing to the light old Roman walls have been curtailed. The total cost of repairs carried out during the past six years is £950,680, but this includes the cost of caretaking. In any case, the saving cannot be considerable and the damage to our ancient buildings if allowed to continue unchecked may be irreparable."



Photographs by Mr. H. F. Beale.

Broughton Church, After Repair.

[From the forty-eighth Annual Report of the S.P.A.B.]

The Roumanian Exhibition.

NEAR the Champs Elysées at the end of the Rue d'Orléans, there is to be seen an exhibition of the mediæval and modern art of Roumania—if the modern art may be said to count at all—which, with this exception, is of a quite unusual and even extraordinary interest. The exhibition is housed in the Musée du Jeu de Paume, very accessible to visitors. Nor is it only that the interest of the works shown is so great, but that they are set in such a becoming and harmonious atmosphere, representing the high credit to the organisers of the exhibition. The quiet grey walls, the attractive blue arras cloth which frames a remarkable eighteenth-century iconostase, all tend to sustain the beauty and completeness of the exhibition, the contents of which include pottery, textiles, carpets, embroidery, wall-painting, wood carving &c.

metal work, all of ancient character, nearly all of it distinguished by the sensibility and beauty of rare achievement. There is also much of interest to architects in the series of photographs of Roumanian architecture, which occupies one of the rooms. The exhibition closes at the end of August, and it were well worth while to visit Paris if only to see this exhibition, to which we hope to refer at greater length a little later.

War Memorial Inscriptions. We confess that the outcry against the inscription attached to the Machine Gun Corps Memorial at Hyde Park Corner is not uncalled for, and we trust that it will be altered. We should have expected such a memorial to commemorate those who fell, instead of commemorating with a bloodthirsty text the number of Germans killed. Such an inscription to all right-thinking people is opposed to what we feel and to what such memorials should convey. In reply to a question in the House it was stated that to alter the inscription would be to make the memorial unintelligible. If that were so—which we much doubt—it is better that it should be unintelligible than that such an inscription should remain.

Mural Painting in Paris. It would seem as though there was more danger to the vitality of an art in theorising and encouragement of it than in leaving its emergence to depend on the natural desire of a people towards expression. Fostered too much it becomes artificial, and theories of painting take the place of natural impulse, while the intellect dries up the sources of spontaneous artistry. The wholly remarkable series of mural paintings, for instance, which adorn the walls of the building of the Serbs, Croats, and Slovenes are spontaneous and full of nature. They are nearly life-size figures painted in tempera and live before us as a true interpretation of the life of the people. Here no theories, no academic formulæ come between the artist and the direct impulse of nature with which he is inspired. We see the native dress, the occupations, age and youth, characteristically represented in a way which is an example to us. In conversation with a Serbian gentleman, we were told that the paintings were wholly authentic of the life, character, dress, and occupation of the people represented, though one hardly needed to be told this, the paintings themselves proclaiming it. We can imagine nothing more instructive to the student of art than a visit, first to the magnificent series of mediæval paintings in the Roumanian Exhibition, and afterwards to see these Serbian decorations, the latter revealing as in the earlier art the importance of a subject matter inspiring and human enough to promote a natural and sincere expression.

The August Issue of "Architecture." THE August issue of *Architecture* is a varied and interesting number and includes several articles by contributors who are well known to the architectural profession, while the illustrations are probably of more than usual charm and interest. The articles on "Criticism," which will be continued in subsequent issues, deal with a question of some importance to readers of an architectural journal, who are constantly

asking for critical expressions of opinion on current architecture; and the articles make some attempt to show the attitude of the critic and the meaning of much of the criticism which is attempted. The magazine, we are glad to say, is receiving increasing support, and this issue contains illustrations of the Birkenhead War memorial; Bramhall Hall; some charming illustrations of Danish work; as well as the usual and fresh features of interest.



Cabinet Design, by MR. E. C. FRERE, F.R.I.B.A.
[This cabinet was designed for the President and Council of the Royal College of Surgeons of England to contain the surgical appliances, records, manuscripts and personal mementoes of the late Lord Lister. It is made of Italian walnut, inlaid with ivory and ebony, by Messrs. C. Bessant & Sons.]

GENERAL NEWS

Public Lighting Conference.

The second Annual Meeting and Conference of the Institution of Public Lighting Engineers is to be held at Leeds from September 14 to 16.

Bramall Hall.

Bramall Hall, recently threatened with demolition, has been bought by Mr. J. H. Davis, of Manchester, who intends to reside there.

Change of Address.

Mr. Arthur Boxall, quantity surveyor, has removed his offices from Lloyds Bank Chambers, Henrietta-street, W.C., to 7, Queen Anne's Gate, Westminster, S.W.

Obituary.

We regret to announce the death of Mr. James Franklin Fuller, for many years architect to the Representative Body of the Church of Ireland, to the Benchers of the King's Inns, and to the National Board of Education, Ireland.

New Hull Bridge.

Hull City Council has approved a scheme for a new bridge to replace the existing structure which provides the main avenue of communication between the western and eastern portions of the city. The estimated cost of the bridge is £275,000.

Abbey War Memorial, St. Andrew's Church.

The Abbey War Memorial scheme at St. Andrew's Church, Plymouth, involving the purchase of ancient buildings adjoining the fifteenth century church and their reconstruction and restoration, will be completed next month, at a cost of £10,000.

Wells Cathedral.

The west front of Wells Cathedral is reported to be in a dangerous condition. One fine statue has recently fallen, and others are stated to be in imminent peril. It is reported that several thousands of pounds will have to be spent on the consolidation of the masonry and the repair of the statues.

Hidden Art Treasure.

A Sheffield artist, Mr. Harry Baxter, of Newhall-road, after many months' patient work removing the stain of years, has discovered that a painted panel is the work of Anselmus Hebbelynck, better known as Jan Van Hulle, the well-known Belgian artist. The picture bears the artist's signature.

A Model of St. Paul's.

A model of St. Paul's Cathedral, showing the faulty condition of the piers of the dome and the suggested method of saving the structure by means of hidden collars of reinforced concrete, has been ordered by the authorities of the Science Museum at South Kensington. It will be executed by the author of the scheme, Mr. William Harvey. The Museum authorities required the model as a means of demonstrating to future generations the nature of the weaknesses discovered in Wren's structure, and the ideas of constructional experts of to-day.

The Holt Building, Liverpool.

Messrs. Alfred Holt & Co., the Liverpool ship-owners, have placed the £857,000 contract for the building of the main superstructure of their new building, between Water-street and Brunswick-street, with the Liverpool firm of William Thornton & Sons, Ltd., of Wellington-road. The contract was competed for by firms in Liverpool, London, Manchester, Birmingham, and Rugby. It is for the whole of the building, a half of which is being built at a time. Messrs. Arnold Thornely and Herbert J. Rowse are the architects.

A New Hotel in Piccadilly.

After a lapse of ten years' work has been resumed on the new Park-lane Hotel, known to nearly a generation of Londoners as the Bird

Cage Hotel. Five Yorkshiremen and a Scotsman are responsible for the continuance of the work, and they hope to give London within fifteen months a super hotel capable of accommodating 600 persons. The contract, which has been secured by Messrs. Higgs & Hill, amounts to about £300,000.

ROYAL INSTITUTE OF BRITISH ARCHITECTS

Final and Special Examinations.

THE Final and Special Examinations, qualifying for candidature as Associate R.I.B.A., were held in London from July 8 to 16. Of the 62 candidates admitted (one of whom took Part II only), 42 passed, and the remaining 20 were relegated. The successful candidates were as follows:—

K. W. Aimer (Special), W. J. Allcorn, G. H. Alsop, C. E. A. Andrews (Special), B. W. S. S. Baily (Special), G. M. Bhuta, W. A. F. Bowen (Special), G. D. Channon (Special), A. O. Chatterley, H. Conolly, J. B. Cooper, C. P. Fahy (Special), E. Forster, R. S. D. Harman, B. S. Hume, A. F. Ibrahim* (Special), J. G. King, F. J. Lander, G. L. Martin, J. A. Metcalfe, J. C. Miller, J. H. Parker, C. T. Prangnell, W. J. B. Price, G. E. Read, A. D. Rix, N. Rizkalla* (Special), L. Senyard (Special), P. L. Sharma, J. R. M. Simpson (Special), E. S. Smith, H. W. Stokes, K. S. Tayler, A. J. Thompson (Special), W. Tocher, A. A. G. Toone, E. G. Turner (Special), E. Unwin (Special), F. T. Winter (Special), J. A. Woodgate (Special), K. F. Wray, F. H. Wrigley.

*These candidates are not British subjects, but took the examination for the purpose of obtaining certificates to that effect.

SPECIAL EXAMINATION IN DESIGN FOR FORMER MEMBERS OF THE SOCIETY OF ARCHITECTS.

The Special Examination in Design for former members of the Society of Architects to qualify for the Associateship was held from July 8 to 13. Of the 23 candidates admitted, 19 passed and the remaining four were relegated. The successful candidates were as follows:—

W. H. Adams, E. R. Bill, F. C. Button, E. A. Chilton, H. Collins, S. H. Collins, C. W. Fox, J. O. Hughes, G. W. Jackson, J. C. F. James, E. D. Jones, D. S. Macphail, J. E. Marshall, D. G. Millett, T. O'Beirne, C. J. Picton, T. G. Price, S. G. Scales, W. J. Werry.

EXAMINATION IN PROFESSIONAL PRACTICE FOR STUDENTS OF RECOGNISED SCHOOLS EXEMPTED FROM THE FINAL EXAMINATION.

The following candidates passed this examination, which was held on July 14 and 16:—

A. M. Allen (Architectural Assoc.), F. N. Astbury (Liverpool Univ.), H. L. Barton (Liverpool Univ.), A. E. Cameron (Architectural Assoc.), J. C. Clark (Robert Gordon's Colleges, Aberdeen), F. H. Crossley (Liverpool Univ.), P. Cutbush (Architectural Assoc.), T. V. Deas (Glasgow Sch. of Arch.), L. G. Farquhar (Glasgow Sch. of Arch.), W. Glashan (Robert Gordon's Coll., Aberdeen), F. E. Green (Arch. Assoc.), J. T. W. Greenidge (London Univ.), H. H. Khan (Architectural Assoc.), R. S. Lawrie (Robert Gordon's Coll., Aberdeen), Miss D. A. Lewis (Architectural Assoc.), H. J. Louw (Architectural Assoc.), Miss E. Meikle (Architectural Assoc.), C. A. Minoprio (Liverpool Univ.), R. H. Morrison (Robert Gordon's Coll., Aberdeen), J. H. L. Owen (Liverpool Univ.), W. Percik (Architectural Assoc.), F. L. Preston (Architectural Assoc.), F. Roscoe, Junr. (Architectural Assoc.), C. C. Shaw (Liverpool Univ.), Miss F. T. Silcock (Liverpool Univ.), A. M. Stewart (Robert Gordon's Coll., Aberdeen), H. Thearle (Liverpool Univ.), A. G. Walker (Glasgow Sch. of Arch.), Miss M. A. M. Wall (Liverpool Univ.), T. T. Wills (Liverpool Univ.), J. W. Wood (Architectural Assoc.), T. R. Wood (Robert Gordon's Coll., Aberdeen).

COMPETITION NEWS

Shuttering Competition.

Major Wightman Douglas, a former Housing Commissioner at the Ministry of Health, has been engaged recently examining the entries for the shuttering competition. A committee is to inspect models illustrating the methods submitted by certain selected competitors. There have been altogether 201 valid entries, but some of the systems are regarded as quite out of the question for practical use.

Bathgate School, West Lothian.

Mr. T. P. Marwick, F.R.I.B.A., the assessor in the limited competition for a technical school and an R.C. school at Bathgate for the West Lothian Education Authority, has made his awards as follows:—1 (for both plans), T. Aikman Swan, A.R.I.B.A., F.S.A., 42, Frederick-street, Edinburgh; 2 (£100), Messrs. Reid & Forbes, 7, Ainslie-place, Edinburgh; 3 (£50), Messrs. Thomas Roberts & Hume, 22, Engine-street, Bathgate. These awards have been confirmed by the Education Authority.

Australian War Memorial, Canberra.

Competitive designs are invited for the Australian War Memorial at Canberra. The competition is open to architects of Australian birth wherever located, and in order that competitors who are abroad may be placed on the same footing as those in Australia, the conditions governing the competition will not be available in Australia until August 15, at which date they will be available at the Office of the High Commissioner, Australia House, Strand. To ensure that the same working time is allowed to all competitors, the competition will close simultaneously in Australia and London on March 31, 1926, at noon, on which date designs from architects in Europe will be received at the Office of the High Commissioner in London. Intending competitors should communicate with the Official Secretary to the Commonwealth of Australia, Australia House, Strand, W.C.2.

*Enlargement of Carnegie Hall, Dingwall.

The Competitions Committee of the R.I.B.A. call the attention of members to the fact that the Conditions of the above Competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members are advised to take no part in the competition.

	Particulars published in "Builder."	Sending in date.
War Memorial, Pontardulais, to cost up to £600. Apply Mr. H. M. Gibbon, Aberdare House, Pontardulais, Glam.	—	Aug. 22
Copenhagen Bridge. Three premiums, highest 15,000 kroner. Apply C. Eng's Office, Town Hall, Copenhagen. Dep. 100 kroner	April 24	Sept.
Wolverhampton Hospital. Premiums: £200, £150, £110. Mr. T. R. Milburn, F.R.I.B.A., Assessor	May 22	Sept.
Drammen Bridge (Drammenselven). Premiums: 10,000 Norwegian crns., 8,000, 6,000. Apply Gov. Eng., Drammen.	May 29	Oct.
Newcastle Fire and Police Station. Premiums: £500, £300, £100. Mr. F. S. Worthington, F.R.I.B.A., Assessor.	June 12	Oct.
Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply parties, 35, Old Queen-street, S.W.1	April 24	Dec.
New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool	—	1926 Jan.

*Competitions when "warned" or vetoed by R.I.B.A. are Starred.



Porch and Tower, St. Mary's Church, Pimlico.

MR. H. S. GOODHART-RENDEL, Architect.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

New York Cathedral and some Theories.

SIR,—As the note to which your correspondent refers in his letter on this subject somewhat misses the point I wished to emphasise, I should like with your permission to offer some reply. The root of the whole criticism is not as Mr. Randolph describes it "the familiar assumption that there can be no such thing as Modern Gothic." I was not concerned and never raised so abstract a proposition. The root of my criticism was that the mere imitation of Gothic forms, separated from the law of their own growth was not the way to reach it. The mistake of the writer lies in leaving out the human factor, and seeing in Gothic only the forms, the arch and the vault, proportional system, mouldings, etc. This is not the way to interpret the Gothic of the 13th century.

What we have to ask is whether the conditions, the approach and outlook on life, the organisation of labour under industrialism tend to produce the Gothic spirit? Or are we enforcing a mechanical and unenlightened imitation in the name of the tradition which it falsifies, as the same thing? I don't doubt for a moment the permanent significance of these forms or their "basic reality," and it is because I do not doubt it, that I detest the unreality which gives us a sham thing untouched by the spirit which moved the Gothic, as the same thing. Is it a "prejudice or obsession" to dislike such unreality? yet Mr. Randolph would appear to like it.

To me the reality of "salesman's architecture" which we see so paramount to-day is preferable to the falsity of such imitation, which is only a cloak to our own sterility. It is the spirit which governs the form. Corporate impulse evolved them, and corporate union can only sustain them. But what union is sustained by "office" Gothic executed by mechanical labour?

Mr. Randolph complains that I suggest no clearer alternative than "a more robust and genuine form of building." Though not in itself a bad alternative to suggest, I do really suggest much more than this, and include much more, and what the writer asserts that I exclude, I do not exclude at all. For that were to exclude what has once had truth and reality for its directing force. But life interpreted through a paramount industrialism for material ends has not the freedom for Gothic, which was communal and brought a corporate strength of vital craftsmanship through the inspiration of its life. Gulfs divide us from any such union, so long as labour registers mechanically the office drawing of the architect for in such a way materials yield up no secret; thought and imagination find no expansion. Such mechanical registration may give us a Bush Building, but not a Chartres Cathedral. But why should we continue to drag in Gothic at all, when as a nation we neither feel nor act in the spirit which produced it? To me this is all over, and shows only the similitude of life, and things will be better when we more generally recognise that this is so. Therefore to go on building pseudo-Gothic cathedrals is to perpetuate an unreality which a later age will abhor. That I should ignore, as the writer suggests, the permanent significance of Gothic forms will appear strange to any one who knows with what constant advocacy I have upheld the Gothic tradition. But what I ask is that we should reverence and understand it enough, by getting down to the sources out of which its forms grew, not to plagiarise and caricature it.

All this is, however, only half the matter, though the alternative schemes such as I am challenged to produce by Mr. Randolph suggests the patent pill rather than fundamental remedy. And yet there is at the present time something

to which we may look, pregnant with vast issues, whereby the spirit of the nation may find liberation towards more creative expression. I look at the art of the East—of the so-called subject races—and see in temples and other buildings such as Amanda, Boro-Budur and Angkor, that which reveals in the miracle of their inspired achievement, a help toward amelioration. The portent, so menacing in some minds—of the rapidly growing confederation and race-consciousness of the East has still something for us of benefit if it brings liberation from our own too self-centered and static outlook. As our contact with Eastern peoples becomes more receptive, to learn as well as to rule, we shall expand from ideas which have become case-hardened from want of taking in ideas. Thinking we stand we are perilously in danger of falling. There is liberation I believe through the East, in absorbing more of ideas directed towards contemplation and self-knowledge—a spiritual anodyne to our harder, narrower administrative convictions.

Religion, the sense of beauty, the attachment to ideals, to the contemplative life, modified and transfigured the art of Eastern Europe in the 8th and 9th centuries, so now new and more enlightened interpretation of Eastern culture will add the strength that we need, and then, whether we build in the forms of Gothic, Classical or Byzantine will appear secondary to the impulse which, once more inspired by religion and contemplation, transfigures all that we achieve.

THE CORRESPONDENT.

Erecting a Small House.

SIR,—I am proposing to build a small house costing perhaps £900 to £1,000. It seems hardly necessary to employ an architect as many builders could do what is required. Can any reader advise me whether, if the builder is a man of good repute, a legal agreement is necessary or desirable, and if so, what form it should take? If it is considered that an architect should be employed, about what would be the fee to see the matter through?

"SUSSEX."

[*We do not agree with our correspondent that "it seems hardly necessary to employ an architect," as the modest fee of about £50 which "Sussex" would pay for competent advice would amply repay him.—ED.]

The Vagaries of Architectural Competitions.

SIR,—Anent my letter printed in your issue for July 31, I observe that "Justitia's" indictment in to-day's *Builder* avails any reference to what was said about blameworthy awards "made by assessors of excellent repute" in the past. He describes my note as the climax of an extraordinary doctrine that no competitor has a right to protest when weary weeks of work have been wasted by unfair decisions by referees. Not so. On the contrary, let me assure the writer, I have consistently endeavoured to point out in print to the utmost of my ability when such discrepancies have happened, and have seldom, if at any time, failed to support all justifiable protests of the sort. For example, in 1890, when Professor Roger Smith, as assessor, awarded the first premium to a competitor who had taken the liberty of adding 6 ft. to the width of the frontage more than the plan of the site issued with the conditions had shown, for Whitfield's Tabernacle in the Tottenham Court-road. Naturally, there was a rumpus and a correspondence followed in the professional journals. My comment about the issue on that occasion was, do the writers "really believe the Institute will move in the matter? Did it ever do so in any case of the kind?" No, no. When Mr. William Woodward's motion on the matter was subsequently brought forward it was ruled out of order on the ground that the question was strictly an affair as between the promoters and the assessor. So that was that! It is only one out of not a few which might be mentioned. The building erected was not, how-



South Burlingham Church.

ever, the design chosen in this competition, and the result is not ideal! J. M. Brydon was one of the unsuccessful competitors and he was also relegated, with similar architectural results, when Robert Walker's design was chosen for Kensington Town Hall. These were two very sad cases, and I recall another of anterior date when I published a rejected design by E. W. Godwin alongside of the fearful selected one to demonstrate the injustice of such a choice. Mr. Henthorne Stott describes my letter as an "inversion of wisdom and justice." I am sorry, but others may judge differently. I saw his letter in *The Builder* of July 17, with a section of his scheme for the Art Gallery at Manchester. My experience leads me to the opinion as I respectfully stated, that the sooner the controversy about this Art Gallery competition is closed the better for all concerned.

MAURICE B. ADAMS.

R.I.B.A. BOARD OF ARCHITECTURAL EDUCATION

Conference with Teachers of Building.

As we have already recorded, on Tuesday, July 28, the Board of Architectural Education of the R.I.B.A. held a Conference with the representative teachers of building who have been undergoing a course in London arranged by H.M. Board of Education. The Conference took place (says an official communiqué) in the R.I.B.A. Galleries and was largely attended. The Chairman of the Board of Architectural Education, Mr. Maurice E. Webb, D.S.O., M.C., presided, and papers were read by Professor Beresford Pite and Mr. M. S. Briggs, H.M.I. on the Teaching of Building Construction from the Architects' and from the Teachers' points of view respectively. In the subsequent discussion the following spoke:—Mr. A. R. Sage, M.B.E. (Principal of the L.C.C. School of Building), Mr. J. W. Riley (Head of the Building Department, Rochdale Technical School), Mr. W. W. Hitchins (Lecturer in Building Construction, University College, Reading), Mr. Donald Cameron (School of Architecture, the Architectural Association), Mr. E. H. Evans (School of Architecture, the Architectural Association), Mr. C. B. Howdill (Leeds), Mr. T. P. Bennett (Head of Department of Architecture Surveying and Building, The Northern Polytechnic), Mr. F. E. Drury (School of Architecture, Manchester University), Mr. G. J. Grantham (School of Architecture, Manchester University).

At the conclusion of the Conference Mr. Hugh Davies, H.M.I., in a short speech, moved a vote of thanks to the Chairman. The teachers subsequently inspected the following examples of architects' working drawings, which were exhibited in the Galleries:—Adelaide House, London Bridge (Sir John Burnet, R.A., & Partners), Britannic House, Finsbury-circus (Sir Edwin Lutyens, R.A.), Tetton House, Kingston, Somerset (Mr. H. S. Goodhart Rendel), Bush House, Aldwych (Messrs. Helml & Corbett).

BRITISH ARCHÆOLOGICAL ASSOCIATION
CONGRESS AT NORWICH

By P. H. DITCHFIELD, M.A., F.S.A.

THIS venerable antiquarian Association held its eighty-second Congress during last month, at the ancient city of Norwich as a centre, pouring into many parts of the historic county of Norfolk, visiting Great Yarmouth, Thetford, Litcham, East Dereham, countless churches, earthworks, manor houses and other historic buildings for which the shire is famous. Norfolk is justly renowned for its archæological treasures, and also has an active and learned Archæological Society, the members of which co-operated whole-heartedly with the Association in making the Congress successful, and in explaining the various antiquities and sites which were visited during the week. The officers of the Association present were Mr. Charles E. Keyser, M.A., F.S.A., President; Mr. E. Reginald Taylor, F.S.A., Hon. Secretary; Mr. Ernest A. Kent, Organising Secretary; the Rev. P. H. Ditchfield, F.S.A., Editor; Mr. Francis Weston, F.S.A., Hon. Treasurer; Mr. P. M. Johnston, F.S.A., &c. The Patrons of the Congress were H. Prince Frederick Duleep Singh, M.V.O., F.S.A., the Lord Mayor of Norwich, Dr. Pope, the Bishop and the Dean of Norwich, the Misses Colman and Mr. J. H. F. Walter, F.Z.S., and the Reception Committee consisted of Mr. W. R. Rudd, Mr. B. Cozens-Hardy, Mr. L. G. Bolingbroke, Mr. E. M. Beloe, Mr. R. F. E. Ferrier, F.S.A., and Mr. R. H. Teasdale. The headquarters of the Congress were fixed at the interesting and ancient Maid's Head Hotel and the Royal Hotel, Norwich.

Monday, June 29.

We arrived in the city in time for luncheon at the hotels, and then proceeded to inspect Norwich, the first place being—

ST. PETER MANCROFT.

At St. Peter Mancroft Church the visitors were received by the vicar (Canon Meyrick), who afterwards outlined the history of the fabric, and pointed to its many features of interest. With regard to the title "Mancroft," Canon Meyrick said it was generally held to be derived from "Magna crofta," a great open space used in ancient days as a tilting field. A local antiquary, whose opinion was not to be despised, suggested that was a wrong assumption, and that the name "Mancroft" came from "Man-resh's Croft." The Canon specially called attention to the absence of any chancel screen in the church. That fact had a special interest in East Anglia, because in 1281, at the peasants' revolt, the great church of North Walsham in Norfolk was destroyed, and when (according to Mr. Francis Bond) it was rebuilt, it was the first Perpendicular church not to have any chancel arch. More characteristic of a church without a chancel screen was the gorgeous church of St. Nicholas at King's Lynn.

THE GUILDHALL.

On arrival at the Guildhall the visitors were greeted by the Lord Mayor in the Council Chamber. In some remarks on the history of the building he incidentally referred to the Guild of St. George, founded in 1385, and said that in 1417, when Henry V gave his charter to the municipality, he conferred a charter on this Guild, licensing it to hold property to the extent of £10. Its recognition as part of the Corporation saved it from suppression in the reign of Edward VI. In 1731 the St. George's Company voluntarily agreed to deliver up to the Corporation all their charters, books and records provided the city would pay their debts, which it promised to do, and so this ancient company, after an existence of nearly three and a-half centuries, became extinct.

The Lord Mayor then called attention to the pictures of local celebrities of past days which adorn the walls of the Chamber, and referring to the portrait of "Old" Crome, which hung

there for so long, said it now had a place in the Castle Museum. Among the notabilities to which he particularly pointed were Sir James Hobart, Recorder and M.P. for Norwich in 1596, who contributed to the cost of rebuilding the Chamber; Robert Tannys (Sheriff 1509, Mayor, 1517 and 1524), a curious and notable portrait with the figure of death seizing the worthy citizen; Sir John Pettus (Sheriff 1598, Mayor 1608), a considerable benefactor to the city; Sir Peter Reade, who, according to Blomefield, was knighted by Charles V at the winning of Tunis; and Augustine Steward (Sheriff 1526, Mayor 1534, 1546 and 1556), a very powerful citizen in his day. It is on record that when the monasteries were dissolved he secured the great Dominican convent, now known as St. Andrew's Hall, from Henry VIII, for a ransom of £81. The civic insignia and plate were also shown to the company and explained in detail.

CARROW ABBEY.

On leaving the Guildhall the visitors went to Carrow Abbey, where they were entertained by the Misses Colman at tea. After this a short account of the Abbey was given by Miss Ethel M. Colman, the late Lord Mayor of Norwich. She pointed out that though the foundation had from early times been called an abbey, its true designation was Carrow Priory. It was before the middle of the twelfth century that the portion of the land on which Carrow Abbey stood was granted by King Stephen to the nuns of a church or hospital in Norwich dedicated to St. Mary and St. John, now lost sight of. In 1176 two of these nuns, named Seyna and Lascelina, probably sisters, founded a Benedictine priory there. The Abbey stood on rising ground above the marshy district which bordered the River Wensum a little way to the north. Some people thought that the word Carrow was derived from two words, "car," a marshy spot, and "how," a hill. Of the church, only the ruins remained. Unfortunately, no picture, either on canvas or in the illuminated pages of some old manuscript, had yet come to light to show what the priory church was like, but, judging from its site, from its commanding position overlooking the river, and from the number of beautifully carved and moulded stones which had been found among the ruins, it must have been a stately and beautiful building. The Prioress's house, in which they were met, was built about 1514 by Isabel Wygun, the last, or possibly the last but one, of the prioresses. No doubt the present house replaced an earlier one on the same site, or thereabouts.

The visitors were then shown over the Abbey by Miss Colman and Miss Helen Colman, and they also inspected the ruins of the church and other buildings. Cordial thanks were returned to them by the President of the Association.

THE RECEPTION.

The Lord Mayor's reception at St. Andrew's Hall in the evening was invested with all the picturesque ceremonial which has of late years come to mark such civic occasions. To strangers to the city the interior of the Hall itself with its pictures immediately created a fine impression, and their interest was further stimulated by an inspection of Blackfriars' Hall and the conventual buildings. They were conducted round by Mr. Walter Rudd, Mr. Basil Cozens-Hardy, and Mr. E. A. Kent, and in Blackfriars' Hall their attention was specially called to the only monumental slate from the Church of the Dominican Convent placed at the east end. This shows the matrices of the brasses of Edmund Hastings, and Elianore Wodehouse, his wife, their two sons, John and William, and their daughter Anne. The slab is dated 1487.

The Lord Mayor, in offering a cordial welcome

to his guests, explained that he was going to speak only for the city of Norwich, and would leave the country people to speak for themselves. "I am always glad," said the Lord Mayor, "to see people visiting our city, who see with their eyes, hear with their ears, and discern with their intellect, and are able to realise the beauties which are crowded into our old city." The President of the British Archæological Association had admitted making an attempt to survey the beautiful churches in Norwich, and had collapsed after accomplishing sixteen. He wished the President would live to complete this inventory of those churches before he handed on the torch of his office to his successor.

The Lord Mayor announced to the Association that an Ancient Buildings Committee had recently been set up in the city, whose special function would be to circumvent the machinations of all the engineers and artists in reinforced concrete who calculated only in dimensions of strain, stress, tension, and other abominations without any regard to architectural value and beauty. He wished the members of the Association every joy during their visit to Norwich, and hoped they would come again.

Mr. Charles E. Keyser, M.A., F.S.A. (President of the Association), in acknowledging the Lord Mayor's welcome, said the members of the Association would not have liked to leave St. Andrew's Hall without expressing their appreciation of the hospitality that had been offered to them. They appreciated it very much and felt sure they would have a thoroughly enjoyable visit, not only in the city of Norwich, but also in the county of Norfolk. They were looking forward with great anticipation to the week they were to spend in this wonderful neighbourhood. That was the eighty-second Congress of the Association, which was founded in 1843, just at the time of the Gothic revival. It was felt that practical use should be made of people who possessed expert knowledge and who were prepared to visit various parts of England to encourage people to take an interest in and also take care of architecture and objects of antiquarian interest. It was found shortly afterwards that local societies were being formed, and if they would refer to the Norfolk archæological records—and as an old member he had the whole series—they would find that the Norfolk and Norwich Archæological Society was founded in December, 1845. He believed they had a visit from the Archæological Institute in 1843. Unfortunately, there was later a little schism, and that society was afterwards split in two. From that there had arisen the British Archæological Association and the Royal Archæological Institute. A little while ago it was suggested and hoped that the two societies would amalgamate, but the idea did not fructify, though a very happy feeling existed between the two organisations. He (the speaker) was the President of the British Archæological Association, and also the senior member of the Royal Archæological Institute. The British Archæological Association had been to Norwich



Blo' Norton Hall.



Attleborough Church.

before (Mr. Rudd thought it was somewhere in the 'sixties), and they thought the time had arrived when they should again visit the city, but had put off their visit until now because the other society, the Royal Archaeological Institute, had come to the locality only last year. They had made a good start that day with a representative party at the luncheon. He wished to thank Mr. Rudd, Mr. Kent, and Mr. Bolingbroke for the trouble they had taken in arranging the programme for the week. He did not think there was any town or city which possessed so many ancient buildings as the city of Norwich. He hoped the Ancient Buildings Committee would be active, and that if they heard that even an old cottage was to be pulled down they would try to save it. In conclusion the President warmly thanked the Lord Mayor for the civic receptions which had been given to the Association, and also the Misses Colman for the reception at Carrow Abbey.

Tuesday, June 30.

The members of the Association started out at an early hour. Starting from the Royal and Maid's Head Hotels, the party first visited South Burlingham Church (described by Mr. E. A. Kent), with its Norman doorways, and from there went on to Ranworth Church, where they were conducted round the building by Mr. P. M. Johnston, F.S.A., and finally to Spixworth Hall, where they were entertained by Mr. and Mrs. Reginald Gurney. On their way back to Norwich a short stop was made at the Chapel of St. Mary Magdalen, which was founded by Bishop Herbert de Losinga before 1119 for the relief of lepers. In the afternoon the members met in the Deanery Garden and were conducted over the Cathedral by the Dean, and afterwards the Bishop of Norwich entertained the Association to tea in the Episcopal Palace. A short visit was then made to St. Helen's Hospital, which was described by the Rev. F. W. Bennett Symons, while in the evening a lecture was given by the Dean on "Norwich Cathedral" at the Technical Institute.

SOUTH BURLINGHAM CHURCH.

The architectural interest of the church lies not so much in its exterior, with the Norman doors and Perpendicular tower, as in its interior. The pulpit has a delicacy of carving and richness of tracery and cresting that make it comparable with any in England. Round it still faintly marked is the famous Latin quotation: "Inter natos mulierum non surrexit major Johanne Baptista." Above is a somewhat ungraceful sounding board, with a broken hour glass and stand, and beyond is the rood screen, which is generally considered as contemporaneous with the pulpit, and the work of the same artist. It is the mural paintings, however, that give the church more than a superficial interest from an archaeological point of view. On the south chancel wall is the remarkable representation of the death of Thomas à Becket. Mr. P. M. Johnston pointed out that if the yellow distemper on the walls was carefully removed the painting itself would at once be made clearer. Opposite the entrance is another mural painting of St. Christopher, the colours now partially blended

with the yellow of the wall and almost unrecognisable.

RANWORTH CHURCH.

The Perpendicular church of Ranworth, which was restored in 1903 by the late Mr. J. T. Micklethwaite, has become famous for the loveliness of the rood screen. The difficulty of obtaining stone in those days and the still greater difficulty of paying for a church built of stone brought an inevitable economy in its use. Thus there are no aisles, and most of the stonework is alternated and extraordinarily slender.

SPIXWORTH HALL.

Mrs. Reginald Gurney, who gave a short paper on the Hall, said a house undoubtedly stood on the site in Henry VIII's time. A mullioned window in the yard was a witness, if any witness was needed, of this. The main part of the house was, however, Elizabethan, and at that time the property of the Southwells. But in 1609 it was sold to Wm. Peck, and it was again sold in 1693 to the ancestors of the present owners.

THE CATHEDRAL.

In the afternoon, at the invitation of the Dean, the visitors gathered in the secluded garden of the Deanery before going on to inspect the Cathedral. The beautiful view of the east end of the fabric to be gained from this spot was greatly admired, and the Dean declared that whenever he could he liked his friends to begin their tour of the Cathedral with that delightful impression of the great church in their minds. While the visitors remained in the garden for a brief while the Dean gave a very interesting account of Herbert de Losinga, the founder of the Cathedral. Herbert was, as far as he knew, his own architect. The foundation stone was laid in 1096, and in five years from that time the eastern part was completed. Herbert died in 1118, honestly mourned by the whole country. The slab in front of the High Altar marked his burial place.

In speaking of the spire, the Dean told an amusing and thrilling little story, the truth of which he said he had had vouched for. It was customary, he said, for large flags to be hung outside the top windows of the spire on special occasions. When this was being done on the public rejoicings following the conclusion of the South African War a young sailor, who had gone up with one of the bedesmen, got out of one of the highest windows, and, clutching to the crockets, scrambled up to the weather vane and stood with his arms round it. He returned down the uppermost part of the spire and through the window quite safely.

On leaving the garden the party crossed over to Life's Green and remained for a few minutes before the grave of Nurse Cavell. Thence they entered the Cathedral and spent a considerable time inspecting the interior with the Dean as guide.

THE BISHOP'S PALACE.

From the Cathedral they passed into the Palace gardens and were the guests of the Bishop at tea in the main dining room. After partaking of the Bishop's hospitality, the visitors were shown over the more interesting parts of the Palace. The Bishop preceded this little tour by telling his guests that among other things which the Palace possessed were a Norman coal cellar, a Norman larder, and a huge kitchen with walls eight feet thick in one part and eleven feet in another. Since taxation had become so crushing he had had to give up the kitchen and use a much humbler apartment for the cooking of food. The house was renovated about sixty or seventy years ago by Bishop Pelham, who was guided by a famous architect of those days but who in these times had few friends. The chief work which he (the Bishop) had done to the Palace was to undo what that architect and Bishop Pelham did. There was a dungeon in the house where the first heretic burnt in England lived for two years.

Before leaving the Palace the President of the Association tendered cordial thanks both to the Bishop and the Dean.

ST. HELEN'S HOSPITAL.

From the Palace the party went to St. Helen's Hospital, where the Rev. F. W. Bennett Symons, the chaplain and vicar of St. Helen's Church, welcomed them in the name of the trustees and the master. Describing the hospital, he said that it was formerly known as St. Giles's Hospital and was founded by Bishop Suffield in 1250. Being of a monastic character it was dissolved by Henry VIII, but afterwards re-founded under a Charter of Edward VI as an almshouse for the aged poor, and its ample revenues were vested in the Corporation for this purpose. The institution now had a complete record of the masters from the foundation of the hospital to the present day. Up to the early part of the nineteenth century people who came there as inmates were required to bring their coffins with them. These they were wont to use as cupboards in their cubicles, but as the inmates lived too long and their coffins wore out before they were needed the arrangement was not considered to be a profitable one. The average age of the inmates was about 87, and there was one there to-day aged 96. In former days a person on becoming an inmate had also to deposit a sovereign to provide a shroud for burial. A pound had still to be given on admission, but it now went towards the funeral expenses of the inmates.

In the evening the Dean delivered at the Technical Institute his lecture on the Cathedral, illustrated by numerous lantern slides. The President of the Association was in the chair, and expressed at the close the very warm thanks to the Dean.

Wednesday, July 1st.

From 9 a.m. until the late evening the visitors made a motoring tour of a wide stretch of South Norfolk, stopping to inspect many objects of interest. The first halt was at Wymondham Church and after that at Attleborough Church. Thence the party made for Thetford, where they visited the mound and earthworks, the ancient Tudor House in White Hart-street, purchased by Prince Frederick Duple Singh, and used as a museum, and Thetford Priory. The last was inspected by the courtesy of Mr. George W. Bird. Luncheon was served at the Bell Hotel, and in the afternoon East Harling and South Lopham Churches claimed the visitors' attention. At Blo' Norton Hall the party were the guests of Prince Duple Singh at tea, and the hall was afterwards described to them. At night the President of the Association (Mr. C. E. Keyser) lectured at the Technical Institute, Norwich on "Norman Doorways in Norfolk."

WYMONDHAM CHURCH.

Here the church was described by Mr. R. V. Reynor. He said the Priory was founded in 1107 by William d'Albini, who built the church for the use of both the monks and the people but in consequence of disputes between them the Pope, by a Bull of 1249, ordered that the parishioners should have the nave and the north and south aisles, while the monks should retain the transepts, the presbytery, with its north and south chapels, and the central tower. The Norman tower was entirely rebuilt in 1400 and is now roofless. The only other remaining part of the priory, afterwards an abbey, is the gable of the Chapter House. The great western tower was built by the town in 1445 to 1470. The Italian Renaissance structure, presumably the sedilia, in terra-cotta, is the most exceptional feature of the church. The President remarked on the admirable restoration work that had been carried out and thought that the church had been treated in an exceedingly good way. He remembered seeing the fabric when it was in a very bad and neglected condition.

ATTLEBOROUGH.

At Attleborough Church the rector (the Rev. Maxwell F. Webb) greeted the party, and pointed out the chief features of interest, drawing particular attention to the fine wood screen at the west end, where it was placed in 1894. Formerly it stretched across the east end of the nave in front of the tower and the chapel arch

This church was originally Norman, but the only part of that structure surviving is the central (now eastern tower), with its passages in the middle of its walls. A description of the church was given by the Rev. H. M. Mills, and the President referred to the screen as a magnificent example. Usually, when a screen was removed it found its way into the builder's yard, and was cut up, but this was not so treated.

THETFORD.

Thetford was reached about noon. The mound there was described by Mr. E. A. Kent. But for the great loss archæology has sustained by the death of Mr. W. G. Clarke, this task would have been discharged by him, for no one was so well equipped to perform it. The Rev. H. T. Green was at the ancient Tudor House and gave a very interesting account of the buildings, which were opened as a museum in 1924.

EAST HARLING.

The visitors were much impressed with the fine old church at East Harling, and its many internal features. They were described by Mr. Philip M. Johnston, who said that the parclose screen of the time of Henry VII. was alone worth coming to see. The church was completed in 1449. The east window contains fifteenth-century glass, representing scenes from the life of Christ, and also the donor, Sir Robert Wingfield (c. 1475); the glass seems to have been kept for safety at the hall for some 200 years, but was restored to the window in 1700. The vicar (the Rev. Leonard Holt-Wilson) assisted in showing the visitors round the church, which they were loth to leave.

SOUTH LOPHAM.

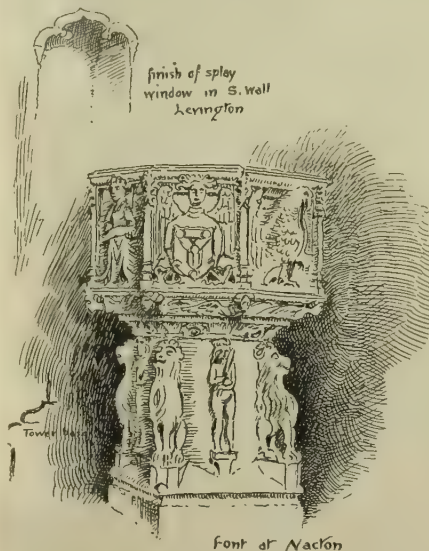
The central tower of South Lopham Church has been said, next to Norwich Cathedral, to be the most important piece of Norman architecture in the country. The parapets are perpendicular. The small circular window deeply splayed externally near the west end of the original north wall of the aisle, is Saxon, and retains the wooden frame with small holes in it. This feature of the church was carefully studied. A paper on the history of the fabric was read by Mr. Cecil Upcher.

BLO' NORTON HALL.

On arrival at Blo' Norton Hall the visitors were entertained at tea in the grounds, and afterwards Prince Duleep Singh welcomed his guests in a cordial speech. The date of the present house was 1535, and from that time it had always been lived in, the names of three of the chief families who had occupied it all beginning with B—Brampton, Best and Browne.

The return journey to Norwich was then made direct, but it was not till eight o'clock that the city was reached.

(To be concluded next week.)



Font at Naclon

BACK TO METHUSELAH

By DUDLEY HARBON.

WHEN the architectural profession were busy at Newcastle listening to the speech of Sir Theodore Morison, Vice-Chancellor of the University of Durham, on "Architects and the Public," in the course of which he said: "An unhealthy literary romanticism had made us believe that modern things were always vulgar and ugly. This was absurdly untrue. . . ." an anonymous writer was writing to the Press to this effect:—

"To-day we are at a somewhat similar period; men are beginning to question this spirit of materialism, and to grope back to some of the old idealism. Hence in spirit we are like the people of Tudor times, but we have no original architecture to express it in.

These two opinions are in direct contradiction, although that of Sir Theodore Morison has the advantage in that it explains the position of the anonymous writer. But anonymous writers are, you consider, of not much consequence; possibly, but then we must consider the conjunction that provokes his statement.

The City of Kingston-upon-Hull has obtained Parliamentary powers to cut a "New street from Paragon Station to the junction of Spring Bank and Beverley-road"; this is much needed and has been projected for many years. Now, the Lord Mayor of Kingston-upon-Hull, with the best intentions, has brought before the citizens a scheme, to quote his own words, as reported in the minutes of the Housing and Town Planning Committee:—

"What I wish, therefore, to propose for the consideration of the Committee is that, in the first place, one period of architecture alone should be used; that we shall have a street, therefore, representing one distinct period. The period of architecture I suggest is the Tudor Period. I suggest, therefore, the following:—

"(1) That the elevation shall be not less than 46 ft. to the eaves, and the architecture shall be of Tudor style, as shown in the two sketches submitted."

It is unnecessary to quote more, for the remaining three suggestions but extend the explanation of the scheme, and the manner in which, in the Lord Mayor's opinion, it should be carried into effect.

With the main suggestion, the whole profession of architecture will be in accord, that "in the first place, one period of architecture alone should be used"; though the choice of the word "period" does not seem completely to cover what the Lord Mayor desires, namely, as I understand him, harmony. On various grounds I have ventured to protest against that section of the report reading:—"And the architecture shall be of Tudor Style."

I do not propose to recapitulate my arguments, which in the first case were addressed to the man in the street, and not in particular to the architect or the reader interested in architecture. To these I write now, on entirely different grounds.

Whether the present is at all like the period of the Tudor need not long detain us. The Tudor was the first glimmering of the Renaissance—the discovery of the past—men looked backward. In many cases they look backward yet; we have not escaped from the Renaissance though the strong trend of thought and the methods of teachers and investigators and historians are in the opposite direction—towards the future. We are making a prodigious effort to shake off "unhealthy literary romanticism," and architects are undoubtedly contributing their ideas in building; these representations of their thought have no touch of the Tudor about them.

A walk in London to-day reveals the situation to any who have eyes to see. Nearly every

new building shows some deliberate effort to escape from the trappings of the past, some of them very nearly succeed, others hesitate and stretch out one hand to the old nobility of Greek or Roman birth, and the other uncertainly to the new democracy. It is what any student of society would anticipate. The emergence from the industrial confusion of the last hundred years is at last recognisably in sight to our artists; building is becoming cleaner and more vigorous and healthy, like the nation.

Where these buildings chiefly fail is due to the conservative love of fires to warm and cheer, and an individual assertiveness particularly English, and not altogether reprehensible, when directed in the right path. To these traits must be added a new comer not yet assimilated, namely, Wireless; the poles of the aerials have not yet accommodated themselves to the architectural scheme of many buildings. What will happen to roofs that are not flat when flying becomes a commonplace I will not attempt to forecast. Though flying will, like the motor, hasten the straightening of our bent and twisted cities.

On to this satisfactory though slow evolution of a modern city the Lord Mayor of Hull would affix a reproduction in modern terms of a Tudor street. Architects having misplaced their sketch books, must scour the countryside for vestiges of Tudor, or buy one of the many big illustrated volumes that deal so fully with the period which they have forgotten—so is "tradition" recaptured in the modern world. They must soak themselves in Tudor, in the hope that they will find in the contemporary thought contained in the writings from that distant time similarities with our own. My prolonged reading of the reports of the Historical Manuscripts Commission does not lend much support to any happy issue out of their affliction.

True the resources at the disposal of the reviver are more liberal than at any other period in history. But imitation is not art. It does not even require an artist to collect the raw material; any antiquarian, any photographer, with a smattering of archæological knowledge, can amass enough examples to last a lifetime, and the result will be dry bones, a record of the past worth keeping, but not worth repeating.

The scene painter, the poet, the artist, the actor are all endeavouring to escape from these silly shackles; only in architecture can the public for a moment forget the reality, and get back to the romantic; but such a retreat is at the expense of architecture. The other impermanent arts might with less injury thus gambol for the public entertainment; but the reciter of other people's poetry is not a poet, he is an elocutionist. And these artists, exercising their antiquarian bents or those of their patrons, are not thereby forwarding their art or their age.

And all the time, however faithful a reproduction they may make, the conditions of life, the tools, the technique, the materials, to omit all the inherited impulse of the designer, conspire to defeat their aim—the recapture of a glamour that is supposed by the fearful to lie in the bosom of the past. The Tudors paid scant deference to the Gothic, that had been the glory of their grandsires. If we are, as the writer of the anonymous letter which I have quoted suggests, "like the people of Tudor times," who "sat upon the arch and squashed it," we shall not spend much time, "weeping over the glory that was Greece, the grandeur that was Rome."

Nobody wishes to disparage the past. We are better employed in trying to understand the source of all that was estimable than in dwelling upon witchcraft and burnings. So all art worth the name is a revelation, not a repetition; however persuasive.

LEADING CONTENTS. PAGE

REPORT OF THE MINISTER OF HEALTH....	237
NOTES	238
GENERAL NEWS	240
R.I.B.A.	240
CORRESPONDENCE	242
BRITISH ARCHÆOLOGICAL ASSOCIATION	243
BACK TO METHUSELAH	245
ROYAL ARCHÆOLOGICAL INSTITUTE.....	254
ARCHITECTS' AND BUILDERS' INQUIRY	
BUREAU	257
HINTS TO BUILDERS	258
WORKMEN'S COMPENSATION	259
RATING AND VALUATION BILL.....	259
APPORTIONMENT UNDER THE RENT ACTS..	260
SCHEME FOR INCREASING THE SUPPLY OF	
WORKING-CLASS HOUSES	261

ILLUSTRATIONS

Easthorpe Hall, near Malton, Yorks.

Easthorpe Hall was originally a farmhouse, and part of the Castle Howard estate. Somewhere about the end of the eighteenth century it was altered and enlarged into the Dower House by John Carr, of York, the predecessor of the architects for the present alterations, and about 1840 it was occupied by Charles Smithson, a London attorney, the youngest son of a lawyer of local repute, a Bailiff of the Borough of Malton and a close friend of Charles Dickens. The novelist frequently stayed at Easthorpe Hall, enjoying many pleasant rides through its charmingly wooded surroundings, and he wrote the developing chapters of *Martin Chuzzlewit* in the room which is now destined to become the study of Lord Grimthorpe, a member of the famous Yorkshire banking firm of Beckett. All the rooms which bear the imprint of the famous architect and noted writer have been retained in their entirety, and form the main central block, with new wings projecting to the north and forming a new entrance forecourt. The alterations and additions harmonise with Carr's work, and are restrained and quiet. The walls are of local limestone, the roofs are covered with greenish-grey Westmorland slates, and the fall pipes and gutters are of cast lead. The contractors were: Wm. Anelay, of York (builder); G. N. Haden & Sons, of Manchester (heating engineers); Thorne & Allen, of York (plumbers); Green & Smith, of Leeds (electricians). The architects are Messrs. Brierley & Rutherford, of York.

Masonic Buildings, Norwich.

The design which we illustrate this week for additional accommodation to existing Masonic premises in Norwich was recently placed first in a competition limited to architect Masons in Norfolk. Messrs. Edward Boardman & Son acted as assessors, the design by Mr. E. H. Buckingham, of Messrs. Morgan & Buckingham, being placed second. In the winning design available land at the back has been utilised, and the existing premises altered to give proper access to the new building on the ground floor. Owing to the desirability of arranging for the work to be built in portions, the new Temple was placed on the ground-floor level, and consequently can, with the compartments requisite in connection with it, be proceeded with as a first instalment. The mezzanine floor, which was made possible owing to the height of the Temple, together with the top floor, being the second portion. All this work can be done without interfering with the present building, and its uses as a club, and Masonic meetings can be carried on uninterrupted. The third instalment would be the alterations necessary to the existing buildings, the existing kitchen, which is at the top of the present building, remaining in use until the new one is completed. An important feature in the planning is one service room serving the new banqueting room, also the dining room. The estimated cost of the new building, together with alterations to the exist-

ing one, including heating, lighting, etc., is £12,700. Mr. Stanley J. Wearing, A.R.I.B.A., is the architect.

Paddington Central Baths.

The new Public Baths and Washhouses (Central Establishment), Paddington, which we illustrate this week, have been erected from the designs of Mr. Herbert Shepherd, F.R.I.B.A. The principal entrance, which aligns with the centre of the north end of the Queen's-road, has been designed to meet the dual needs of a baths establishment and a public hall, also to facilitate the working arrangements for the use of the buildings in either capacity. The separate entrances for men and women are approached from Queen's-road through a portico built in Portland stone, about 44 ft. long and 10 ft. wide. The front is carried upon coupled columns and has Cornish granite flooring, steps, etc., with brick and stone flanking pavilions at either end. The entrance porch is enclosed by wrought-iron gates. The main entrance hall is carried out in glazed terra-cotta, oiled teak woodwork and panelled plaster. The fireplace is finished with enamelled tiles in two colours, with a black marble hearth. The devices modelled in plaster in the spandrels of the arch over the fireplace are designed with a portcullis superimposed upon a Tudor rose. The portcullis is the main feature of the arms of the Abbey and City of Westminster, and recalls that at one time the Abbots of the Church of St. Peter, of Westminster, held the land upon which the buildings now stand. The entrance hall is reached through the men's and women's vestibules on either side of the main ticket office. It is two stories in height and contains the principal staircase, with a balcony to the first floor and is partly top-lighted from a decorated glazed dome. Immediate access from the hall is given to the first- and second-class swimming ponds, and the men's and women's private baths, thus obviating long corridors.

The first-class swimming pond is 100 ft. long and 35 ft. wide. It is provided with a portable temporary floor and platform for use during the winter months for meetings, concerts, etc. The collapsible dressing boxes are of teak and fold back against the walls, forming a wood-panelled lining and dado some 7 ft. high. At each end of the bath are large dressing-rooms, with lavatories, which in the winter months will serve for the use of artistes and possibly as refreshment rooms. There are five direct exits to the street on the ground floor and four from the balcony and gallery on the first-floor level. The walls are generally of glazed terra-cotta with a plastered barrel ceiling. The hall has side lighting in addition to the top-lighting from the roof lantern. The flooring of the bath platforms in this and in the second-class pond is of special non-slip moroccan tiling. The second-class swimming pond is 75 ft. long and 30 ft. wide, and a large dressing-room is provided on the north side. It may be entered from the rear of the premises, near the public laundry entrance, the ticket office being so placed as to allow for its use for the bath and the laundry. The walls are built finished in glazed brick with coloured bands of the same material. The lantern and roof-light have been specially designed. The private slipper bath halls are situated east and west of the main entrance. They are top-lighted and have glazed brick walls, terrazzo floors, enamelled slate divisions, and fireclay baths. There are twenty-nine baths for men and thirty-four for women. The public laundry is entered from the private roadway on the north side from Porchester-road, and contains thirty washing troughs, three hydro extractors and thirty drying horses. The ironing room has three mangles, tables and heating stove. A waiting room, lockers and lavatories are also provided. The establishment laundry is easily accessible for service from the swimming baths. The aeration plant is on the roof.

Generally the buildings are built in stock and Fletton brickwork, with red and purple facings on Porchester houses frontage and Portland

stone facings to Queen's-road; the sloping roofs are slated with Cornish slates, and the flats asphalted. Internally the wall finishings are terra-cotta, glazed brickwork, and painted plaster; the floors to the lavatories and pond platforms are tiled; the slipper bath floors are finished with terrazzo paving; and the main entrance hall is marble paved. The windows generally are of steel and gunmetal, and the doors and dressing boxes are of teak. The whole of the establishment is lighted by electricity from the generating plant, and safety electric lighting in the licensed hall is also provided off the Company's supply. Should either fail, the buildings can be still fairly adequately lit by means of a change-over switch installed in the baths generating room for this purpose. The quantities were taken out by Mr. W. H. Webber, F.S.I. The engineering equipment was designed by and installed under the supervision of the Consulting Engineer, Mr. Wingfield Bowles. Mr. William Lake was the clerk of works.

The contractors and sub-contractors were as follows:—Contractors for the buildings, Perry & Co. (Bow), Ltd.; contractors for the engineering, Z. D. Berry & Sons; together with the following firms:—Blackburn, Starling & Co. (electric generating plant); "Turn-over" Filter Co. (filtering plant); A. D. Dawnay & Sons (steelwork); Siegwart Fireproof Floor Co. (fireproof floors); Hathern Station Brick and Terra-Cotta Co., Ltd. (terra-cotta); the Leeds Fireclay Co., Ltd., and the Farnley Iron Co., Ltd. (glazed bricks); Empire Stone Co. (reinforced concrete ponds); Ragusa Asphalte Paving Co., Ltd. (asphalte); Gilbert Seale & Son (stone and wood carving); F. Bradford & Co. (artificial stone); Roberts, Adlard & Co. (roof slating); Art Pavements and Decorations, Ltd. (marble paving); Wimer & Sons, Ltd. (enamelled slate divisions); Carter & Co. (London), Ltd. (tiling and terrazzo paving); George Wragge, Ltd. (diving platforms); Yannedis & Co. (ironmongery); Jos. F. Ebner (parquet flooring); A. R. H. Maxted, Ltd. (bronze grilles and ironwork); Geo. Wright (London), Ltd. (grates and wrought-iron gates); J. A. King & Co. (pavement lights); E. Busby & Co. (mixing valves and floor gratings); Williams, Gamon & Co. (Kaleyards), Ltd. (steel and bronze windows); the British Challenge Glazing Co. (glazed dome and fire-resisting glazing); Thos. Bradford & Co. (laundry plant); R. Brightwell (electric lighting); Veronese (fibrous plasterwork); Tylors (Water and Sanitary), Ltd. (fire hydrants); Mellows & Co., Ltd. (roof glazing); G. A. Williams & Son (sunblinds); Mander Bros. (paints).

Recent Domestic Work.

The three houses shown on the drawing on page 253 have been completed recently from the designs of Mr. Charles B. Pearson, F.R.I.B.A. Mr. Simpson's house was built as shown by Messrs. H. Hillman & Sons, of Morecambe. The other two houses were modified in execution. The house for Mr. Holder was built by Messrs. Parkinson & Sons of Lancaster; and the farmhouse at Arkholme by Messrs. Rainey Brothers, of Barrow-in-Furness.

Fonthill House.

We illustrate this week two perspective drawings of Fonthill House, now on exhibition at the Royal Academy. Messrs. Detmar Blox & Billerey are the architects.

Tudor-street, Hull.

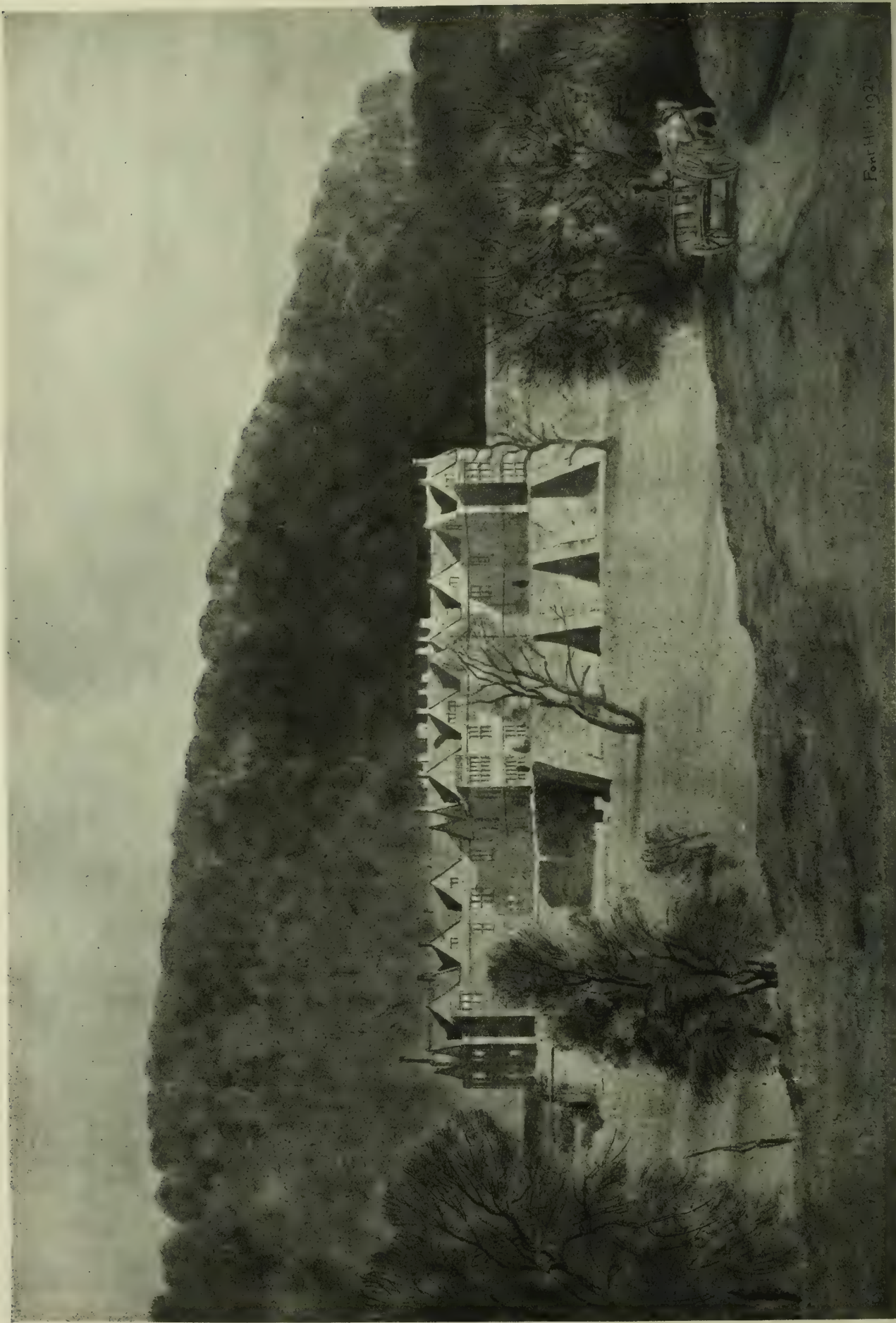
The suggested architectural treatment of the proposed new thoroughfare, which has been designed by Messrs. Wheatley & Houldsworth, architects, is discussed in the article "Back to Methuselah," by Mr. Dudley Harbron, on page 245.

Porch and Tower, St. Mary's Church, Pimlico.

This new work, illustrated in the perspective drawing on page 241, has been designed by Mr. H. S. Goodhart-Rendel.

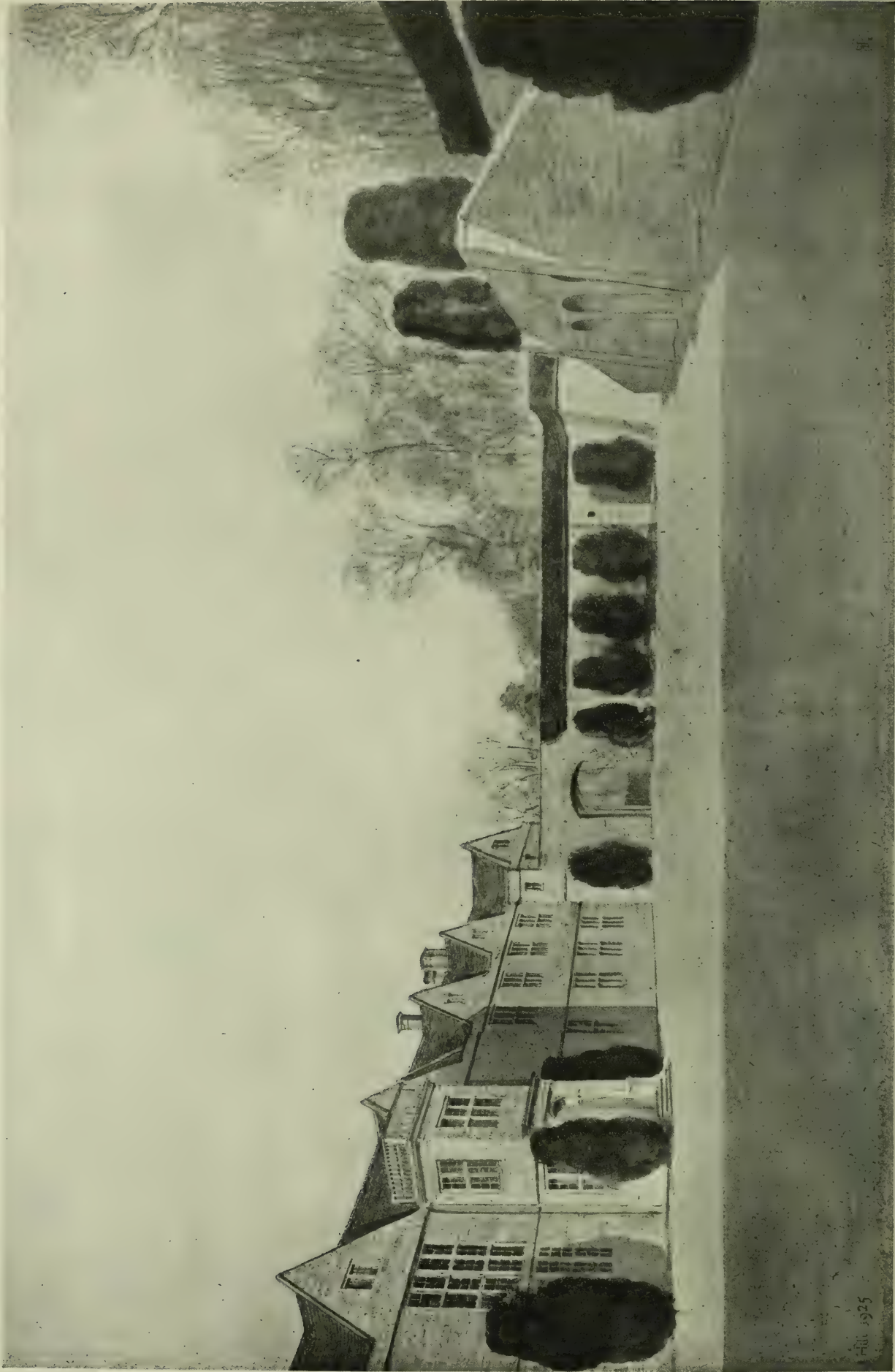


The Proposed new Tudor Street from Paragon Station to Beverley-road, Hull. Design by MESSRS. WHEATLEY & HOULDSWORTH, Architects.
[See article, "Back to Methuselah," on page 245.]

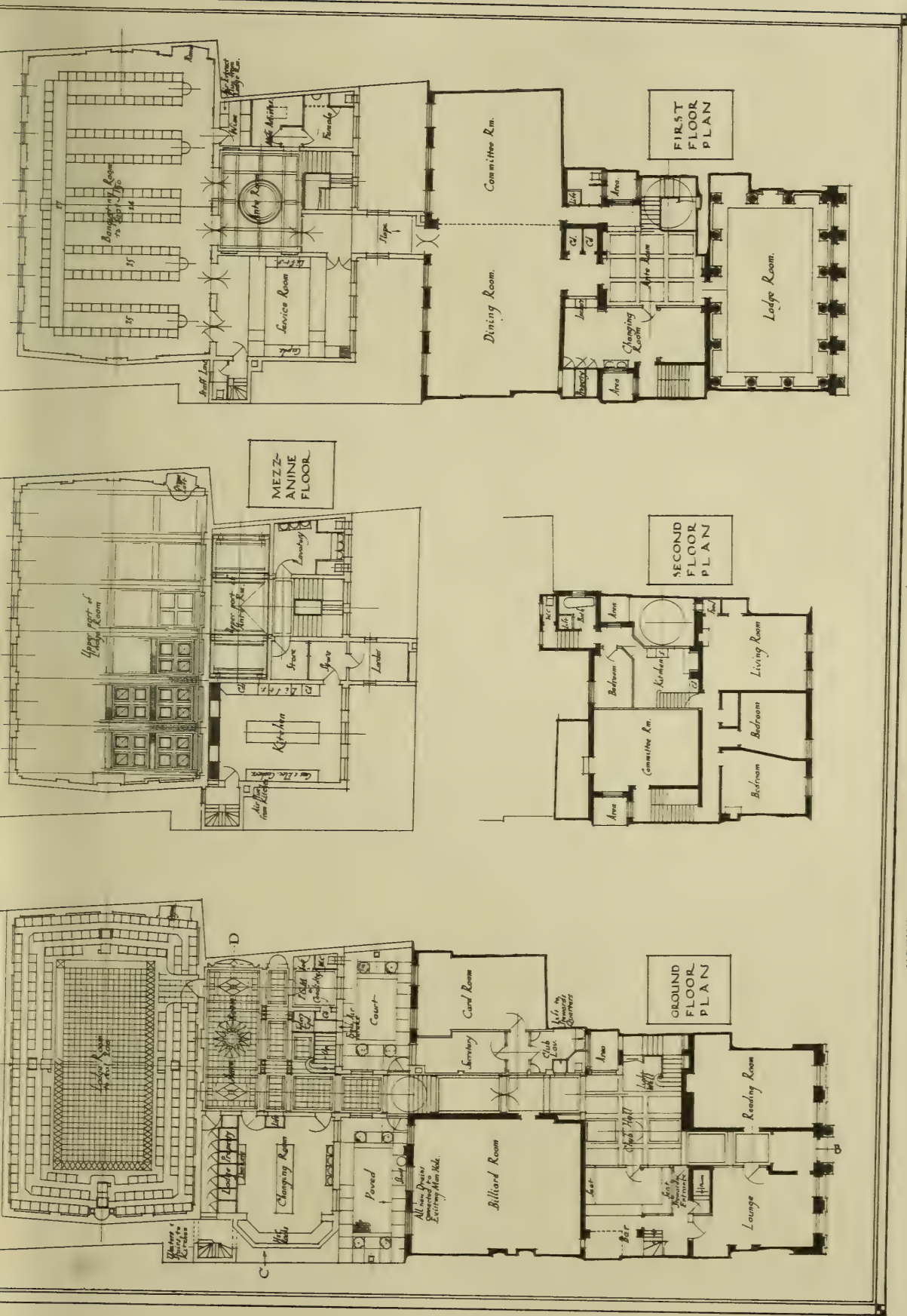


Fonthill 1925

Fonthill House. Messrs. Detmar Blow & Fernand Billerey, Architects.



Fonthill House : The Courtyard. Messrs. DETMAR BLOW & FERNAND BILLEREY, Architects.



NORWICH MASONIC BUILDING SCHEME COMPETITION: FIRST PREMIAED DESIGN.

MR. STANLEY J. WEARING, A.R.I.B.A., ARCHITECT.



R.A. EXHIBITION.

ADDITIONS & ALTERATIONS
MESSRS. W. H. BRIDGES



HALL, NEAR MALTON, YORKS.

REHEKFOR, ARCHITECTS.



New Public Baths and Washhouses, Paddington : The Main Entrance, Queen's-road.

Mr. HERBERT SHEPHERD, F.R.I.B.A., Architect.





SECOND-CLASS SWIMMING POND.



DETAIL OF MAIN ENTRANCE, QUEEN'S-ROAD.

New Public Baths and Washhouses, Paddington. MR. HERBERT SHEPHERD, F.R.I.B.A., Architect.



COMMEMORATIVE TABLET OVER FIREPLACE IN ENTRANCE HALL.



FIRST-CLASS SWIMMING POND.

New Public Baths and Washhouses, Paddington. MR. HERBERT SHEPHERD, F.R.I.B.A., Architect.



HALL AND STAIRCASE.



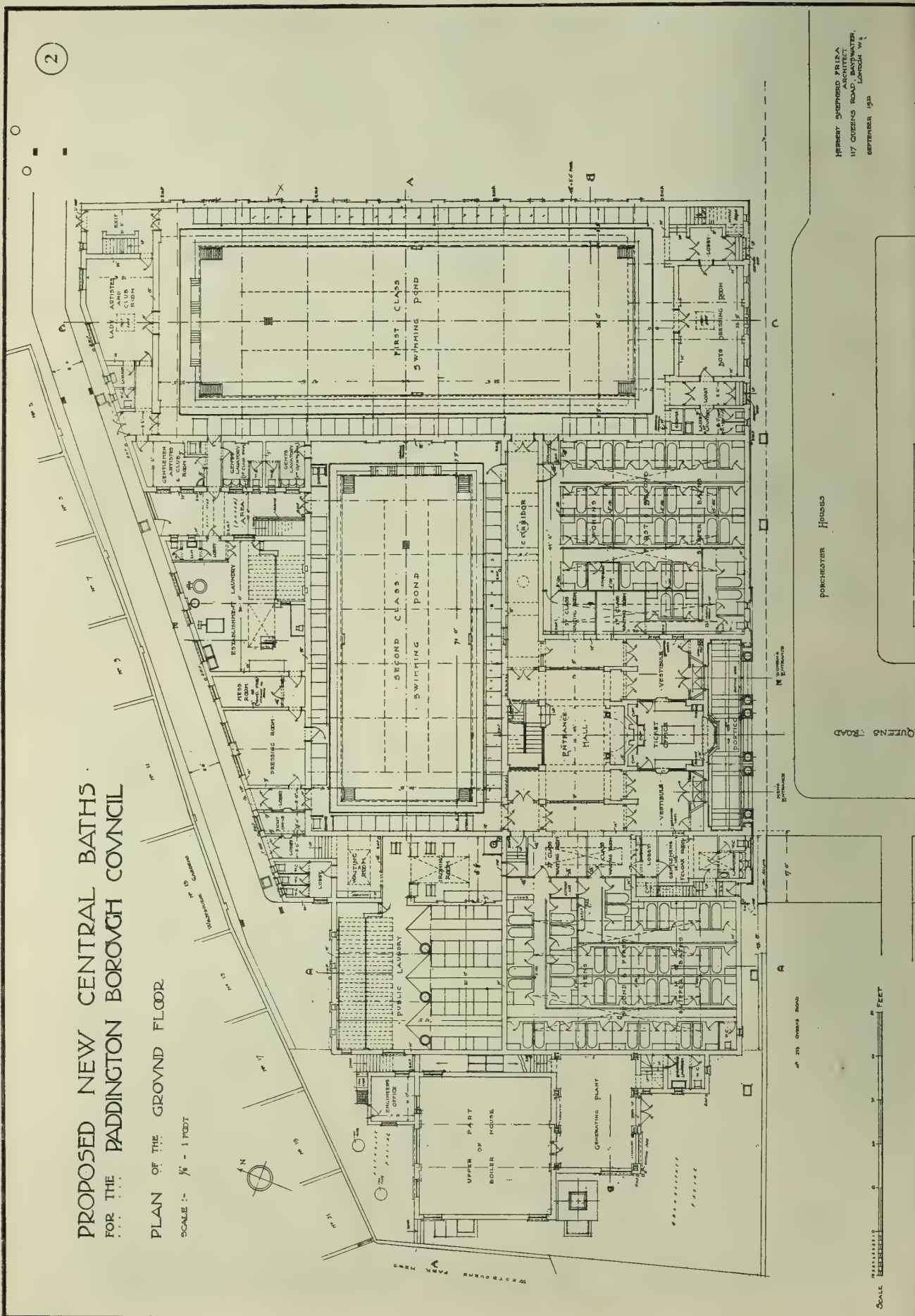
COMMITTEE ROOM.

New Public Baths and Washhouses, Paddington. Mr. HERBERT SHEPHERD, F.R.I.B.A., Architect.

PROPOSED NEW CENTRAL BATHS
FOR THE PADDINGTON BOROUGH COUNCIL

PLAN OF THE GROUND FLOOR

SCALE :- $\frac{1}{8}'' = 1 \text{ FOOT}$

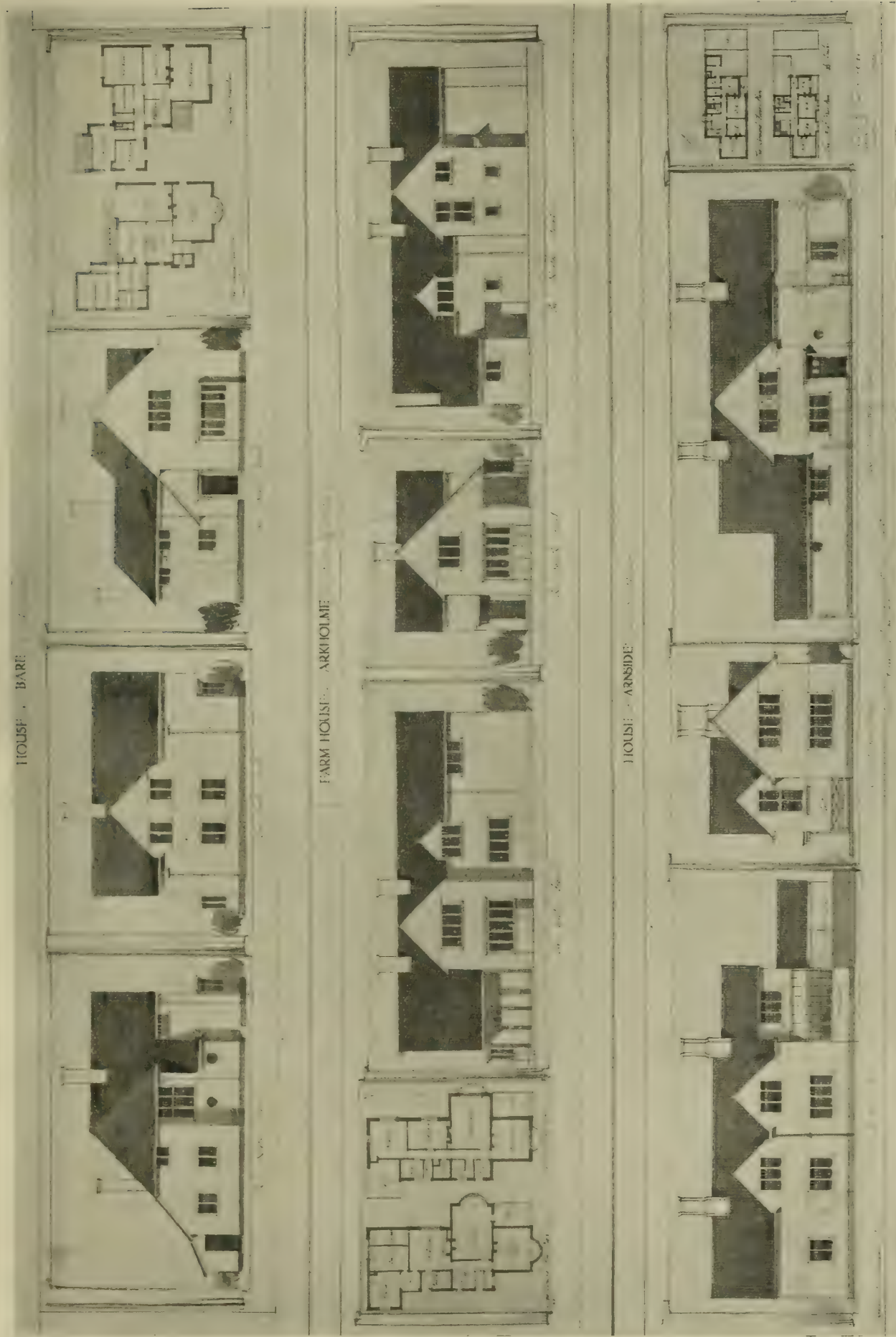


HERBERT SHEPHERD PRIZE
ARCHITECT
117 QUEENS ROAD, BAYWATER,
LONDON W.2
SEPTEMBER 1933

PORCHESTER HOUSE

QUEENS ROAD

New Public Baths and Washhouses, Paddington: Ground-floor Plan.



Three New Houses at Bare, Arkholme, and Arnside.
Mr. CHARLES B. PEARSON, F.R.I.B.A., Architect.

THE ROYAL ARCHÆOLOGICAL INSTITUTE

By H. J. D. ASTLEY, M.A., Litt.D., F.R.Hist.Soc.

ANNUAL MEETING.

THE annual meeting of the Royal Archæological Institute was held at Newcastle-on-Tyne from July 21 to July 29 under the presidency of Sir William Boyd-Dawkins, F.R.S. Mr. W. C. Soden-Bird, of Newcastle, acted as hon. secretary of the meeting. The Institute has visited Newcastle on two previous occasions, the last being in 1884, but much work has been done since then in exploring the antiquities of Northumberland.

About 100 members assembled at 10.30 on Tuesday morning in the Council Chamber of the Town Hall, and were cordially welcomed by the Deputy Lord Mayor (Mr. T. A. Lowe).

Newcastle might, he said, be new to some of them, but it was very old in history, and they claimed, living close to the Border, to have absorbed all the virtues of the Scotsman and few of his vices. In their meetings and tours he was sure they would find much of the greatest interest.

Sir William Boyd-Dawkins responded.

The party then proceeded to visit the Cathedral Church of St. Nicholas, and were welcomed by Canon Newsom, the vicar, who introduced Mr. W. H. Wood, F.R.I.B.A., who described the building. Special attention was drawn to the severe and unadorned character of its architecture. The whole of the exterior was renewed about 40 years ago by Sir Gilbert Scott, but otherwise the present church belongs to the fourteenth century. It rose on the site of a previous church, consecrated in 1091 by Osmund, Bishop of Salisbury, a nephew of the Conqueror, and was destroyed by fire in 1216. Of the earlier church there is a portion of a thirteenth-century pier and capital in the easternmost pier of the northern nave arcade, embedded in the later pier, and left exposed to view at the Restoration. The severity of the style is seen in the fact that the piers of the arcades rise sheer up into the spring of the arch; there is no capital nor even a fillet. This mode of building is not uncommon in Northumberland. The nave is said to have been completed in 1359, the choir in 1369. The glory of this church is the tower of the west end. Originally there was a square tower with open battlements, but in the middle of the fifteenth-century a lawyer of Newcastle, Robert de Rodes, built the present magnificent perpendicular steeple with its imperial crown at the summit. From the pavement to the top of the lantern it is nearly 200 ft. high, and is divided into three stages, the lowest of which forms the vestibule of the church and is covered with a richly groined vault bearing the inscription "Orate pro anima Roberti Rodes." The font with a beautiful carved canopy was also the gift of the same munificent donor. The oldest monument in the church is that of a cross-legged knight of the time of Edward I., generally supposed to be Peter de Mauley, Earl Marshall, who died in 1307.

A visit was next paid to the Castle and the Black Gate, which were described by Mr. Hunter Blair and Mr. W. Parker Brewis, F.S.A. The Castle Keep is a monument of the time of Henry II., and is known to have been built 1172 to 1177. The Chapel, with the elegant late Norman mouldings of the arches and arcades, and the vaulting at the basement, resting on a noble central column, are specially noticeable. On the roof is a remarkable sundial, dated 1667, consisting of an oblong block of stone, poised on a pedestal at an angle of 45 degrees, marked for telling the time on the top, the two sides, and at both ends. In the Keep there is an interesting museum of mediæval and other objects, including some early specimens of breach-loading cannon; in the Black Gate is to be found a unique collection of Roman altars, from the wall, and other antiquities. Among these must be mentioned the magnificent gold fibula

from Æsica and a beautiful silver brooch of the same period. After lunch St. John's Church was visited and described by Mr. Wood. The date of its building is uncertain, but was probably *temp.* Henry I.; it is mentioned in a Charter of 15 Edward I., and the pointed arches of the arcade bespeak a date in the late fourteenth-century.

A reception was next given by the Newcastle Society of Antiquaries in the Bolbec Hall, where the guests were received and entertained to tea by Professor and Mrs. Bosanquet.

A meeting in the adjacent Lecture Theatre of the Literary and Philosophical Society followed, and Professor Bosanquet gave a lecture on the Roman Wall with lantern illustrations. The resources of the excavator had, he said, been largely extended by the researches of the last 30 years as was shown by the work done at Rutchester by such men as Lieut.-Col. Spain, Mr. Brewis, and Mr. F. Gerald Simpson. Of the work of the latter he could not speak too highly.

Another meeting was held after dinner in the same hall, when Prof. Baldwin Brown, F.S.A., lectured on English art in the Saxon Period in the light of its treatment by recent Continental writers, such as Heinrich Zimmermann, J. Brönsted, and Josef Strzygowski. These writers, to put it briefly, would derive our native art in that period from such distant sources as Armenia, or Asia Minor generally, but the professor gave reasons for holding these views to be misleading.

Roman Wall.

On Wednesday the members proceeded by motor-cars to visit the Roman Wall. Journeying westwards as far as Housesteads, stoppages were made en route to enable the party to see all interesting points on the line under the able guidance of Mr. Gerald Simpson and Professor Bosanquet. The morning was dull and heavy rain fell at Chollerford, where lunch was partaken of; the afternoon was gloriously fine. A brief halt was made at Heddon-on-the-Wall, where a notable fragment of the Roman Wall, with its ashlar facing on both sides, had been recently presented to the Newcastle Society of Antiquaries. For the most part, however, the modern road made by General Wade after the Scottish rising in 1745, runs right along the top of the old wall. The next halt was made at Rutchester, where the Fort of Vindobala is intersected by the road, and so on to Matfen Piers, where one of the mile-castles built in the south side of the Wall may be seen. Mr. Gerald Simpson, the great authority on the Vallum, speaking at Matfen and again at Down Hill, laid emphasis on the point that the Vallum, a flat-bottomed ditch running between two banks, was originally the boundary line of the Roman Province; it had no significance as a work of defence, nor except in some places did a road run along it; the defensive work was the great wall on the north, never nearer than 100 ft., and sometimes 500 yards away, which, though so often called Hadrian's Wall, was really of the time of Severus. It was built of concrete faced with small square blocks back and front, and was about 8 ft. thick. Though very few courses now remain, it is supposed to have been originally about 18 ft. to 20 ft. high. The wall was protected by a 30 ft. ditch, and a military road ran immediately behind it. This can be best seen at Lime Stone Bank. The defence of the wall was served by forts on or near it, "mile castles" and turrets. Seventeen forts can still be counted. These were permanent quarters for a garrison, with walls and ditches, and one or more gates on each side. Outside were extensive civil settlements, temples, and bath-houses, serving as a club and recreation-room for men off duty. Eight of these forts were

passed on the day's journey, of which Cilurnum, 25 miles from Newcastle, and Borcovicium, 30 miles, were visited. The "mile-castles" were built into the south side of the wall. They were roughly 50 ft. by 60 ft., with gates on the north and south, each designed for a small garrison. The turrets, recessed into the wall and spaced at the rate of two to each "mile-castle," were about 13 ft. square and had a door on the south only. On arriving at Chollerford a visit was paid to the remains of the Roman bridge over the North Lyne. This lies about half a mile below the modern bridge. The bridge consisted of two land abutments, and three piers with cutwaters facing up stream. The superstructure was probably of timber. Remains of the massive lower courses of the eastern abutment were discovered by accident some few years ago, and this was the one visited. It lies in a plantation, now about 15 yards from the bank, the river having changed its course since Roman times. The stones employed were of enormous size. Under the remains of the castle which defended the bridge there was a covered way, leading to a mill further down the stream. One of the columns which stood at the bridge even now lies prostrate, and one of the most curious remains is a large stone shaped like a barrel pierced with holes for ropes, which must have served as a pulley.

After lunch at Chollerford, the party walked, now in glorious sunshine, to the museum at Chesters, which is wonderfully rich in inscribed and sculptured stones and other antiquities from Cilurnum and other forts adjoining it. These were described by Lieut.-Col. Spain, who paid a warm tribute to the late Mr. John Clayton (1792-1890), who, he said, collected Roman remains as other people collect pottery. His nephew, Mr. N. G. Clayton (1833-1895), built the museum, and his widow continues the protection of the monuments on her estate with generosity and public spirit.

The inscribed stones begin with Hadrian; there are two of the time of Antoninus Pius, and one commemorates the building of an aqueduct at Chesters in the reign of Commodus. There are numerous religious monuments, among which the small altars dedicated to Coventina take first place; they were found with 16,000 coins and other offerings in the sacred well at Procolitia. Of curious interest are two huge stones set up in honour of a god, called Mars Thingsus, by a detachment of German soldiers; numerous stones dedicated to the Mother Goddesses, and to the old gods; and the statue of Cybele standing on a bull. There is one Christian tombstone of a class common in the Celtic West. A notable recent find is a bronze modius or corn measure bearing an official record of having been tested in the reign of Domitian. The Roman fort at Cilurnum, in the grounds of Chesters, was next visited and described by Prof. Bosanquet. Chesters is the sixth fort on the Wall, and guards the Roman bridge described above. This fort was built before the Wall, which crosses its filled-in ditch on the east and west, probably about A.D. 120, when Hadrian is thought to have marked out the new frontier by digging the great dyke which we call the Vallum. It contains over five acres, an area exceeded by only one other fort, Amboglanna. There were four main gateways with two smaller gates on the east and west. The garrison consisted of the second ala of the Asturians, Spanish cavalry. The remains in the camp are extensive, consisting of the barracks on the north, the forum and offices, and the Prætorium in the centre, and buildings of a later period further south. The treasure vault to the west of the Forum elicited much interest. The bath-house at the river side is well preserved, some of the wall still being 12 ft. high. It has the usual arrangements, but the entrance hall with seven cupboard-like recesses in its west wall is unusual.

From Chesters the drive was continued to Housesteads (Borcovicium) with remains of the Roman Wall almost along the entire dis-

tance. A halt was made at Limestone Bank, where the ditch has been driven right through the basalt, and the section is well exposed. Housestead's "mile-castle" is exceptionally well preserved, the north doorway retaining both its jambs and the springers of the arch. To reach this entailed a walk of nearly a mile over the thick wet grass, and a little further on is the fort of Borcovicium. This stands nearly 900 ft. above sea level and is the highest fort on the Wall mid-way between the two seas. There was no room for a fort of the usual pattern, hence it lies east and west. Long lying derelict, it came under cultivation about 1700, and yielded many inscriptions and sculptures which excited the wonder of eighteenth-century antiquaries. From 1822 onwards excavations have been carried on, first by Hodgson, the historian, and then by Mr. J. Clayton, who bought the property. The gates and ramparts are now more completely exposed than those of any similar site. The arrangements of the camp are the usual plan; it was garrisoned by the first cohort of Tungrians, an infantry regiment from Lower Germany. At the south-east corner there is a large cistern, formed of flags jointed with lead; a second similar cistern adjoined it. These were necessary, as the camp was situated on the side of a hill, and the surface water had to be brought to them and stored. The religious centre of the settlement lay to the south, and there was a Temple of Mithras in a hollow further to the west.

This was the furthest point reached, and after tea at Chollerford a pleasant drive back brought a memorable day to an end.

The annual meeting was held in the evening, and a very satisfactory report was presented by the hon. secretary. During 1924 there was a net gain of 20 members, and the year closed with a surplus in hand of over £300. Before the meeting an interesting lecture on the Roman Wall was given by Mr. F. G. Simpson, who dealt specially with the Vallum and its characteristics, illustrated with excellent lantern slides.

Durham.

Thursday was spent at Durham. The first visit was paid to the Castle, under the guidance of Mr. W. T. Jones, F.S.A., who gave a most interesting survey of its history and buildings. The members assembled in the Bishops' Hall, in which a series of plans showed the advance of the work from the building of the old chapel in 1072, the great building in which the Hall is situated of the time of Bishop Puiset, about 1170, to the black stair inserted by Bishop Cosin after 1660. The Castle now belongs to the University of Durham, and the shell-keep originally built in the twelfth century, and rebuilt by Bishop Hatfield in the fourteenth century, now contains rooms for students. A thorough inspection was then made, and Bishop Puiset's splendid doorway and the black staircase were particularly admired. Built, as it is, on the summit of the great hill on which also stands the cathedral, the buildings are showing signs of slipping down the declivity, and are now being underpinned, a work which is costing the University a large sum. One result of this restoration is the disclosure of pre-Norman vaulting near the chapel, which must have formed part of an original gate; these remains were inspected by some adventurous members by the aid of ladders and electric light.

In thanking Mr. Jones, the president remarked that there are evidences of an early Iron Age occupation of the site, but no Roman remains have ever been found in Durham.

The members then visited the Cathedral, where the party were welcomed by the Dean, Bishop Welldon, and Professor Hamilton Thompson, F.S.A., gave a general description of the building and its history, and afterwards conducted the members round. Durham Cathedral is so well known that there is nothing new to say about it, except to note that the foundations of the apses of the original church were discovered in 1895 and may

be seen below the floors of the feretory, which contain the Shrine of St. Cuthbert, and the adjacent aisles. A remarkable example of the progress of construction in the hands of Anglo-Norman builders, and of the appearance in Romanesque forms of the essential characteristics of Gothic structure, may be seen in the high vault of the Choir, and their development from the choir aisles to the vault of the nave, with the corresponding development in abutment.

After lunch an inspection was made of the cloisters, the Library, and the Deanery. At the evening meeting Mr. Hunter Blair gave an illustrated lecture on some minor mediæval monuments in Northumberland and Durham; these included a fine series of tomb-slabs, seals, effigies, and shields which are to be seen on the Castles of Bothal, Alnwick and elsewhere.

Hexham.

On Friday the members proceeded by train to Hexham, where the Priory was first visited and described by Mr. C. Hodges, who has done so much to elucidate its history. The known history of Hexham begins with the foundation of the church by St. Wilfred in 674; glowing accounts of this church have been handed down; for example, Prior Richard, writing in the twelfth century, gives a long account of it, and concludes by saying: "In fact, in these days such a one could not be found on this side of the Alps." These accounts and others written by Symeon of Durham and William of Malmesbury, were long looked upon as exaggerated; but the excavations made in 1907 when the new nave was begun revealed the entire plan of Wilfred's Basilica, and showed it had no parallel at the time in England or France. The crypt was accidentally discovered in 1725, and was found to be entirely composed of Roman stones, brought by Wilfred from Corbridge. As well as foundations, some remains of Wilfred's Basilica exist above ground, and show that the building was 165 ft. long by 10 in width; it terminated in a small apse, which may be seen just east of the present crossing. During the restoration the remains of the Norman apse were discovered about 20 ft. further east, and belonged to the Choir built in 1153 by the Austin Canons, who had been making use of the old church since they arrived in 1113; but they soon got dissatisfied with their small choir, and within 30 years the present grand eastern arm of the church rose round and beyond it. This was between 1180 and 1190.

In 1296 it was burned by the Scots, and the Canons do not appear to have made any effort to rebuild or to erect the nave for a long period; the greater part of the transepts, crossing, and choir may be regarded as fully developed Early English work. The present nave was only erected in 1908. An aisle across the east front for chantry altars was built in 1349, but this has disappeared. One of the most interesting relics of Wilfred's Cathedral is the far-famed "frith stol" or Bishop's seat, which was used in the Middle Ages for sanctuary, and so escaped destruction. The only other example of about the same date is in Beverley Minster. Among objects of special interest in the church must be noticed the Ogle Chantry Chapel (about 1410) and the Chantry Chapel of Prior Leschman (1480 to 1491), the old pulpit with painted panels, and the series of painted panels, representing the Dance of Death and several Bishops, which are now all in the choir.

In the crypt special attention was drawn to the interesting stone containing part of an inscription by the Emperor Geta after the murder of his brother Caracalla, with the latter's name erased, which forms part of the roof; during the rebuilding of the nave another stone, containing the remaining portions of the inscription was found, and is now built into the north wall of the nave.

After a thorough inspection of the church and remains of the conventual buildings visits were paid to the Tower of Hexham (about

1330) and the Gate House, which were described by Professor Hamilton Thompson.

In the afternoon a delightful motor run brought the members to Blanchland Abbey, described by Mr. C. Hodges. This abbey is most romantically situated in a lovely valley with wide moorlands stretching beyond on all sides. Little remains of it; of the church only the choir, north transept with aisle and tower to the north, like fountains, exist; the guest house and other buildings to the west now form "The Lord Crewe Inn," and here tea was partaken of. The nave of the church has entirely disappeared. Blanchland belonged to the Premonstratensian Order of White Canons and was founded in 1165; the remains chiefly belong to the thirteenth century. In 1752 Lord Crewe, Bishop of Durham repaired the ruins of the church and made it a parish church.

At the evening meeting Mr. W. H. Knowles, F.S.A. read a paper on the Castle of New-castle, and illustrated its growth from 1172 by many excellent lantern slides.

Alnwick.

On Saturday morning the members proceeded by train to Alnwick, where the first visit was paid to the Parish Church, which was described by Canon Mangin, Archdeacon of Lindisfarne. The present building belongs to the fourteenth century, but a few stones, sculptured in diaper pattern, built into the wall above the chancel arch, and the bases of some round piers, which were buried under the floor, speak the existence of an earlier church. In the chancel aisle are three sculptured effigies, one being probably that of Isabel, widow of the last Baron de Vesci; another is that of a young man who may have been her son and who died in her lifetime. The Castle was next visited, and described by Professor Hamilton Thompson, who first gave a clear account of the ancient families who owned it until the line of Vesci died out in 1297, and after belonging for a short period to Antony Bek, Bishop of Durham, was purchased in 1309 by Henry Percy, the head of a family whose possessions up to that time had lain chiefly in Yorkshire. This great fortress belongs to the type of early castle in which, as at Windsor and a few other places, the mount is found at an angle between the outer and inner bailey. Henry Percy and his son Henry (1315) and (1352) repaired and largely rebuilt the Castle. The most interesting portion of the outer defences is the great gatehouse belonging to this period. The present house, with its imposing array of towers, although for the most part a nineteenth century rebuilding, follows the general character of the work of the first Percys, and retains their gatehouse. Beneath the battlements, as at Bothal, is a fine row of carved shields, and on these and all along the line of towers and curtain-walls are numerous ornamental figures of mediæval soldiers in striking attitudes, said by tradition to have been placed there to frighten the Scots, but really belonging to the latter part of the eighteenth century. The Lion gateway through which the gardens are entered is a striking collection of Egyptian and Assyrian antiquities, and numerous Roman monuments found in the county.

The town of Alnwick remained unwallled till 1434; a charter of fortification was then granted and the walls were finished in 1450. The view from the battlements of the castle over the valley of the Aln is very fine.

In the afternoon the members proceeded by motor to the site of Alnwick Abbey in the Park. This, like Blanchland, belonged to the Premonstratensian Order and was founded in 1147 by Eustace FitzJohn, and colonised from Newhouse in Lincolnshire. Only the gatehouse remains above ground; but the site was excavated in 1884 by the late Sir W. St. John Hope and carefully planned out in the turf of the meadow; the circular Chapter House, entered through a straight vestibule, is very unusual.

The Priory of Hulme was next visited. This

was a house founded for Carmelite Friars about 1240 by William de Vesci, and was one of their earliest settlements in England.

The ruins, which are extensive, stand on a hill on the left bank of the Aln in a beautiful situation, three miles above Alnwick. The precinct wall still surrounds them, and they afford an unusually complete example of the arrangements of a friary. The church consisted of a nave and chancel without aisles, and the usual buildings lie to the south. In 1488 a fortified, or Peel, tower was built west of the cloister by the fourth Earl of Northumberland; in 1776 the first Duke of Northumberland built a house on the site of the western range, which was used for summer parties and known as a gazebo. Professor Hamilton Thompson was the guide here, after which the members returned from Alnwick to Newcastle by train.

Brinkburn and Warkworth.

On Monday morning the members left by motor for Brinkburn, the first stop being made at Bothal. Here the Castle was visited and described by Mr. Hunter Blair, who gave an interesting account of the families by whom it has been held from the first grant to Guy Baliol, by William Rufus, down to Sir William Cavendish in 1628, from whom it descended through an heiress to its present owner, the Duke of Portland. The chief architectural interest of Bothal centres in its noble gatehouse, and in the series of armorial shields carved upon it beneath the battlements. These are in two lines, three above and ten below. On the top line are the arms of the Black Prince as Duke of Cornwall, a unique shield; King Edward the Third and Lord Liddell; below the ten shields are those of Robert Bertram under the King, who in 1343 obtained the King's licence to make his Manor House into a castle and on each side those of his friends, such as Henry Percy, Sir William Scargell, Ogie, Delaval, and others. These shields must have looked very fine before the original colours disappeared. The gardens here are lovely and the view from the bailey over the Valley of the Coquet is beautiful. The church was next visited, and is a good example of the plain type of thirteenth-century work in Northumberland. It contains the only tomb of alabaster work in the county, that of Ralph, third Lord Ogle of Bothal (d. 1513), and his wife.

A twelve-mile ride via Morpeth brought the party to Brinkburn Priory, which was described by Professor Hamilton Thompson. The remains of this Priory of Augustinian Canons founded in the reign of Henry I. are situated on the left bank of the Coquet, which here runs through a thickly-wooded defile, and consist of little more than the church. This is a building of great interest, belonging almost entirely to the closing years of the twelfth century. It consists of an aisleless presbytery of two bays, a transept with two eastern chapels in each arm and a low tower above the crossing, and nave of six bays with north aisle. It lay roofless till 1858, when it was restored. The mingling of Romanesque with Gothic forms throughout, especially in the north doorway and the west front, make it a fine and imposing example of the work of the period.

A modern house has been built on the site of the cloister and only fragments of the monastic buildings are left.

The morning was fine but in the afternoon Warkworth Castle was visited in pouring rain. Here the party were met by Mr. C. R. Piers, F.S.A., and assembled in one of the lower rooms of the Keep, which was built about 1400, and is noticeable for combining the features of a fortress and a private residence. The Tower, containing the effigy of the Percy Lion, is a fine object. This formed the entrance to a second mansion, and between it and the Keep are the foundations of a collegiate chapel which was never completed. The Castle stands astride a narrow neck of land almost surrounded by a bend of the River

Coquet, and was the home of Shakespeare's famous Harry Hotspur. After tea at Warkworth House, by the kind invitation of Mr. and Mrs. G. Glendenning, the members visited the church, in which there is some interesting old glass, one panel representing St. Hilda and the fortified bridge over the Coquet, after which a 30 mile motor run brought them back to Newcastle.

At the evening meeting Mr. C. R. Piers gave an interesting lantern lecture on the art of Northumbria, with special reference to the recent finds at Whitby, in connection with Iona and Ireland.

Bamburgh and Dunstanborough.

On Tuesday morning the members proceeded by train and motor to Bamburgh Castle, which was described by Mr. W. Parker Brewis. In its noble situation on an outcrop of basaltic rock close to the sea shore, Bamburgh is one of the cradles of our national life; it is said by Nennius to have born the Celtic name of Dynguarydi, and it has been connected with the "Joyous gard" of Arthurian legend. Previous to this date, as the president pointed out, it was probably a settlement in the Iron Age. In 547 King Ida made it his stronghold, and his grandson, Ethelfrith, gave the place to his wife Bebba, from whom it received its name. This early Royal Burgh must be distinguished from the later fortress which after the Norman Conquest occupied the site. Nathaniel, Lord Crewe of Steane, Bishop of Durham, married one of the co-heiresses of the Forsters, into whose hands the castle had come, and purchased their estates from their creditors in 1704; dying in 1720, he left much of his property to trustees for charitable purposes. The castle was then in ruins, and between 1757 and 1766 Archdeacon Sharp, one of the trustees, restored it. In 1890 it was purchased by the late Lord Armstrong, who carried out extensive alterations and rebuilding. Thus the present buildings, while bearing the appearance of a mediæval fortress, are, as one of the party expressed it, nothing but a "magnificent fraud." The keep was originally built in 1164, and contains the castle well, 145 ft. deep, on the ground floor. The remains of a chapel belonging to pre-Norman times, and possibly one of St. Aidan's churches, are on the north wall of the inner ward. The church at Bamburgh contains nothing of much interest; in the churchyard is the tomb of Grace Darling. In the afternoon a run of eleven miles took the members to Dunstanborough Castle, which was described by Mr. Hunter Blair. Here we have a piece of genuine antiquity. Unlike the many other castles in Northumberland, it was not built as a bulwark against Scotland, but figured in many sieges during the Wars of the Roses. The great gatehouse was built by Thomas Earl of Lancaster, in 1313, and in 1380 it passed to John of Gaunt, who turned the gatehouse into a keep or "donjon," and made a new gateway to the west. During the Wars of the Roses, Queen Margaret took refuge here after the battle of Northampton in 1460, and after the battle of Hexham in 1464 the castle was taken by storm by the victorious Earl of Warwick, the King-maker. The ruins stand nobly on the isolated hill, the great gatehouse, the south curtain wall, and Queen Margaret's Tower still witnessing to the splendid work of the masons of Earl Thomas, while the work of John of Gaunt has mostly perished.

On Wednesday the morning was occupied by a perambulation of the west walls of the City of Newcastle, and visits to St. Andrew's Church and the remains of the Blackfriars' Monastery and the old Guild Hall.

In the afternoon the members proceeded to Tynemouth, where the Castle and priory were described by Mr. W. H. Knowles. Part of the walls of the nave of the church belong to the twelfth century; the foundations of the apsidal choir of that church were recovered by excavation in 1904-1905; the remains of the present building belonging mostly to the thirteenth and fourteenth centuries. The site is magnificent

and resembles that of Whitby Abbey in Yorkshire, being on the summit of a lofty limestone cliff at the mouth of the river. After tea some of the members proceeded to Seaton Delaval Hall, now in the possession of Lord Hastings.

This brought a successful week to a close. Thanks are due to Mr. W. Soden-Bird for his work as hon. secretary, and to the organisers of the meetings, and the lecturers for much valuable information. The book of the programme, with maps and plans of the principal places visited prepared by Mr. Harding-Tyler, and the members of the Meeting committee was as useful and attractive as usual.

NATIONAL ASSOCIATION OF MASTER PLASTERERS

Work of Conciliation.

THE half-yearly meetings of the National Association of Master Plasterers have recently been held at the Central Library, Blackpool, under the presidency of Mr. W. Masters, of Middlesbrough. We are informed that during the past six months the officials have been in attendance at something like twenty-two meetings of various kinds, namely, the National Allied Building Trades Employers' Executives, the National Allied Disputes Committee, the National Association of Operative Plasterers, the National Joint Council for the Plastering Industry, and with meetings of its own Executive. It is generally known that the operative Plasterers have resigned from the National Wages and Conditions Council, and on April 1 this year were without rules and agreements, and were desirous of entering into agreements with the employers of plasterers either locally, regionally, or nationally. The National Association of Master Plasterers, being affiliated with the Wages Council, was prevented by the fact from entering into any agreement other than those agreed by the Wages Council, and in order to preserve peace in the industry, strenuous efforts have been made to secure a general meeting of all concerned for a round table talk so that differences may be discussed, and a common platform reached whereby it might be possible to continue the good offices of the Wages Council in stabilising wages on a national basis. It appears, however, that the operative plasterers have taken a ballot vote of their members, with the result, we understand, that on no conditions will they return to the Wages Council.

The meetings between the employers and the operative plasterers have been marked by a distinctly friendly feeling, and it is satisfactory to know that the operatives have agreed to meet the National Allied Disputes Committee so that they may put their case before them, explaining their reasons for resignation from the Wages Council, and to offer certain proposals for the future government of the plastering industry which have been approved and mutually agreed by the two bodies concerned. The National Joint Council for the plastering industry has also had under consideration an education scheme for apprentices to plastering, and during the coming session it is hoped classes will be set up in the various technical schools throughout the country; the scheme also includes the giving of prizes to successful students, whose work will be examined by an experienced and practical plasterer. The Council have also had under consideration a new form of indenture for apprentices, which is to be put into operation at once.

The officials of the Master Plasterers Association record the continued increase in the numerical strength of its membership, and are hopeful that in the near future all master plasterers throughout the country will recognise the work done on their behalf, and hasten to affiliate themselves with the Association. The Association have decided to appoint an organiser, whose duty will be to approach all employers of plasterers throughout the kingdom.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on all matters.

They are appeal to our correspondents to submit their queries on paper of a size easily filed, and written as fully as possible, or, better still, in typewriting!—Ed.

Cleaning Porcelain Enamel Baths.

SIR,—I have always experienced difficulty in advising clients how to clean porcelain enamel baths and earthenware lavatory basins. Most of the preparations sold for the purpose contain lime powder or a similar ingredient, which soils the surface and renders constant cleaning essential. Could any reader recommend a suitable preparation for the purpose?

R. P. B.

Red Ash Tennis Courts.

North-country readers write, asking for an line specification for red ash tennis courts which it is proposed to construct on the site of an old depression, which has been filled in, the filling-in material obtained on the site from culling, being red roche (or soft, shaley sandstone). Perhaps some reader can provide such specification.

Wind-driven Electric Lighting Plant.

SIR,—Will any of your readers who have installed a wind-driven electric lighting plant for small country house lighting give me their experiences, particularly as to efficiency in low winds.

P. EDWIN STEPHENS.

Sand-Lime Bricks.

SIR,—Where can full information be obtained the sand-lime bricks so extensively used on the Continent, particularly with regard to their composition, colour, durability and method of manufacture? Have any been made in this country, and can the plant for making them be obtained in England?

RICHARD ANDERTON, A.R.I.B.A.

Building with Flints.

[REPLY TO S. S. G.]

SIR,—It is a great mistake to assume that the use of a hard impermeable material like flint is in itself a safeguard against weather, especially in rubble work where it often occurs that a bed here and there may be laid as to tip slightly inwards so that the rather leads straight into the body of the flint. It is, therefore, very necessary in good-class work to back up the wall with a 4½ in. brick shell tied in with wall ties and leaving dry cavity. If S. S. G. is in a flint district it may be possible to get experienced labour locally; but if this has to be imported will be difficult to lay hands upon men willing to travel, and the ordinary mason will probably be unable to handle the material. I may state that I live in a granite district where one frequently comes across walls 18 in. thick that let water through though appearing roughly sound and substantial.

ARCHITECT.

Rights of Light.

SIR,—In my reply to the inquiry of "Crown" given in last week's number, "an angle of light of 45 per cent." should of course read "an angle of light of 45 degrees." As it is now a common practice to set up a standard of measurement for the intensity of light, the above list's error may make for confusion, and I could therefore be glad if you would kindly print this correction.

LEX.

Waterproofing Sand-faced bricks.

[REPLY TO W. J. RENDELL.]

SIR,—There are quite a number of colourless waterproofing preparations for water-proofing brick faces without affecting the colour now on the market and advertised in *The*

Builder. If, however, the walling is not yet built (and your correspondent does not make this clear) I should recommend that cavity walling be adopted for keeping out the weather without any further treatment. I have heard of cases where the sealing of the surface of the wall by a petrifying liquid has led to condensation troubles inside, especially where the brick-work has been in cement mortar. CAVITY.

Horse Power required for Pump.

SIR,—Given the amount of water required to be lifted to a given height in a given time by a pump of known efficiency, can you tell me how may be obtained the Horse Power of the motor required for the operation? AQUA.

B.T.U.

SIR,—Can you kindly inform me what is the significance of the term B.T.U. or British Thermal Unit?

CHERCHER.

Reduced White Lead.

SIR,—I have been offered white lead described as "Reduced White Lead" and am unable to find what is meant by the term. It appears to be considerably more expensive than the ordinary type I have been in the habit of buying. Can any of your correspondents inform me whether the above is an accepted description, and if so what is the proportion of actual white lead that should be contained therein?

PIGMENT.

Rise and Go of Stairs.

SIR,—I have found in practice that the rule "twice the rise plus the go equals 23" to provide the best results, but am unable to account for the fact by any logical reason. It would be interesting to hear if any of your correspondents can throw any light upon the matter.

PITCH.

Mahogany.

SIR,—I have a piece of furniture of which the figure suggests that it is of mahogany. Very little stain has apparently been used, but the colour is considerably greyer than any mahogany of which I have had previous knowledge. Can you suggest what timber it is likely to be, and whether it is likely to be mahogany at all?

COLLECTOR.

Increase in Price of Building.

[REPLY TO "LONDON," AUGUST 27.]

SIR,—In general, a contractor is entitled to refuse to do extra works, unless they are such as are essential to the satisfactory completion of the work contracted for, or unless they are provided for in the conditions of the contract. In this case the R.I.B.A. (1909) form of contract (applicable where quantities form part of the contract) has, it is understood, been used, and clause 12 of the conditions of contract, provides for the due performance of properly authorised variations and extras. The powers given to an architect under this clause do not extend to such variations as a total alteration of the original plans or specification; but, provided the variations are as to matters of detail only, and come within the scope of his authority, and they are properly authorised under, and within the terms of, and as directed by the contract, then the contractor must carry out the extra work ordered.

If it is found, as in a lump-sum contract, that the satisfactory execution of the work contracted for demands extras, the contractor must perform them without additional remuneration; but in the case under consideration payment for extras is specially provided for under clause 13 of the conditions of contract, for variations are to "be valued at the rates contained in the contractor's original estimate."

Subject to a consideration of the above, it would appear, on the information given in this

case, that the contractor is bound to carry out the work ordered and at the contract rates. If he, without lawful excuse, fails or refuses to perform his contract, he may be regarded as having suspended the work and clause 26 of the conditions of contract is then applicable. This clearly sets forth the procedure that should be adopted by "London" in employing another contractor, and subsequently recovering from the original contractor.

Further, it may be pointed out, that if the contractor without lawful excuse fails or refuses to perform his contract, or abandons the work before completion, he becomes liable for breach of contract.

Velocity of Flow of Sewage.

[REPLIES TO "DESIGNER," AUGUST 7.]

SIR,—I would refer "Designer" to Blake's "Drainage and Sanitation," page 261, where the necessary information is set out at some length.

M. D. R.

SIR,—The velocity of flow of sewage in any drain may be found from the following formula:—

$V = C \sqrt{r s}$ where
V = Velocity of flow in feet per second.
r = Mean hydraulic depth = $\frac{\text{area of stream}}{\text{wetted perimeter}}$
in feet = $\frac{\text{area of stream}}{\text{wetted perimeter}}$

s = Fall ÷ length.

C = A constant varying according to different authorities, but for pipes of 3 in. to 9 in. diameter usually taken at from 90 to 100.

D = Diameter in feet.

When a sewer is flowing full or half-full the value of $r = D \div 4$, in circular sewers. Various other formulae are given in the engineering pocket-books, such as Molesworth, Kempe, Trantwine, &c., but that quoted above has the advantage of being easily remembered and, provided due discretion is exercised in the selection of the constant C, is reasonably accurate. If extreme accuracy is required a recently devised formula (based upon the researches of Reynolds, about 1884, confirmed and amplified by a very exhaustive series of experiments at the National Physical Laboratory within the last few years) is now available. This takes account of such factors as the density and viscosity of liquids at varying temperatures in addition to the usual ones such as size, length and fall of pipe, and eliminates the necessity of guessing, more or less accurately, the value of C. An explanation of the formula in question, however, would take up too much space in these columns, and "Designer" is recommended to refer to a small booklet entitled "The Flow of Liquid Chemicals in Pipes," by Norman Swindin, price 3s. (Benn Bros.), if he wishes to pursue the subject further.

W. G. W.

SIR,—To find velocity of flow of sewage in feet per minute—

$55 \sqrt{H.M.D. \times S.A. \times F.}$
where H.M.D. = Hydraulic mean depth.
S.A. = Sectional area of pipe or sewer in feet

F. = Fall in feet per mile.

The H.M.D. of a pipe flowing full or half-full is always $\frac{1}{4}$ the diameter in the case of circular sewers. (See note below.)

Example: Sewer 18 in. in diameter. Gradient 1 ft. in 580 ft. Running full. Velocity required.

$V = 55 \sqrt{H.M.D. \times S.A. \times F.}$

$V = 55 \sqrt{\frac{1}{4} \times \frac{1}{4} \times 1.76 \times 9.1}$

$V = 55 \sqrt{.375 \times 16}$

$V = 55 \times 2.44$

$V = 134.2$ ft. per minute.

NOTE.—The H.M.D. is found by dividing the sectional area of the fluid by the Wetted Perimeter.

W.P. in pipe flowing full (1 ft. diam.)
 $= D \times 3.1416$

$S.A. = D^2 \times .7854$

$H.M.D. = \frac{.7854}{3.1416} = .25$

Sevenoaks.

L. F. S.



THE BUILDING TRADE.

HINTS TO BUILDERS

By J. H. BARNES, F.I.O.B.

IN dealing with the question of estimates great care should be taken to see that the estimate is sent in for the correct amount, as instances have occurred where a builder has made a gross error in his estimate and the customer has accepted the tender and called upon him to carry out the work, with disastrous results to the contractor, and this would particularly apply where a number of articles are being tendered for; if the price quoted is for each article it should be clearly stated. These elementary precautions may be the means of saving the contractor from a considerable loss.

The builder is sometimes placed in rather a difficult position in tendering as he has to give a firm price, whereas the merchants and other firms who perform special work will sometimes hedge their quotations with all sorts of terms and conditions, e.g., "subject to our approval of the detailed drawings," etc., etc., and in such cases it may be advisable for the builder to put a similar note to his tender. If the tender is not intended to be a binding one under all circumstances it should be so stated.

When a builder is sending in a very large number of estimates and would not be able to carry out, within a reasonable time, all the jobs if they were entrusted to him, it would be advisable for him to insert a clause in his estimate giving him the right "to accept the jobs should his arrangement permit." When invited to tender, the estimate must be prepared either by the builder himself or by some qualified person.

Estimating requires some considerable practice to keep the estimator in touch with prices current. The small builder can hardly find time to prepare estimates because he will be more nearly concerned in the personal management and arrangement of the details of his business, and is therefore often forced, from mere lack of time, to arrange for his estimate to be prepared by some qualified person outside his own staff, or to employ approximate methods of estimating.

Approximate estimates have a value of their own, but should not take the place of a definite estimate prepared upon proper particulars, for approximate estimates can only give approximate results; and if that is borne in mind no harm is likely to occur in dealing with a job from that point of view. On other occasions it is sometimes convenient to be able to obtain quickly an approximate price, and it is surprising how nearly correct estimates can be prepared by approximate means. Such methods, however, require very careful study and a close observation of details.

The best method for the untrained person to adopt is "cubing." "The people who know" affect to despise this method, yet it must be acknowledged that, within certain limits, the preparation of estimates by obtaining the cubical contents of the building and pricing them at an inclusive price to cover all the details of construction, is really helpful.

There are other methods of preparing approximate estimates for buildings, but we will first deal with the method of estimating by the cubic foot extent of the buildings. The usual way is to take the length from the outside dimension of the walls and the depth in a similar way, the height to be taken from the top of the footings or concrete continued to the roof. If the roof is a pitched one similar to the ordinary slated roof, the dimension would be taken to half-way up the roof.

Any outbuildings, back additions, and so on should then be measured, and by this means the length, depth and height of the building

can be ascertained. From these particulars the whole cubical contents of the building can be arrived at. If there are any chimney stacks projecting considerably above the roof these would also have to be measured.

In dealing with the question of pricing the cubical contents obtained by the methods described above, the builder will find it of very great value to construct his own schedule of prices based upon the particular class of work he is in the habit of doing, for it is remarkable how nearly the cost of one building of a particular class will approximate to the cost of a building of a similar class but slightly different size; the law of averages seems to work so that the slight differences in size and general arrangements counterbalance themselves.

Having once arrived at the approximate price for a completed building of a particular type, it should be an easy matter to add on suitable amounts for slight increases or deduct amounts for decreases in the probable cost of the work as compared by the hypothetical standard taken.

For instance, if the standard example house were finished with either stock bricks or perhaps a roughcast facing, this would be a cheaper finish than an expensive red-brick facing; but if that were the only difference in the house, this could be easily added on by a lump sum to the cost of the building when priced out at per cubic foot.

The ordinary sanitary arrangements should be included in the price for the house, but any connection to sewer or length of drain outside the house should be taken separately. Laying on the water from the company's main should also be added separately, also the electric light or gas, as these are charges which may vary very considerably in different districts.

Needless to say, the cost per cubic foot of the house would not include the garden walls or fences, and these would have to be added separately. The cost of any special sanitary fittings, heating, or stoves inside the house could be added to the total figure. The number of gas or electric points should be counted and a sum of money included for them. Any special kind of wall decoration required would also form the subject of an additional charge. Any fittings in the nature of cupboards are usually considered as tenant's fittings, and are not included in the cost per cubic foot of the building. In the case of ordinary dwelling-houses, the cost will vary from 11d. to 1s. 6d. or 2s. per cubic foot in accordance with the general arrangements, design and type of finish of the house.

Small public buildings or assembly halls would cost from 1s. 3d. to 2s. per cubic foot. The cost of commercial buildings will depend in a measure upon whether any special expense is proposed by reason of some architectural features on the elevation and the weights the floors are designed to carry.

In attempting to arrive at an approximate price per foot, the dimensions of the building should be taken in the method described above and the various items of extra cost previously suggested should be carefully gone into, and in addition a special sum should be added for work such as a sub-basement, if required, as this usually entails expensive excavation and shoring, the shoring of surrounding property, fireproof staircase, lifts, and heating arrangements.

For an ordinary commercial building in London with concrete floors, fireproof staircase, and passenger lift, but no expensive

architectural embellishments to the front cost to-day is from 2s. to 3s. per cubic foot. Should any special architectural treatment be required to the front of such a building a sum could readily be arrived at for such

In these days, when so much of the work of buildings is carried out by specialists, the price of arriving at an approximate price is simplified, as it is possible to approximate the cost of such trades as ferro-concrete for floors, beams or constructional steelwork, filler and beams, and such special work, so that the unit of price per foot cube for the general class work can be obtained and the correct price applied for the specialists' trade enumerated. The prices upon which the rates per foot are based are those current in *The Builder* at this date. Should any alterations in the conditions occur these can be adjusted to suit the actual conditions.

The usual objection to making approximate estimates for buildings and pricing them per cubic foot is that the voids are priced at the same rate as the actual solid work of a building may be sub-divided in many ways which would considerably increase the cost but would not increase the cubical contents. This objection can be overcome by pricing the building at per yard superficial area of the actual finished material. For instance, the front elevation could be measured as one item and priced at an inclusive price for facings, including either brickwork or stonework, windows, doors, painting and pointing, and internal plastering and distempering. The side and division walls could be dealt with in the same way, and the floors could be measured and taken as one item comprising floor joists and ceiling under. The roof could be dealt with in a similar way. A lump sum should be added for the staircase, and the sanitary arrangements, such as w.c.s and lavatories should be numbered, and an inclusive price placed against each item for the apparatus and all necessary pipes.

This method, by means of which the actual work involved in the building is dealt with, necessitates taking off very rough "quotations" and more nearly represents the actual work required than the measuring and pricing of the cubical contents of both material and void together.

The beginner may think it somewhat difficult to average the cost of the stonework to the front of the building, but if the whole is taken solid to a depth of from 9in. to 1ft. in accordance with the general proportions of architectural details, this should be sufficient for most buildings. The beginner should not make notes on these lines to get some idea of the effect of the difference that the stone is taken into the wall will have upon the cubical contents of stone used, therefore on the cost of the stonework on the front elevation.

When the superficial measurements of buildings have been taken the following give some idea of the method of arriving at the price of buildings by the superficial yard actual work:—

1 yd. super 1½ in. brickwork in cement mortar at £31 10s. rod, say.....	£1
1 yd. super extra only to red-brick facing and pointing	
1 yd. super internal plastering	
1 yd. super distempering	
Total per yard	£1

Extra only to windows could be added with as follows:—

The size of the window presumed to be 4ft. wide x 5ft. high.

	£	s.	d.
0ft. super of deal sashes and frames, ironmongery and glass	4	0	0
About 5 yards super painting both sides measured over all, 2s. 6d.	12	6	
ft. 6in. run of 11in. x 3in. stone sill	1	2	6
ft. 6in. run of window board	4	6	
0ft. run angle and return to plastering	5	0	
Arch and lintol, say	10	0	
	£6	14	6
Deduct:—			
0ft. super. 14in. brick wall £2	7	0	
0ft. super. brick facing and pointing	13	4	
0ft. super. internal plastering, say	5	3	
0ft. super. distempering	1	8	
	3	7	3
	£3	7	3

It will be observed that the small details of labour have not been taken, but rates affixed to the items should cover these. The size of window given is only an example, but in measuring one would take the average size of window required for the building. The figures used are adapted from those quoted in current issue of *The Builder*. By these figures it would seem that the approximate value per superficial yard of the wall would be 30s., and the extra cost of windows would be about £3 7s. 6d. each.

WORKMEN'S COMPENSATION

An important decision has been given by the Court of Appeal in two cases under the Workmen's Compensation Acts. *Briggs v. Thomas Dryden & Son*, and *Talbot v. Vickers, Limited* (*Weekly Notes*, June 20).

In the first of the above cases on April 4, 1918, the applicant, who was then nearly seventeen years of age, in the course of his employment met with an accident and lost the greater part of a forefinger. He received compensation at 10s. a week until September 13, 1918, when he resumed work, but a declaration of liability was filed on November 6. The applicant attained the age of 21 on December 7, 1923. On September 29, 1924, he underwent an operation to remove the stump of his finger and was totally incapacitated until January 3, 1925. During this period compensation was again paid him at 17s. 6d., being 10s., plus the war bonus; but the applicant applied for a review and an increase of compensation to 35s. a week under the First Schedule, par. 6, of the Act of 1906. The employers in this case opposed the application on the ground that the above paragraph had been repealed by section 24 sub-section (6) of the Act of 1923, and no claim could be made by a minor or increased compensation on a review after he has attained 21 years. As regards this point the second case raised a similar question.

Paragraph 16 of the Act of 1906 provides: "Any weekly payment may be reviewed at the request either of the employer or of the workman. . . . Provided that where the workman was at the date of the accident under 21 years of age, and the review takes place more than 12 months after the accident, the amount of the weekly payment may be increased to any amount not exceeding 50 per cent. of the weekly sum which the workman would probably have been earning at the date of the review if he had remained uninjured, but not in any case exceeding £1." Section 24 sub-section (6) of the Act of 1923 is as follows: "For the proviso to paragraph 16 of the principal Act the following proviso shall be substituted: 'Provided that where the workman was at the date of the accident under 21 years

of age and the review takes place more than six months after the accident and before the workman attains the age of 21 years, the amount of the weekly payment may be increased to such an amount as would have been awarded if the workman had at the time of the accident been earning the weekly sum which he probably would have been earning at the date of the review if he had remained uninjured.'"

The Court of Appeal, affirming the county court judge, held that the effect of the declaration of liability in each case was that the workman had an accrued right to have his compensation on review fixed according to par 16 of the Act of 1906. for in each case the workman had attained 21 before the Act of 1923 came into force, and thus under the proviso in section 24 sub-section (6) they would have lost the benefit of that provision; but this was obviated by section 38 of the Interpretation Act, 1889, which in sub-section (2) provides: "Where this Act or any Act passed after the commencement of this Act repeals any other enactment, then, unless the contrary intention appears, the repeal shall not (c) affect any right, privilege, obligation, or liability acquired, accrued, or incurred under any enactment so repealed." Section 24 of the Act of 1923 contained nothing to show "a contrary intention," and thus the Act of 1906 still applied in these cases.

It may here be noted that under section 30 of the Act of 1923, sections 2 to 10, which include the new scales of compensation, are not to apply to any case where the accident happened before the commencement of that Act which by section 31 is fixed as January 1, 1924, but by section 1, which repeals the War Addition Acts it is expressly provided that in respect of total incapacity arising from an accident which occurred before December 31, 1923, the additions provided by those Acts shall continue to apply. There is a curious lacuna here of one day, for if the accident should have happened on December 31, 1923, the scales of compensation provided by sections 2 to 10 of the new Act would not apply, and neither would the War Additions Acts, as their operation is expressly excluded where the accident happened before December 31, 1923. The position of minors still does not appear clear under the Workmen's Compensation Acts, 1906 and 1923. In the case under consideration the Court held the Act of 1923 to have no application because the workman had attained 21 years before the Act came into force, and the claim was relegated to the Act of 1906, and paragraph 16 of the First Schedule to that Act does not appear to raise difficulties as to the scale of compensation, for it does not refer, as does section 24 sub-section (6) to "such an amount as would have been awarded" (words which imply an application of the scales for compensation), but merely provides "that the weekly payments may be increased to any amount, not exceeding 50 per cent. of the weekly sum which the workman would have been earning." But assuming the accident to have occurred before the new Act came into force, but the review to take place after the Act came into force, and before the workman attained the age of 21, how is the compensation to be calculated then? Section 24, as we have said, implies a computation according to scale, but the scales provided by the new Act in sections 2 to 10 are not to apply where the accident happened before the Act came into force, therefore apparently the compensation in such cases must be computed under the scales provided by the Act of 1906, plus the War Additions when the accident results in total incapacity, with the one exception that if the accident happened on December 31, 1923, no War Addition can be taken into consideration. The courts have observed that there seems a fatality in legislating on Workmen's Compensation, and that obscurity is always the result, and the provisions above referred to seem to justify these observations.

THE RATING AND VALUATION BILL

THE proceedings in Committee on the Rating and Valuation Bill appear to prove eventful to the end. When the Committee resumed its sitting on July 28, the Chairman ruled out of order two pages of amendments relating to clause 72, subclause (3), which appears not to have been in the draft Bill, and which relates to hereditaments occupied by the Crown; but at the sitting on July 30 he announced that since delivering that ruling he had found a precedent in the Valuation of Property Bill, 1874, for an amendment of the nature of one of those put down, and Mr. Barker then moved a new clause that all property in the occupation of the Crown should be chargeable in respect of rates, and the gross and rateable values of such property should be determined in accordance with clause 21 of the Bill. This clause was opposed on behalf of the Government, but was carried by 17 votes to 10. A further clause that all property in the occupation of the Crown used for public purposes only should be chargeable in respect of rates was also carried.

The proceedings are too shortly reported to enable the exact effect of the two amendments to be considered, and the Committee adjourned to the following week. In the Bill as it stood, where any hereditament was occupied by the Crown for public purposes, no gross value was to be determined or entered in the valuation list, and if any contribution in aid of rates was made by the Crown the value entered in the valuation list was to be the value upon which the contribution was computed; in other words, such contributions were to be made *ex gratia*.

Sir Kingsley Wood, on behalf of the Government, at the sitting on July 28, had expressed sympathy with the views put forward that certain classes of Crown property should be rated, as, for instance, where the public services imposed burdens on the local authorities as in the case of aerodromes, where the roads giving access to the same were torn up, but he had expressed the opinion that a general rating of all Crown property of all descriptions was outside consideration.

The other matters of interest dealt with during the week were the new clauses dealing with questions which had been deferred. A new clause to take the place of clause 11, which deals with the rating of houses let out in parts, was agreed to without discussion. This clause enables the rating authority or the assessment committee, if they think fit, to treat a building let out in parts as though it were a single hereditament in the occupation of the person who receives the rents, and it appears to do away with a difficulty which was inherent in the original clause which depended upon the degree of the structural alterations carried out, raising the question whether they were such as to convert the parts into separately rateable hereditaments, a question which, under the Rent Acts, has proved conducive to much litigation.

As regards clause 10, which relates to the collection of rates by owners, a new clause was also carried. The principal amendment introduced by this clause appears to be the introduction of a specified limit placed upon the house brought within the clause as it is to apply to hereditaments as before, where the rent is collected at intervals shorter than quarterly, but now shall in no case apply to houses where the rateable value exceeds £13. The allowances made to owners under this clause also appear to be varied, but at present it is difficult to state how the matter exactly stands. We rather gather that the "commission" for collecting the rates, is as in the Bill, 5 per cent., and that if the owner pays the rates before the date specified in the agreement or resolution and, whether the house is occupied or not, 15 per cent.; in similar circumstances, if the house is occupied, 7½ per cent. What is not clear

from the report is whether the 5 per cent. commission is payable in any event, or whether that too is dependent on the payment being made before it is due. Sir Kingsley Wood intimated it was desired to include London in these provisions. A new clause was also proposed by Sir Kingsley Wood and inserted in the Bill constituting a central Valuation Committee, consisting of members of the County Valuation Committees and of Assessment Committees, and of such other persons as may be provided by the scheme which, to secure uniformity, should take into consideration the operation of the Act and remove inequalities in the system of rating by such consultation and conference with such bodies or persons as they should deem desirable.

THE WEEK IN PARLIAMENT

WESTMINSTER, Wednesday.

Scottish Housing.

THE subject of Scottish housing was raised during the debate on the Scottish estimates. Sir John Gilmour the Secretary for Scotland, said that the shortage in Scotland was now 100,000 houses, but the greatest difficulty was the shortage of building labour. There was room in Scotland for all the brick and stone houses that the building operatives were capable of erecting and in addition for any other method of construction could produce, whether they were Weir houses, Atholl steel houses, or steel-roofed houses. The problem could be solved only by co-operation on the part of operatives, masters, the local authorities, and the Government.

New Bill.

Mr. G. Hall, a labour member, has presented a Bill to make further provision for the housing of miners and mine workers.

Unemployed Workers.

Mr. Betterton informed Mr. Day that on June 22, 50,910 building trade workers were registered at Employment Exchanges as unemployed of whom 12,000 were skilled workers, 20,000 skilled workers' labourers and 18,000 others.

Lead Poisoning.

Mr. H. Williams asked the Home Secretary which countries had put into full operation the Convention of 1921 with regard to the use of lead in the painting of buildings, and which countries had legislated only to the extent of the Lead Paint (Protection against Poisoning) Bill, 1925.

Sir W. Joynson Hicks said that four countries, namely, Austria, Czechoslovakia, Poland and Sweden, had formally ratified the Convention and taken legislative or other steps to give effect to it. He had no information of countries with Legislation on the lines of the Lead Paint Bill.

Parliament rose for the summer recess on Friday, August 7, and will reassemble on Monday, November 16.

THE SURVEYORS' INSTITUTION

AN application from the South African Institute of Quantity Surveyors for affiliation with the Surveyors' Institution has been approved by the Council of the latter body. The South African Institute is a professional society of high standing in the colony, and was incorporated in 1908. It includes upon its governing body six members of the Surveyors' Institution. Under the conditions of affiliation, members of the Colonial society, who are not members of the Institution, will not be given any personal connection with the latter. The Council of the South African Institute will, however, supervise the Institution examinations in the Colony, and in other ways co-operate with the Council of the Institution in furthering the interests of the profession.

APPORTIONMENT UNDER THE RENT ACTS

No branch of the law is more difficult to follow than the numerous decisions dealing with the apportionment of rent under the Rent Acts. The decisions are indeed becoming irreconcilable the one with the other, and the greatest confusion prevails. In a recent note on the case *Barratt & Evans v. Hardy Brothers (Alnwick), Ltd.* (*The Builder*, May 22) we quoted Lord Justice Bankes as having said that the Courts, in trying to stop up holes in the Rent Act, 1920, had really created greater difficulties, and a chasm had been opened up in which even a house in Pall Mall can become engulfed within the statute.

In our issue June 25 we noted the case *Abrahart v. Webster*, as decided by a Divisional Court; this decision has been appealed, and is now reported (1925, 1 K.B. 563). *Abrahart* was the tenant of a basement in a house in Hove and he was applying for an apportionment of the rent. On August 3, 1914, the house had been let as a whole at a rent of £60 per annum, and the house consisted of a basement, a ground floor and two other floors. It continued to be let as a whole to various tenants, but at some time subsequent to 1918 one of these tenants had sublet certain floors, and in 1920 this basement (with the exception of a room called the "slip room") was sublet to *Abrahart*, and he also was tenant of two rooms on the top floor. On January 4, 1921, the respondent in this case had purchased the house, and in February *Abrahart* had surrendered his lease of the two top rooms but retained possession of the basement as before on a new tenancy at 11s. 9d. a week. The rest of the house was let to another tenant until September, 1923, when the respondent made certain alterations in the house with a view of converting the parts above the basement into two separate tenements, but no alteration was made in the basement, and the basement derived no benefit at all from the alterations.

On the application for an apportionment of the rent of the basement the county court had fixed the standard rent of the house at £60, and apportioned the standard rent of the basement at a fifth of that sum. A Divisional Court had set this aside, holding that section 12, subsection (9), must be read as referring to the house as a whole, and that there had been such a reconstruction of the house, reading the subsection in that sense as to take it out of the Act. The Court of Appeal have now set this judgment aside, holding that the subsection only applies to the part actually converted, and the basement, untouched by the alterations, remained a part of the premises let as a whole in 1914, and the right to apportionment survived.

Stockham v. Easton (1924, 1 K.B. 52; *The Builder*, May 18, 1924) is the nearest to the above case, but in that case the structural alterations were shown indirectly to have benefited the floor there in question, and the whole house was held to have lost its identity. In *Abrahart's* case Lord Justice Atkin distinguished *Stockham's* case on the ground that it was a case where the alterations had caused the house to lose its identity, but the distinction between the two cases is so fine that we cannot but think had the present decision of the Court of Appeal preceded *Stockham's* case a Divisional Court would have felt bound to follow it, and would not have distinguished it. The whole difficulty appears to have originated as was pointed out by Lord Justice Bankes in *Barrett & Evans v. Hardy Brothers*, with the decision of the Court of Appeal in *Sinclair v. Powell* (1922, 1 K.B. 393; *The Builder*, January 27, 1922). In that case the whole house was not within the Rent Restriction Act then in force, and a Divisional Court had held that, as the building when it was let off in flats was not restricted, the owner was entitled to do with it as he pleased, and that a tenant of one of the flats was not entitled to an apportionment. The Court of Appeal, Lord Justice Scrutton dissenting, upheld this judgment, but on other

grounds, the majority holding that the question depended upon whether there had been such a reconstruction of the building as to cause it to lose its identity. Lord Justice Bankes sitting with Lord Justice Scrutton as a Divisional Court, in *Barrett's* case admitted this had been an unfortunate decision leading to the confusion which has resulted, as it has led to sub-section (3) of section 12, the apportionment sub-section, being applied to parts of houses let as separate dwellings, although the house as a whole is not within the Acts.

But we may point out that another difficulty arises in connection with this interpretation. In *Smith v. Prime* (1923, *Weekly Notes*, 131; *The Builder*, May 25, 1923) a building had been so converted by conversion into flats that it was admitted it had lost its identity within *Sinclair v. Powell*, but it was argued that the flats were not "separate and self-contained flats or tenements" within section 12, subsection (9). It was held that they answered this description, but this case was followed very quickly by another case, *Darrell v. Whitaker* (1923, *Weekly Notes* 165; *The Builder*, May 18, 1923) of the same kind, and in that case it was again held that the house had lost its identity, and also that the flats were separate and self-contained, but the Divisional Court which decided the case for the first time pointed out that if the rule as to loss of identity was applied to the whole building then it appeared impossible to give effect at all to subsection (9) as that subsection appeared redundant.

In our note on that case we ventured to point out, what has since been confirmed by the above dicta of Lord Justice Bankes in *Barrett's* case, that there was very great doubt whether the doctrine of identity was in the contemplation of the Legislature. We said: "An examination of the Act can only lead to a doubt whether the doctrine as to buildings losing their identity was in the contemplation of the Legislature at all," and further on we observed: "There is reasonable doubt as to whether the decisions as to flats based on the question of identity with the original building stand on a firm basis," and indicated that it was impossible to treat any section of an Act of Parliament as redundant if a meaning could be given to it, and that the apportionment sub-section could be applied to parts of houses, as has now been held in *Abrahart's* case, when the house itself was within the Acts and unaltered as to its identity. It is almost impossible to say at present what the actual position is. *Barrett's* case is not yet reported in the Law Reports but it appears that the Court held apportionment to apply because there had been no reconstruction of the house. The application for apportionment in itself marked a new departure in that it was based not on the rent but on the rateable value of the premises, but this building had always been let in floors since before August 3, 1914, although the basement and first floor had been assessed together and the second, third, fourth, and fifth floors were also assessed together.

In *Lelyveld v. Peppercorn* (1924, 2 K.B. 638; *The Builder*, June 27, 1924) where some floors in a house had been let before August 3, 1914, it was held the house as a whole never had a standard rent, and the standard rent of a flat subsequently let was held to be the rent at which it was first let, but the Court in *Barrett's* case intimated some doubt whether this decision was in accord with the earlier decisions. The real difficulty in the decisions appears to be this: that the test of the identity of the house has been carried so far that it has come to be applied to flats in an unaltered house, although the house as a whole was never within the limits of the Rent Acts. That is the effect of the decision in *Barrett's* case (following *Sinclair v. Powell* and numerous other cases), and has, as the Court pointed out in that case, led to unforeseen results, and as the Court observed

Darrell v. Whitaker rendered sub-section (9) most redundant. On the other hand Abart's case gives the Act a reasonable interpretation, and also gives effect to sub-section (9), where the whole house was within the limits of the Rent Acts, and the unaltered basement was separately treated as part of a dwelling house let as a separate dwelling under sub-section (8) of section 12, and it was held that an apportionment of the rent of that portion could be made, whilst the altered portion of the premises if containing two or more separate and self-contained flats came within the exception provided by sub-section (9). It appears that the doctrine of identity is the cause of all the trouble, and unless a case comes to be stated to the House of Lords, and that tribunal should over-rule the cases that imported it, there is urgent need for action by legislation.

THE KANGO HAMMER

An interesting demonstration took place recently at the offices of the Kango Co., Ltd., 78, Petty France, Westminster, of their light-weight (9½ lb.) Kango hammer. This hammer works on an entirely new mechanical principle which hitherto has never been adopted for practical commercial purposes. In this centrifugal force is used for the conversion of rotary into reciprocating motion with such simplicity that it is essential to see it working in practice to properly appreciate or realise its great scope. The principle has been first applied in this instance to a very long-felt want, namely, that of a light and portable hand-power hammer. The motor is universally wound for either 110, 220 or 230 voltages, and the motor speed is in the vicinity of 9,000 to 10,000 r.p.m. As a practical indication of the low current consumption required, it will be sufficient to state that that of the 220 volt hammer is approximately 4 amps. The most interesting point of this new principle is the part played by the speed of rotation of the weights and the effect on the oscillating motion at the hammer head. Variation of speed produces a harmonical variation of the number of blows, and as the speed is increased, blows of proportionately increased intensity to those obtained at one blow per revolution can be obtained at every second or third revolution. This point is being put into practice for larger hammers which will be produced in due course.

So far it has only been possible to use pneumatic tools for this type of work, because there has been no other means sufficiently developed for practical commercial use. The low efficiency of the pneumatic system, however, has always proved a serious disadvantage in its use, and this, together with the cost of compressor plant installations as well as their upkeep, has limited the use of percussion tools to cases where only their extensive use has counterbalanced the deficiencies of the system sufficiently to render it of practical use. By the production of the Kango hammer both the efficiency and the portability of percussion tools has been increased very largely, since at the present moment there are but few potential users without electric light, from which source the hammer derives its power. The Kango hammer requires only a fractional amount of power as compared to the pneumatic hammer.

At the demonstration the hammer was shown (1) cutting wood—in a far shorter space of time than could be accomplished by a plane saw, and with a very high resulting finish. (2) Cutting ½-in. steel with the utmost ease. (3) Drilling brick. This last operation should be of particular interest to builders; a brick 1-in. thick can be drilled in just over 30 secs. (4) Cutting out brick. (5) Stone dressing. (6) Drilling marble blocks. The Kango hammer can undoubtedly be made use of, economically (running costs work out at about 4d. per hour) and efficiently, in a large number of ways connected with modern methods of house-building. If required, the company are prepared to make special tools for any specific purpose.

A SCHEME FOR INCREASING THE SUPPLY OF WORKING-CLASS HOUSES

[The following essay, by Mr. John E. Yerrbury, was submitted in the *Daily Chronicle* Housing Competition, and received third prize.]

The two main essentials are maximum output and cheap capital. Maximum output can only be secured from contented workers; contented workers by security, and security by a guaranteed minimum wage.

The revival of the Building Trade Parliament would be the best means to attain our end; failing this, a separate branch of the building trade should be created for housing, by the provision of cheap capital to be advanced to local authorities and public utility societies willing to provide houses to let at rentals within the means of the poorest-paid worker.

Successive Governments have approached the difficulty on the assumption that subsidies are absolutely necessary, ignoring the fact that, by a system of deferred payment, cheap capital could be provided which would make commercial rents possible.

The scheme here proposed for supply of cheap capital is as follows:—The Government, by creation of 4 per cent. Housing Bonds, repayable capital and interest in 40 years, would secure a fund from which to make loans to local authorities and public utility societies for the purpose of building houses to let at rentals under 10s. per week; the loans would be at 2½ per cent., repayable in 60 years. The cost of bonds would be £5 1s. per cent.; the return from loans £3 7s. 4d. per cent.; showing a loss to the State of £1 13s. 8d. per cent. for 40 years, which would be repaid by the continued receipts from loans of £3 7s. 4d. per cent. for a further 20 years after State payments had ceased; a saving to the country of £1,376,000,000 promised by the Wheatley Act to rent payers.

The factors in rent are:—

1. INTEREST ON CAPITAL EXPENDITURE
 - a. Site.
 - b. Development.
 - c. Building.
2. WORKING EXPENSES
 - a. Maintenance.
 - b. Management.
 - c. Rates, Taxes and Insurance.
3. RESERVE OR SINKING FUND.

The Local Authority, being saved the subsidy under present Acts, it is proposed to fix upon them the charges for roads and sewers.

A further suggestion is to transfer from rates to taxes all those charges which are not purely local, by an increase of grants-in-aid to cover such charges.

Strikes against payment of rent would be made illegal by the Act of Parliament dealing with this scheme. Local by-laws should be revised to meet the necessities of the position. If found necessary to prevent profiteering public utility societies in combination would manufacture or import all material for their own use, and also supply local authorities.

Estimated Cost of Cottage.	
Land, under Acquisition Act, £180 per acre, 15 Houses	£12
Roads and sewers—expense borne by Local Authority, £375 per acre	25
Labour and Material	325
Commissions, costs and fees	8
Profit	30
	£400

Comparative Rentals of Houses to Cost £400.			
	Government Scheme.		Suggested Scheme.
	£	s. d.	£ s. d.
Interest on cost at 6 per cent. ..	24	0	0
Interest and repayment of loan in 60 years	£400		
Less Roads, &c.	25		
	£375		
Rates 25 per cent. gross rent. ..	11	0	0
15	—		
Maintenance "15" per cent. and Management 5 per cent. gross rent	8	16	0
Sinking fund ½ per cent. on capital expenditure	2	0	0
Commercial rental	45	16	0
Subsidy under Wheatley Act ..	13	10	0
Rental to be paid by tenant ..	32	6	0
After deduction of Subsidy, weekly rental	12	5	10

It is thus seen that, in addition to saving the subsidy (under the Wheatley Act £1,376,000,000), a deferred payment scheme, with other reforms advocated, would reduce rents by 2s. 6d. per week. If anticipations are realised by the creation of contented workers and satisfied tenants, further reductions would be made in the cost of building and in maintenance charges, still further reducing rents: while some slight reduction may be brought about by new methods of construction, but this will not be very great. With the all-in cost reduced to £300, a cottage could be provided under this scheme at 7s. 6d. per week, inclusive of rates, meeting the requirements of tenants in receipt of guaranteed wages of 30s. per week.

Several points of objection may be raised to the scheme outlined above:—

1. That bonds could not be raised at 4 p.c.
2. The Treasury would not lend at lower rate than it can borrow, or over a longer term of repayment.
3. Transfer of rates to taxes is hidden subsidy.
4. No account is taken of compound interest on losses made.

In reply, it is held that:—

1. 4 per cent. is not a fixed rate, but merely a figure to illustrate the scheme, the essential of which is that a deferred payment system is necessary to produce cheap capital and save subsidies.
2. If by a somewhat unorthodox method the Treasury can save the country from taxation (which under the Wheatley scheme might reach £1,376,000,000), it ought to accept proposals and make necessary safeguards.
3. The transfer of national charges from rates to taxes is a reform long overdue; increased grants-in-aid is the only method which would prevent delay, and the Exchequer might recoup the loss by a tax on unearned increments over a certain amount since purchase by present owner.
4. Interest is taken into account in repayment of bonds and in repayment of loans; there would not be any loss on the completed transaction. Interest on loss is not taken into account in any of the schemes proposed by successive Governments.

The capitalists of the country under the Wheatley Act would have to find £1,376,000,000 for subsidies, after providing the capital for building (over 1,000 millions). The scheme set out here would give them 4 per cent. on the money invested in bonds and save them the amount of the subsidy, while their investments would be productive of buildings.

The Ministry of Health would only require a comparatively small staff to assure (a) good building, (b) proper maintenance.

Builders' Estates.

Mr. Robert Owen Jones, of Dinarth Park, Llandudno-road, Colwyn Bay, Denbigh, builder and contractor (net personality nil), £9,460.

Mr. Robert Edward Jones, J.P., of Plas Llanfaelag, Anglesey, retired builder, formerly in business in Liverpool, an Alderman of the Anglesey County Council and High Sheriff in 1908, who died on March 5 last, aged 75 years, left estate of the gross value of £142,970, with net personality £46,744 9s. 4d.

The Heating of Rooms.

A paper by Dr. Margaret Fishenden, D.Sc., F.Inst.P. (Technical Paper No. 12 of the Fuel Research Board of the Department of Scientific and Industrial Research, published by H.M. Stationery Office, 1s. net), describes the results of experimental work undertaken to determine the relative costs of different methods of heating rooms when conditions of bodily comfort, under varying circumstances, are taken as the basis of comparison.

NEW BUILDINGS IN LONDON.

Acton.—Plans are under the consideration of the Governors of the Acton Hospital, Gunnersbury-lane, W.3, for the erection of additional buildings, including a nurses' home. The architects are Messrs. E. C. P. & H. Monson, F.R.I.B.A., Finsbury-pavement House, E.C.2.

Artillery-row.—Work has now commenced upon the rebuilding and extension of the showroom and staff quarters fronting on to Artillery-row and Spenser-place, S.W.1, of the Army & Navy Co-operative Stores, Ltd. The builders are Messrs. Dove Bros., Ltd., Cloudestley-place, Islington, N. The architects are Sir Aston Webb & Sons, Queen Anne's-gate, S.W.1. Further important improvements particularly affecting the Victoria-street frontage, will be put in hand later.

Barking.—Messrs. Charrington's Brewery, Mile End-road, E.1, intend to rebuild the "Crooked Bilet," at Creeksmouth. The contract has been placed with Messrs. George Parker & Sons, Ltd., 134, Sumner-road, Peckham, S.E., and will be supervised by Mr. S. A. S. Yeo, F.R.I.B.A., Bank Chambers, 2, St. John-street, E.C.2, the architect.

Becontree.—Mr. E. Meredith, A.R.I.B.A., 7, Goodmayes-road, Ilford, Essex, has prepared plans for the building of three lock-up shops and nine garages on a site in Burnside-road.

Bedford.—The War Memorial to Old Bedfordians near the West Gate will take the form of a hall, to be used as a library and reunion hall for Old Bedfordians. The architects are Messrs. O. P. Milne & Phipps.

Bishopsgate.—Foundations are now being constructed for the large office building in Bishopsgate, E.C.3, for the Hudson Bay Co. The contractors are Messrs. Dove Bros., Ltd., Cloudestley-place, N.1. The plans, which provide for a building surmounted by a tower 150 ft. high, have been prepared by Messrs. Mewès & Davis, 22, Conduit-street, W.1. The consulting engineer is Dr. Oscar Faber, M.I.C.E., the quantity surveyor being Mr. F. Henniker.

Bishopsgate.—Extensive internal alterations are to be made to the premises of the Midland Bank, Ltd., in Bishopsgate, E.C. The contractors are Messrs. Dove Bros., Ltd., Cloudestley-place, Islington, N. The architects are Messrs. Whinney, Son & Austen Hall, 8, Old Jewry, E.C.2.

Bishopsgate.—Foundations for the second portion of the large offices to be built in Bishopsgate, E.C., for the Westminster Bank, Ltd., are now in course of construction, about 25 ft. below pavement level. The contractors are Messrs. Holloway Bros. (London), Ltd., Bridge Wharf, Grosvenor-road, S.W.1. The architects are Messrs. Mewès & Davis, 22, Conduit-street, W.1.

Borough.—The Governors of the Borough Polytechnic Institute in Borough-road, S.E.1, propose to spend £79,804, exclusive of the purchase of the site, on the extension of their buildings. Mr. W. Courtenay Le Maitre, F.R.I.B.A., 133, Moorgate, E.C.2, is the architect.

Bromley.—A number of houses are to be erected in the district, and a contract has been placed with Messrs. C. T. Ward & Co., 2, Mortimer-place, N.W.6.

Buckingham Palace-road.—The L.C.C. have approved provisionally plans for the new "King's Arms" public house, No. 77, Buckingham Palace-road, S.W.1. Messrs. Petch & Fernand, 12, Buckingham Palace-road, S.W.1, are the architects acting on behalf of the owners, Messrs. Watney, Combe, Reid & Co., Ltd.

Catford.—A new road is to be constructed from Bromley-road, at Southend Village, S.E., to provide access to the site of the proposed new church of St. John's, for which Sir Charles Nicholson, Bart., F.R.I.B.A., 2, New-square, Lincoln's Inn, W.C., is the architect.

Charing Cross-road.—Large factory premises in Charing Cross-road, W.C.2, are being converted into shops, offices and showrooms. The

contractors are Messrs. Foster & Dicksee, Ltd., Manresa-road, S.W.3. The architects are Messrs. F. Taperell & Haase, 3, Gower-street, W.C.1.

Downs-lane.—An addition is to be made to the warehouse premises of Messrs. G. & J. Lines, Ltd., Thistle Works, Downs-lane, N.17, to plans prepared by Mr. Clifford S. Tee, F.R.I.B.A., 50, Moorgate, E.C. The contractors are Messrs. Henry Knight & Son, 16, Bruce-grove-road, N.17.

Edmonton.—Messrs. E. Rogers & Son, 3, Church-road, N.1, builders, are to erect a row of shops with flats above in Fore-street, Edmonton, N.1. Mr. W. A. Lewis, 11, Finsbury-square, E.C.2, is the architect.

Finchley.—A new depot is to be erected in Squires-lane, Finchley, N., at a cost of about £12,000. The contract has been placed with Mr. R. J. Rowley, Belmont-road, N.15. Mr. P. T. Harrison, 9, The Hawthorns, Regent's Park-road, N.3, architect.

Finchley.—A new hall and additions to existing buildings are to be erected at the Woodhouse Secondary School, Finchley, N. Mr. H. G. Crothall, F.R.I.B.A., architect, Middlesex Guildhall, Westminster, S.W.1. The contract has been placed with Messrs. Turner & Payne, High-road, Finchley, N.12.

Greenwich.—A Bill is before Parliament, promoted by the Dreadnought Seamen's Hospital, of Greenwich, S.E.10, to empower the Committee to proceed with the erection of new buildings, including a nurses' home, pathological department, &c., on an adjoining disused burial ground. The architect is Sir Edwin Cooper, F.R.I.B.A., 4, Verulam Buildings, W.C.

Hackney.—An extension is to be made to the manufacturing premises of Messrs. Benmax Bros., at 22, Mare-street, E.8. Mr. S. Ansell, 89, Leconfield-road, N.5, architect.

Hayes.—Funds are being collected for the building of a new Roman Catholic church. Plans have been prepared by Senor Evilldrino, Eiraguirre, of Portugal.

Hendon.—3,000 houses will shortly be erected on the recently acquired L.C.C. Housing Estate at a cost of £1,800,000. Mr. G. Topham Forrest, F.R.I.B.A., County Hall, S.E., architect.

Huntley Street.—The contract for the erection of the new Royal Ear Hospital on the site at the junction of Huntley-street and Pancras-street, W.C.1, at a cost of about £50,000-£60,000, has been placed with Messrs. Higgs & Hill, Ltd., Crown Works, South Lambeth-road, S.W.3. Messrs. Edmund Wimperis and Simpson, 61, South Molton-street, W.1, architects.

Ilford.—On an area of land facing Hampton, about 50 houses are to be erected, by Mr. J. W. Davies, Henley-road, Ilford.

Kensington.—A scheme for the erection of 38 flats on a site in Virginia-place, W., at a cost of about £17,000, is contemplated by the B.C. Mr. L. R. Guthrie, 37, Bruton-street, W.1, architect.

Kensington.—The conversion of the large residence in Princes-gate, W., into quarters for the American Ambassador, is now in hand. The contractors are Messrs. Holland & Hannen and Cubitts, Ltd., 258, Gray's Inn-road, W.C. The architects are Messrs. Carrere and Hastings, of Vanderbilt-avenue, New York City.

King William-street.—New headquarters in King William-street, Nicholas-lane, and Nicholas-passage, E.C., are to be erected by the London Life and Clergy Mutual, 81, King William-street, E.C.4. Mr. W. Curtis Green, A.R.A., 5, Pickering-place, S.W.1, architect.

King's Cross.—A warehouse is to be erected at the engineering works in Field-street, N.W.1, owned by Messrs Hewitt Bros. Mr. Max C. Cooke, F.R.I.B.A., 20, Bedford-row, W.C.1, and 25, Castlebar-road, W.5, architect.

Kingston.—The Ministry of Health have approved the scheme of the Kingston Board of Guardians for the erection of a new nurses' home, &c., at a cost of about £80,000. The architect is Mr. F. Danby Smith, Parliament Mansions, Victoria-street, S.W.1.

Lambeth.—Further alterations are to be carried out to the works premises in Borough-road,

S.E.1, of Messrs. R. Hoe & Co., Ltd., engine Messrs. Robinson and Rood, F.S.I., Bedford-row, W.C.1, architects.

Leicester-square.—The Cavour Restaurant, Leicester-square, W.1, is being rebuilt. The contractors are Messrs. Bovis, Ltd., 43, U. Berkeley-street, W.1. Mr. Claude W. Fe, F.R.I.B.A., 11, Waterloo-place, S.W.1, tect.

Marlyebone.—It is proposed to add a to the new blocks of tenements in Fische street, W., at a cost of £7,800. Messrs. A. & Newman, 14, Gray's Inn-square, archit

New Oxford-street.—An addition of four is to be made to the branch in New Ox street, W.1, of the Westminster Bank. The contract has been placed with Messrs. and R. Roberts, 144, Lower Clapton-road, Messrs. Campbell Jones, Son & Smither Dowgate-hill, Cannon-street, E.C.4, archit

Northfleet.—In connection with the cement works at Bevan for the Associ Portland Cement Mfrs., Ltd., Tothill-st S.W.1, a contract for eight silos of 1,000 each has been placed with Messrs. Th & Edge, Cross-street, Woolwich, S.E. I by the company's engineers.

Regent-street.—Application for the erec of a block of shops and offices on the sit Nos. 99-101, Regent-street, W.1, higher than prescribed under the London Buildings has been made to the L.C.C. by Mr. E. A. St F.S.I., 20, Berkeley-street, W.1.

Richmond.—Premises in Hill Rise, Richm have been acquired by the National Provid Bank, Ltd., Bishopsgate, E.C.3, for conver into branch offices. Mr. F. C. R. Pal F.R.I.B.A., architect to the bank.

Rosebery-avenue.—Messrs. Frank Matc & Co., 9, Warwick-court, Holborn, W.C.1, been appointed architects for the reconstru of Sadler's Wells Theatre, in Rosebery-ave E.C. The cost is estimated at £30,000.

St. Mary Axe.—A large office and wareh building is to be erected on a site in St. Axe, E.C., for Messrs. Bunge and Co., grain merchants, 33, Bury-street, E.C.3. Delissa Joseph, F.R.I.B.A., 2, Basing avenue, E.C.2, architect.

Stepney.—The London Jewish Hospita Stepney Green, E.1, propose to build additi stories to their premises at a cost of a £25,000. Messrs Joseph, 2, Paul's Bakeho court, E.C.4, architects.

Teddington.—Teddington Memorial Cot Hospital Committee propose to build a hos at a cost of £13,000. Mr. John Armbr architect, 42, Clarence-road, Teddington.

Tokenhouse-yard.—The steelwork is abou to be erected for the new building in Tokenh yard, E.C.2, for the Bank of England. The contractors are Messrs Matthew T. Shaw & Ltd., West Ferry-road, Millwall, E.14. The builders are Messrs. F. G. Minter, Ltd., 1 Works, Putney, S.W. The architect is M W. Troup, F.R.I.B.A., 14, Gray's Inn-sq W.C., and the quantity surveyor Mr. I Watkins, 13, Gray's Inn-square, W.C.

Twickenham.—The U.D.C. propose to con York House, a large residence, into muni offices, at a cost of about £40,000. Plans been prepared by Mr. Ralph Knott, F.R.I. Adelphi-terrace House, W.C.2. A tender been submitted by Messrs. F. & H. F. F. Ltd., Hinton-road, Herne Hill, S.E., at £3. Quantities by Mr. F. S. Henniker, 1-3, Ro street, W.C.2.

West Ham.—A new building is to be er in Woodgrange-road, E., for Messrs. Up Ltd., boot manufacturers, 8, Gt. Dover-s S.E.1. The contractors are Messrs. Ham & Miles, Ltd., Scrafton-road Works, I Essex. The steelwork will be by M. Archibald Dawney & Sons, Ltd., Steelw road, Battersea, S.W. Mr. S. C. Addison Grove-road, Eastbourne, architect.

Westminster.—At a cost of £58,000 a building for students and staff is to be ei at St. Thomas's Hospital, Albert Em ment, S.E.1. Plans by Mr. H. W. Ch F.S.I., 37, Norfolk-street, Strand, Messrs. Sabey & Son, 100, Great Ru street, W.C.1, builders.



Westminster.—Demolition of the old baths washhouses in Marshall-street, S.W.1. has been commenced, preparatory to the erection of much larger buildings. Plans by Mr. Veit, C.E., F.S.I., City Engineer, Westminster, who has appointed Mr. A. R. R. F.R.I.B.A., 42, Cecil Park, W.8, architectural assistant.

Westminster.—The adaptation and extension of Crosby Hall, on the Embankment, S.W., as a hostel for the British Federation of University Women, at a cost of about £50,000, is to be put in hand. Messrs. Wratten and Grey, 18, Queen Anne's-gate, S.W.1, architects.

Westminster.—The L.C.C. have approved plans prepared by Mr. Victor Wilkins, F.R.I.B.A., for the extension of the Corporation Buildings, Adelphi, W.C.2 for a further block of tenement dwellings on the eastern side of the ferry-road, S.W.1, for the Peabody Donation Fund, 15, Buckingham-street, Strand, W.C.2.

Westminster.—Messrs. L. H. & R. Roberts, Lower Clapton-road, N., have secured the contract for the erection of an additional building at St. Martin's School of Art, S.W.1. G. Topham Forrest, F.R.I.B.A., County of S.E.1, architect.

Whitcomb-street.—The second section of the premises for the Automobile Association is shortly to be put in hand. The general contractors are Messrs. Arthur Vigor, Ltd., Hantsbridge, S.W. The steelwork will be erected by Messrs. Smith-Walker, Ltd., 33, Mill-street, S.W.1. The architect is Mr. Henry Mather, 38, John-street, Bedford-row, W.1.

Willesden.—A new factory is to be built in Ware-road, N.W.10, for Mr. E. W. Hay, brush manufacturers. Mr. A. Arnell, Regent-lane, Golders Green, N.W., has prepared the plans.

Willesden.—A new works building is to be erected in Milton-avenue for Messrs. G. Blunt, bookbinders, etc., Kilburn-lane, W. The contract has been placed with Messrs. Greenwood & Sons, Ltd., Mordant, N.10. Mr. John Lawrence, F.S.I., Pattiad, West Hampstead, is the architect.

Willesden.—The Industrial Engineering Co., propose to extend their works at Oat-road, N.W.2. Plans have been prepared by Messrs. Trant, Brown & Brightiff, 332, Elm High-road, N.W.

Wimbledon.—Messrs. A. & H. Crowley, brewers, propose to carry out considerable alterations to the "White Hart" house at North-road, Wimbledon, S.W., by the company's architect.

Wood-street.—Foundations for the auto-telephone exchange in Wood-street, are now being put in by Messrs. Higgs & Co., Ltd., Crown Works, South Lambeth, S.W. The super-structure will form a separate contract. Plans by H.M. Office of Works, Storey's Gate, S.W.1.

THE INTERNATIONAL CONGRESS OF BUILDING AND PUBLIC WORKS

The Fourth Congress of the International Association of Building and Public Works was held recently in Paris, there was a large attendance of delegates from most countries in Europe, also from Asia, Africa, and the American Continent. Great Britain was represented by Sir Lionel Earle, Permanent Secretary H.M. Office of Works; with whom Mr. R. Pitcher, O.B.E.; Mr. F. W. Leggett, Minister of Labour; Mr. Roland B. (vice-president of the International); Mr. J. Forsdike, Mr. Wm. H. Nicholls, Sir Airey, Mr. Ernest J. Brown, Mr. A. N. and Mr. H. R. Middleton, representing the International Federation of Building Trades of Great Britain and Ireland; Mr. R. Swann, surveyor for the City of Liverpool; Mr. T. J. Byrne, chief architect to the Corporation of Public Works, Dublin; and many other representatives from India, Ceylon and Mauritius, were also present. With most cordial expressions of welcome, Mr. B. Chessum was elected President for the coming term normally beginning in October.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	C'pters. Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Accrington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Altrincham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Ashton-under-Lyne.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barnsley.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barrow-in-Furness.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barry.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bath.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bedford.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Birkenhead.....	1/9	1/9	1/8 1/2	1/9	1/9	1/9	1/8 1/2	1/1 1/2
Birmingham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bishop Auckland.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Blackburn.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Blackpool.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bolton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bournemouth.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bradford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Brentwood.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Bridgewater.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1 1/2
Brighton.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bristol.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Burnley.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Burton-on-Trent.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/1 1/2
Bury.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Cambridge.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Cardiff.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chatham.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Chelmsford.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Cheltenham.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Chester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chesterfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Colchester.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Coventry.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Crewe.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Darlington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Derby.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Doncaster.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Dudley.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/1 1/2
Durham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
E. Glam.(Mon. Vall.).....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Eastbourne.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Exeter.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/1 1/2
Folkestone.....	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/1 1/2
Gloucester.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Grantham.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Grays.....	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/1 1/2
Grimby.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Great Yarmouth.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Guilford.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Hallifax.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Harrogate.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hartlepool.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hastings.....	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/1 1/2
Hereford.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Huddersfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hull.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Ipswich.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Launceston.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leamington Spa.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Leeds.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leicester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Lichfield.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Lincoln.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Liverpool.....	1/9	1/9	1/8 1/2	1/9	1/9	1/9	1/9	1/3 1/2
Llanelli.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
London (12 m. radius).....	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/4 1/2
London (12-15 m. radius).....	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
Loughborough.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Luton.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Maldstone.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Manchester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Mansfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Merthyr Tydfil.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Middlesbrough.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Newcastle-on-Tyne.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Northampton.....	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/2
Norwich.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Nottingham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Oakham.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Oldham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Oxford.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Plymouth.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Pontypridd.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Portsmouth.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Preston.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Reading.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Rochdale.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Rochester.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Rugby.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
St. Albans.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
St. Helens.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Scarborough.....	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/2
Sheffield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Shrewsbury.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Southampton.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Southend-on-Sea.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Southport.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
South Shields.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stockport.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stockton-on-Tees.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stoke-on-Trent.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stroud.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Sunderland.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Swansea.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Swindon.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Taunton.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Torquay.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Tunbridge Wells.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Wakefield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Walsall.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Warrington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
West Bromwich.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Wigan.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Windsor.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Wolverhampton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Worcester.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
York.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2

(For rates of wages in the Building Trade in Scotland, see Page 269.)

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

AUGUST 17.—Biggleswade.—ENGINE-HOUSE.—For the erection of an engine-house, for the Water Board. H. Chandler, Clerk.

AUGUST 17.—Bottle.—PAINTING.—Cleaning and painting the exterior wood and iron-work of the Town Hall, Municipal Offices, Public Library, Police buildings, Weigh Office, and Weights and Measures offices; cleaning, painting, and decorating work required to the interior of (a) the ladies' swimming bath, and (b) the Superintendent's house, Balliol-road Baths, both for the B.C. Borough Engineer's Office, Town Hall.

AUGUST 17.—Cardiff.—DEMOLITION.—Of cooling tower, for the Electricity Department of the Corporation. Cecil W. Brown, Town Clerk.

AUGUST 17.—Dublin.—PAINTING.—External painting to cottages in the Rathdown No. 1 R.D. Scheme No. 154. Chief Clerk, Irish Sailors' and Soldiers' Land Trust, 30, Lower Fitzwilliam-street, Dublin. Deposit 10s.

AUGUST 17.—Farnworth.—SCHOOL.—Erection of the proposed Central School, Harper Green-road, Plodderlane, Farnworth, to accommodate 640 scholars, for the E.C. William Bradley, L.R.I.B.A., 8, Acresfield, Bolton. Deposit £3 3s.

AUGUST 17.—Glamorgan.—VARIOUS.—The repair, painting, and alteration of police stations at ten centres in the county, for the C.C. Sir T. Mansel Franken, Clerk to the C.C. County Hall, Cardiff.

AUGUST 17.—Godmanchester.—HOUSES.—For the erection of 10 pairs of houses, for the B.C. G. Stevens, Borough Surveyor, Town Hall.

AUGUST 17.—Sidmouth.—COTTAGES.—Erection of 70 cottages for the U.D.C. The contract may be divided into lots of 14 cottages or let as a whole. R. W. Sampson, architect, Manor Offices, Sidmouth. Deposit £1 1s.

AUGUST 17.—Swindon.—HOUSES.—Erection of 96 houses on Hurst Housing Estate, for the Corporation. Borough Surveyor, 34, Regent-circus, Swindon.

AUGUST 17.—West Riding.—SCHOOL.—The following works:—Woodhouse Secondary School, laying of cricket pitch, for the E.C. Education Department, County Hall, Wakefield.

AUGUST 18.—Angel-street.—PAINTING.—The General Post Office. H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works).

AUGUST 18.—Birkenhead.—ALTERATIONS.—Structural alterations to the premises, "Manor Grange," Egerton-road, for the B.G. E. Kirby & Sons, architects, 5, Cook-street, Liverpool.

AUGUST 18.—Godstone (Surrey).—HOUSES.—Erection of sixteen Class "A" houses and eight Class "B" houses at Tyler's Green site, Godstone, for the R.D.C. Council's Surveyor, Lloyds Bank-chambers, Oxted. Deposit £3 3s.

AUGUST 18.—Hailsham (Sussex).—HOUSES.—Erection and completion of sixteen houses in blocks of four in South-road, for the R.D.C. The Engineer, 17, London-road, Hailsham. Deposit £1 1s.

AUGUST 18.—London.—PAINTING.—Painting, &c., at the General Post Office, North, Angel-street, E.C. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners of H.M. Works).

AUGUST 18.—Solihull.—PAINTING.—Internal painting and alterations at the Children's Homes, "The Hermitage," W. T. Orton, architect, 5, Waterloo-street, Birmingham.

AUGUST 18.—Wealdstone.—HOUSES.—Erection and completion of the whole or any portion of 126 parlour-type houses in various sized blocks. Surveyor to the Council, Council Offices, Peel-road, Wealdstone. Deposit £2 2s.

AUGUST 19.—Dundee.—HOUSES.—For the various trades in connection with the erection of 220 houses. G. Baxter, Director of Housing, 91, Commercial-street, Dundee.

AUGUST 19.—Pontardawe.—HOUSING.—Erection of 10 houses at the Alltnew site and completion of road relative thereto. Mr. E. D. Jones, A.R.I.B.A., architect to the Council. Deposit £2.

AUGUST 20.—Dublin.—RESTORATION.—Restoration of roofing, slating, &c., of the Central Main Block of the Hibernian Military School, Phoenix Park. J. J. Healy, Secretary, Oifig Oibreacht Publi (Office of Public Works), Baile Atha Cliath (Dublin).

AUGUST 20.—Rhymney.—ALTERATIONS.—Alterations and extensions to the Democratic Club. G. E. Gait, Rhymney. Deposit 10s. 6d.

AUGUST 21.—Ireland.—RESTORATION.—Restoration of the following ex-R.I.C. Barracks:—Ballynure ex-R.I.C. Barrack, Co. Tipperary; Ballyduff ex-R.I.C. Barracks, Co. Waterford. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1 1s.

AUGUST 20.—Leeds.—URINALS.—Erection of urinals on the undermentioned sites, for the Health Committee:—1, Junction of Whitehall-road and Springwell-road; 2, junction of Low-road and Pepper-road; 3, Cross Flats Park; 4, Hunslet Lake; 5, junction of Jack-lane and Nineveh-road; and 6, conveniences for males and females at Holbeck Moor. Town Clerk's Office, Great George-street.

AUGUST 22.—Grayford (Kent).—WORKING-CLASS DWELLINGS.—Designs, specifications, and prices from builders and firms specialising in concrete and other

recognised forms of construction, in connection with the provision of 50 working-class dwellings, for the U.D.C. Engineer and Surveyor, Council Offices, Crayford. Deposit £1 1s.

AUGUST 22.—Pontefract.—HOUSES.—The Corporation invite tenders for the following trades in connection with the erection of 22 parlour type houses on the Lovelace housing site:—1, Carpenter and joiner; 2, plumber and glazier; 3, plasterer. W. H. Newton, A.M.I.C.E., Borough Engineer and Surveyor, Municipal Offices, Pontefract. Deposit £2 2s.

AUGUST 22.—Wakefield.—REBUILDING.—Works required at Rawcliffe Hall Institution, Rawcliffe, near Goole, for the West Riding Mental Deficiency Act Committee:—(a) Rebuilding portion of water tower, (b) rebuilding sunk wall, (c) alterations to scullery. West Riding Architect, County Hall, Wakefield.

AUGUST 24.—Dublin.—FLOORING, &c.—Please note that the date for the receipt of tenders for roofing, flooring, and other works to the central portion of the south front of the Custom House, Dublin, has been extended from the 7th instant till 12 o'clock on August 24. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £5.

AUGUST 24.—Glamorgan.—SCHOOLS, &c.—The Glamorgan Education Committee desire to contract for the following works:—1. New school for 376 scholars, including Domestic Science and Handicraft, at Tiryberth (Pengam). 2. Additional classrooms, &c., at Tymeinw, near Blaengarw. 3. Fencing, &c., at Tondy Boys' Council School. 4. Levelling playground, &c., at Blaengarw Boys' Council School. 5. New windows and repairs at Tonyrefail Infants' Council School. 6. Rebuilding boundary retaining wall and various repairs at Penybank (near Fochriw) Council School. 7. Cutting through walls and providing and fixing two large windows at Albert-road, Penarth Council School. 8. Various repairs at Rhydygwern (near Machen). 9. Painting internally the Coedybrain Girls' Council School, Llanbradach. 10. Painting internally and externally the Pantywaun Council School. 11. Additions to temporary buildings, &c., at Tonmawr (Pont-rhydyfen) Council School. 12. Extension of dining-rooms at Ystalyfera Intermediate School. 13. Rellevelling playgrounds, building retaining walls, sloping ways, &c., at Craigcfeir park (Clydach-on-Tawe) Council School. 14. Improving approaches to Wern (Ystalyfera) Council School. The Secretary, Glamorgan County Hall.

AUGUST 25.—Leeds.—FILTRATION SHED.—Erection of a shed for filtration plant at Holbeck Baths, Leeds, for the Property Committee. Town Clerk's Office, Great George-street.

AUGUST 25.—Leeds.—DANCING FLOOR.—Construction of a dancing floor at Cockridge-street Baths, for the Property Committee. Town Clerk's Office, Great George-street.

AUGUST 25.—Leeds.—WASHHOUSES.—Works in connection with proposed erection of public washhouses and slipper baths at Stocks Hill, Holbeck, Leeds, for the Property Committee. Town Clerk's Office, Great George-street, Leeds.

AUGUST 25.—Norwich.—HOUSES.—Erection of 250 houses on the Drayton-road Estate for the Corporation of Norwich. Stanley G. Livock, A. F. Scott & Sons, George J. Skipper, Stanley J. Wearing, all of Norwich. Deposit £1.

AUGUST 25.—Prestwich.—HOUSES.—Construction of five "A" type houses in a terrace on a plot of land in Hampden-road, Prestwich. The Surveyor, Town Hall, Prestwich. Deposit £1 1s.

AUGUST 25.—Tullamore.—RECONSTRUCTION.—Of the Courthouse. T. F. McNamara, M.R.I.A.I., architect, 192, Pearse-street, Dublin. Apply A. Edward Smith, F.S.I., 5, St. Andrew-street, Dublin. Deposit £10 10s.

AUGUST 25.—Wigan.—SCHOOL.—To accommodate 768 scholars, at Whalley, for the C.B. R. B. Donald, Borough and Water Engineer. Deposit £2 2s.

AUGUST 26.—Edmonton.—HEATING APPARATUS.—Installation of a hot-water warming apparatus and other works at the Infirmary, Chase Farm Schools, Enfield, Middlesex. J. C. S. Mummery, A.R.I.B.A., architect, 34, Bloomsbury-square, W.C.1.

AUGUST 26.—Hemsworth.—HOUSE, &c.—Erection and completion of a Master's house and a porter's lodge at the Poor Law Institution, for the B.C. W. T. Lynam, F.S.I., Union Offices, Hemsworth. Deposit £1 1s.

AUGUST 26.—London, S.W.6.—UNDERGROUND COAL STORE.—Erection of underground coal store at Western Hospital, Seagrave-road, Fulham, S.W.6, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

AUGUST 26.—London, S.W.—CLEANING AND PAINTING.—Cleaning and painting and repairs at Chelsea Casual Ward, Milman's-street, Chelsea, S.W., for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

AUGUST 26.—London.—LIGHTING, &c.—The M.A.B. invite separate tenders for (a) Installation of additional electric lighting in wards of the North-Eastern Fever Hospital, St. Anne's-road, Tottenham; (b) installation of three washing machines in the laundry at Caterham Mental Hospital, near Caterham, Surrey; (c) installation of four washing machines at the South-Western Fever Hospital, Landor-road, Stockwell, S.W.9.

Mr. T. Cooper, M.Inst.C.E., M.I.Mech.E., Engineer-Chief. Office of the Board, Victoria-embankment, E.C.4. Deposit £1 each.

AUGUST 27.—Middleton.—HOUSES.—Erection of 52 houses in various blocks. The Borough Engineer and Surveyor, Town Hall, Middleton, Lancs. Deposit £2 2s.

AUGUST 27.—Whitehall.—For external painting of various Government buildings, S.W. Separators for each building will be considered. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

AUGUST 28.—Swansea.—ALTERATIONS AND ENLARGEMENTS.—Alterations and enlargements to existing Municipal Secondary School for Boys, erection of a new Municipal Secondary School for new gymnasia, and other works, &c., in Dynevor-park and De la Beche-street, Swansea, for the Corporation Council, Borough Architect, 3, Prospect-place, Swansea. Deposit £5 5s.

AUGUST 29.—Kettering.—FIRE STATION.—Erection of fire station in Market-street, together with fireman's house, hose tower, &c., for the U.D.C. Reader Smith, surveyor, Market-place, Kettering. Deposit £2 2s.

AUGUST 29.—Kingston-upon-Thames.—HOUSES.—Erection of 50 non-parlour type houses and 20 parlour type houses, for the Corporation. Borough Surveyor, Municipal Offices, Kingston-upon-Thames. Deposit £1 1s.

AUGUST 29.—Oswestry.—HOUSES.—Erection of non-parlour type houses on the Llwyn Estate, for Borough Council. P. Ridge, A.R.I.B.A., Bailey-street, Oswestry. Deposit £1 1s.

AUGUST 29.—Southampton.—COTTAGES.—Erection of five new cottages (Contract No. 1) in Lyndchurch-Totton, and for the pulling down of old cottages alterations at Redbridge (Contract No. 2), for County of Southampton. The County Architect, Castle, Winchester. Deposit £1 1s. (cheques payable to Hants County Council, and crossed Lloyd's Bank Ltd., Capital and Counties Branch, Winchester).

AUGUST 29.—Tadcaster.—Erection of 306 parlour houses in the following parishes, viz.:—12 Allerton Bywater, 60 at Micklefield, 42 at Kippax, Swillington, 12 at Church Fenton, 24 at Sherburn. Office of the Council's Housing Inspector, 23, Park-avenue, Swillington, Woodlesford, near Leeds.

AUGUST 29.—Watford.—HOUSES.—The Corporation invite tenders for the erection of houses on their High Wall Housing Estate, Watford, as follows: Section 74 houses (40 "A" type and 34 "B" type); Section 3, 48 houses (26 "C" type and 22 "D" type); total, 122. The total number of houses is divided into the following contracts, viz.: Contract No. 1, 24 houses (2 "A" type and 24 "B" type); Contract No. 2, 24 houses (22 "A" type and 2 "B" type); Contract No. 3, 24 houses (16 "A" type and 8 "B" type); Contract No. 4, 26 houses ("C" type); Contract No. 5, 22 houses ("D" type). (Buildings tender for one or more contracts.) W. W. Adams, A.M.Inst.C.E., Borough Engineer. Deposit £1 1s.

AUGUST 31.—Gellygaer.—CONVENIENCE.—Construction of an Underground convenience at Bargoed, for U.D.C. F. Read, Assoc. M.Inst.C.E., Engineer, Surveyor, Council Offices, Hengoed, near Cardiff. Deposit £1 1s.

AUGUST 31.—Stafford.—SECONDARY SCHOOL.—Erection and completion of a new secondary school for about 500 boys in Milchouse-lane, Wolstanton, for the Education Committee. Graham Balfour, Director of Education, County Education Offices, Stafford.

SEPTEMBER 1.—Hammersmith, W.6.—STONEWORK CLEANING AND REPAIRING.—Work and material required in the repairs, cleaning down and restoring stonework at the Passmore Edwards Library, 1, Herd's Bush, London, W.12, for the Metropolitan Borough of Hammersmith. The Borough Engineer and Surveyor, Town Hall, Hammersmith, W.6.

SEPTEMBER 1.—Liverpool.—Demolition and statement of Ministry of Pensions Hospital at K. Ash. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

SEPTEMBER 4.—Berks.—DRAINAGE AND BUILDING WORK.—(a) Re-drainage work; and (b) extending and repairing courts at Broadmoor Asylum, Berks. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

SEPTEMBER 4.—Merthyr Tydfil.—HOUSES.—Erection of six pairs of one-storied brick houses with Celliflaeg, Merthyr Tydfil. Alternative tenders for concrete-slab houses will be considered. Borough Architect, Town Hall.

SEPTEMBER 5.—Torquay.—NEW SCHOOL.—Erection of a new school for 600 children at West Hill, the Borough of Torquay. Geo. H. Widdows, Architect, County Offices, St. Mary's Gate, Derby, or the Education Offices, Town Hall, Torquay. Deposit £1 1s.

SEPTEMBER 7.—Surrey.—HOUSES.—Erection of 50 houses at Tolworth, forming an extension housing scheme, for the U.D.C. C. Edgar, Clerk to the Council, Council Offices, Ewell, Surrey. Deposit £1 1s.

SEPTEMBER 8.—Mountain Ash District.—HOUSES.—Erection for the Mountain Ash U.D.C. houses as follows:—Contract F: Forty-eight houses (40 parlour and eight parlour types) at Pontcynon; Contract G: Forty non-parlour houses at Penrhyn site. Tender to be on fixed basis for materials adjustable to wage alterations. W. H. Williams, Architect, Council Offices, Mountain Ash.

SEPTEMBER 9.—Essex.—SECONDARY SCHOOL.—Erection of a secondary school at Walthamstow, 410 pupils, for the Essex C.C. County Arc Springfield Old Court, Chelmsford. Deposit £2 2s.

SEPTEMBER 15.—London, E.C.1.—SANITARY CONVENIENCE.—Certain work in connection with erection of the new underground sanitary conveniences and renewals of existing sanitary work, &c., Institution, Shepherdess-walk, City-road, N.1, 1

wardians of the Poor of the Holborn Union. Clerk to the Guardians, Administrative Offices, 53, Clerkenwell-road, E.C. 1. Deposit £1 1s.

AUGUST 16.—Sunderland.—HOUSES.—Erection of 78 four-roomed houses and 58 three-roomed houses on the Spark Farm estate, under the terms of the Housing (Financial Provisions) Act, 1924, for the County Borough. Borough Engineer's Office, Town Hall. Deposit £2 2s.

NO DATE.—Allica.—HOUSES.—Erection of 120 houses for the T.C. Jas. Cuthbert, Town Clerk, Burgh Chambers, Allica.

NO DATE.—Biggleswade.—HOUSES.—Forty-one houses on Section B of the Townfield Housing site, for the U.D.C. Thos. R. Howitt, Surveyor.

***NO DATE.—Birkenhead.—Pavilion.—**New Female Pavilion at the Poor Law Institution, Chatterbridge, for the Wirral Union. Finchett, Lancaster & Archer, architects, 13, Houghton-street, Southport. Deposit 3s.

NO DATE.—Douglas.—HOUSES.—Erection of terrace houses on the Hill's Estate, Douglas, Isle of Man, for the C. Jos. E. Teare, F.S.I., 46, Athol-street, Douglas.

***NO DATE.—Findon and Worthing.—VICARAGE.—**Erection of a vicarage. Singer Hyde & Son, architects, Heene-terrace, Worthing.

NO DATE.—Johnstone.—TENEMENTS.—For two-story tenements at the corner of Lighthouse-street and Russell-street, for the T.C. Jaffrey & Lochhead, High-reet, Johnstone.

NO DATE.—Kilmarnock.—LIGHTING.—Electric lighting work in connection with the 72 houses presently in course of erection, for the T.C. William Dunbar, Market Bridge, Kilmarnock.

NO DATE.—Llanwrnarn Garden Suburb.—HOUSES.—Two pairs of houses on the above estate for the Llanwrnarn. Surveyor to the Estate, 72, Bridge-street, Newport.

NO DATE.—Leeds.—EXTENSIONS.—Excavator, brickwork, and concrete, carpenter and joiner, plumber and tiler, slater, and painter's work (only) required in the erection of extensions to factory, New York-road, Leeds, for Messrs. Heaton's (Leeds), Ltd. G. Fredk. Bowman & Son, architects and surveyors, 5, Greek-street, Leeds.

NO DATE.—Rothwell.—LIGHTING.—Installation of electric light in the Woodlane Council School. P. P. Mount, W.R. Education Offices, 8, St. John's North, Wakefield.

NO DATE.—Wakefield.—CHURCH.—Erection of new church on the Portobello housing site at Sandall. W. H. Martin, architect, Leeds.

NO DATE.—Wandsworth.—HOUSES.—Erection of a further 209 houses for the B.C.

NO DATE.—Weth-on-Dearne.—HOUSES.—Ninety-six houses for the D.C. Tennant & Smith, architects, Sheffield.

MATERIALS. etc.

AUGUST 17.—Middlesbrough.—MATERIALS.—Angled scoriae (broken) bricks, castings, concrete galls and kerbs, pitch and tar, sanitary pipes, gulleys, actions, etc., slag (broken), tarred whinstone and slag, amber, whinstone and granite (broken), whinstone and granite setts, and kerbs, and sand, for the C.B. E. Burgess, Borough Engineer.

AUGUST 18.—Pembroke.—MACHINERY.—For the supply and erection of a plant for the manufacture of macadam and asphalt compounds, including stone crushers, crushing pools, screens, dryers, mixer, weighing scales, elevators, etc., for the T.C. Joshua C. only, Clerk, Town Hall, Balafridge, Co. Dublin.

AUGUST 19.—Leigh.—KERBS.—Supply of grit kerbs, for the T.C. Borough Surveyor, Town Hall, Leigh, Lancs.

AUGUST 20.—Manchester.—WEIGHBRIDGE.—For the supply of weighbridges, for the T.C. Paving Department, Town Hall.

AUGUST 20.—Manchester.—GIRTERS.—Supply only about 50 tons of steelwork in girders, for covering the River Medlock at Holt Town Sanitary Works, be delivered at the L.M. & S. Railway Goods Yard, Vis-street, Manchester, for the Cleansing Committee. Engineer's Office, Town Hall, Manchester. Deposit £2 2s.

AUGUST 20.—Rhonda.—FENCING.—Delivery to bus stations in the Rhonda Valleys for the U.D.C. 6,000 yards of wrought-iron unclimbable fencing. Taylor, Surveyor, Council Offices, Centre, Rhonda.

AUGUST 26.—Bournemouth.—RAILS.—600 tons rails, the C.B. I. Bulfin, General Manager. Deposit 1s.

AUGUST 26.—Ilkley.—FENCING.—About 1,900 lins. of crosscut (under pressure) wood fencing. J. M. Mason, Chartered Civil Engineer, Surveyor, Town Hall, Ilkley.

AUGUST 27.—Lambeth.—CEMENT, &c.—The B.C. tenders for a period of six months ending March 1926, for the following:—(a) Ham River sand, (b) Portland cement and lime, (c) Portland cement and lime, resorted deal blocks, (d) stock and Fletton bricks, (e) timber for sewer works. Osmond Cattlin, M.Inst. C.E., Borough Engineer, Town Hall, Brixton-hill, S.W. 2.

AUGUST 28.—Hampstead Heath.—FENCING.—Supply of open pale oak fencing to shrubberies. Officer, Parks Department, County Hall, Western Bridge, S.E.1.

SEPTEMBER 2.—Wills.—MISCELLANEOUS.—For the supply of road metal, coal, oils, petrol and waste, tar and road tools, for the T.C. J. George Powell, County Surveyor, Trowbridge.

SEPTEMBER 4.—London.—TELEGRAPH POLES.—Supply of Swedish, Norwegian, Finnish or Baltic red fir or some-grown Scots fir telegraph poles, to be felled during the winter of 1925-26 and delivered during the spring summer, for the Government. The Com. Post Office Stores Department, 17-19, Bedford-square, W.C.2.

SEPTEMBER 9.—Cairo.—MACHINERY.—For the supply of one 50 h.p. Diesel engine, generator, electric pumps and machine tools, for the M.E. Department, Overseas Trade, 35, Old Queen-street, London, S.W.1. reference A.X.2,271.

SEPTEMBER 11.—Durban.—MATERIALS.—Steel, cast-iron pipes and specials, and sluice and air valves, for the T.C. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

SEPTEMBER 30.—Melbourne.—RAILS.—Victorian Government Railways. Supply of manganese steel rails, 100 lb. A.S. section, and of manganese steel cross-overs for 5 ft. 3 in. gauge railway. (D.O.T.)

OCTOBER 13.—South Africa.—ELECTRICAL EQUIPMENT.—The Electricity Supply Commission invite tenders as follows for plant and equipment and buildings for an electric power station at Durban:—(1) Complete boiler-house equipment, also other plant and piping; (2) complete boiler-house installation, including pulverised fuel equipment with buildings, piping and other plant; (3) steel frame buildings, including overhead electric travelling crane; (4) coal and ash handling plant; (5) two 12,000 kilowatt turbo alternators; (6) condensing plant and auxiliary apparatus; (7) transformers for power station; (8) switchgear and auxiliary plant. Separate specifications and forms of tender for each of the above sections may be obtained on and after August 10, 1925, at the offices of:—(a) The Electricity Supply Commission, 82, Marshall-street, Johannesburg; (b) the Commission's Local Manager, Dock-road, Cape-town; (c) the Commission's Local Manager, Office of the Borough Electrical Engineer, City Hall, Durban; (d) the High Commissioner for the Union of South Africa, Trafalgar-square, London; and (e) the National Bank for South Africa, 44, Beaver-street, New York. Applications for further information may be made to the Commission or its Consulting Engineers, Messrs. Merz & McLellan, 32, Victoria-street, London, S.W.1. Contractors may tender for any or all of the above sections. The charge for specifications relating to each section of the work is £8 8s. for the first two copies and £2 2s. each for any further copies. Sums paid for any number of each specification up to three will be refunded.

NO DATE.—Aberdare.—MATERIALS.—Supply to the Powell Duffryn Coal Co., Ltd., in quantities, for a six months' period, from October 1 next, of the following stores:—Bar and other iron, bolts, nuts, and rivets, gun-metal fittings, india-rubber, asbestos, ironmongery, colliers' tools, ambulance sundries, steel girders, channels, and rails, nails, oilskin clothing, cast steel tram wheels, axles, steam and "Williams" joint tubes and fittings, kraitie cloth, waste, yarn, chains, timber, wire ropes, lime and cement, electric cable, and accessories. Stores Manager, Aberaman Offices, Aberdare.

NO DATE.—Dundee.—RAILS.—For the supply of 100 tons of tramway rails, for the C.C. G. Baxter, City Engineer, 91, Commercial-street.

NO DATE.—South Africa.—ROOFING FELT.—Supply and delivery of roofing felt for the Administration of the South African railways and harbours. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

ENGINEERING, IRON AND STEEL.

AUGUST 17.—Horsham.—BOREHOLE.—Sinking of a new borehole at Whites Bridge, Magpie-lane, for the U.D.C. C. G. Atkinson, surveyor. Deposit £2 2s.

AUGUST 19.—Louth.—RECONSTRUCTION.—Removal of five existing bridges and the construction of five reinforced concrete road bridges over the Louth Canal, Lincolnshire, for the R.D.C. John H. Haiste, consulting engineer, Union Bank Chambers, Trinity House-lane, Hull. Deposit £1 1s.

AUGUST 20.—Manchester.—SUB-STATION.—Supply, delivery, and erection of constructional steelwork at their Burnage sub-station, for the T.C. S. L. Pearce, Manager, Electricity Department, Town Hall. Deposit £1 1s.

AUGUST 22.—Ware.—CHLORINATING APPARATUS.—Supply and fixing at their pumping station at Broxbourne, Herts, of a Paterson's chlorinating apparatus, for the R.D.C. Mr. H. J. Jackson, Council's Surveyor, Rye-road, Hoddeston, Herts.

AUGUST 24.—Bolton.—BRIDGES.—Construction of three bridges at Bolton, viz.:—(a) Bridge over the Eagle Brook; (b) bridge under the L.M. & S. Railway Blackburn line at Tonge Moor; (c) road widening at Toxtill Bridge, Bury-road. The works are divided into two portions, viz.:—Contract No. 1: Abutments and general contractor's work; Contract 2: Steelwork. Samuel Parker, Town Clerk, Town Hall. Deposit £2 2s.

AUGUST 25.—Carnarvonshire.—BRIDGE.—For the reconstruction in ferro-concrete of the superstructure of bridge over the River Glaslyn, and strengthening of piers, for the T.C. Mr. T. Owen, County Surveyor, County Offices, Carnarvon.

AUGUST 26.—Bournemouth.—RECONSTRUCTION.—Of the permanent way, for the C.B. I. Bulfin, General Manager, Tramways Offices, Wootton-gardens. Deposit £2 2s.

***AUGUST 26.—Essex.—REPAIRING CAUSEWAY.—**Repairing timber causeway at the Shore buildings of T.S. Emouth, Grays, Essex, for the Metropolitan Asylums Board, Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

***AUGUST 26.—Various Places.—CLEANING AND PAINTING.—**Cleaning and painting works and repairs at various places and buildings for the Metropolitan Asylums Board. Office of the Board, Embankment, E.C.4. Deposit £1 in respect of each work.

SEPTEMBER 5.—Stockport.—LIFT.—Conversion of the passenger and goods lift at the Stepping Hill Hospital, Stockport, from hydraulic to electric motive power. Steward of the Hospital, Union Offices, Shaw Heath, Stockport.

SEPTEMBER 16.—Cornwall.—BRIDGE.—Construction of a large floating bridge propelled by steam for use on ferry service between Devon and Cornwall, for the C.C. W. L. Platts, Clerk of the County Council County Hall, Truro. Deposit £2 2s.

SEPTEMBER 21.—Hong Kong.—HARBOUR CROSSING.—The Crown Agents for the Colonies, acting on behalf of the Government of Hong Kong, invite tenders from experienced and approved firms for the construction of two lines of steel pipe main across Hong Kong Harbour, between Kowloon and the city of Victoria, with all works in connection therewith. The Crown Agents for the Colonies, Z Department, 4, Millbank, Westminster, S.W.1. Deposit £5.

ROAD, SEWERAGE AND WATER WORKS

AUGUST 17.—Hendon.—SEWER.—Laying of about 420 yards of 12 in. and 360 yards of 9 in. pipe sewer and surface water drain, together with manholes and other works in connection therewith, in Hale and Selva-lanes, Mill Hill, within their district. A. O. Knight, Engineer and Surveyor, Town Hall, Hendon, N.W.4. Deposit £5 5s.

AUGUST 18.—Abingdon.—SEWER.—Laying of about 675 yards of 9 in. glazed stoneware pipe sewer, with manholes and ventilator, at Radley-road, for the B.C. Walter H. Lewis, Borough Surveyor. Deposit £1 1s.

AUGUST 18.—St. Austell.—ROAD.—Construction of a two-course concrete road at Victoria-road, for the U.D.C. E. D. Groves, surveyor. Deposit £2 2s.

AUGUST 18.—Tiptree.—PIPES.—Seventy yards of 4 in. stoneware pipes, and all works incidental thereto, for the B.C.

AUGUST 18.—Wealdstone.—ROADS AND SEWER.—Construction of three roads with the necessary 7 in. sewers and manholes, complete. Mr. H. Walker, Surveyor of the Council, Council Offices, Peel-road, Wealdstone. Deposit £1 1s.

AUGUST 19.—Letchworth.—DRAINAGE.—Extension of their main drainage system, for the U.D.C. Howard Humphreys & Sons, 28, Victoria-street, Westminster. Deposit £2 2s.

AUGUST 19.—Porthwl.—SEWERS.—Construction of certain lengths of stoneware and concrete tube sewers of 12 in., 18 in. and 21 in. diameter, with the necessary manholes and other appurtenances, of a total length of about 600 yards, for the U.D.C. Taylor & Sons, engineers, Westminster. Deposit £5.

AUGUST 19.—Prestwich.—SEWERS.—Construction of approximately 440 yards of 15 in. and 9 in. sewers along Bury New-road, including manholes and other works, for the U.D.C. F. H. Ashton, Clerk, Town Hall, Prestwich, Lancashire. Deposit £1 1s.

AUGUST 19.—Whicheham.—MAKING-UP.—Making-up of Wellington-road from back Dunston-road West to the railway arch, Dunston, as follows:—(1) Tender for forming, kerbing, channelling, concrete foundation and drainage; (2) tender for 3,600 yards super steam-rolled asphalt macadam surfacing. Council Offices, Whicheham, co. Durham.

AUGUST 20.—Carmarthenshire.—IMPROVEMENT.—Road widenings and improvements as follows:—(1) At Garregawr on the Abermarlais to Llanwrda main road; (2) at Abermarlais on the Abermarlais to Llanwrda main road, for the T.C. Gomer Henry, County Surveyor. Deposit £2 2s.

AUGUST 20.—Kilmarnock.—SEWERS, &c.—The T.C. invite tenders, in one contract, for (a) the laying of 450 lineal yards of water piping; (b) the supply and laying of 435 yards of fireclay sewers; (c) the excavation and bottoming of 1,240 yards of roadway; and (d) the erection of 190 yards of stob and wire fencing; and other necessary works in connection with the scheme for the erection of 60 houses on the piece of ground adjoining Ayr-road. William Dunbar, Burgh Surveyor, Market Bridge, Kilmarnock.

AUGUST 20.—Preston.—ROAD.—Diversion of a length of the Lancaster, Pilling and Blackpool road (A.588) and the construction of a culvert in masonry at Carr Bridge, over Wardley's Pool, for the C.C. W. H. Schofield, A.M.I.C.E., County Surveyor and Bridge-master, County Offices, Preston.

AUGUST 20.—Rochester.—NEW ROAD.—Sewering, levelling, paving, metalling, flagging, channelling, making good, and lighting Goddington-road. City Surveyor, Guildhall. Deposit £1 1s.

AUGUST 22.—Dartford.—RE-SURFACING.—Resurfacing with tarmacadam approximately 23,110 super yards of carriageway of the Crockenhill and Swanley Junction unclassified roads, for the R.D.C. Engineer and Surveyor's Office, Council Offices, West Hill, Dartford. Deposit £2 2s.

AUGUST 22.—Middle-in-Wharfedale.—DRAINAGE, &c.—Painting, asphalt footpaths and land drainage, for the West Riding Public Health and Housing Committee. West Riding Architect, County Hall, Wakefield.

AUGUST 22.—Walthamstow.—ROADS.—(1) The supply and laying of tarmacadam (including incidental works in connection therewith) in various roads in the Urban District of Walthamstow; (2) the construction of a reinforced concrete roadway (including incidental works in connection therewith), for the U.D.C. G. W. Holmes, Assoc. M.Inst.C.E., Surveyor to the Council, Town Hall Annex, Oriord-road, Walthamstow, E.17.

AUGUST 22.—Ware.—SEWER.—Extension of a sewer in new road, Broxbourne, and the extension of a water main at Baas Hill, Broxbourne, for the R.D.C. H. J. Jackson, Surveyor to the Council, Rye-road, Hoddeston.

AUGUST 24.—Catherington.—MAINS.—Providing and laying about 4,100 lin. yds. of 6 in. cast-iron water mains, also 4,850 yds. of 4 in. and 2,700 yds. of 3 in. ditto, with hydrants, sluice valves and fittings, also for the construction of two concrete reservoirs and a pumping station, for the R.D.C. G. C. Vernon-Inkpen, engineer, 40, Commercial-road, Portsmouth. Deposit £10 10s.

AUGUST 24.—Gloucester.—RE-SURFACING.—Resurfacing with roller-finished asphalt a total length of 949 yards of the Stroud and Painswick roads. City Surveyor.

***AUGUST 24.—Islington, N.19.—BOILER COAL STORE AND TAR PAVING.—**Erection of a boiler coal store; also for breaking up and excavating the tar paving and renewing same to the girls' playground, and forming an asphalt roadway through the latter, at their schools in Andover-row, Hornsey-road, N., for the Guardians of the Parish of St. Mary, Islington. Edmund J. Harrison, architect, 23, Berkeley-road, Crouch End, N.8. Deposit £2.

AUGUST 24.—Marazion.—PIPING.—Supply, laying, and jointing of approximately 200 yards of 8 in. cast-iron pipes over the foreshore, including one manhole, excavation in rock, concrete supports to pipes, anchoring down pipes, and other works incidental thereto, in accordance with the plans and specifications prepared by the Engineers, Messrs. A. P. I. Cotterell & Son, 17, Old Queen-street, Westminster, S.W.1, for the R.D.C.

T. H. Cornish, 8, Parade-street, Penzance. Deposit £2 2s.

AUGUST 24.—Mid-Glamorgan.—PIPES.—Providing and laying about 4,500 yards of 7 in. diameter cast-iron pipes between the Service Reservoir now under construction at Cefn Forest, Windmill Farm, in the parish of Llansannor, along the District-road, through the village of Llanharry to Dolau, Llanharan, including all appurtenant works, and the construction of two mass concrete service reservoirs, one near the "Red Cow" Inn, Maesteg, and one at Caerau, Maesteg, together with provision and laying of about 2,300 yards of 12 in. diameter cast-iron pipes, 120 yards of 9 in. diameter cast-iron pipes, 100 yards of 7 in. diameter cast-iron pipes, and 400 yards of 6 in. diameter cast-iron pipes, for the Water Board. Thomas & Morgan & Partners, Civil Engineers, Pontypridd. Deposit £10 10s. each.

AUGUST 25.—Devon.—ROADS.—Construction of new by-pass roads at Buckfastleigh and South Brent Mill, to include bridges and culverts, for the C.C. A. Warren, County Surveyor, Avenue-road, Newton Abbot. Deposit £10 10s.

AUGUST 25.—Titchhurst.—SEWERS, &C.—Making-up and sewerage Western-road, Wadhurst. For making-up apply Mr. F. Laurens, District Surveyor, Sparrows Green, and for sewerage apply Mr. A. E. Harris, Sanitary Surveyor, Sparrows Green.

AUGUST 26.—Wallasey.—RECONSTRUCTION.—Reconstruction of the following roads, namely, (1) Penkett-road, Stringhey-road, part of Trafalgar-road; (2) part of Mill-lane; (3) Parkside and Hampstead-road; (4) Martin's-lane for the T.C. Borough Engineer and Surveyor, Town Hall, Wallasey.

AUGUST 27.—Horsforth.—ROADS.—Roads, sewers, and water mains, Broadgate-lane improvement and water mains. Jas. E. Aldersley, Engineer to the Council, Council Offices, Horsforth. Deposit £2 2s.

AUGUST 27.—Pembroke.—WIDENING.—Widening and reconstructing parts of the Milford-Waterstone-Neyland road between Fort Scoveston and Coybush Gate. H. R. Judd, Highways Surveyor, Pembroke R.D.C., Main-street, Pembroke. Deposit £5 5s.

AUGUST 29.—Margate.—SEWER.—Supplying the necessary pipes, excavating for and constructing about 252 yards of 15 in. cast-iron sewer in road in rear of Marine-terrace, for the T.C. Borough Engineer's Office, 13, Grosvenor-place, Margate.

AUGUST 29.—Tadcaster.—ROADWAYS, &C.—Construction of new roadways, footpaths, and soil and surface water sewers on the Allerton Bywater and Mickelfield housing sites, for the R.D.C. Council's Housing Inspector, 23, Park-avenue, Swillington, Woodlesford, near Leeds.

AUGUST 31.—Nuneaton.—STREET WORKS.—Completion of the street works comprised in the various roads on the Attleborough Housing Estate, for the Town Council, Borough Engineer and Surveyor, Municipal Offices, Nuneaton. Deposit £2 2s.

AUGUST 31.—Rochester.—SEWERS.—Construction of stoneware pipe sewers and other relative works included in Contract No. 3. The works included in the contract comprise the laying of approximately 6,543 lineal yards 7 in. sewers, 2,059 lineal yards 9 in. sewers, 2,244 lineal yards 12 in. sewers, 356 lineal yards 15 in. sewers, and 92 lineal yards 18 in. sewers, and the necessary man-holes and subsidiary works. William Law, A.M.I.C.E., City Surveyor and Engineer for the Sewerage scheme. Deposit £5 5s.

AUGUST 31.—Somerset.—RECONSTRUCTION.—Of the trunk Bristol-Exeter road, for the C.C. Edward Stead, County Surveyor, 49, High-street, Weston-super-Mare. Deposit £5.

SEPTEMBER 5.—Wimbledon.—ROADS.—Street works in each of the following roads, namely, Worcester-road and Compton-road (Section III), Wimbledon, for the B.C. Borough Engineer and Surveyor, Town Hall, Wimbledon.

NO DATE.—Yeovil.—SEWERS, &C.—Construction of roads and sewers at Yeovil, Somerset. J. P. Sturge & Sons, Surveyors, 11, Orchard-street, Bristol, or J. Trevor Freeman, "Old Sarum" Estate Office, Yeovil, Somerset.

Competitions.

(See Competition News, page 203.)

Auction Sales, Tenders, etc.

AUGUST 18 & 19.—Wandsworth, S.W.—F. H. Clark will sell, without reserve, on site, Central Stores Depot, Stewarts-road, Wandsworth, S.W., Government surplus timber and building materials. Auctioneers, Railway Wharf, York-road, Wandsworth, S.W.18.

AUGUST 20.—East Kent.—Worsfold & Hayward will sell, at the Dover Institute, Dover, in one or three lots, freehold property, comprising modern brick buildings intended for the Hanwell Colliery, together with land. Auctioneers, Dover.

AUGUST 25.—Fleet-street, E.C.—J. F. Skelding & Co. will sell, *re* Bargmans, Ltd. (by order of the Receiver for the Debenture holders) C. W. Stanley Temple, on the premises, 21, Bride-lane, Ludgate-circus, E.C.4, stock and plant of the above firm of builders and contractors. Auctioneers, 48, Gresham-street, Guildhall, E.C.2.

***AUGUST 26.—Gloucester.—Henry Butcher & Co.,** in conjunction with John A. Bloss, will sell, *re* Messrs. Hartwells, Ltd., without reserve, at "Broadlands," Bourton-on-the-Water, agricultural and motor engineers' plant, machinery and stock motor and agricultural engineer. Auctioneers, H. Butcher & Co., 63 and 64, Chancery-lane, W.C.2; J. A. Bloss, Bourton-on-the-Water, Gloucester.

AUGUST 27.—Northwood (Middlesex).—J. T. Skelding & Co. (in conjunction with W. G. Carter & Co.), by order of the administrator of the estate of the late A. E. Wilson, will sell, without reserve, on the premises, 33, The Pavement, Northwood, the complete equipment of woodworking machinery, builder's stock and plant, timber, buildings, and Ford touring car, *ac.* Auctioneers: J. T. Skelding & Co., 48, Gresham-street, Guildhall, E.C.2; W. G. Carter & Co., 89, The Grove, E.15.

***AUGUST 29.—Isle of Wight.—Henry J. Way & Son** will sell at The Wheatsheaf Hotel, Newport, freehold

premises known as the Ningwood Brick and Tile Works, with modern buildings, the whole containing an area of about 70 acres, 3 roads, 2 perches. Auctioneers, Newport and Freshwater, I.W.

***AUGUST 31.—London, E.C.—Farebrother, Ellis & Co.** will sell, by order of the liquidator, in voluntary liquidation, British Portland Cement Research Association, at the London Auction Mart, Queen Victoria-street, E.C., freehold property, Rosherville-court, Burch-road, Gravesend. Auctioneers, 29, Fleet-street, E.C., and 26, Dover-street, W.

***SEPTEMBER 9 AND FOLLOWING DAYS.—North Devon.—J. T. Skelding & Co.** will sell, *re* P. & W. Anderson, Ltd. (in liquidation), by order of the Receiver for the Debenture Holders, at The Dump, adjoining the North Devon Clay Co.'s sidings (by their kind permission), Peter's Marland, Dunsbear Station, North Devon, contractors' plant and machinery, tools, buildings, and effects used in the construction of the new line from Torrington to Halwill. Auctioneers, 48, Gresham-street, London, E.C.2.

SEPTEMBER 10.—Bucks.—Knight, Frank & Rutley (in conjunction with Hammett, Raffety & Co.), will sell, in the Mansion, Hedsor, Bourne End (unless previously sold privately), the remaining portions of the freehold residential building estate, Hedsor, including the Mansion. Auctioneers, Knight, Frank & Rutley, 20, Hanover-square, W.1; Hammett, Raffety & Co., 30, High-street, High Wycombe.

Public Appointments.

AUGUST 17.—Dublin.—Qualified Architect with knowledge of modern housing for the working classes required by the Commissioners of the County Borough of Dublin. Housing Department, Exchange Buildings, Lord Edward-street, Dublin.

***AUGUST 19.—Lewes.**—Clerk of Works required in connection with alterations and additions to Darbell Hall Sanatorium, Robertsbridge. County Surveyor, County Hall, Lewes.

AUGUST 19.—Stoke-on-Trent.—Clerk of Works in connection with housing scheme required by the City Council. City Surveyor, Town Hall, Stoke-on-Trent.

AUGUST 20.—Hove.—Assistant required in the Borough Surveyor's Office. Borough Surveyor, Town Hall, Hove, endorsed "Assistant."

AUGUST 20.—London, E.C.4.—Temporary first-class Architectural Draughtsman in the Department of the Engineer-in-Chief for the Metropolitan Asylums Board. The Clerk, Office of the Board, Victoria Embankment, E.C.4.

***AUGUST 21.—Hemsworth, near Pontefract.**—Temporary Architectural Assistant required by the R.D.C. Surveyor to the Council, Hemsworth.

***AUGUST 21.—London, S.W.1.**—Evening Classes, Lecturers required in various branches of the building trade for session 1925-26, commencing September 21, 1925, for the Technical Institute, Gladstone-road, Wimbledon, S.W.19. The Principal.

AUGUST 21.—Perth.—ARCHITECTURAL ASSISTANT (temporary).—Wanted in City Engineer's Office, for housing scheme. City Engineer, 16, Tay-street, Perth.

***AUGUST 21.—Stafford.**—Clerk of Works to superintend the erection and completion of new departments for boys and girls at the Rushall Council Schools. Director of Education, County Education Offices, Stafford, endorsed "Clerk of Works."

AUGUST 22.—Croydon.—Architect required to superintend the erection of an elementary school within the borough to accommodate 800 scholars. Clerk to the Education Committee, Katherine-street, Croydon.

***AUGUST 22.—Shropshire.**—Assistant required by the Education Committee Works Department for inspecting and reporting upon work in progress. The Secretary for Education, County Buildings, Shrewsbury.

AUGUST 24.—Wakefield.—Four Architectural Assistants in the office of the Education Architect required by the West Riding Education Committee. Education Department, County Hall, Wakefield.

AUGUST 24.—Middlesbrough.—TEMPORARY CLERK OF WORKS.—Required by the Education Committee, to superintend the erection of the Marton-grove Council School. Director of Education, Education Offices, Middlesbrough.

***AUGUST 25.—Blackpool.**—Town Planning Assistant required in the office of the Borough Engineer and Surveyor, for the administration only of the Corporation's Town Planning scheme. The Town Clerk, Town Hall, Blackpool (endorsed "Town Planning Assistant").

***AUGUST 28.—Walsall.**—(1) Architectural Assistant, (2) Temporary Architectural Assistant required by the County Borough Council. Applications, endorsed as above, to be sent to the Borough Engineer and Surveyor, Council House, Walsall.

AUGUST 29.—Norwich.—Estate Surveyor in the City Engineer's Office required by the City Council. City Engineer, Guildhall, Norwich.

AUGUST 31.—London, E.8.—VISITING TEACHER OF BUILDING CONSTRUCTION (Stages 1, 2 and 3).—On three evenings weekly (Mondays, Tuesdays, and Fridays), for the L.C.C. Education Officer (T.J.A.). The County Hall, Westminster Bridge, S.E.1. (Stamped addressed foolscap envelope necessary), for form.

SEPTEMBER 5.—Portsmouth.—One permanent General Assistant, and one permanent Architectural Assistant in the Borough Engineer's Department. Borough Engineer, Town Hall, Portsmouth.

SEPTEMBER 25.—Manchester.—Assistant Lecturer in Building Construction in the College of Technology. The Registrar, College of Technology, Manchester.

NO DATE.—London, W.C.2.—Temporary Engineering Assistant, with experience in calculations for and design of steel-framed structures, such as Airship Sheds. Secretary, (S/1437), Air Ministry, Admiralty House, Kingsway, W.C.2.

***NO DATE.—Tanganyika.**—Chief Draughtsman required for the Public Works Departments of Tanganyika Territory for a tour of 20 to 30 months' service. Apply at once, Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/13,635.

PROPOSED NEW BUILDINGS & OTHER WORKS

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building work taking the responsibility of commencing before plans are finally approved by the authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ABERDEEN.—The U.D.C. is to construct a new way in the bed of the old Aberdeen Canal.

APERFORTH.—Cardigan County Surveyor has instructed to prepare plans for an improvement of the road to counteract the effects of coast erosion. The idea is to construct a concrete wall.

BANFFSHIRE.—The Keith District Committee of Banff County Council have sanctioned the reconstruction, at a cost of £8,520, of the Perth-Inverness road between Bridge of Brown and Bridge of A. near Tomintoul.

BISHOPSTOKE.—Hampshire C.C. have authorised further expenditure of £12,000 on adapting and furnishing the Mount Sanatorium at Bishopstoke.

BLACKBURN.—The T.C. will be asked to sanction borrowing of £87,642 for the erection of 160 houses the Brownhill site, £1,900 for the construction of a living green and shelter in the Corporation Park, and approve an application to the Ministry of Health sanctioning the borrowing of £5,000 for the purpose of granting financial assistance in the building of houses.

BLACKPOOL.—The B.C. are to apply to the Ministry of Health for the sanction of the Ministry to the borrowing by the Corporation of the sum of £12,000, repayable in 20 years, for subsidy on 150 houses erected by private builders. Plans passed: Fourteen houses in Knibbridge-avenue, for Mr. J. Harrison.

BLACKWATER.—Hampshire C.C. have voted £25,000 for the construction of a bridge and highway over railway.

BLYTE.—A report for the construction of a new pool at an estimated cost of £7,000, prepared by the Borough Surveyor, has been passed by the B.C. subject to slight amendments.

BOLTON.—The T.C. have passed plans: Thirty houses in Forton-avenue, for W. Gornall & Sons; 22 houses, off Lever Edge-lane, and 12 houses in Montshire-road, for Mr. A. S. Woods; 12 houses in Montshire-road, for Leigh Bros., Ltd.; and 15 houses in road, Church-road, and Highfield-road, for Mr. J. Halliwell.

BRANDON AND BYSHOTTLES.—The U.D.C. appointed a special sub-committee to consider a scheme for the building of 50 additional houses at Brandon Colliery and 25 at Sleethburn.

BRIGHTON.—The T.C. have approved the application of the Education Committee for consent to the purchase of a portion of the Hodsbrooke Meadow site for the purposes of a school.

COVENTRY.—The L.M.S. have now approved a proposal of the Warwick C.C. for the widening of the Humber-road bridge in the Coventry R.D.

DARLINGTON.—The T.C. is making application to the M.H. for sanction to borrow £13,500 for the construction of a new deep main sewer for Woodside district, £1,415 for a new 6 in. water main at Salter's. The Corporation has decided to erect 100 houses letting purposes.

DONCASTER.—The new swimming baths proposed to be built will probably occupy a site at the corner of James-street and Catherine-street, where a improvement scheme is contemplated.

DUNDEE.—Plans passed: Alterations for John & Co., Ltd., Horserwater Wynd, Robert Gibson, Ltd., 2, India-buildings; additions for the Royal Army, Magdalen Yard-road, George Jamieson, Ltd., 20, Whitehall-street; alterations for Wallace, Castle-street; Allan & Friskin, architect, Castle-street.

DURHAM.—The C.C. estimate that the cost of the new old Browney Bridge and erecting a bridge is £14,000; and the proposed reconstruction of Blackwell Bridge and diversion of main road is £25,000.

The T.C. have decided that renewals of manholes carried out in Eightlands-lane, Melbourne, Newton-road, Bethel-street, Canning-street, and Green. The T.C. are shortly to invite tenders for provision of unclimbable fencing for the Moot Reservoir. Plans passed: Fourteen houses in bury and Lambourne roads; 84 houses for Jaggars & Sons. The B.G. have secured sanction from the M.H. to erect cottage homes at Crossgate Moat. The cost of not more than £11,160.

EDINBURGH.—Plans passed: Twenty-four houses in Huchison Crossway, for the Corporation.

ELY.—The R.D.C. are purchasing two acres of land for the erection of 12 houses at Lawn-lane, Downham.

ESSSEX.—On the recommendation of the Building and Supply Committee plans submitted by the County Architect for the erection of a new school at Clacton, to accommodate 220 scholars, at an estimated cost of £41,100 were approved.

EUXIMOOR.—Isle of Ely E.C. have decided to proceed with a scheme for a new school for the C. of Christchurch and Euximoor.

* See also our List of Contracts, Competitions



EXMOUTH.—The U.D.C. have recently adopted a report from the Pavilion Committee recommending that the Council purchase the whole of the property of the Imperial Stables for the purpose of erecting an entertainment pavilion or hall, and that Mr. Palmer, the owner, be offered £2,800 for it, subject to the sanction of the Ministry of Health being obtained to the borrowing of the money.

FELLING.—The U.D.C. is raising loans for £34,371 for housing purposes.

GLOUCESTER.—The C.C. propose to build a further 50 houses by direct labour.

HAILSHAM.—At a meeting of the R.D.C. recently, it was reported that the Town Planning Regional Committee was of the opinion that the whole of the area of the Hailsham Rural district should be included in the scheme. It was decided to inform the Ministry of the proposal to invite tenders for the erection of 16 houses.

HAITHWISTLE.—The R.D.C. has decided to proceed with a sewerage scheme for the east end of the town, at an estimated cost of £7,000 to £8,000.

HAUNDERWELL.—The Dalton Main Colliery Co., Ltd., are to erect 262 modern type houses on the Bramley village site, for the housing of their own workpeople.

HEADLEY.—Hampshire E.C. are to enlarge the Headley Bordon elementary school at a cost of £3,500.

HEXHAM.—The B.G. are seeking permission from the M.H. to re-model the sanitary arrangements at the hospital, at a total estimated cost of £1,149.

HOYLAND.—The Surveyor has been instructed to prepare plans and estimates for a new Town Hall.

HULL.—The C.C. have been decided by a large majority to seek powers to build a new North Bridge, which is estimated to cost £275,000.

ISLEWORTH AND HESTON.—The U.D.C. have decided that application be made to the Ministry of Health for sanction (a) to the raising of a loan of £908 for the purpose of widening and improving Westbrook-road, Heston; (b) to the borrowing of the sum of £524 for the purpose of extending the foul sewer in North Hyde-road, Heston. Plans passed: Messrs. William Harbrow, Ltd., for 26 houses, Vicarage Farm-lane, Heston; Mr. L. Fowler, for 12 houses, New Heston-road.

KENSINGTON.—The London E.C. has acquired a site in the Golbourne ward for the erection of an elementary school. The B.C. propose to erect 38 flats at an estimated cost of £18,000.

KINGSTON.—Alterations are to be made at the offices of the Surrey C.C. at Kingston at a cost of about £500. An expenditure of £2,500 has been voted for the provision of temporary accommodation for staff.

LAMPETER.—Cardigan County Surveyor has been instructed to prepare a scheme for widening Lampeter Bridge. Cardigan E.C. are to erect a new wing at the Bryn-road central school, Lampeter, at a cost of £2,191.

LANKARSIDE.—The District Committee approved an application to the Scottish Board of Health with respect to 1,000 houses which they proposed to erect in the Lower Ward.

LEICESTER.—The E.C. have submitted to the Leicester C.C. their estimates for the extension to the Colleges of Art and Technology amounting to £47,000.

LISS.—The Council school at Liss is to be enlarged and improved by the Hampshire E.C. at a cost of £1,000.

LONDON.—Freemasons are proposing to build a central home as a Peace Memorial.

LONGFORD.—Warwick C.C. are negotiating for land required for the widening of the Longford river bridge.

MACCLESFIELD.—The Highway Committee have approved a plan of new mill, offices and warehouse, to be erected in Pickford-street, deposited by Messrs. G. H. Heath & Co., Ltd.

MARPLE.—Additional land is to be purchased by the Marple (Cheshire) U.D.C. at a cost of £1,050, for sewage disposal purposes.

MEPAL.—The Highways Committee of the Isle of Ely C.C. express readiness to assume responsibility for the future maintenance of a new bridge over the Hundredfoot River, at Mepal, provided the Ouse Drainage Board will contribute £3,000 towards the cost of the construction of such bridge.

MILFORD.—Eleven tenders have been received for the erection of the Milford Sanatorium, for the Surrey C.C., but as the lowest exceeded the estimate on which the capital grant of the M.H. has based, the Public Health Committee are trying to arrive at a satisfactory agreement with the Ministry as to modifications of the plans.

MONKS KIRBY.—The R.D.C. are to effect an improvement at dangerous corners on the main road at Street Ashton.

MONKTON.—Final plans are being prepared by the Durham County E.C. for an elementary school at Monkton.

NEWPORT.—The estimated cost of the reconstruction of Newport Bridge, is £170,000.

NORTH BERWICK.—The T.C. are proposing to build new public hall at a probable cost of £13,950.

NORTHWICH.—The U.D.C. have a proposal for the widening of the bridge over the Cheshire Lines railway at Northwich station. The Rural Hospital Committee have acquired land for the erection of a tuberculosis pavilion.

NOTTS.—In regard to the erection of bridges on the great North-road in lieu of existing level crossings, Notts County Council reports receipt of a communication from the L.N.E.R. offering a contribution of £10,000 towards the cost of the scheme. The M.T. has intimated a grant of 75 per cent. of the cost, estimated at £50,000, after deducting the railway company's contribution.

OLDHAM.—The Ashton District E.C. has approved of plans for the provision of alteration and extensions at the Minor-street Council school, Failsforth.

PONYTON.—The Parochial Church Council are acquiring a site at Ponyton (Cheshire) for the erection of a parish church hall.

QUEENSBERRY.—The U.D.C. has decided to erect 12 houses in Russell-avenue.

RICHMOND.—The Richmond County School for Boys to be enlarged by the adaptation of the premises

"Thornwood" for school purposes, plans prepared by the Surrey E.C. having been approved by the B.E. SALFORD.—The Corporation have decided to widen Eccles Old-road at a cost of £43,000. The sewer in Claremont-road is to be reconstructed at a cost of £7,300. A site in Pendleton is being acquired for the erection of a branch library.

SEAHAM HARBOUR.—Designs submitted by the Surveyor for 56 houses, to be erected as a first instalment of the new housing scheme, have been adopted by the U.D.C. and estimates are to be invited from builders for their erection.

SHEFFIELD.—The Corporation have voted £157,475 in connection with a housing scheme on the Wyburn estate, it being reported that the land will provide for 340 houses. Six acres have been acquired for the extension of Blackmore Woods. A hut is to be provided at Phillimore-road school at a cost of about £1,000 for a domestic economy centre.

SHIRLEY.—Warwick C.C. are to proceed with the scheme for widening the main road at Shirley.

SMETHWICK.—The T.C. passed plans for 12 houses in Bowden-road, for Mr. W. Lees.

STOCKBRIDGE.—The elementary school at Stockbridge is to be improved and enlarged by the Hampshire E.C., at a cost of £3,250.

SUTTON COLDFIELD.—Erection of 20 houses at Britwell-road, for Mr. H. S. Barber, have been approved by the T.C.

THORNEY.—Isle of Ely County E.C. have acquired land for the extension of the boys' council school at Thorney.

TREDELD.—Cardigan C.C. have under consideration a scheme for improving and widening Treldel Bridge.

WALLASEY.—The T.C. have recommended that application be made to the Ministry of Health for sanction to borrow the sum of £19,520 for the erection of 32 houses on the Belvedere-road site.

WALTHAMSTOW.—The U.D.C. will make application to the M.H. for sanction to borrow £610 for the erection of a sanitary convenience in Courtenay-place.

WANDSWORTH.—Messrs. Sturgis & Son propose to erect 12 houses on a site on the Southfields housing estate, which they have leased for that purpose.

WEDNESBURY.—The T.C. has decided to make application for sanction to borrow £6,384 for the purposes of erecting a new school at Moxley.

WELNEY.—At a M.T. conference regarding the proposed reconstruction of the Welney Suspension Bridge, it was provisionally arranged that the Ministry would contribute 50 per cent. of the total cost, and that towards the balance of £7,500 the Isle of Ely C.C. and the Welney Parish Charity will each contribute £1,000, the remainder to be shared between the Norfolk C.C. and the Ouse Drainage Board.

WETHERAL (CUMBERLAND).—The London & North-Eastern Rly. Co. have decided to erect eight non-parlour type cottages at Great Corby, near Wetheral, for aged railway employees.

WILLESDEN.—The U.D.C. passed plans: Twenty-four dwelling houses, Burnley-road, by and for Messrs. Pearce & Taylor, and 12 dwelling-houses, Anson-road, Cricklewood, by and for F. Walters, Ltd. (amended plan).—Ministry of Health have approved a period of 15 months for the erection of 67 houses on the Brentfield estate.—The U.D.C. have accepted the offer of the Imperial War Graves Commission to erect a war cross in the New Cemetery.

WIMBLEDON.—The buildings of the Wimbledon County School for Girls are to be completed by the Surrey E.C., at a cost of £22,500.

WISBECH.—Two new elementary schools, one for 300 boys and another for 300 girls, are to be erected by the Isle of Ely E.C. at Wisbech on a site in Queen's road.

WOOLWICH.—The M.B.C. propose to construct a means of communication for pedestrian traffic on the western side of the Well Hall railway bridge. The Borough Engineer, on the instruction of the Works Committee, has prepared and submitted drawings to the Southern Rly. Co.—The M.B.C. recommend (a) that application be made to the London County Council for their sanction to a loan of £62,317, for the erection of 101 houses on the Council's housing estate, Eltham; (b) that application be made to the Ministry of Health for their sanction to a loan of £1,900 for the erection of a Maternity and Child Welfare Centre at Plumstead High-street.—Plans passed: The M.B.C. has approved plans for building and draining a Parish Hall as addition to the existing hall, by J. J. Taylor, Westminster.

WOKING.—A drainage scheme for the Pyrford-road district is being considered, the cost being estimated at £2,500. A surface water drainage scheme is being considered for the Fletcher-road estate. Both for the U.D.C.

YEADON.—The M.H. has now definitely approved of the U.D.C.'s scheme for the erection of 72 houses on the Hawthorn-crescent site.

YORK.—The Government is to be asked to approve for grants the following relief schemes: Culvering Lang Hall Beck, estimated cost, £5,100; widening of Bootham-crescent, £2,500; improvement of Price's-lane, £300; concrete surfacing Alma-terrace, Carey-street, Francis-street, and Ambrose-street, at £4,554; and the construction of a 60 ft. wide road from Bishop-thorne-road to Fulford-road, including bridge over the River Ouse, at £79,500.

TRADE NEWS

Mr. Wilfred E. Ellis, builder, has removed from 176, Blackhorse-lane, E.17, to Watford-road, Watford, Herts., where he is erecting modern offices and workshops.

Messrs. William Shepherd & Sons, Ltd., who have established a bituminous asphalt department, have already secured important contracts with the Borough of Bromley, Kent, and the City of Coventry.

We are informed that as from August 1 Messrs. Allen-Liversidge, Ltd., Victoria Station House, Westminster, S.W.1, are taking over the sole selling agency for Great Britain and Ireland of the electric welding products of Messrs. Buckley, Saunders & Co., Ltd., Princes-street, Westminster, and Birmingham.

We are informed that the Jury of Award at L'Exposition Internationale des Arts Decoratifs et Industriels de Paris, has accorded the "Diplome d'Honneur" on four pieces of furniture that are being shown by Messrs. The Bath Cabinet Makers' Co., Ltd., in the British Pavilion, all of which were designed by Mr. C. A. Richter.

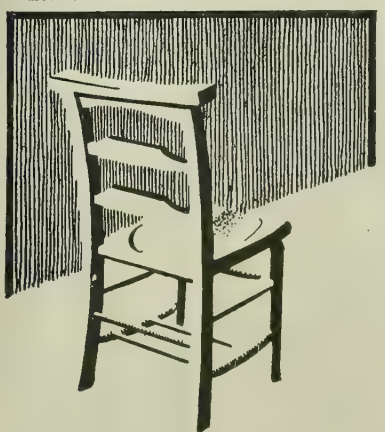
Messrs. Leech, Brain & Co., of Glaucus-street, Bow, London, E.3, have sent us particulars of their new B.T.M. welded tank, which is welded throughout and has therefore no holes punched in the plates to weaken them. This implies a double advantage, for not only is the tank stronger than one which is riveted, but the absence of rivet heads eliminates a prime cause of corrosion. Another improvement is that these tanks are made watertight before being galvanised, whereas riveted tanks are made watertight through the galvanising.

We have received from Messrs. C. S. Johnson & Sons, Ltd., of West Drayton, Middlesex, a copy of their booklet, "The Proper Treatment for Floors, Woodwork, and Furniture," which sets forth the uses of the firm's various woodwork finishes and allied products, which include polishing wax, varnishes, enamels, undercoats, dyes, fillers, and flat wall finish. The booklet gives full particulars of methods of application and of the varied artistic effects to be obtained. Some of these latter are shown in some excellent coloured reproductions. We would draw the attention of readers to Messrs. Johnson & Sons' advertisement in this issue, which contains a coupon offering to all applicants a half-pint size of their wood dye free of charge.

Hertfordshire Town Planning.

The Joint Regional Town Planning Committee have decided to appoint Mr. W. R. Davidge to prepare a scheme of regional planning for the county of Hertfordshire.

CHAIRS FOR ALL PURPOSES STRONG & INEXPENSIVE.



GEO. M. HAMMER & CO. LTD.
CROWN WORKS, ST. JAMES'S RD.,
BERMONDSEY, LONDON, S.E.16

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 13 3
Per 1,000. Delivered at London Goods Stations.	
Flettons, at	£ s. d.
Do. King's Cross	2 13 3
Do. grooved for plaster	2 15 3
Do. Bullnose	3 3 3
Best Stourbridge Fire brick—	
2½ in.	8 11 0
3 in.	10 3 0
GLAZED BRICKS—	
Best White	D'ble Str'chers 30 10 0
Ivory and Salt Glazed	D'ble Headers 27 10 0
Stretchers	One Side and Two Ends 31 10 0
Headers	Two Sides and one End 32 10 0
Quoins, Bull-nose and 4 in.	Splays and Squints 30 0 0
Flats	28 10 0
Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.	

BREEZE CONCRETE SLABS.

Delivered London	£ s. d.
2 in. per yd. super	1 11
2½ in. "	2 4
3 in. per yd. super	2 9
4 in. "	3 6
Thames Ballast	10 6 per yd.
Pit Sand	13 9 "
Thames Sand	14 6 "
Best Washed Sand	14 6 "
¾ in. Shingle for Ferro-Concrete	12 9 "
¾ in. Broken Brick	11 6 "
Pan Breeze	7 6 "
Per ton delivered in London area in full van loads. Best Portland Cement, British Standard Specification, Test £2 18 0 to £3 3 6 51s. alongside at Vauxhall in 80-ton lots.	
Ferrocrete per ton extra on above.	0 10 0
Super Cement (Waterproof)	4 8 0
Roman Cement	8 15 0
Parian Cement	5 15 0
Keane's Cement, White.	5 15 0
" Pink	5 10 0
Plaster, Coarse, Pink	3 0 0
" White	3 12 6
" Fine	5 12 0
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Limc.	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Half	17 0 0
Granite Chippings	1 12 0
NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.	
Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.	

STONE.

BATH STONE—delivered in railway trucks at	£ s. d.
Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube.	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube.	2 11½
PORLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube.	4 4
Do. do. delivered on road wagons at above stations, per ft. cube.	4 5
White basebed, 3d. per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every foot over 20 ft. average, and ½d. beyond 30 ft.	

HOPTON WOOD STONE—	
Delivered at any Goods Station, London, small random blocks, up to 10 ft. cube, P. ft. cb.	7 0
Random blocks from 10 ft. and over	17 0
Sawn two sides	27 0
Sawn three or four sides	32 0
YORK STONE, BLUE—Robin Hood Quality.	
Delivered at any Goods Station, London.	£ s. d.
6 in. sawn two sides landings to sizes (under 30 ft. super.)	Per ft. super 5 6
6 in. rubbed two sides, ditto	6 0
3 in. sawn two sides slabs (random sizes)	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes)	1 6½
1½ in. to 2 in. ditto, ditto	1 4

HARD YORK—	
Delivered at any Goods Station, London.	£ s. d.
Scrapped random blocks	Per ft. cube 6 3
6 in. sawn two sides landing to sizes (under 40 ft. super.)	Per ft. super 5 1½
6 in. rubbed two sides ditto	6 1½
4 in. sawn two sides slabs (random sizes)	2 10
3 in. ditto	2 1½
2 in. self-faced random flags	Per yd. super 9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.	
--	--

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£32 0	3 × 6	£23 0
4 × 9	28 0	3 × 11	28 0
4 × 8	26 0	2 × 11	28 0
4 × 7	25 0	3 × 9	25 0
3 × 8	24 0	2 × 9	25 0
3 × 7	23 0	3 × 4½	23 0
2 × 7	22 0	3 × 4	23 0

PLANED BOARDS.

1 × 11	£32 0	1 × 9	30 0
--------	-------	-------	------

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	21/-	1½	32/6
1	23/-	1¾	37/3
1½	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.	Inches.	per sq.
1	25/-	¾	16/6
1½	32/6	1	20/-
1¾	37/6	1½	25/-

BATTENS.

Inches.	a. d.
¾ × 2	2 6 per 100 ft.

SAWN LATHS.

Per bundle	1" AND UP THICK.
	0 2 4

Dry Austrian Wainscot, per ft. cube	0 16 0 to 0 18 0
Dry American and/or Japanese Figured Oak, ft. cube	0 15 0 —
Dry American and/or Japanese Plain Oak, ft. cube	0 11 0 to 0 13 0
Dry sq. edged Honduras Mahogany, ft. cube	0 16 0 to 0 18 0
Dry Log cut Honduras Mahogany, ft. cube	0 18 0 to 1 1 0
Dry Cuba Mahogany, ft. cube	1 4 0 to 1 10 0
Dry Teak, ft. cube	0 13 0 to 0 15 0
Dry American Whitewood, ft. cube	0 11 0 to 0 14 0
Best Scotch glue, per cwt.	4 10 0 to —
Liquid Glue, per cwt.	4 7 0 to 5 10 0

SLATES.

1st quality slates from Langoor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

24 by 12	£ s. d.	18 by 10	£ s. d.
22 by 12	37 12 6	18 by 9	21 2 6
22 by 11	34 0	16 by 10	18 12 6
20 by 12	31 5 0	16 by 9	17 12 6
20 by 10	29 12 6	16 by 8	13 15 0

TILES.

Best machine-made tiles from Broseley or Staffordshire district	Per 1,000 f.o.r. London.
Ditto hand-made ditto	5 12 6
Ornamental ditto	5 17 6
Hip and valley tiles (per dozen)	6 2 6
(Hand-made)	0 9 6
(Machine-made)	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—	£ s. d.
R.S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.

To London Station, per ton.	£ s. d.
Diameter.	£ s. d.
½ in.	16 10 0
¾ in.	14 10 0
1 in.	13 10 0
1½ in.	13 0 0

WROUGHT-IRON TUBES AND FITTINGS—
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

Tubes.	Fittings.	Flanges.
Sizes	Over ½ to 1	Over ½ to 6
Black Gas 55	47½	50½
Blue Water 50	42½	52½
Red Steam 45	37½	47½
Galv'd Gas 40	37½	47½
" Water 33½	32½	42½
" Steam 27½	27½	37½

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles and Stop Ends.
3 in.	1/2	11d.
3½ in.	1/4	10½d.
4 in.	1/5	12½d.
4½ in.	1/6	14d.
5 in.	1/8	15½d.

O.G. GUTTERS.	1/3	3/4	3d.
3 in.	1/7	1/3	3d.
3½ in.	1/7	1/3	3d.
4 in.	1/8	1/4	3d.
4½ in.	1/10	1/6	4d.
5 in.	2/3	1/9	4½d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock Branches, angles, stock angles.
2 in. plain	1/3	1/2
2½ in.	1/1½	1/4
3 in.	2/4	1/8
3½ in.	2/10	2/-
4 in.	3/8	2/4

L.C.C. COATED SOIL PIPES—London Prices, ex Works.

Per yd. in 6 fts. plain	2 11	2 3	2 9
2½ in.	4 1	2 9	4 8
3 in.	4 5	3 5	4 8
4 in.	4 11	3 9	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex Works.

Per yd. in 9 ft. lengths	4 3	5 9	7 8
4 in.	6 3	6 11	9 3
5 in.	7 10	12 0	15 3
6 in.	9 6	15 0	20 9

Gasken for jointing 38/6 per cwt.

IRON—

Common Bars	£ s. d.	£ s. d.
Staffordshire Crown Bars—good merchant quality	13 10 0	14 10 0

Staffordshire "Marked" Bars

Wild Steel Bars	13 10 0	13 10 0
Steel Bars, Ferro-Concrete quality, basis price	11 0 0	12 0 0
Hoop iron, basis price	16 0 0	17 0 0
Galvanised	31 0 0	32 0 0

Soft Steel Sheets, Black—

Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	14 10 0	15 10 0
" " " 24 g.	15 10 0	16 10 0
" " " 26 g.	17 10 0	18 10 0

Sheets Flat Best Soft Steel, C.R. & C.A. quality—

Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	19 10 0	20 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g.	21 10 0	22 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	23 10 0	25 10 0

Flat and Galvanised Corrugated Sheets—

Ordinary sizes, 6 ft. to 9 ft. to 20 g.	19 10 0	20 10 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g.	19 10 0	20 10 0
Ordinary sizes, 6 ft. to 9 ft. to 24 g.	22 10 0	23 10 0

Sheets Galvanised Flat, Best quality—

Best Soft Steel Sheets, 22 g. and thicker	22 10 0	23 10 0
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0	26 10 0
Best Soft Steel Sheets, 26 g.	26 0 0	27 0 0

Cut Nails, 3 in. to 6 in. (under 3 in. usual trade extras.)

METAL WINDOWS—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about	1s. 4d. to 1s. 7d. per foot super.
--	------------------------------------

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	48 10 0
Pipe in coils	50 0 0
Soil Pipe	52 0 0
Compo pipe	53 0 0
NOTE—Country delivery, 30s. per ton extra; for under 3 cwt., 3s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.	
Old lead, ex London area.	35 0 0
At Mills, per ton	
Do., ex country, carriage forward	36 0 0

COPPER.

Seamless Copper tubes (basis)	per lb. 1 1
Strong sheet	2 3
Thin	2 4
Copper nails	2 3
Copper wire	2 4

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in. ½ in. 1 in. 1½ in. 1¾ in. 2 in.	29/- 45/- 76/- 153/- 246/- 510/- per doz.
---------------------------------------	---

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in. ¾ in. 1 in. 1½ in. 1¾ in. 2 in.	41/6 62/- 92/- 174/- 300/- 588/- per doz.
---------------------------------------	---

NEW RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in. ¾ in. 1 in. 1½ in. 1¾ in. 2 in.	39/6 60/- 116/6 per doz.
---------------------------------------	--------------------------

CAPS AND SCREWS.

1½ in. 1¾ in. 2 in. 3 in. 3½ in. 4 in.	7/6 10/- 14/- 23/- 30/- 42/- per doz.
--	---------------------------------------

DOUBLE NUT BOILER SCREWS.

½ in. ¾ in. 1 in. 1½ in. 1¾ in. 2 in.	7/6 11/- 17/- 29/- 36/- 63/- per doz.
---------------------------------------	---------------------------------------

BRASS SLEEVES.

1½ in. 2 in. 3 in. 3½ in. 4 in.	10/- 12/- 20/- 24/- 31/- per doz.
---------------------------------	-----------------------------------

NEW RIVER PATTERN CROYDON BALL VALVES, S.F.

½ in. ¾ in. 1 in. 1½ in. 1¾ in.	55/- 56/- 98/- 162/- 228/- per doz.
---------------------------------	-------------------------------------

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.

1½ in. 1¾ in. 2 in. 3 in.	8 lbs. P. traps 33/- 41/- 56/- 101/- per doz.
---------------------------	---

8 lbs. S. traps	35/- 45/- 65/- 126/-
-----------------	----------------------

1½ in. English Ingots, 1/6 per lb. SOLDIER—Plumbers' 1/2, Tinmen's 1/4, Blowpipe 1/5 per lb.

PAINTS, &c.

Raw Linseed Oil, in pipes	per gallon 0 3 3
" " in barrels	0 3 10
Doled " in drums	0 4 1
" " in barrels	0 4 1
Turpentine in barrels	0 4 4
" in drums (10 gall.)	0 5 9
Genuine Ground English White Lead, per ton	58 15 0
(In not less than 5 cwt. casks.)	
Genuine WHITE LEAD PAINT—	
" Father Thames," " Nine Elms," " Park," "Supremus," "St. Paul's," "Spedol," "Polacco" and other best brands (in 14 lb tins) not less than 5 cwt. lots	per ton delivered 79 15 0
Red Lead, Dry (packages extra)	per ton 64 0 0
Best Linseed Oil Putty	per cwt. 0 15 0
1 lb. cwt. KD Quality	0 15 0
1 lb. cwt. KD Quality	0 3 6

Continued on next page.

The information given on this page has been specially compiled for THE BUILDER and is copyright. Our aim in this list is to give, as far as possible, the average price of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

CURRENT PRICES FOR BUILDING WORK IN LONDON

EXCAVATOR.		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11	0
Add if in clay	"	1	0
Add for every additional depth of 6 ft.	"	0	6
Planking and strutting to trenches	per foot super	0	5
Do. to sides of excavation, including shoring	"	1	0

CONCRETOR.		s.	d.
Portland cement concrete in foundation 1 to 6	per yard cube	32	0
Add it in underpinning in short lengths	"	7	0
Add it in floors 6 in. thick	"	3	3
Add it in beams	"	3	9
Add if aggregate 1, 2, 4	"	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	"	2	6

BRICKLAYER.		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	30	0	0
Add if in stocks	"	7	10	0
Add if in Staffordshire blues	"	22	0	0
Add if in Portland cement and sand	"	1	10	0

FACINGS.		s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0 1½

POINTING.		s.	d.
Neat flat struck or weathered joint	"	0	0 3

ARCHES.		s.	d.
Extra only to the price of ordinary brickwork:—			
Fair external in half brick rings	"	0	0 10
Axed in stocks	"	0	1 9
Rubbed and gauged jointed in putty camber or segmental	"	0	6 0

SUNDRIES.		s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement	"	0	1 0
Setting ordinary register grates and stoves	each	1	0 0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15 0

ASPHALTER.		s.	d.
Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	"	8	6
¾ inch on flats in two thicknesses	"	6	3
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	"	1	2

MASON.		s.	d.
York stone templates fixed	per foot cube	13	0
York stone sills fixed	"	22	0
Bath stone and all labour fixed	"	10	6
Portland stone fixed	"	20	0

SLATER.		s.	d.
Welsh 16 in. x 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. x 10 in. Do. Do.	"	80	9
Do. 24 in. x 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.		s.	d.
Fir framed in plates	per foot cube	5	0
Do. joists	"	5	6
Do. roofs, floors and partitions	"	6	0
Do. trusses	"	8	6

FLOORING.		s.	d.
Deal rough close boarding	per sq. 35/6 40/- 45/-	72/-	
Flat centering for concrete floor, including struts or hangers	"	50	0
Do. to beams	per ft. sup.	1	0
Centres for arches	"	1	6
Gutter boards and bearers	"	1	0

FLOORING.		s.	d.
Deal-edges shot	per sq. 44/6 53/- 60/6	65/-	
Do. tongued and grooved	" 49/- 57/6	65/-	
Do. matchings	" 45/- 51/-		
Moulded skirting, including backings and grounds	per ft. sup. 1/6 1/9 2/0	2/6	

SASHES AND FRAMES.		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	"	2	1
Add for fitting and fixing	"	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	"	3	9

DOORS.		s.	d.
Two-panel square framed	per ft. sup.	2/1 2/4 2/6	
Four-panel Do.	"	2/5 2/8 2/11	
Two-panel moulded both sides	"	2/8 2/11 3/2	
Four-panel Do. Do.	"	2/11 3/2 3/5	

CARPENTER AND JOINER—continued.		s.	d.
FRAMES.		s.	d.
Deal wrot moulded and rebated	per foot cube	11	0
Plain deal jamb linings framed	per ft. sup.	1/7 1/8 1/11	
Deal shelves and bearers	"	1/4 1/6 1/9	
Add if cross tongued	"	2d. 2d. 2d.	

STAIRCASES.		s.	d.
Deal treads and risers in and including rough brackets	2/1 2/4 2/9	—	—
Deal strings wrot on both sides and framed	1/8 2/ 2/2 2/8	—	—
Housings for steps and risers	each	0	11
Deal balusters, 1 in. x 1½ in.	per ft. run.	0	9
Mahogany handrail; average 3 in. x 3 in.	"	11	10
Add if ramped	"	23	9
Add if wreathed	"		

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).		s.	d.
6 in. barrel bolts	8d.	Rim looks	2/-
Sash fasteners	11½d.	Mortice looks	4/3
Casement fasteners	1/5	Patent spring hinges and letting in to floor and	
Casement stays	1/2	Cupboard locks	19/-
Cupboard locks	1/5	making good	

FOUNDER AND SMITH.		s.	d.
Rolled steel joists	per cwt.	16	3
Plain compound girders	"	19	0
Do. stanchions	"	21	9
In roof work	"	27	6

RAIN-WATER GOODS.		s.	d.
Half-round plain rebated joints	ft. run 1/6 1/9 2/- 2/6		
Ogee Do. Do.	" 1/9 2/- 2/6 3/3		
Rain-water pipes with ears	" 1/9 2/7		
Extra for shoes and bends	each 4/4 5/11		
Do. stopped ends	" 1/11 2/4½ 3/7 4/-		
Do. nozzles for inlets	" 2/2 2/7 3/10 4/3		

PLUMBER.		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	63	0
Do. Do. in flats	"	62	0
Extra labour and solder in coated cesspools	each	6	9
Weld joint	per ft. run.	0	6
Soldered seam	"	1	6
Copper nailing	"	0	6

DRAWN LEAD.		s.	d.
Drawn lead waste per ft. run	1/2 1/9 2/0 3/4 4/0		
Do. service	1/3 2/2 2/7 3/10		
Do. soil	"	6/9	
Bends in lead pipe	each 1/2 1/8 2/1 2/10 3/3 8/3		
Soldered stop ends	" 11d. 1/- 1/3 1/11 2/4 4/10		
Red lead joints	" 2/10 3/8 4/- 4/11 6/6 9/9		
Wiped soldered joints	"		
Lead traps and cleaning screws	" 6/4 9/7 15/4 41/- 19/6		
Bib cocks and joints	" 15/4 17/2 25/8 64/-		
Stop cocks and joints	"		

PLASTERER.		s.	d.
Render, float and set in lime and hair	per yard sup.	2	4
Do. Do. Sirapite	"	2	7
Do. Do. Keen's	"	3	7
Add sawn lathing	"	1	7
Add metal lathing	"	2	6
Portland cement screed	"	2	2
Do. plain face	"	3	3
Mouldings in plaster	per 1 girth	0	11
One-and-a-half granolithic pavings	per yard sup.	5	9

GLAZIER.		s.	d.
21 oz. sheet plain	per foot sup.	0	8½
28 oz. Do.	"	1	0
Obscured sheet	"	1	0
½ in. rolled plate	"	0	9
½ in. rough rolled or cast plate	"	0	10½
½ in. wired cast plate	"	1	4

PAINTER.		s.	d.
Preparing and distempering, 2 coats	per yard sup.	0	9
Knotting and priming	"	0	7
Plain painting 1 coat	"	0	9
Do. 2 coats	"	1	2
Do. 3 coats	"	1	9
Do. 4 coats	"	2	4
Graining	"	2	3
Varnishing twice	"	1	9
Sizing	"	0	3
Flattening	"	0	7
Enamel	"	1	1
Wax polishing	per foot sup.	0	6
French polishing	"	1	2
Preparing for and hanging paper	per piece 2/- to 4/-		

These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright. Prices include both materials and labour.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

↑ denotes accepted. † Denotes provisionally accepted. * denotes recommended for acceptance. Denotes accepted subject to modifications.

OURNEMOUTH.—Making-up of Chessel-avenue, the T.C.:—
Grounds & Newton £2,194

OURNEMOUTH.—Making-up of Firs Glen-road, the T.C.:—
B. Gulliver £846 3 6

OURNEMOUTH.—Reconstruction of Boscombe Head, for the T.C.:—
D. G. Somerville £10,779

OURNEMOUTH.—Reinforced excavation and s at generating station:—
Premier Cooler & Engineering Co. £2,005

RENTFORD.—Decorations to Maternity Hospital, Claypotts-lane, for the Chiswick and Ealing Local Committee:—
Hidden & Co., Ltd., Brentford £65 0
W. J. Fensom, Ltd., Chiswick 49 10
Myring & Son, Ealing 47 0
H. Kerswell, Ealing 45 19

RIDLINGTON.—Extensions at the Bridlington School and at the High School for Girls, for the East Ang. C.C.:—
Armistage & Hodgson, Leeds £24,266

UNGALOW TOWN.—Street improvements:—
J. W. Woolnough, Ltd., Eastbourne £20,688

UMBRIDGE.—Painting at the Infectious Diseases Hospital, for the T.C.:—
A. R. Jones £292 0
Craft & Co. 254 0
A. Butler 244 12
Negus & Sons 239 0

UMBRIDGE.—Hot-water circulating systems in houses in course of erection in Hawthorn-way, for the T.C.:—
Allin & Sons £608 10

UMBRIDGE.—Paving of 8,917 sq. yds. super in streets, for the T.C.:—
Limmer & Trinidad Lake Asphalt Co. per sq. yd. 12s. 2d.

URDIFF.—Laying of the second section of the pipe from the Taff Tawr Waterworks, for the Com. C.C.:—
Shane, Mackenzie & Shand, Darley Dale £170,737

URHAM.—Painting Holywood Hall Sanatorium, Baal Hill Farm, for the C.C.:—
W. Whitfield £360

URHAM.—New department and alterations to existing premises at Silksworth County School:—
W. W. Lazenby & Co., Ferryhin Station £5,445 12

UTTON.—Erection of house and repairs at farm, Cheshire Agricultural Committee:—
Sergeant Bros., Winsford £1,338

AST RIDING.—Reconstruction and improvement of sections of the Hull-Selby road within the areas of the Beverley and Sculcoates Rural Districts, for the C.C.:—
H. Coxhead & Co., Ltd., Middlesborough £56,993

RODSHAM.—Adaptation work at Union Farm, Cheshire Agricultural Committee:—
Messrs. Gleave & Son £1,350

ASGOW.—Erection of sub-station in Jordan, for the T.C.:—
J. Crawford £879 4 4

ASGOW.—Erection of sub-station in Dunk, for the T.C.:—
R. Murdock & Son £848

ASGOW.—Constructing of operating theatre at Oyston Hospital, for the T.C.:—
M. Henderson, Ltd. £8,440

SPORT.—School for 200 children at Gordon, for the E.C.:—
J. Croad, Portsmouth £9,111 0
S. Salter, Portsmouth 7,600 0
Dash & Son, Gosport 7,492 0
J. J. Privett, Portsmouth 7,474 0
H. Hunt, Ltd., Gosport 6,678 10

ILDFORD.—Adapting a ward for an operating theatre, and other works, at the Institution, Warren, for the B.G. Messrs. Norris & Shattock, architects, High-street, Guildford, Surrey:—
W. Franks, Guildford £535
Bishop, Godalming 288
S. Smith & Sons, Guildford 247

ALING.—Houses, &c., for the Village Park housing scheme (2):—

Section No. 1.		Section No. 2.		Total.
62 Parlour Houses.	34 Parlour Houses.	73 Non-parlour Houses	59 Non-parlour houses.	
32 Flats.	76 Flats.			
£150,889 3	£141,425 9			£292,314 12
122,443 0	116,011 0			238,454 0
112,637 0	108,093 0			220,730 0
112,790 0				112,790 0
111,910 9	106,941 0			218,851 9
107,450 0	102,150 0			209,600 0
104,744 15	99,527 5			204,302 0
104,481 0	99,477 0			203,958 0
94,983 0	90,434 0			185,417 0
94,963 0	85,035 0			179,998 0
87,671 0	83,483 0			171,154 0

HAREFIELD.—Erection of an Infants' Block at the Council School, in accordance with the plans prepared by the County Architect, for the C.C.:—

*W. S. Try, Cowley £7,830

HODSOCK.—Erection of school at Langold, with teachers' house and caretaker's cottage, for the Notts C.C.:—

*Greenwood, Ltd., Manchester £21,792

HULL.—Third instalment of street works and sewers on the Hessle road housing site, for the T.C.:—

G. Boyce, Hessle £6,971 14 0
H. Coxhead & Co., Beverley 6,872 7 6
H. Langton & Son, Hull 6,725 0 0
Sangwin, Ltd., Hull 6,617 16 4
G. Curtis, Hull 6,526 13 8
*R. & H. Fisher, Hull 5,822 4 4

HULL.—Street works and sewers on the East Hull housing site, for the T.C.:—
Sangwin, Ltd. £35,633

ILFORD.—Widening of Cranbrook-road and High-street, for the T.C.:—
*D. T. Jackson £31,200

ILKESTON.—Erection of reinforced concrete columns and roof for Moortown Reservoir extension for the T.C.:—
*Matthews & Mumby, Ltd. £7,880

ISLEWORTH.—Erection of the proposed additions and the alterations to the County School, in accordance with the plans and specifications prepared by the County Architect, for the Middlesex C.C.:—
G. Challis, Brentford £8,223

JARROW.—New offices at the Central Council School, for the E.C. Mr. Ernest R. Knaggs, Clerk of Works:—

*Watson & Co., Newcastle-upon-Tyne £402 19 9

LANCASHIRE.—Cleaning and painting certain steel bridges, for the C.C.:—
*J. Robb, Glasgow £517 16 2

LANCASHIRE.—Alterations at various farms, for the C.C.:—
*W. & J. Hart, Longton £768 7

LANCASHIRE.—The C.C. have accepted the following tenders for the construction of the three bridges required in connection with the construction of the new by-pass road:—

Kirkland Bridge, over River Wyre—
*Morrison & Sons, Liverpool £9,097 6 2

Bridge over Lancaster Canal—
*J. Byrom, Ltd., Bury 6,022 0 0

Bridge over L.M. & S. Ry. (Knott End Section)—
*J. M. Firth, Todmorden £6,114 11 0

LEEDS.—Adaptation of premises No. 40, Park-lane, for office accommodation:—

*J. Tomlinson & Son £1,977 0

LEEDS.—Six type "B" houses on the Wyther Housing estate:—

*Phormium Co., Ltd. each £535

LEEDS.—Construction of bridge over Farnley Beck, Butt-lane, for the T.C.:—
*H. Arnold & Son, Ltd. £409 3

LIVERPOOL.—Repairing roofs and lights, &c., at the Oldham-place sub-station, for the T.C.:—
J. H. Taylor £578 9 3

LIVERPOOL.—Erecting electric sub-station at 58, Kirkdale-road, for the T.C.:—
*C. & G. L. Desor £1,242

LIVERPOOL.—Alterations required to 90, Allerton-road, to convert into a library, to the surveyor's plans:—

*S. Hill & Co., Grassendale £2,987

LIVERPOOL.—Installation of new section of boiler and heating pipes to greenhouse, at Calderstone estate, for the T.C.:—

*S. O. Lees & Son, Liverpool £230

LONGSTAMPS.—Supplying pipes to the main from Sandford Mill to Longstamps Reservoir:—
*Messrs. French, Buckhurst Hill £3,250

LUTON.—Works to roads, for the C.C.:—
Improved Wood Paving Co., Ltd. (London) £4,228 5

MANCHESTER.—Tenders as follows have been accepted by the E.C.:—

Ardwick Central Schools—Reconstruction of sanitary conveniences—
*Gatley & Higson, Manchester.

Southall-street School—Outside urinals—
*Gatley & Higson, Manchester.

Harpurhey High School—Ventilating turrets—
*Brown & Sons, Manchester.

Princess-road School—Heating boiler—
*Haden & Sons, Manchester.

Upper Lloyd-street School—Outside urinals—
*Green & Sons, Manchester.

Wheler-street School—Outside urinals—
*Green & Sons, Manchester.

MANCHESTER.—Construction of viaduct in connection with the Glengall extension scheme, for C.C.:—
†S. F. Hopley, Prestatyn.

MAPPERLEY.—Sewage Works extensions:—

H. H. Barry, Radcliffe-on-Trent, Notts £475 10 0
J. E. Jervis, Ltd., Long Eaton 463 0 0
Harris & Hunt, Marehay, Derby 440 0 0
C. S. Tomlinson, South Nor-manton 428 0 0
H. Sewell, Ilkeston 417 0 0
G. F. Tomlinson, Derby 385 0 0
Evans Bros., Riddings, near Alfreton 370 18 0
Vincent Ogden & Co., Belper 362 7 3
*J. Payne, Crich, near Matlock 360 15 0

MIDDLESBOROUGH.—Erecting a new school at Grove Hill, for the E.C.:—
*W. Pearson & Son, Hartlepool £44,745

MIDDLESEX.—Interior decoration of the Guild-hall, for the C.C.:—
*Catterall & Sons, S.W. £1,140 5 9

MIDDLESEX.—Erection of one type "D" cottage on Holding No. 5, on the Denham estate, for the C.C.:—

R. Hewett, Ltd., Acton Green, W. £1,151
A. Monk, Lower Edmonton, N. 1,090
H. H. Knight & Son, Tottenham, N. 1,061
Ferris Bros., Acton, W. 995
Y. J. Lovell & Sons, Gerrards Cross, Bucks 940
*W. S. Try, Cowley, Middlesex 829

MIDDLESEX.—Construction of a bridge to carry the North Circular-road over the Lee Navigation, for the C.C.:—

*Edwards Construction Co., Ltd. £12,025

MILFORD.—Installing an artesian bore tube well and pump, for the Surrey C.C.:—
Isler & Co., Ltd. £776 10

OSSETT.—Erection of new county school at Gawthorpe, for the T.C.:—
Excavator, mason and bricklayer—
H. Oldroyd, Ossett £7,196 18 7

Carpenter and joiner—
M. Lockwood & Son, Ossett 2,184 15 0

Slater—
John Kellett, Morley 816 0 0

Plasterer—
R. H. Lockwood, Horbury 805 1 7

Plumber and glazier—
J. A. Fawcett, Ossett 984 0 0

Painter and Decorator—
J. Hancock & Son, Horbury 246 6 9

(All accepted.)

OXFORD.—Erection of convenience at Park Town, for T.C.:—
†Billings & Co. £990

PONTYPRIDD.—Internal and external work at Park schools, Pontshonorton school, and internal work at Lan Wood school, Maesvooed school, and external work at Graig schools, for the E.C. Mr. W. E. Lowe, architect:—

Lan Wood School—
*Gough Gros., Partridge-road, Cardiff £347

Pontshonorton School—
*Gough Bros. 116

Park School—
*A. Powell, 51, Cathays-terrace, Cardiff 279

Glyntaff School—
*A. Powell, 51, Cathays-terrace, Cardiff 20

Maesvooed School—
*T. Culliford, Windsor-road, Treforest, Pontypridd 207

PRESTON.—Additions to the slaughter-houses at the Cattle Market:—
*L. Titterton £1,600

PRESTON.—Two shelters and conveniences, for the T.C.:—
*J. Turner £1,089

PRESTON.—Erection of a band stand at Moor Park, for the T.C.:—
*G. Hill & Sons £337 12

PRESTON.—For the alterations to the Withnell Pulmonary Hospital and annexe for 46 patients, for the Lancashire Tuberculosis Committee:—

*T. W. Hall & Son, Chorley.

PRESTON.—For the erection of a new Council school for 200 scholars, and alterations and additions to the existing premises at the Broad-o'-the-Lane Council school, Shavington:—
*D. A. Ablett & Sons, Wigan.

PRESTON.—Bridge over Holderness Drain, for the T.C.:—

Contract No. 1. Contract No. 2.
Piling. Builder's work
£1,959 .. £5,192

Kettlewell, Son & Co., Hull 1,850 .. —
Simplex Concrete Piles, Ltd., London 1,823 .. 5,336

Yorkshire Hennebique Co., Ltd., Leeds 1,810 .. 5,319

R. & H. Fisher, Hull 1,593 .. 5,966

A. Waddington & Son, Sheffield 1,472 .. 3,948

G. Curtis, Hull 1,445 .. 1,383

H. Connell, Selby 1,371 ..

†H. Langton & Son, Hull 1,371 ..

Sangwin, Ltd., Hull 1,371 ..

I. Robinson, Hull 1,371 ..



PYRCROFT.—Erection of 46 houses, for the R.D.C. :—

*Lacey & Sons £25,430

RICHMOND (YORKS).—Thirty-two houses (not 100 as previously stated), for the R.D.C. :—

J. F. Bainbridge, Redcar £16,680

ROMFORD.—Bandstand base at Cottons-road Recreation Ground, and pavilion and fencing at Raphael Park, for the U.D.C. Mr. F. G. Beaumont, Surveyor, 73, South-street :—

*A. Partridge, Romford £977

SCARBOROUGH.—Widening of Scarborough Bridge over the Beverley, for the East Riding C.C. :—

*J. Sawdon (Bridlington) £600

SHEFFIELD.—For the supply of materials and works required for the erection and completion of a transformer sub-station in Bentley-lane, Crosspool for the Electricity Committee :—

*Wellerman Bros., Ltd., Hyde.

SHREWSBURY.—Alterations, additions and repairs to Infants' Department, Highley Council School, for the E.C. Mr. George H. Bailey, School's Architect, 1, College Hill, Shrewsbury :—

*Ellams & Doughty, Highley, Kidderminster £1,030



PARQUET & WOOD-BLOCK FLOORING
supplied & fixed complete.
Post or 'Phone (Park 1985)
details of requirements to
TURPIN'S PARQUET FLOORING CO.,
25, NOTTING HILL GATE
LONDON, W.11.

J. GLIKSTEN & SON

LIMITED

Specialities in

SEASONED

HARDWOODS

**MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.**

REGISTERED OFFICE AND WHARF

**CARPENTERS RD.
STRATFORD
LONDON E.15**

Telephone :
EAST 3771
(5 lines)

Telegrams
GLIKSTEN 'PHONE
LONDON

SKELOW.—For the erection of a Baptist church at Skellow, near Doncaster. Messrs. Garside & Pennington, F.R.I.B.A., architects, Pontefract :—

*Leadley, Firth & Whittington, Doncaster.

SOUTHWARK.—Supply and laying on the Council's concrete foundations of an approximate area of 12,000 superficial yds. of creosoted deal block paving, for the B.C. :—

William Griffiths & Co., Ltd. per yard 11s. 8d.

The Acme Flooring & Paving Co., Ltd. per yard 11s. 6d.

*The Improved Wood Pavement Co., Ltd. " 11s. 0d.

SPRINGBURN.—Erection of the Springburn Child Welfare Centre with "Terazzo" blocks, for the T.C. :—

W. R. T. Macbeth & Co., Glasgow £2,092 6 3

ST. ALBANS.—Resurfacing of St. Albans main road (A.6), between Wash Cross road and the Hertfordshire County boundary, for the Middlesex C.C. :—

*Val de Travers Asphalt Co., Ltd. £7,197 10

ST. ANNE'S-ON-SEA.—For erection of 12 subsidy houses at Forshaw-avenue, for the T.C. :—

*Keenan & Yates, Ltd., St. Anne's.

ST. ANNE'S-ON-SEA.—For erection of 50 rental houses, for the T.C. :—

*Keenan & Yates, Ltd., St. Anne's.

STOKE NEWINGTON.—Supply of 45,000 wood paving blocks :—

*Sir Wm. Burnett & Co., Ltd.—
Per thousand £10 2 6

SUDBURY.—Construction of the bridge over the Metropolitan District Railway on the line of the Sudbury spur extension, for the Middlesex C.C. :—

*Hipperson & Co. £12,072 14 9

TORQUAY.—Beacon Hill improvement scheme, for T.C. :—

*W. H. Smith £2,138 4 9

TYNEMOUTH.—For duplication of Fort water main, for the T.C. :—

Cast-iron pipes—

*Cochrane & Co., Ltd. £23,256 2 0

Valves and fittings—

*Guest & Chrimes, Ltd. 1,894 0 0

Trench work—

*J. G. Rutter & Sons 13,052 4 9

WALLASEY.—Erection of 32 houses on the Belvidere-road :—

*A. H. Chelwick £19,520

WALLASEY.—External painting of 56 houses in Mill-lane, Ruskin-avenue and Rostherne-avenue, for the T.C. :—

*H. Dodd, Wallasey £263

WEST DRAYTON.—Widening of Station-road, for the Middlesex C.C. :—

George Wimpey & Co. £3,843 1 8

Stephen Kavanagh & Co. .. 3,787 11 8

G. J. Anderson 3,491 6 2

H. Morecroft 3,490 0 0

*John Cronk & Sons 3,288 14 4

J. J. ETRIDGE, J. Ld

SLATING AND TILING

SLATE MERCHANTS

CONTRACTORS.

Inspections and Reports made on

OLD OR FAULTY ROOFS

in any part of the country.

Telephone: Bishopsgate 1944/5, or write,

Bethnal Green Slate Works,

BETHNAL GREEN, LONDON, E.

WINCHESTER.—Extensions to electricity works for the T.C. Messrs. Barnard & Carter, F. & L.R.I.B.A. architects :—

W. T. Nicholls, Ltd., Gloucester £3,840

H. Stevens & Co., Southampton 3,755

H. G. Ross, Netley 3,754

J. Croad, Portsmouth 3,725

S. Salter, Southsea 3,699

F. Rendell & Sons, Ltd., Devizes 3,536

*Wise & Lansdell, Ltd., Winchester 3,489

FLOORINGS

HIGH-CLASS

of every description in

WOOD BLOCKS. PARQUET

SEASONED T. & G. WAINSCOT OAK

TEAK AND MAPLE.

FACTORY AND ROADWAY PAVING

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASANT

WANDESWORTH, S.W.18.

(Phone: Putney 1700 & 2400)

School & Hospital Stoves

MAKERS OF

WRIGHT'S IMPROVED and also SHORLAND PATENT

WARM AIR VENTILATING PATTERNS.

GEO. WRIGHT (LONDON LIMITED)

19, Newman St., Oxford St., London, W.1

Burton Weir Works, Rotherham.

FITZPATRICK & SON

Masons and Paviors,

455, OLD FORD ROAD, BOW, E.

Phone: EAST 4808.

Granite Setts and Kerbs (redressed and second hand), York Paving Spur Stones, Granite Chippings, and Granolithic and Setts Paving.

Telegrams: 'Frolic, Liverpool.' 'Phone 228 Bax

E. B. BURGESS & CO

6, CASTLE ST., LIVERPOOL.

WOOD BLOCK FLOORING

AND PARQUETRY.

Telephone GL1808.

OGILVIE & CO.,

Many years' experience with the late Firm of W. H. LARSEN & Co. of Bunhill Row.

Mildmay Works, Mildmay Avenue, Islington

EXPERTS IN HIGH-CLASS JOINERY

ALTERATIONS AND DECORATIONS.

HOWELL J. WILLIAMS

Builders Ltd.

High-Class Building

and

Joinery Work

11/17, BERMONDSEY STREET,

LONDON BRIDGE, S.E.1

Telephone: HOP 202

Builders of very many well-known Banks, Office and Business premises. Our works especially convenient for City Building and fittings.



GRANITE
WM EDWARDS & SON
BERDIE

Supply all classes of Polished and Axed Granite Work in variety of colours and from quarries in any part of the world

Specialists in Carvings and Statuary, War Memorials, Columns, Pilasters, Dadoes, Facias, Shop and Bank Fronts.

Correspondence invited

**HEAD OFFICE AND WORKS,
PITTOBRIE, ABERDEEN**

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

OL. XXXIX.—No. 4,307

AUGUST 21, 1925

VOLUNTARY HOSPITAL ACCOMMODATION

THE needs of the people of a great country with an ever-increasing population exposed to the uncertainties of life and health, due in no small degree to a complex state of society and the vagaries of a no less uncertain climate, have suggested many of the voluntary and efficient organisations which, with or without state assistance, have been established in our towns and cities. Of these organisations, the voluntary hospitals of the country take a leading position and surely no more beneficial agencies could be established, not only to help our individual needs, but to safeguard the health and well-being of the country as a whole. The provision of adequate hospital accommodation has been one of the first obligations of those responsible for the administration of the medical charities of the country, and the results so far achieved by the personal service of a large body of disinterested workers are some testimony of the zeal with which the work has been carried out. But what has been accomplished falls far short of the requirements, and though the voluntary system, which a few years ago seemed doomed, has since taken a fresh lease of life, there can be no doubt that a service of such vast national importance should receive an adequate measure of State support.

The building undertaken since the war has not been of much extent, and the hospitals have not expanded with the growth of the population. But there has been a distinct improvement in the last two years, though a large proportion of the building undertaken in this period has been in respect of additional accommodation for nurses. The distribution of the Government grant of £500,000 and the effort voluntarily made has resulted in a marked improvement in the financial position of voluntary hospitals, so far at least as current maintenance expenditure is involved. Attention has since been directed particularly to the need for the provision of additional hospital accommodation, and early in 1924 the Minister of Health (Wheatley) asked the Voluntary Hospital Commission to inquire, on the following terms of reference:—

The Voluntary Hospitals Commission are requested to inquire into and report upon the extent of the additional voluntary hospital accommodation required in England and Wales and the best means of providing and maintaining it."

The Commission has now presented their report to the Minister of Health and this has now been published by the Stationery Office as a Command Paper (Cmd. 2486). At the commencement of their report the Commission point out that there is no general agreement as to the number of hospital beds required for a given population; and they have not attempted to lay down any ideal standard, as they felt that in the present circumstances inquiry could be more usefully directed to a consideration of what extensions could be regarded as immediately necessary and capable of accomplishment within a reasonable period of time.

In approaching the problem of the additional accommodation required and the means of providing and maintaining it, the report refers to a number of incidental questions such as:—(1) Waiting lists, which provide a criterion of doubtful value in estimating the need for additional accommodation;

(2) The importance and relative merits of convalescent and nursing homes as a means of relieving the pressure on the beds of primary hospitals;

(3) The possibility of economy by means of co-ordination.

In the last mentioned matter the Commission report that there is at present a multiplicity of institutions whose functions overlap, and they express the opinion that if the Managing Committees could arrive at a mutual arrangement for co-ordination of work, economies might result both in expenditure and in accommodation.

The additional accommodation recommended by Local Voluntary Hospital Committees outside London amounts in England and Wales to 10,614 beds, and King Edward's Hospital recommends an addition in London of 2,088 beds. Details of the recommendations of the various areas are given in an

appendix of the Report. The Commission regard the London figure as a conservative estimate and they express the conviction that it does not permit of any reduction. But they come to the conclusion that the recommendations of some of the Local Committees are in excess of the immediate needs, and therefore consider that there should be a reduction of 20 per cent. on the provincial figure.

The reports of the Local Voluntary Hospital Committees and the experience of the Commission in distributing the Parliamentary grant of £500,000 towards maintenance deficits point to the conclusion that the voluntary system has now recovered sufficiently to be able to undertake the maintenance of the 10,000 additional beds proposed. Figures are quoted in an appendix showing that in 1923 the voluntary hospitals in England and Wales (including London) taken as a whole, had a surplus on the maintenance account amounting to almost £497,000. But though during the last few years the majority of the hospitals have been able to balance their budgets, there has been no margin out of which capital for expansion on any considerable scale could be provided. In the circumstances the Commission recommend that some measure of State assistance is essential. Failing such assistance there is in most cases no prospect of essential extensions being undertaken within the next few years; and the Commission remark that "failure to meet the present needs of a growing population will not only entail a great amount of avoidable suffering, but it must also react to the prejudice of the voluntary system."

On the question of the incidence of building, the Commission think that the presumption should in general be in favour of suburban rather than urban extensions, unless it can be shown that there are special circumstances, such as the possibility of adding an additional story at relatively low cost, which would justify an exception to the general rule. They think also, that the erection of costly buildings of elaborate design should in general be discouraged, and that preference should be given, where sufficient space is available, to buildings of a more utilitarian and less permanent type. The development of medicine is bringing with it constant demands for variation in design. There is no finality in hospital design, and the more permanent type of building adopted the more certainly will it become obsolete and require costly reconstruction in a generation or two.

With regard to the amount of the proposed State grant, the Commission have given considerable attention to the question of what may be regarded as a reasonable cost per bed, and some of the most recent buildings have been specially inspected. It is clear that the cost in any particular case must be dependent on local circumstances. But they are advised that at present-day prices, excluding the cost of site, furniture and equipment, a reasonable figure for the cost of extending plain buildings of a utilitarian character would be £400 per bed. Where it is necessary that the additions should conform to the architecture of the rest of the building this figure might be considerably exceeded, but they think it represents the minimum allowance for the bare cost of providing additional bed space. Schemes of extension which are now in hand show in some instances a much higher figure, but in most of these cases the schemes include other improvements, besides the provision of additional bed accommodation. They recommend that the State should provide 50 per cent. of the cost up to a maximum of £200 per bed on condition that the remainder of the expenditure is raised locally or is available from existing building funds. The Commission recommend that the first condition of administering such a grant as they contemplate should be to require each Local Voluntary Hospital Committee to submit a scheme for the provision of the necessary new beds in its area, if necessary in consultation with the Local Committees of any other areas interested.

With the main conclusions of the Commission we agree, but we think more might be done to make hospitals self-supporting. Many patients who now go to nursing homes could surely be offered facilities and concessions which would induce them to make more use of the hospitals of the country.

NOTES.

Questionable The opposition which has been raised to the scheme for new working-class dwellings in Limehouse is a curious commentary on our modern efforts to ameliorate the conditions under which the poorer classes live. This opposition has brought into sharp relief the contrast between the ordinary cottage type of dwelling and blocks of flats, and it pertinently suggests the need for much discrimination and patient regard for the feelings of others, even when our main object is to benefit them.

The Limehouse Battle. It might have been imagined that the substitution of blocks of model dwellings for a few acres of rather ramshackle property in Limehouse would not have raised the excited controversy to which the columns of the daily press have called attention during the past week, but whether by accident or design the Stepney Council has lighted on an area evoking crucial grounds for differences in opinion. In the *Observer* of

August 16 we see it noted that this small patch is not "just a segment of the East End, like any other East End in Christendom, but virtually a self-contained village community, proud, independent, and with an industrial ancestry. A century and a half ago fish-curing started there; to-day there are half-a-dozen curing yards in the area supporting, directly and indirectly, probably not far short of a hundred families. The sheds are, literally, in the backyards of some of the houses. In the evening, when stoking up for the night is going on, you may stand at your back door under a gas attack of acrid deal and oak sawdust fumes, with the haddocks hanging before you all a-row. It may not be ozone, but at least it is livelihood, and a livelihood right at your door, as it was at your father's and grandfather's before you. People grow as jealous of work like that as the old hand-loom weavers of one hundred years ago did of theirs." Apart from this particular industry which supports at least two hundred people, many living in the threatened quarter have little gardens where they grow flowers, and keep chickens and rabbits, while here

and there you find a pigeon-fancier. How would these recreations fare in proposed "models"? Would they all be forbidden?

Reorganisa- TAKING the case of the dominant industry—haddock curing—then carried on in competition with large concerns at Aberdeen, Grimsby and elsewhere, and though it succeeds in holding its own for the moment, if once disturbed the costs of re-establishment would probably overweight it, and thus those it supports would be unemployed. It is conducted in a cleanly manner and does not appear in the least detrimental to health. Other activities might be better accommodated further afield, but that is altogether the question, which is less of reconstructing buildings than of bringing up a well-conducted community possessing a clearly defined ideal of living. It must be admitted that many of the cottages, though by no means all, have long passed their best days, that they are small and cramped and in urgent need of repair, also that in several places they are packed far too closely together. With these admissions it yet remains questionable whether the proposed course of substituting quite another type of dwelling is justified, as it is practicable to reorganise up to a reasonable standard with very little disturbance. In the centre of the area the Stepney Council has a district "casual" block, the possession of which was not improbably instigated their scheme. This site could easily be developed to rehouse those to be evicted from the cottages that it would be desirable to clear away, and for stabling, the distribution of which is at present open to criticism. The majority of the cottages, if removed and in some cases enlarged, would make decent dwellings, and the bulk of the present population would remain accommodated in the fashion they desire, which is appropriate to their needs, and in no way a danger from the point of view of health. With the menace of eviction hanging over them, the land would doubtless be amenable, and in a case there should be little difficulty in adopting such measures as in re-organisation rather than destruction. Of course this would require closer and more intelligent attention than a simple clearance scheme, but this is to be an instance where, on social grounds, such a line of action is clearly indicated.

Thames Bridges. PROFESSOR BERES PITE writes to the supporting Sir Reginald Blomfield's "weighty

test against corrupting the æsthetic quality of Waterloo Bridge," and in doing remarks that "the cantilevered footings to London Bridge have already destroyed the once perfect simplicity of Reginald's greatest work," but he is not convinced that Sir Reginald's suggestion that the Charing Cross Bridge will solve the



Benenden War Memorial. MR. ALBERT TOFT, Sculptor.
From a Sketch by MR. T. RAFFLES DAVISON.

problem of Waterloo, as the Strand could not be burdened with increased traffic directed westwards from Waterloo. It admits that a bridge at Northumberland-avenue is wanted, but believes that the facts point to the provision of another bridge from the eastern horn of Aldwych," as has already been suggested. With this suggestion we are in agreement, but we believe a Charing Cross bridge must at some time or other be constructed. In support of the suggestion for a bridge from the eastern horn of Aldwych, Professor Pite says:—"Piranesi, among his 'Magnificences' of Rome, pictures a pair of bridges supporting and enclosing a classical façade upon the banks of the Tiber. The Thames is greater than the Tiber. Somerset House above the Embankment is better even than Piranesi's palace, and Waterloo Bridge is as fine in itself as, and finer in combination than, the Roman dream. London, already possessing the realisation of two parts of this vision, is pressed by the fortunate necessity to complete the third. May the London County Council be courageously inspired and not Byzantine in sightlessness; may it construct the twin bridges, and, like Waterloo, dedicate it to victory, earning the gratitude of all to whom the wonder of a noble river, treated architecturally, has a mysteriously glorious appeal!"

IT will thus be seen that Waterloo Bridge. two distinguished architects have repeated the warning we gave the other week as to the detrimental effect on Waterloo Bridge of overhanging footways. To suggest that this would give the sturdy Grecian columns on the cutwaters something to do is, of course, an absurdity. We are not surprised that Professor Pite sees a great possibility in the repetition of a Waterloo Bridge from the eastern arm of Aldwych, for two such bridges with Somerset House stretching across between them, would make one of the finest pictures in Christendom.

WE doubt not there are idealists like Professor Pite among the members of the London County Council, but it is not an age in which great ideals prosper. There is plenty of mawkish sentimentality about, but visions of true fitness and beauty have small chance. It should not be necessary to exaggerate the claim of Waterloo Bridge to our regard. But one might have thought that as such a quality in itself and such a position in the river perspective and its relation to Somerset House that it would set forth a lesson on the ideal possibilities of our great London Waterway which would be an incentive and a guide. The view of Westminster Bridge, with Pugin's wonderful towers and spires rising above it, would have been equalled



Bronze Group in Memorial Garden, Wootton Wawen, Warwickshire.

MESSRS. JOHN OSBORNE & SON, Architects. MR. RICHARD R. GOULDEN, Sculptor.

by the view towards Blackfriars Bridge as a foreground to St. Paul's if that bridge had been of good design. Our fine Victoria Embankment only needs a corresponding embankment on the southern side of the river to place our Thames waterway amongst the finest things in Europe. A heavy responsibility for the future of London rests now with those who have the final say as to how and where our new bridge designs will be carried out. Is there no body of public opinion which can be brought to bear on a subject so important to the future of London? We are being muddled with conflicting views and counsel about bridges and traffic for, amongst other things, we have been told that Professor Pite's advocacy of another Waterloo Bridge at the eastern arm of Aldwych means a final disappearance of a new road bridge at Charing Cross. We are not lacking a multitude of counsellors, and many of them are very clever, but the initiation lies largely with the London County Council. Surely some concerted

and powerful public opinion could be aroused to support the Council in some auspicious direction for the greater grandeur and beauty of London.

WE should be glad to see **Blackheath**, more of such publications of local interest as the excellent little monograph on Blackheath by Gerald L. Baker which is admirably printed in good large type and contains many dainty illustrations in pen and ink by the author. Professor G. de Montmorency in his foreword refers to this area as possibly the longest inhabited area in Britain: it has certainly witnessed the lives of a marvellous array of distinguished people. To architects Morden College and Greenwich Hospital are of themselves enough to give it distinction; but even in these crowded and degenerate days there is still a good deal of natural charm left on the Hundred of Blackheath which is referred to in Domesday Book as the "Hundred of Grenviz."

GENERAL NEWS

New Partnerships.

Mr. G. H. Foggitt, A.R.I.B.A., A.R.C.A., formerly of 84, Albion-street, Leeds, has entered into partnership with Messrs. Chorley & Gribbon, F. and A.R.I.B.A., of 3, Park-place, Leeds, at which address their practice will in future be carried on under the style of Chorley, Gribbon & Foggitt.

Exeter Town Planning.

Exeter is adopting a comprehensive town-planning scheme, covering about 8,000 acres.

Custom House Extensions at Dover.

To cope with the heavy import of silk goods and other dutiable articles, new warehouses are to be built at Dover.

New Dock for Tilbury.

The Port of London Authority have decided to construct a new entrance lock at Tilbury Docks at a site about 1,200 ft. above Tilbury Ness, at a cost of £1,680,000.

Housing Loans Order.

The Minister of Health has issued a new Housing (Loans by County Councils) Order, 1925, dated July 25, 1925, under section 94 of the Housing Act 1925.

Tottenham Housing Scheme.

In a recent report the Housing Committee of the London County Council outline a scheme for the erection of 346 houses and flats and nine shops on the White Hart-lane Estate, Tottenham, at a cost of £239,693.

Hastings Bathing Pool Scheme.

Hastings Town Council has approved the scheme for the provision of a bathing pool at West Marina, at a cost of £25,000. The pool will be 200 ft. long and 66 ft. wide. There will be seating accommodation for 2,000 people.

Trafalgar Square.

The asphalt surrounding the fountain basins in Trafalgar-square is to be taken up and replaced by stone blocks about 5 ft. 6 in. square; this was the original scheme of Sir Charles Barry, from whose design the square was originally laid out.

Mediæval Kitchen at Hampton Court.

Henry VII's great kitchen at Hampton Court has recently been opened to the public for the first time. It is said that this kitchen is the least modernised mediæval kitchen in England. Its most prominent features are three immense stone-arched fireplaces, one of which still retains its original roasting fittings.

Birmingham Building Exhibition.

The Birmingham and Midland Building and Allied Trades Exhibition (including Public Works and Road Making Section) is to be held at Bingley Hall, Birmingham, from September 7 to 19. The Exhibition presents a good opportunity to all interested in the building and allied trades of displaying their productions to architects, builders and others.

Guards' Memorial, St. James's Park.

Construction work on the site for the Guards' Division Memorial in St. James's Park has begun. The design is the outcome of collaboration between Mr. H. Chalton Bradshaw, the architect, and Mr. Gilbert Ledward, the sculptor, and takes the form of a Portland stone pylon, along the front of which (facing the Horse Guards' Parade) are five figures, each representing one of the Guards' regiments.

New Bridges Across the Thames.

Middlesex County Council has recommended that the Joint Committee of the Middlesex Council and the Surrey County Council should proceed with the scheme for the proposed new

bridge over the Thames at Hampton Court. The Ministry of Transport has been applied to for a grant towards building the proposed new bridges over the Thames at Chiswick and Richmond.

Limehouse Housing Scheme.

Stepney Borough Council propose to carry out an extensive housing scheme on an area known as Limehouse Fields. The scheme involves the demolition of over a thousand small houses and the erection of blocks of flats ten stories high. The tenants, however, are vigorously protesting against the scheme, which, they allege, will mean the ruin of the fish-curing industry, now carried on in small outhouses.

Wollaton Hall.

Nottingham Corporation has now entered into possession of Wollaton Hall, the historic Elizabethan home of Lord Middleton, with the surrounding park of 800 acres. The purchase price was £200,000, but the Estates Committee of the Corporation estimates that it will recover a considerable proportion of this sum by selling parts of the park fronting the main road from Nottingham to Derby as sites for houses of a good class.

Archæological Find.

An archæological discovery of considerable importance has been made at Freshwater West, near Pembroke, where a cinerary urn has been found deposited in a small chamber within a tumulus. The receptacle was completely covered over by a large flagstone, inscribed on which a rudely-patterned cross of unusual design could be distinctly discerned. The urn when examined contained bones which Sir Arthur Keith, the surgeon, dates at about 1200 B.C.

INCORPORATED CHURCH BUILDING SOCIETY

At the last monthly meeting of the Incorporated Church Building Society, held at 7, Queen Anne's Gate, Westminster, the Hon. Sir E. P. Thesiger, K.C.B., in the chair, grants were made towards building new churches at: Claremont, The Holy Angels, £200; Silvertown, West, S. Barnabas, £400; and Welling, S. John, £300. Towards enlarging or repairing the churches at: Almondsbury, S. Mary, £50; Birkenhead, Holy Trinity, £25; Bourne, The, S. Thomas, £200; Bratton, S. James-the-Great, £30; Bromsgrove, S. John-the-Baptist, £50; Charlton, Old, S. Luke, £35; Churchstanton, SS. Peter and Paul, £25; Colnbrook, S. Thomas, £50; Gaywood, S. Faith, £270; Hackney, West, Parish Church, £50; Hartlepool, S. Hilda, £350; Henlow, S. Mary-the-Virgin, £50; Kidlington, S. Mary-the-Virgin, £40; Kilburn, S. Paul, £40; Llanddwywe, S. Dwywe, £20; Loxton, S. Andrew, £40; Manaton, S. Winifred, £125; Puriton, S. Michael and All Angels, £20; Rowledge, S. James, £15; Sutecombe, S. Andrew, £20; Tattershall, Holy Trinity, £50; Taunton, S. Mary Magdalene, £150; Thaxted, S. John-the-Baptist, £100; and Worstead, S. Mary, £25. A grant was also made from the Mission Buildings Fund towards the erection of a mission church at Hallsall, S. Aidan, £60.

The following grants were also paid for works completed at: Alverdiscott, All Saints, £25; Bloxham, S. Mary, £50; Cheddington, S. Giles, £40; Ellesmere Port, Christ Church, £75; Epsom, S. Barnabas, £50; Gaywood, S. Faith, £100; Hanslope, S. James, £125; Lambeth, S. Philip, £10; Luton, S. Nicholas, £40; Melverley, S. Peter, £75; Minster, S. Peter, £30; Newport, S. Andrew, £50; New Shildon, All Saints, £25; Ruishton, S. George, £50; Shotton, S. Ethelwold, £75; and Skelmersdale, S. Paul, £105.

In addition to the above, £495 was paid from Trust Funds towards repairs to twenty-five other churches. With this meeting, the Society has granted £6,825 during the current year. Funds are now urgently needed to continue and extend its work.

COMPETITION NEWS

Public Baths and Washhouses, Chaddert.

The D.C. are inviting the submission of competitive designs for new public baths washhouses to be erected at White. Architects are to be instructed to provide the possibility of only a portion of the scheme being proceeded with at present. The estimated cost of the full scheme is £60,000.

Shirehouse Extension, Norwich.

The assessor in this competition, Mr. G. Pinkerton, F.R.I.B.A., has made the following awards:—1st (premium £150), Mr. A. Dun Smith, F.R.I.B.A., London; 2nd (premium £100), Messrs. Langman & Richardson, Southampton; 3rd (premium £50), Messrs. Kieff Fleming, London. Designs are now on in the Blackfriars Hall, Norwich.

Proposed Parish Hall, Braunton.

We are informed by the Secretary of R.I.B.A., that members must not take part in this competition because the conditions are not in accordance with the public Regulations of the Institute for architectural competitions.

Model Workers' Homes, Moscow.

We have received particulars of an international competition (First Contest) for designs for model workers' homes, Moscow, which has been promoted by the Moscow Soviet of Workers' Peasants, and Red Army Deputies. Various types of houses are required, and the following prizes are offered:—

	Roubles.	
	A.	B.
1. ..	2,000 ..	2,000 ..
2. ..	1,500 ..	1,500 ..
3. ..	750 ..	750 ..
4. ..	500 ..	500 ..
5. ..	400 ..	400 ..

A document supplied to us by the U.S. Society of Cultural Relations with Foreign Countries, 150, Southampton-row, London W.C.1, and giving full particulars of the competition, may be seen at our office. The date for entries is October 15, 1925.

Memorial Pulpit, Boscombe.

The design submitted by Sir Giles Gil Scott, R.A., for a marble memorial pulpit to the late Father de Lapasture, S.J., in the church of Corpus Christi, has been awarded first place in this competition.

	Particulars Published in "The Builder."	See in
Copenhagen Bridge. Three premiums, highest 15,000 kroner. Apply C. Eng's Office, Town Hall, Copenhagen. Dep. 100 kroner	April 24 ..	See
Wolverhampton Hospital. Premiums: £200, £150, £110. Mr. T. R. Milburn, F.R.I.B.A., Assessor	May 22 ..	See
Drammen Bridge (Drammen-selven). Premiums: 10,000 Norwegian crns., 8,000, 6,000. Apply Gov. Eng., Drammen ..	May 29 ..	0
Newcastle Fire and Police Station. Premiums: £500, £300, £100. Mr. P. S. Worthington, F.R.I.B.A., Assessor ..	June 12 ..	0
Town Hall, &c., Pretoria. Open to architects residing in South Africa or Registered under Architects' Act, of 1909, Transvaal. Assessor to be appointed by R.I.B.A. Premiums: £250, £150, £100 ..	.....	N
Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply parties., 35, Old Queen-street, S.W.1	April 24 ..	D
New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool	Aug 7 ..	J
Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London	Aug. 14 ..	M
*Enlargement of Carnegie Hall, Dingwall .....	.....	.....

* Competitions when "warned" or vetoed by R.I.B.A. are starred



Reredos, Gillingham Church, Dorset.

MR. H. P. BURKE DOWNING, F.S.A., F.R.I.B.A., Architect.

MANCHESTER ART GALLERY: THE LIGHTING OF THE WINNING DESIGN

By S. HURST SEAGER, F.R.I.B.A.

In *The Builder* of June 26 was a criticism of the winning design for the Manchester Art Gallery, published in the two previous numbers. It referred to the lighting of the upper galleries as a modified form of the Hurst-Seager Method, and the author of the winning design himself has referred to it as a modified form of the top-side-light. It is perhaps gratifying to find that it is at last recognised that the old central ceiling must be abandoned, but it is disappointing that the fundamental principle of the top-side-light has not been realised—that the method is, in fact, "modified" to such an extent that it would fail to effect the purpose intended. The conditions state:—

"Very careful consideration must be given to the lighting of the galleries, and in top-lighted rooms the light should be so devised that it is thrown mainly on the walls, and not on the floor, and so as to avoid reflections in the glass of the pictures."

The author of the winning design tells us that this most important condition has been fulfilled, but while he must be given credit for the attempt, it should be pointed out that what he suggests in the sections would fail to give the effect desired. The conditions do not state the amount of light that should fall on the walls on a dull day, but it was with reason assumed that enough would be provided to see the pictures properly; nor do they ask for lighting diagrams; had they done so the deficiency of the lighting would have been apparent.

Fortunately, the very method proposed in the design placed first has actually been carried out, thereby providing an immediate test. The architects claimed that they had adopted the top-side-light, and it was necessary for me to point out that the top-side-light had not been installed; a section of the gallery was published, and in conjunction with it a diagram of a top-side-lighted gallery. It was thought that all who had occasion to study the subject would see at once why it could not possibly lay claim to being top-side-lighted and why it could not possibly be successful.

In the sections for Manchester it can be seen that there is practically no direct lighting from the sky on to the picture plane. The main direct lighting from the sky loses itself on the flat central ceiling, and is there scattered. This scattered light enters the gallery at a very acute angle, through a horizontal or lay-light close to the wall, with the result that both the spectator and the picture would be in a very subdued light of nearly equal value. The wall, except the top of it and the cornice, is not better lighted than the spectators, and reflections in the glass of the pictures would be dominant. In the executed example, the room was found to be so gloomy, even though there were no lay-lights to reduce the intensity, that the solid ceiling was removed, and the flood of light thus sent down on to the spectators, while dissipating the gloom, did not increase the relative amount of light on the picture wall, and the reflections can to-day be seen dominant in all glazed pictures.

That the solution cannot come in the attempt to give better light to the picture by placing ceiling lights close to the walls was pointed out (quoted in my R.I.B.A. article of January 13, 1923) as long ago as 1853 by the Messrs. Papworth in their book on "Picture Galleries." On page 70 they state:—

"Pictures have, as is well known, a tendency (especially if dark, highly varnished, or covered with glass) to reflect the light objects near them. This mirror-like tendency will be found to be greater, wherever the windows may be placed, in proportion as the light on the picture is weak. It may be further remarked that the inconvenience in question is not to be counteracted by placing the skylights next the

walls (an arrangement objectionable on other accounts), for under such circumstances the light on any object near the picture is necessarily fuller and brighter, whereas when the lights are nearer the centre of the room, such objects present their shadowed sides to the paintings, which have thus less to reflect."

In the studio of Sir John Soane's Museum there is an excellent example of the truth of this statement, for there, in a small, low room having skylights at the sides and a very wide solid central ceiling, the shade cast is above the heads of the spectators, and therefore would not prevent reflections in any glazed pictures placed on the walls, even though the ceiling is only a few feet above them. The same thing is to be seen in all the galleries where it was thought that the desired effect could be obtained by merely dividing the *top light* and pushing each half of it against the side walls. The fundamental principles of the top-side-light, by which alone a successful result can be achieved, are:—

1. That the light falling upon the picture shall be from one source only.
2. That the source of light shall be invisible to the spectator when standing in the proper position for viewing the picture.
3. That the picture wall must be the best lighted part of the room.
4. That the spectator must be in a subdued light, having a ratio (as shown by my tests at Wembley, the Wallace Collection, and the Fitzwilliam Museum, published in *The Builder* and R.I.B.A. Journal) of 1 to 5 F.C., dependent, of course, on the relative reflective factors of the picture and the objects.
5. The walls of the gallery must be far enough apart to permit tilting of the pictures, in order to avoid reflections of those on the opposite wall, as shown by my diagram in *The Builder* and R.I.B.A. Journal.

I am aware that the Manchester conditions, by limiting the width of the rooms, ask 1 for the impossible. By the preparation of lighting diagrams, which in all cases should have been drawn, it could have at once been shown that the two clauses—the width of the room and the maximum of light on the walls—contradicted each other. It will be seen that the upper galleries at Manchester do not conform in any particular to the requirements for their efficient lighting. It is not merely a question of altering the form of the skylights. Radical changes would have to be made.

With regard to the lighting of the museum galleries in the winning design (Manchester competition), the lofty side-lighted rooms on the exterior have their windows far too low. The sills are only about 4 ft. from the floor, and the heads are no less than about 8 ft. from the ceiling. The most valuable light in all side-lighted rooms is that which falls from the upper part of the room, and all the light which enters it below the level of the eye, and some distance above it, is worse than useless. It brilliantly illumines the spectator and causes a bright and confusing dazzle. Very bright lights and dense shadows are cast near the windows, and only a feeble light is obtained on the other side of the room. There is no diffusion, for the ceiling, which might act as a good diffusing reflector, is in complete shade.

That the lighting of museums from one side only, even if the windows are close to the ceilings, is not successful, can be easily determined by numerous examples everywhere. The best lighted museum gallery of which I know in London is the Science Museum at South Kensington, where there is a large skylight, single glazed and high side lights on both sides. The cases have their glazed tops above the level of the eye and take the reflections of the skylight without any inconvenience. The



FIG. 1.—DECORATIVE ARTS GALLERY, NEW YORK METROPOLITAN MUSEUM, "SHOWING WELL-LIGHTED ROOM WITH HIGH LUNETTE LIGHTS AND WHITE CEILING."

Science Museum at Berne is also lighted in this way, and has high glazed cases, and the effect is admirable. The Museum at St Germain, near Paris, is also excellently lighted by high windows on both sides, and where horizontal cases with the tops below the level of the eye are used, this form should be adopted, as the exhibits can be perfectly seen without any reflection in the glass of the cases.

Again, the side-lighted rooms opening on to the east and west, or long sides of the light area, would be found to be deficient. The court is only 40 ft. wide, and the angle formed by a line drawn from the heads of the windows of the Museum rooms on the "first floor" to the top of the parapet is 35 degrees. I have tested in San Francisco the light area of the City Hall, and give a section of the test I have made (Fig. 2). It will be noted that the angle subtended from the heads is within a degree or two of the angle seen in the section of the Manchester drawings, and it affords absolute proof that the lighting of these rooms would be inadequate.

Side-lighted rooms with the low windows are the very worst for glazed pictures and for general museum exhibits, as I endeavoured to show in my paper, "Recent Developments in Gallery Lighting," in the R.I.B.A. Journal, December 20, 1924.

In every case where side-lighting is desirable, top-side-lights should be used, and they might most easily be arranged at Manchester by embracing for the picture galleries the whole of the width of the available space from wall to wall, and forming with bays the rooms required. In this way the light is over the head of the spectator on entrance. All the objects in the room would be well seen, for they are illumined on the side next to the spectator, and, not as at Wembley, on the side distant from his point of view—with the window causing a glare in his eyes and making the contrast the lighting of the objects appear dull.

The Builder has already pointed out the inadequacy of the lighting in various parts of the building, and rightly questions the efficiency of the lighting of the Sculpture Gallery. The late Mr. Statham stated in one of the discussions at the R.I.B.A. that the nearer you approached the conditions of top-side-light, the better the sculpture would be lighted, and this truth is demonstrated at the Central Sculpture Hall at the Grand Palais, Paris. There, it will be remembered, the whole of the vast roof is of glass, shielded by a white muslin valarium, giving a soft, well-diffused light, in which all the subtle modelling of the sculpture is admirably seen. But high side lights close to a white ceiling also give

cellent results, as can be seen at the decorative Arts wing of the Metropolitan Museum in New York, illustrated in Mr. Brewer's paper in the R.I.B.A. Journal of April 12, 1913, and by the illustration (Fig. 1) accompanying. This hall is 67 ft. high to the crown of the vault, and 43 ft. to the ringing at the sills of the lunette windows, placed fairly close together and extending the whole length on each side. I can confirm what Mr. Brewer has stated, that "no doubt the east height and area of white wall below are largely responsible for the beautiful, soft, diffused light, which floods every part of it." The axis is north-east-south-west. My visits were made on a bright morning, when the sun was shining on the north-east side. Narrow galleries run across each end, and the end walls of the room are in the planes of their balustrades. On the balustrade, some 15 ft. below the windows of the South-west Gallery and at the south-east end, the lighting was over 100 F.C., and at the north-west end 100 F.C. At this height the light on the bright north-west wall was 80 F.C. and 20 F.C. on the south-east wall, while at 5 ft. from the floor level the north-west wall was 30 F.C. and the south-east 15 F.C. The light on the floor itself varied from 50 F.C. on the north-west side to 15 on the south-east. These readings would, of course, be reversed in the afternoon. The lighting was not a degree too bright for sculpture, furniture, and other works of art exhibited. Here is an example with

which the proposed Sculpture Hall at Manchester can be compared. It confirms *The Builder's* impression, for it says: "It is just a question if the lighting of this important feature is quite adequate; certainly it is not superabundant."

At New York the vaulted ceiling is of plain plaster, and the five lunettes, which are about 2 ft. less than half the height of the wall from the floor to their sills, go up to within a few feet of the crown of the vault, giving, therefore, a perfectly lighted reflecting surface. At Manchester there are only three lunettes, having a height equal only to about 2 ft. more than one-third the height of the wall, and their crowns about 7 ft. below the crown of the vault. The light, therefore, on the vault would not be as bright as at New York, and because it is coffered, much of the ceiling would at all times be in shadow, and its value as a reflecting and diffusing surface would thereby be reduced.

The windows shown in the recesses are worse than useless. You have only to try to examine the sculpture placed under the windows in St. Paul's Cathedral to realise the impossibility of seeing sculpture when the side towards the spectator is in dark shadow and the light of the window is in his eyes. The lighting, although considerably diminished, would be infinitely better if these windows were omitted. Moreover, at each end at Manchester there are wide galleries covering the floor of the hall, but there are no windows

within about 22 ft. of the ends, and consequently the space under the galleries would be gloomy indeed, and the galleries themselves would be not well lighted.

The Builder rightly states that "any deficiency, however, could be more than met by top-lighting, although this might destroy to some extent, unless most carefully handled, the monumental character of the coffered vault." Judging from examples elsewhere, I am of opinion that if the coffers are made deep enough so that the glass shall not be visible, unless deliberately looked up at, that this treatment would be most successful. Skylights deeply coffered are in one of the sculpture galleries at the Vatican, so that while the glass cannot be seen, a flood of light falls and the vertical sides of the coffers act as good diffusers with excellent results.

Turning to the print room, many print rooms and galleries have been built with such lighting as there shown, and all are failures. There is in *The Builder* (July 4, 1924) the section of a gallery adopted by M. Bigot for the St. Quentin Museum, which should be used in all cases where close examination of prints, small miniatures, or small pictures is desired.

It is a sorry task to have to point out these defects of lighting in an otherwise excellent design. In the criticism in *The Builder* (page 968) it is stated that "It can be said at once that the disqualification of this brilliant design would have constituted a tragedy." Everyone must share in the regret that the conditions were prepared in such a way that a good solution to the problem could not be offered without breaking them.

BOOK REVIEW

How to Look at Old Churches. By H. SPENCER STOWELL. (London: Methuen & Co., Ltd.) Price 5s.

This little book has been written for those who have no technical knowledge of architecture, but who desire to take an intelligent interest in old churches. For this reason the book does not make any pretence to be more than elementary, and the style of writing is both simple and consistently free from abstruse technicalities. With one or two rare exceptions no attempt has been made to suggest ideas or to stimulate the imagination; it is a plain statement of evidence and details. The author confines his study of church architecture to an examination of the Gothic style, and leads up to the subject through the Saxon and Norman periods. In one of his rare excursions into the realms of architectural philosophy the author observes that the window tracery of the Decorated period was twisted into patterns for their own sake, and that, as the original constructional meaning was lost, it was a sign of deterioration. We question this. We grant the constructional problem of the arch of the window, but we are inclined to accept the tracery as a deliberate attempt (and a legitimate excuse) to produce sheer beauty by means of intricate lacework. It is more to the point, we think, to note the development from the actual shape of the lights to the stonework which separated the lights. We do not remember having seen the term "Crockett" applied to a form of ornament in the position indicated in one of the sketches. There is no doubt that this little book will answer the purpose which the author had in mind. The historical and architectural developments are clearly and simply traced, and are supplemented by many excellent sketches.

Books Received.

COMPRESSED AIR AND ITS MACHINERY By T. H. Plummer. (London: The Association of Engineering and Shipbuilding Draughtsmen.) Price 10s.

COMMERCIAL CREDIT RISKS. By A. H. Swain. (London: Sir Isaac Pitman & Sons, Ltd.) Price 5s. net.

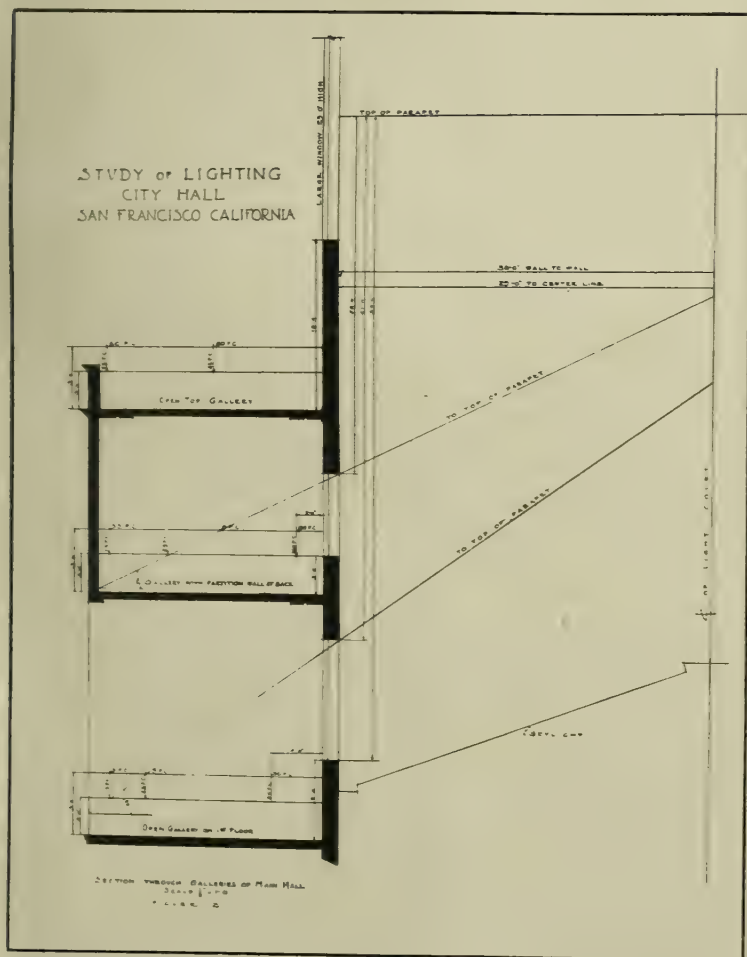


FIG. 2.—SECTION THROUGH LIGHT WELL OF SAN FRANCISCO CITY HALL.

This section shows the same angle from the top of the obstruction to the head of the lower windows as at Manchester. The readings were taken on a bright sunless morning at the windows looking north. Although the light 4 ft. from the window is 50 F.C., it diminishes rapidly that at 18 ft. away it is only 1.5 F.C. Two lots of readings were taken—one with the meter held vertically at 5 ft. from the floor, opposite the window, and one with the meter held horizontally at the height of 3 ft. from the floor. The central readings in each were taken just within the line of obstruction; that is, when the sky disappeared.]

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

New York Cathedral and Some Modern Theories.

SIR,—It seems to me that your correspondents miss the centre of the target at which they aim. Mr. Randolph would hold up Dr. Cram's New York cathedral design as satisfactory, and the writer of the original article seeks to support his view that it is far otherwise by explaining that we can never emulate the mediæval builder because we cannot address ourselves to building in the same spirit and with the old guild organisation, and by asserting that as we cannot emulate it, we ought to eschew the Gothic style altogether. This seems a wearisome field of exploration to those whose aspiration it is to build beautifully, for anyone would be likely to there discover equally good reasons for wiping out also the whole grammar of classic and Renaissance architecture, and with a little thought and verbal ingenuity, the activities of the sculptor and the painter as well. I write in the belief that most of your readers will agree with neither disputant. Among a representative group of our younger architects, whose conception of the motives of human activity have been tainted with the spiritual effluvia of the times in which they live, Dr. Cram's design for New York Cathedral is probably received with a smile and a shrug. The same group reconciles itself to conceding merits to Liverpool Cathedral by attributing those merits to the influence of Imperial Rome; it will not swallow a masterpiece of Christian architecture unless it sweetens the draught by telling itself—on the principles of M. Coué—that it is of pagan origin. The disapproval of his design by those who think after this fashion might well be accepted as a back-handed compliment by Dr. Cram. We need not concern ourselves with prejudices of this kind. The only criticism which is admissible is that which is in sympathy with Dr. Cram's aims and not that which is estranged from them.

American architecture is held in high esteem in England. Those who feel as I do, think that it is among the best things that belong to America. We all recognise the scholarship and high attainment of American architects; and we admire and envy the breadth of conception, the freedom, the eclecticism, the adequate realisation of magnificent opportunity displayed in American architecture; but we find none of these admirable qualities in Dr. Cram's design. It is not free, but fettered with tradition; breadth of conception exists only in the circumstance of bulk; eclecticism is absent, for the individuality of the architect finds no expression in the design; and opportunity, which has rarely been surpassed in the history of the world, is in no way adequately realised, for the design is in all respects, except that of its central tower, a reproduction of ideas which have long been common property, which are staled by long acquaintance, and which express no sense of an individual whole because every part is reminiscent of some other thing already familiar. I do not lose sight of the fact that America has no traditional mediæval architecture, or that the idea of setting up a scholarly representation of the finest achievements of Gothic builders may have reference to that fact; but the building will not represent the achievement of Gothic builders, and it will be a failure.

If anyone doubts this let him come to England and see the results of parallel attempts here; let him view the masterpieces of the late Sir Gilbert Scott, whose buildings I cite as being the best examples we have of the principles governing Dr. Cram's design. That design depicts America as about to give herself up to practices which have been proved retrogressive here; she is setting out to do what we left off doing fifty years ago when the eclecticism of Street and Pearson first showed what Bodley, Butterfield and Bentley afterwards established,

namely, that Gothic architecture subsists, not in the manipulation of its recognised forms, but in the spirit of its intent of building. No Gothic builder ever reproduced what had already been done, but adventured, always, from the point last gained. New York Cathedral consists entirely—as regards its conception and apparent purpose—in nothing but a re-arrangement of recognised forms, and a reproduction of what already widely exists, so that the very principles governing its inception are in direct opposition to the principles of the builders whose achievements it seeks to emulate. A man might as well seek a revelation of the genius of Shakespeare by staring at his wax effigy at Madame Tussaud's Exhibition, as hope to comprehend Gothic architecture by studying the churches of our elder Scott and his contemporaries; and the spirit of mediæval builders will dwell in the aisles of New York Cathedral only as the soul of a dog lives in the glass case that contains its stuffed hide. I do not say that America could not perform the miracle to which Dr. Cram aspires if that miracle were possible of attainment, but it is not. The proposal is saddled with a double impossibility. A cathedral cannot be built in the Gothic tradition because craftsmen versed in that tradition are not available; but even if such craftsmen existed and New York Cathedral were authentically built in the pattern designed for it, the building would still be a failure because it would be a sham; it would merely be a skilful copy instead of an incompetent one. An aspiration to copy never produced a reputable work of art in the history of the world, as is abundantly proved by the deplorable results of all attempt of the kind, and by the fact that no artist or craftsman ever reproduces his own or another's work, which he certainly would do if that were the road to attainment and not the road to failure. We cannot build as men built in mediæval times because we do not think and feel as those men thought and felt, and because we are, in certain essentials, far inferior to them. One of the most vigorous and decisive ways of demonstrating this ignoble fact to all beholders is to invite comparison by reproducing badly, with difficulty, and self-consciously, what they did easily, spontaneously and supremely well. This is all that the great gifts of Dr. Cram, supported by the best intentions of everyone, can hope to accomplish. So far as I am aware the idea of expressing reverence for great works of art by making indifferent copies of them is of modern origin. I recall no usage of the sort earlier than the middle of the eighteenth century, and I am inclined to think it a heritage of that industrial revolution which bemused the world with the slick facility of reproductive machinery. No craftsman ever reproduced himself or others; and the whole history of architecture up to two hundred years ago, is one of adventure in building. That spirit of adventure—the instinct to art—is the aspiration that directs the impulse to all right architecture to-day, and is the motive which alone has ever produced, or ever will produce, memorable building.

H. B. CRESWELL.

EXHIBITIONS AND THE ARTS OF DISPLAY *

The Director of the United Kingdom Exhibits in the British Empire Exhibition has brought together his experiences and results of the Wembley Exhibition. Problems and difficulties are discussed from the managerial and the competitors' point of view, and the results are shrewdly commented upon by the author. The book is packed full of information upon the various commercial factors which have been studied and reconciled, and on this score alone it is safe to prophesy that exhibitions of the future will gain considerably if this book is studied and taken as a guide.

The exhibitors' points of view are interesting up to a point only, and it is when we come to the

* By Sir Lawrence Weaver. (*Country Life*.) 30s. net.

root of the problem that we realise what an enormous amount of hard work and tactful pressure must have been necessary to convince the sceptics that they had much to learn about art and display. In its wider sense this book opens up a new philosophy—the relation of art to commerce and advertisement. The type of architecture especially suitable for exhibition pavilions should occupy an important position in any philosophy concerning art and advertisement, and it is therefore a disappointment to read that the author has resisted the temptation to discuss the various buildings. It would be difficult to think of anyone who could do it better. "An exhibition," he remarks, "should be conducted in a spirit of reasonable gaiety, and while we agree with this, we are left in considerable doubt about some of the building which struck a dominant note of austerity and dignity. The idea is enlarged on in the chapter upon pavilions and kiosks. "If exhibition cannot give opportunity for an architecture of adventure and humour, they lose some of their virtues." Again we agree, and again we find it difficult to reconcile the ponderous gravity of some of the buildings. We feel that the mixture of dignity and gaiety at Wembley was confusing, but symptomatic of different conceptions of the abstract idea to be conveyed in exhibition architecture.

The relationship between art and commerce has drawn perceptibly nearer during the last few years, and the author's opinions on the subject are bound to carry considerable weight. We cannot hazard a guess whether his philosophy has altered; we accept the value of any theories which are the fruit of practical experience and understanding brought into contact with certain definite æsthetic ideals. Exponents of the compromise and no-compromise schools will realise some of the difficulties as they read this book and assimilate both sides of the problem. "I used to be supposed that there are two kinds of arts, 'fine' and 'applied.' Fine arts are things standing by themselves without relation to life or any human concern, nor are other sorts of arts 'applied' to common things, as jam applied to dry bread to make it more attractive. . . . There is no kind of art which is too good to be used in the service of industry and commerce, whether in giving beauty to common things or in making a pattern which publicists may use to commend those things. . . . There is no greater hope for the correction of some evil aspects of the industrial revolution than the whole-hearted devotion of Art to the service alike of manufacture and salesmanship, and then in the interest both of artist and business man."

This is well said. We have no quarrel with the general principles underlying the relationship of art to commerce, but we realise that it is purely a matter of how far we are prepared to follow the advertising movement—a movement which has come to be accepted as a corollary of commercialism. One aspect of the commercial art problem moves by easy stages into the advertisement section, until we begin to question the ethics of the means in relation to the ultimate ends. The advertising side of commercialism must be faced, and it is frankly faced in this book. When we read this—believe the main commercial aim of a great exhibition should be publicity rather than sales—we are in possession of a definite philosophy, and we realise the value of it which we think what Wembley might have been. The moral apparently is this: If we are going to have trade displays, let us make them as decent as we can. In many ways we can see that the Wembley Exhibition must have achieved a great deal (the popularising of seemingly lettering is of them), and this book will enable us to continue the education at our leisure. The book is well illustrated by numerous photographs in colour plates.

Roman Remains at Kingston.

The Earl of Crawford and Balcarres, K. President of the Society of Antiquaries, recently opened the newly-discovered Roman remains at the Kingston Baths site.

LEADING CONTENTS. PAGE

VOLUNTARY HOSPITAL ACCOMMODATION....	273
NOTES	274
GENERAL NEWS	276
COMPETITION NEWS	276
MANCHESTER ART GALLERY	278
BOOK REVIEW	279
CORRESPONDENCE	280
BRITISH ARCHEOLOGICAL ASSOCIATION—II	288
ARCHITECTURAL ASSOCIATION IN WILT-	
SHIRE	290
ARCHITECTURAL SCHOOLS.....	291
ARCHITECTS' AND BUILDERS' INQUIRY	
BUREAU	292
SMALL DWELLINGS ACQUISITION ACT, 1899	294
THE BUILDING STREETS ACT BUILDING LINE	295
NEW BUILDINGS IN LONDON	296
CONTRACTS, COMPETITIONS, ETC.....	297
PROPOSED NEW BUILDINGS	301
NEW BUILDINGS IN SCOTLAND.....	303
TENDERS	305

ILLUSTRATIONS

New Fire Brigade Station, Peckham, S.E.

The new Fire Station which we illustrate this week has just been completed in the Peckham-road from designs prepared in the Architect's Department of the L.C.C. under the personal supervision of Mr. G. Topham Forrest, F.R.S.E., F.R.I.B.A., F.G.S., Chief Architect to the Council, to replace the obsolete station in the same neighbourhood. The site is situated at the corner of Peckham-road and Talfourd-road.

The building, being the first new station since the shift system came into operation, has been planned on new lines to meet the changed conditions. The only residential quarters provided are those for the station officer.

The main block consists of a basement, ground, first and second floors. On the ground floor is the appliance room (28 ft. wide by 36 ft. deep—in which a motor pump and motor escape are housed) with the watch room and office opening from it. Access to these apartments and to the staircase is obtained by a side entrance from Talfourd-road. The run-out is on the Peckham-road front. The first floor accommodates the shift men, whose quarters comprise a mess room, recreation room, locker room, lavatory, bathroom, store, and a room for the sub-officers.

The station officer's quarters on the second

floor include a living room, sitting room and two bedrooms, with scullery, bathroom, w.c., and store cupboard. Sliding poles give quick access to the appliance room from the two upper floors. In the basement are the wash-house, drying room, battery room, boiler house, and fuel stores. A large drill yard is provided in the rear, having a separate run-out into Talfourd-road, and is equipped with a drill tower, pumping well and hydrant. The drill tower contains a space for drying hose. Around the yard are placed the canteen, a workshop, and stores for petrol, oil, wood, cycles, &c. There is a motor pit in the appliance room for the inspection of appliances. The building is heated by a low-pressure hot-water heating installation, a new feature being the placing of radiators in the appliance room floors beneath the appliances. The facings are of multi-coloured red bricks with stone and Crowborough brick dressings; portions of the upper story being plastered. The roof to the main building is of sand-faced red tiles. The contractors were Messrs. Wm. Downs, Ltd., and the contract amount £9,152.

District Baths, Hillsborough, Sheffield.

This building is one of several new public baths projected by the Corporation for various districts in the city. The work is included as part of a scheme for the relief of unemployment, and to comply with Government requirements a system of reinforced concrete construction has been adopted throughout, the central portion only of the main front being faced with local stone. With the exception of the brick chimneys the remainder of the work including pile foundations, walls, subways, pond, floors, stairs, gallery and roofs are reinforced concrete framework consisting of stanchions and beams with infilling of pre-cast blocks or reinforced panels.

The work was designed by and is being executed under the superintendence of the City Architect, Mr. F. E. P. Edwards, F.R.I.B.A., the consulting engineers for reinforced concrete structural details being the Considère Constructions, Ltd., Victoria-street, London, S.W.1. The general contractors for the structure are Messrs. G. Longden & Sons, Ltd., Sheffield; the engineering work being by the Brightside Foundry & Engineering Co., Ltd., Sheffield, and the filtration plant by Messrs. Bell Bros., Ltd., Manchester. The estimated cost of the complete work is about £32,500. The clerk of the works is Mr. F. W. McInnes.

Middlesbrough Technical College Competition : Winning Design.

We illustrate this week the design placed first in the recent competition for Constantine Technical College, Middlesbrough, the success-

ful architect being Mr. Graham R. Dawbarn, A.R.I.B.A. The assessor, Mr. Percy Thomas, F.R.I.B.A., in his report to the Governing Council of the College says: "Design No. 1 is an admirable solution of the problem. The planning is simple and direct, and by compactness of arrangement the author has been able to produce a design which has probably the smallest cubical contents of any in the competition, and which I have no doubt can be erected within the figure stipulated by your Council."

The winning competitor in his report says: "It is considered that elaborate stylistic façades are out of place in Middlesbrough." The external treatment is intended to express the function and construction of the building. The need for economy has been considered throughout. It is noted that some of the public buildings at Middlesbrough, such as the Custom House and Town Hall, have weathered a very depressing colour and already show slight signs of decay. It is therefore suggested that the Technical College be faced with Portland stone. Grey Norwegian granite is suggested for the plinth. It is assumed that this could be shipped direct to Middlesbrough. As a contrast, the main entrance would be formed of white synthetic marble. Metal casements and slate roof would be used throughout.

"The floors would be supported by naked R.S.J.'s, generally at 8 ft. centres. On these R.S.J.'s. would be placed reinforced concrete slabs. In classrooms, laboratories, &c., the finished floor would be of wood, laid on battens leaving a space above the concrete along which laboratory pipes would be led. In the halls, corridors, &c., and in the library and Principal's office the R.S.J.'s. would be cased in concrete or 'tee beams' of reinforced concrete would be used. The floors of the entrance hall and staircase halls on the ground floor would be covered with vitreous tiles, the remaining corridors, &c., and all workshops being finished with dustless granolithic. Some form of terrazzo would be employed for floors and walls in lavatories. In all cases the skirtings would be flush with the walls above and the floors coved up to meet the skirtings (wooden coves being used with wooden floors). Angles of walls would also be slightly rounded. The walls between rooms would be 4-in. slab partitions, thus enabling alterations in size and distribution of rooms to be made later on, without structurally affecting the building. The remaining walls would all be of local bricks. An internal colour scheme would be carefully considered. A clean fresh appearance would be aimed at, with occasional touches of bright colour to avoid the general depressing feeling inside such buildings.

"Provision is made for considerable future extensions. They are indicated on the plan."

Reredos, Gillingham Church, Dorset.

This is a new reredos for the high altar in the Parish Church of St. Mary the Virgin, Gillingham, Dorset. The illustration is from a water-colour drawing by the architect, Mr. H. P. Burke Downing, F.S.A., F.R.I.B.A., of Westminster.

Headquarters Offices, Nairobi.

This design was placed first in a recent competition for new Headquarters Offices for the Uganda Railway at Nairobi. The architect is Mr. F. Gordon McIntosh, of Pretoria.

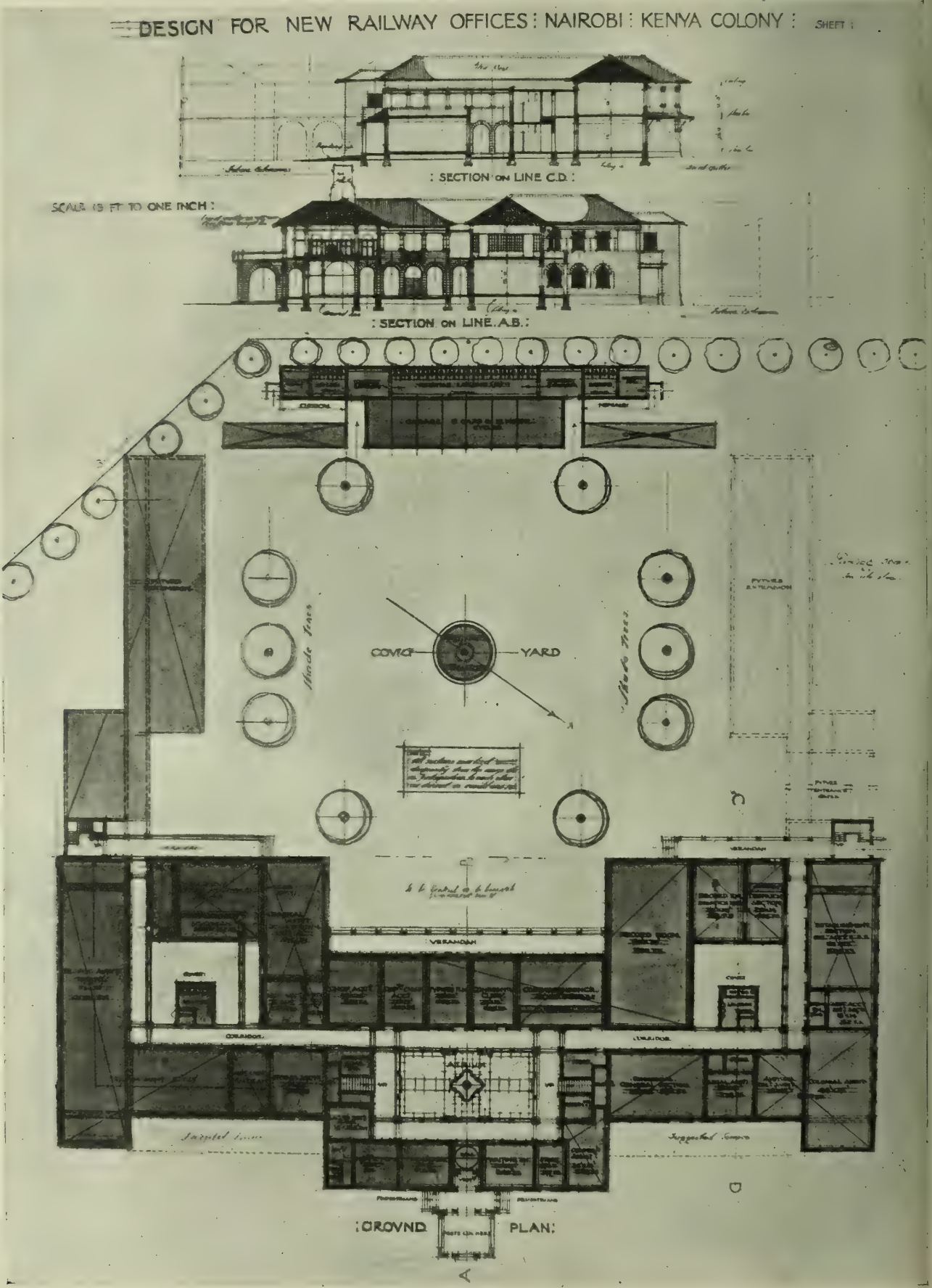
Royal Archæological Institute at Newcastle.

The following corrections should be made in the account of this meeting in last week's issue:—P. 254, col. 3, line 13, for "Lyne" read "Tyne"; line 28, for "even" read "head"; p. 255, col. 2, line 10 from bottom, for "Geta" read "Caracalla"; line 9 from bottom, for "Caracalla" read "Geta"; col. 3, for "like fountains" read "as at Fountains Abbey"; line 21 from bottom read "a striking object; in the castle there is a fine collection," &c.; p. 256, col. 2, line 6, insert comma after "St. Hilda"; line 22, for "born" read "borne."



New Fire Brigade Station, Peckham.

MR. G. TOPHAM FORREST, F.R.I.B.A., Architect to the London County Council.



Competition for New Headquarters of the Uganda Railway, Nairobi, Kenya Colony: First Premiated Design.

MR. F. GORDON MCINTOSH, Architect.

DESIGN FOR NEW RAILWAY OFFICES : NAIROBI : KENYA COLONY : SHEET 2.

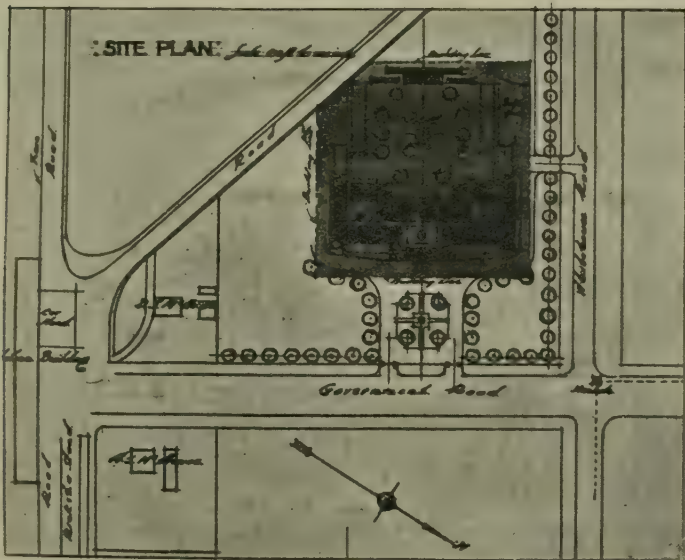


SCALE 1/8" = 1' TO ONE INCH :

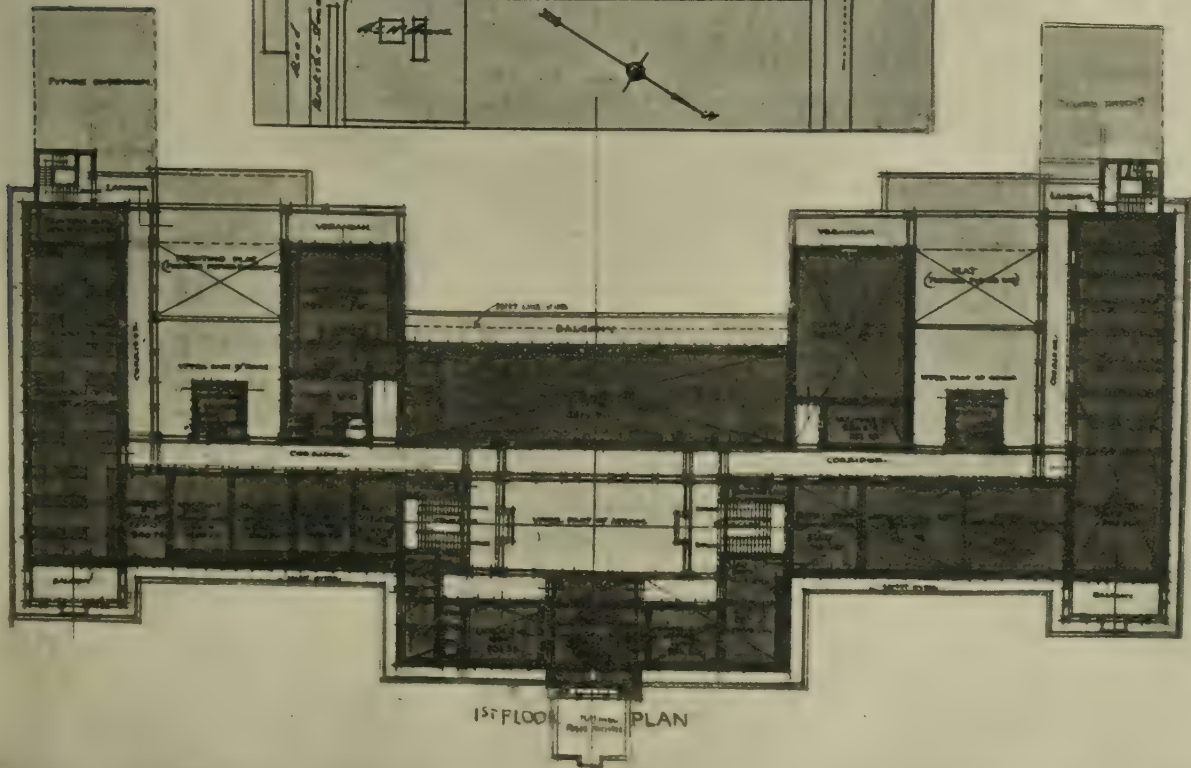
ELEVATION 6 GOVT ROAD :



ELEVATION 6 WHITEHOUSE RD :



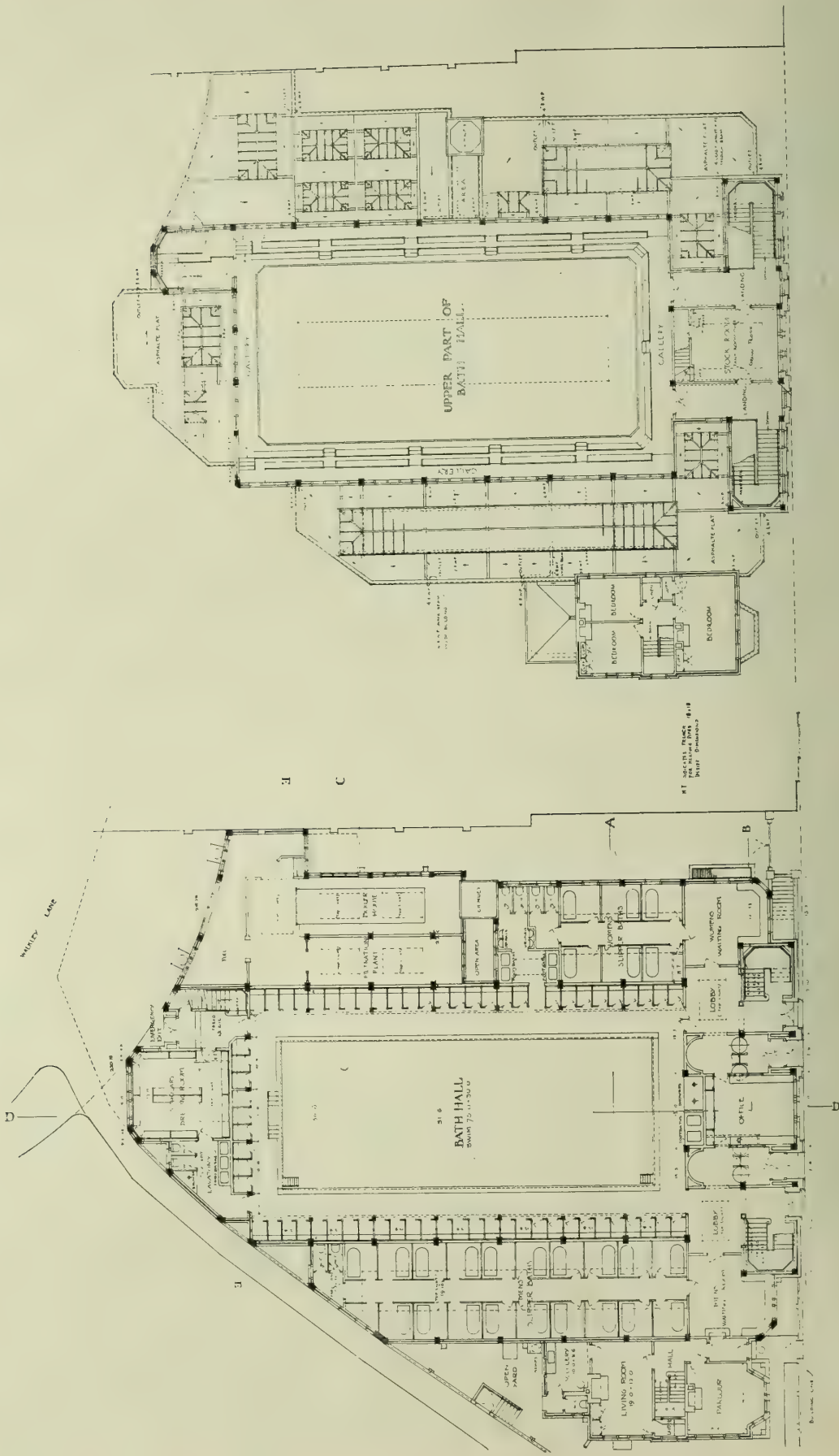
SITE PLAN :



1ST FLOOR PLAN

Competition for New Headquarters of the Uganda Railway, Nairobi, Kenya Colony : First Premiated Design.

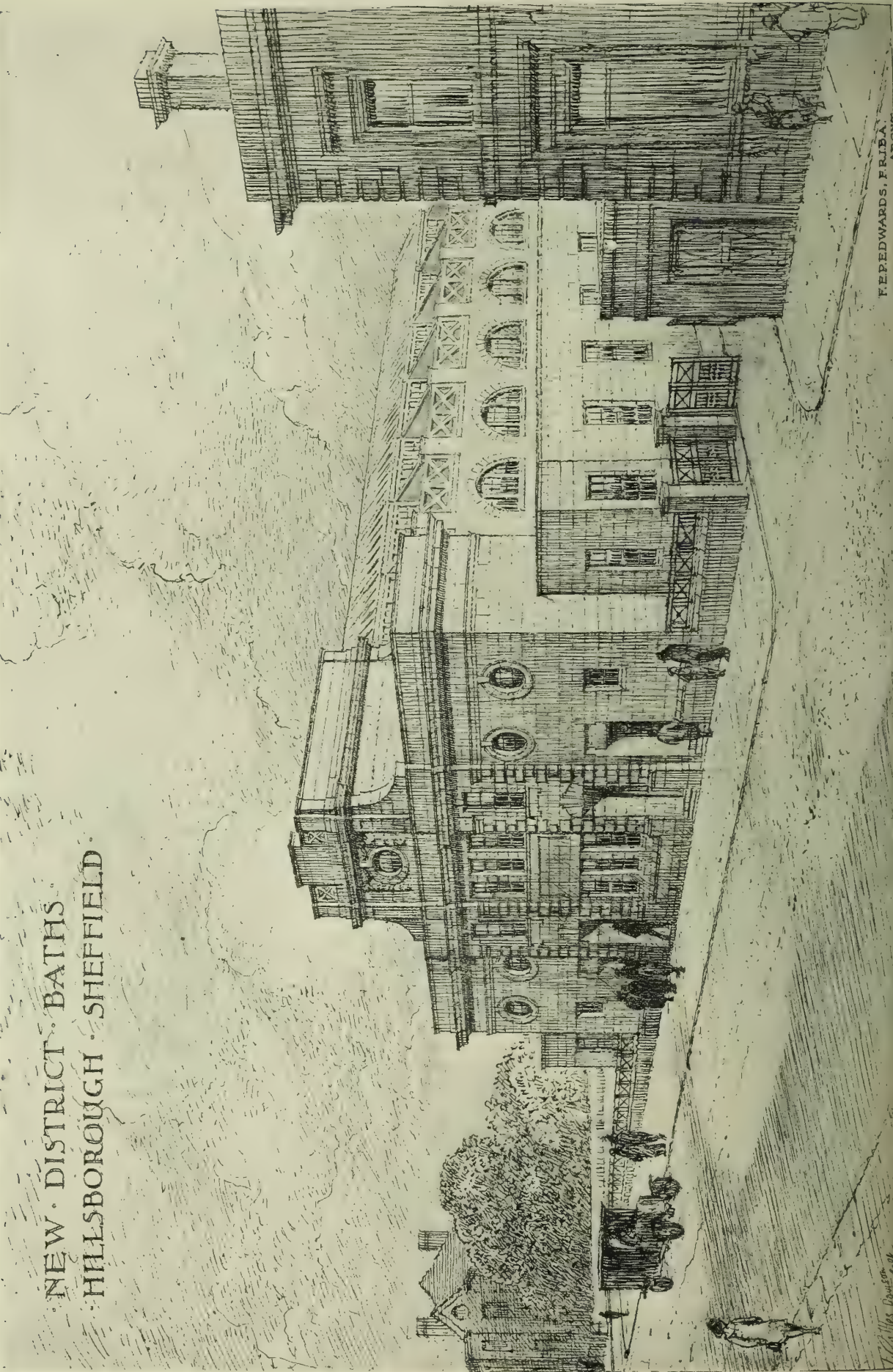
MR. F. GORDON MCINTOSH, Architect,



FIRST FLOOR PLAN.

GROUND-FLOOR PLAN.

New District Baths, Hillsborough, Sheffield: Plans.

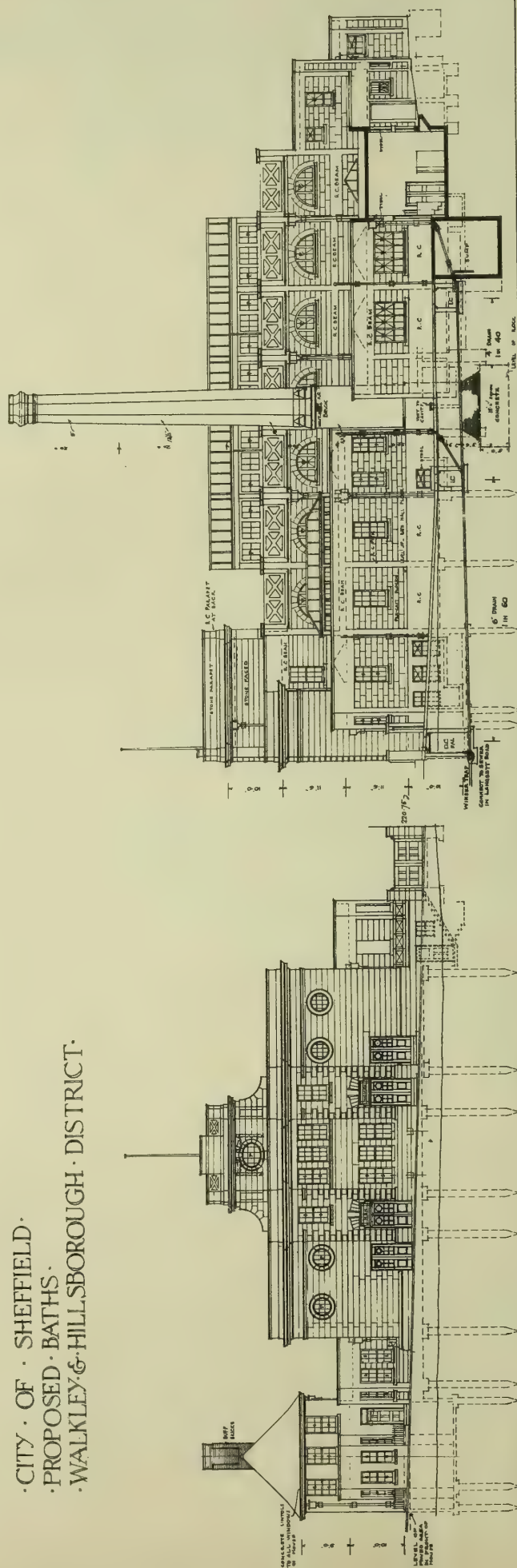


NEW DISTRICT BATHS
HILLSBOROUGH SHEFFIELD

F. PEDWARDS, F.R.I.B.A.

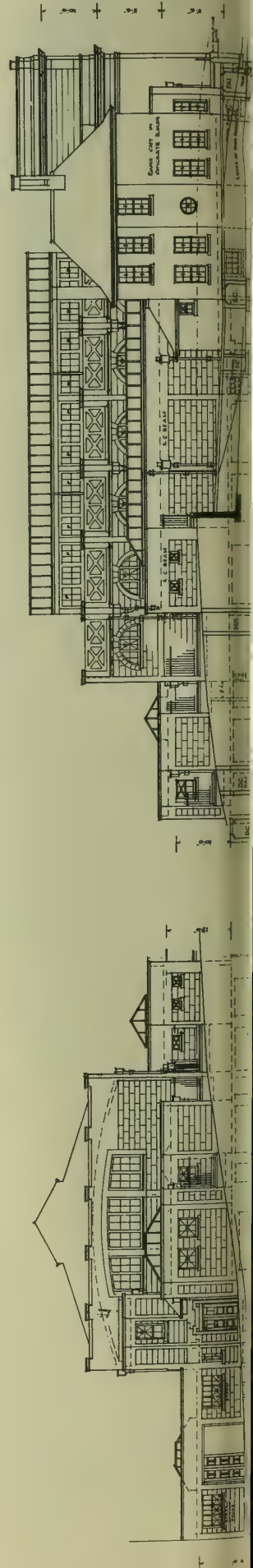
F. Charles Dawkins
ROYAL ACADEMY EXHIBITION, 1925.

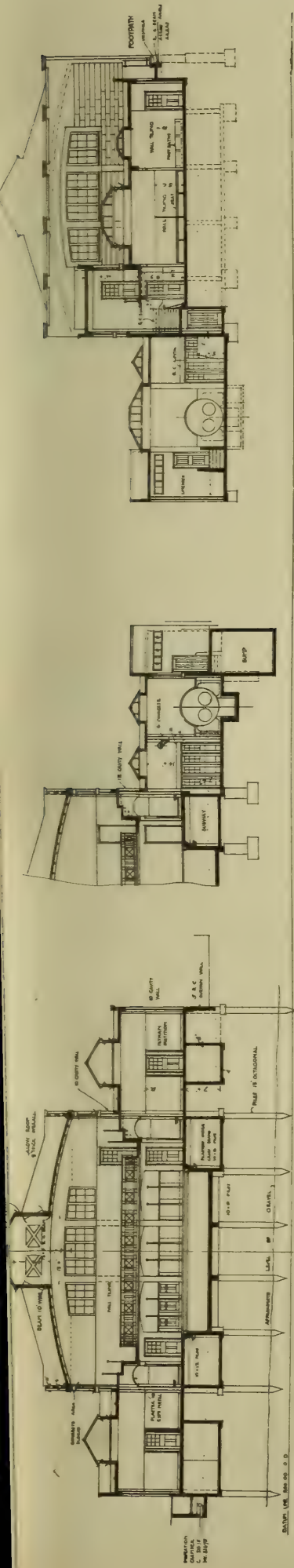
CITY OF SHEFFIELD.
 PROPOSED BATHS.
 WALKLEY & HILLSBOROUGH DISTRICT.



N. W. ELEVATION

ELEVATION TO LANGSETT ROAD

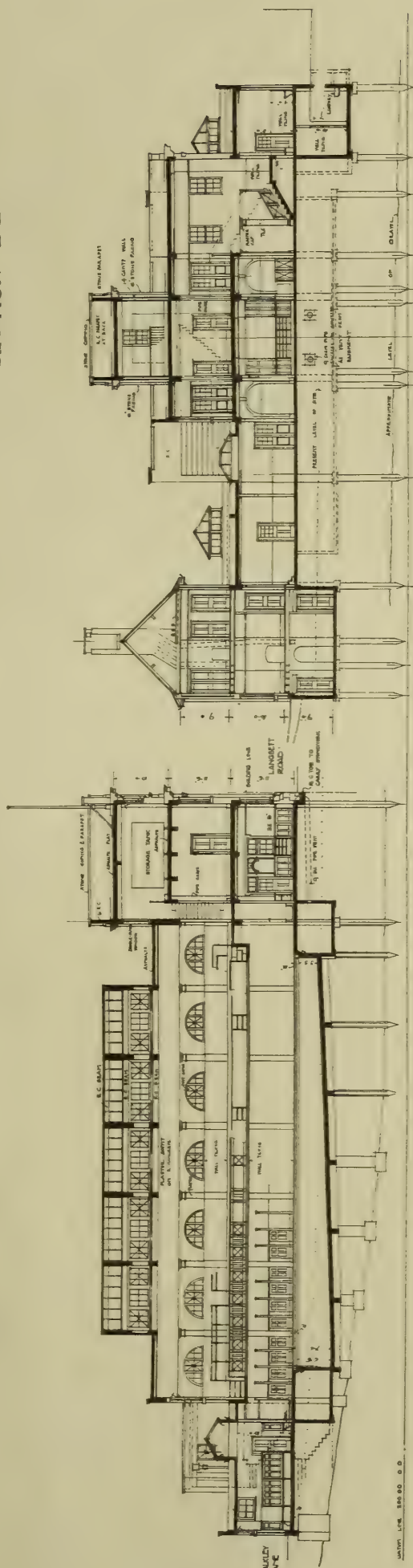




SECTION · A · A ·

SECTION · C · C ·

SECTION · E · E ·

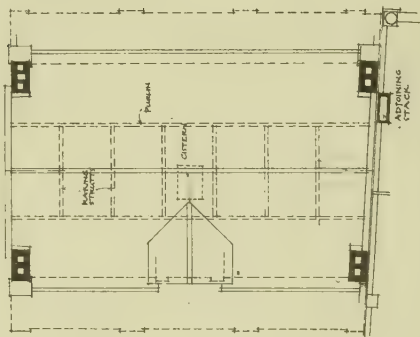
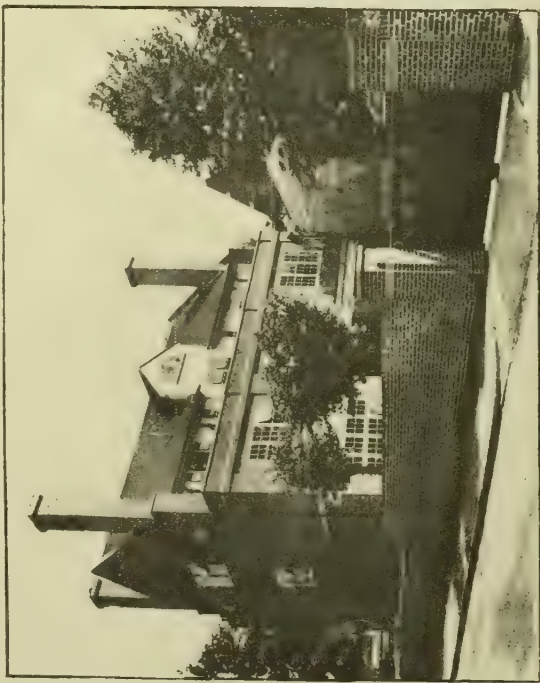


SECTION · D · D ·

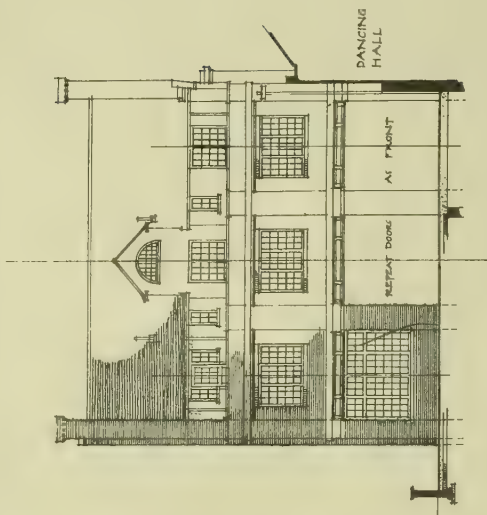
SECTION · B · B ·

SCALE: EIGHT FEET TO ONE INCH

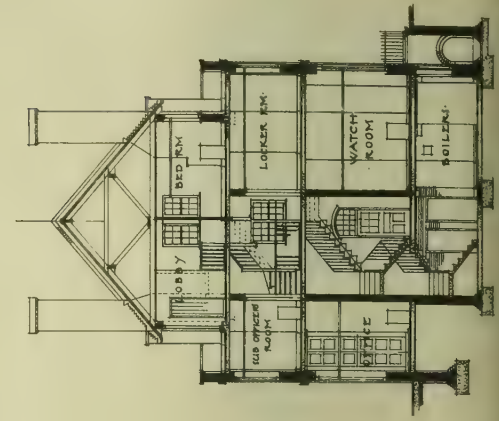
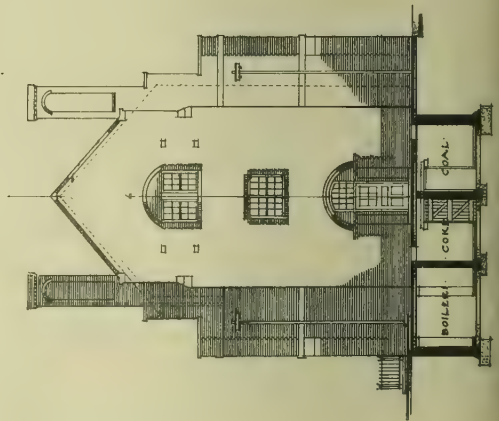
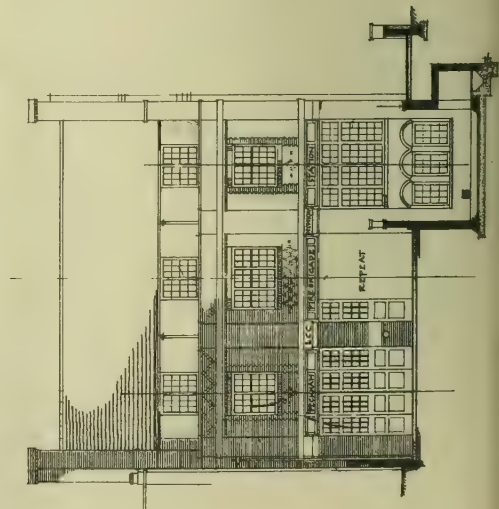
PROPOSED BATHS: CITY OF SHEFFIELD, MR. F. E. P. EDWARDS, F.R.I.B.A., ARCHITECT.

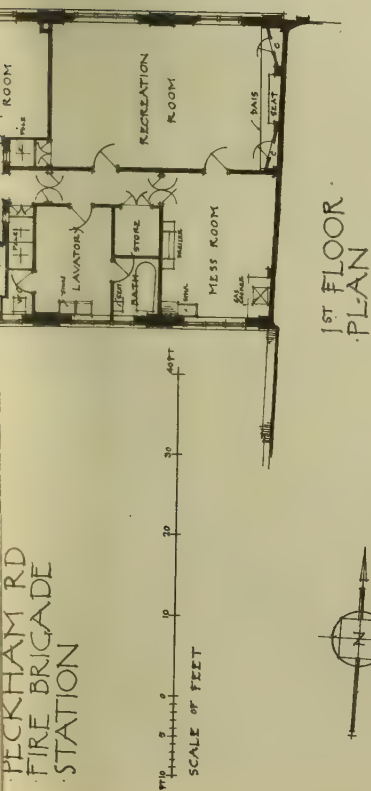


ROOF PLAN

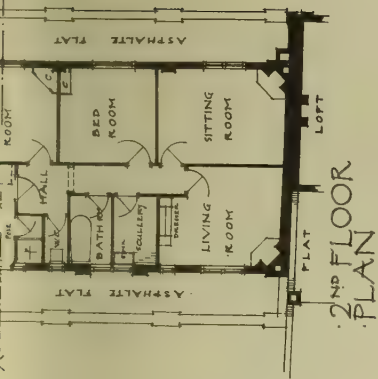


ELEV N TO YARD

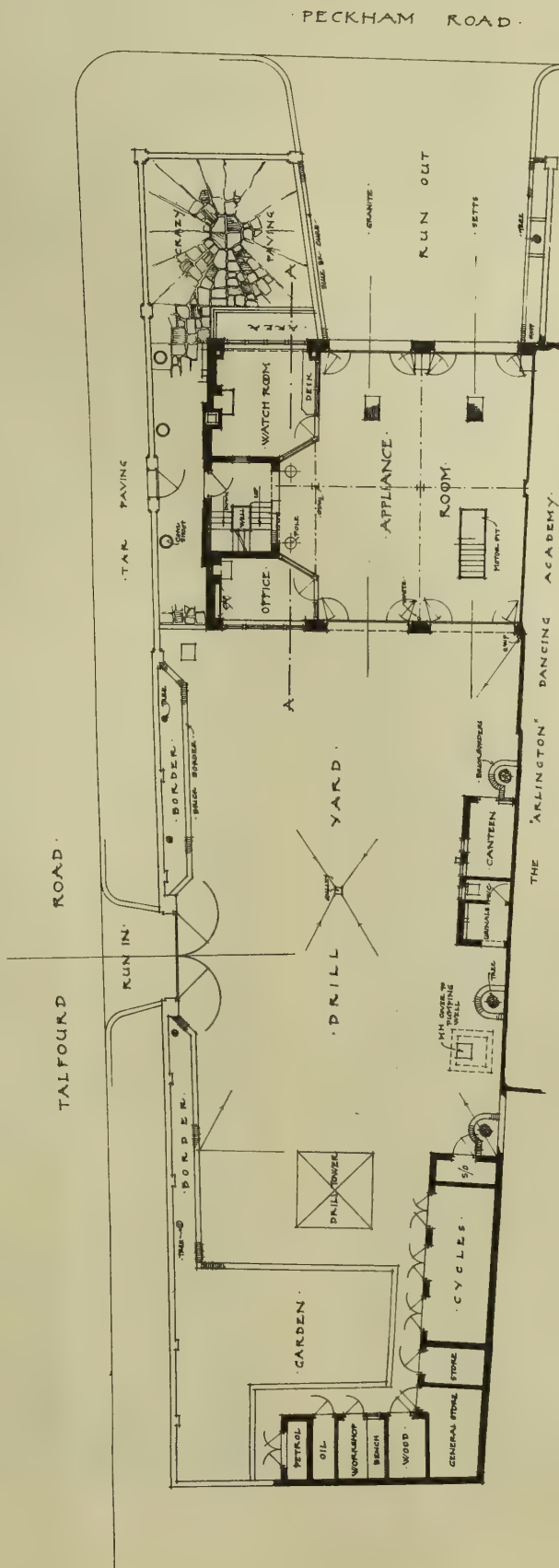




1st FLOOR
PLAN



2nd FLOOR
PLAN



GROUND FLOOR PLAN:

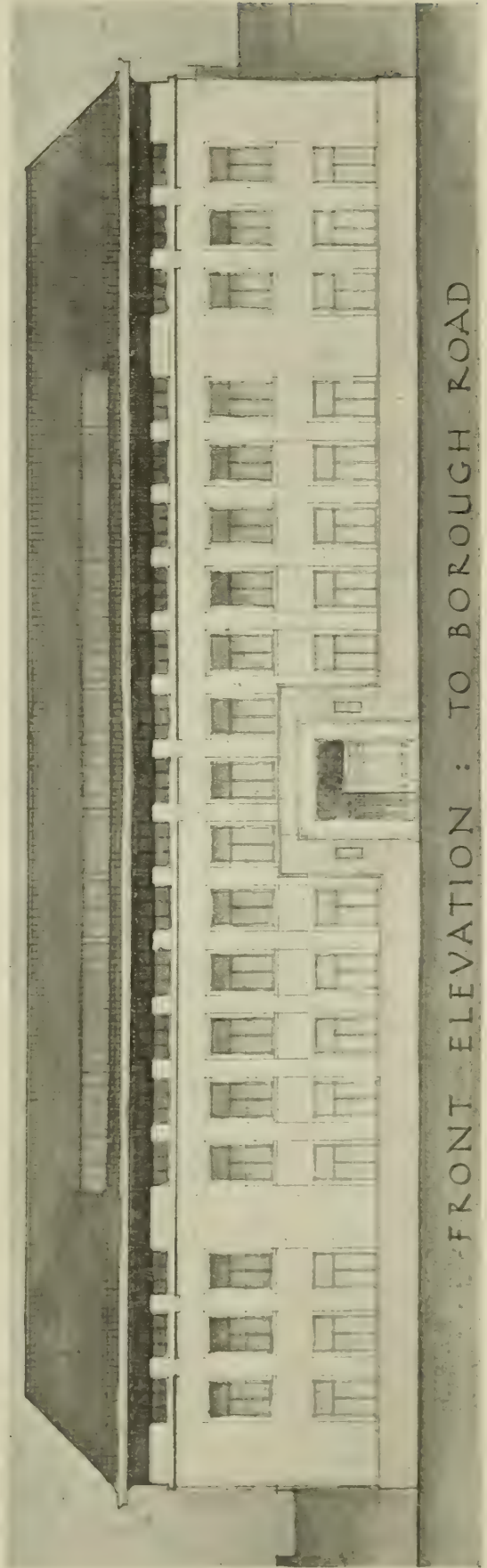
E. M. D. Jones

ARCHITECT TO THE COUNCIL.

NEW L. C. C. FIRE STATION, PECKHAM ROAD, LONDON, S.E. MR. G. TOPHAM FORREST, F.R.I.B.A., ARCHITECT TO THE COUNCIL.



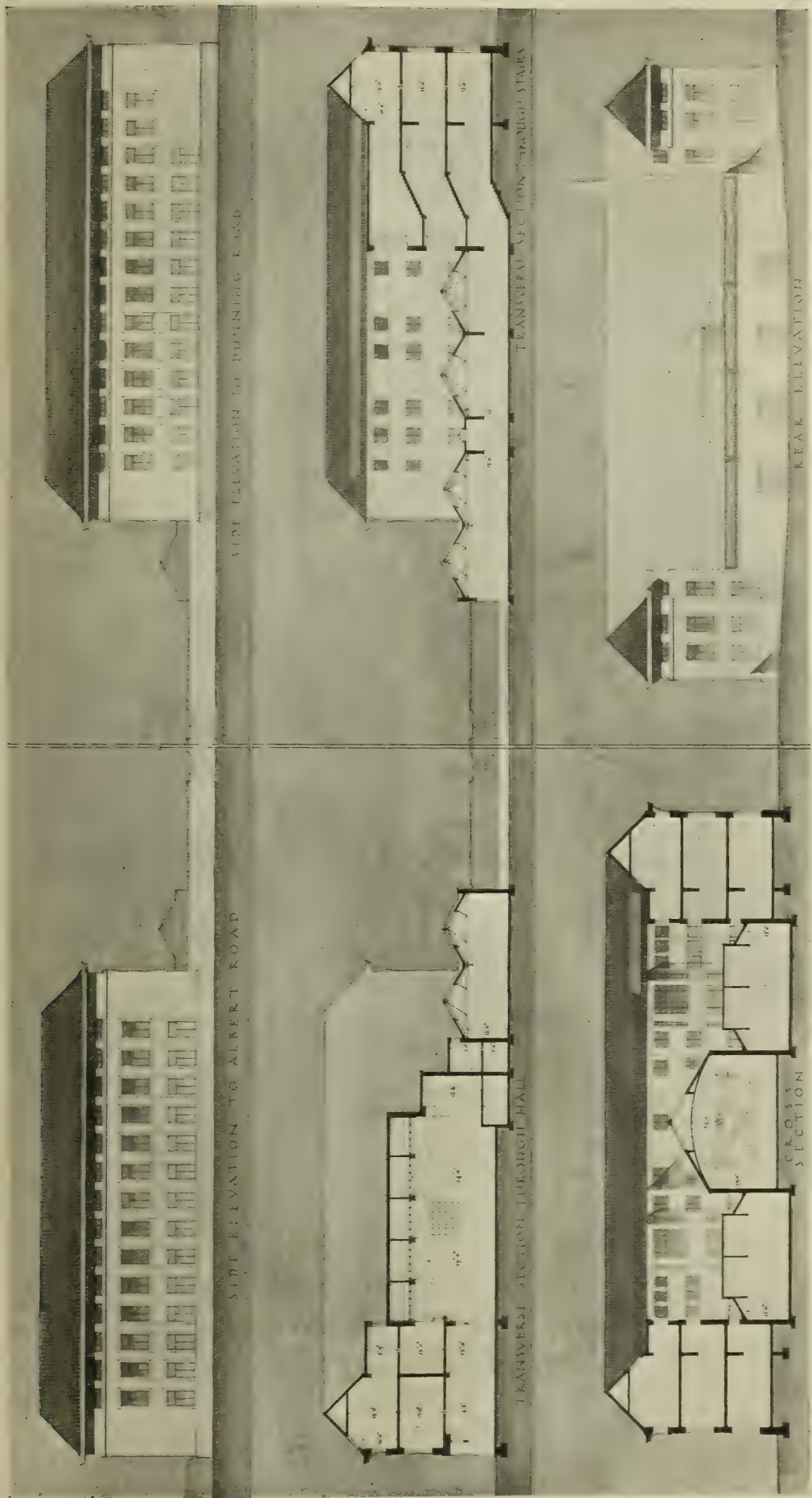
PERSPECTIVE VIEW.



FRONT ELEVATION : TO BOROUGH ROAD

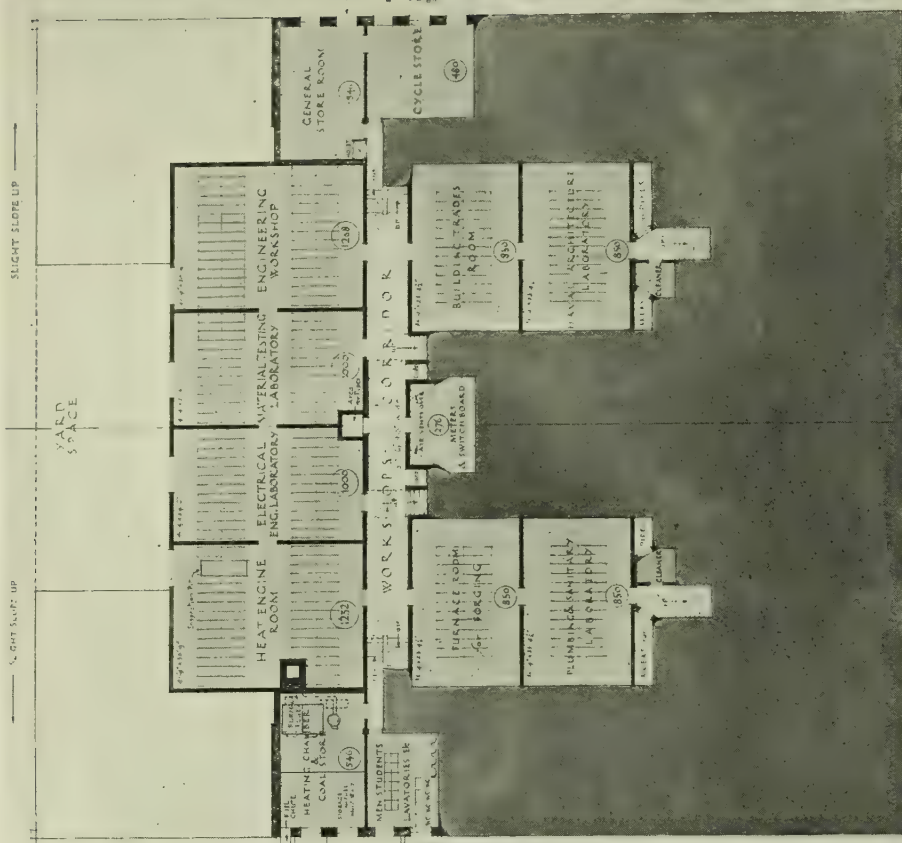
Constantine Technical College Competition, Middlesbrough : First Preliminated Design.

MR. GRAHAM R. DAWBARN, M.A., A.R.E.I.B.A., Architect.

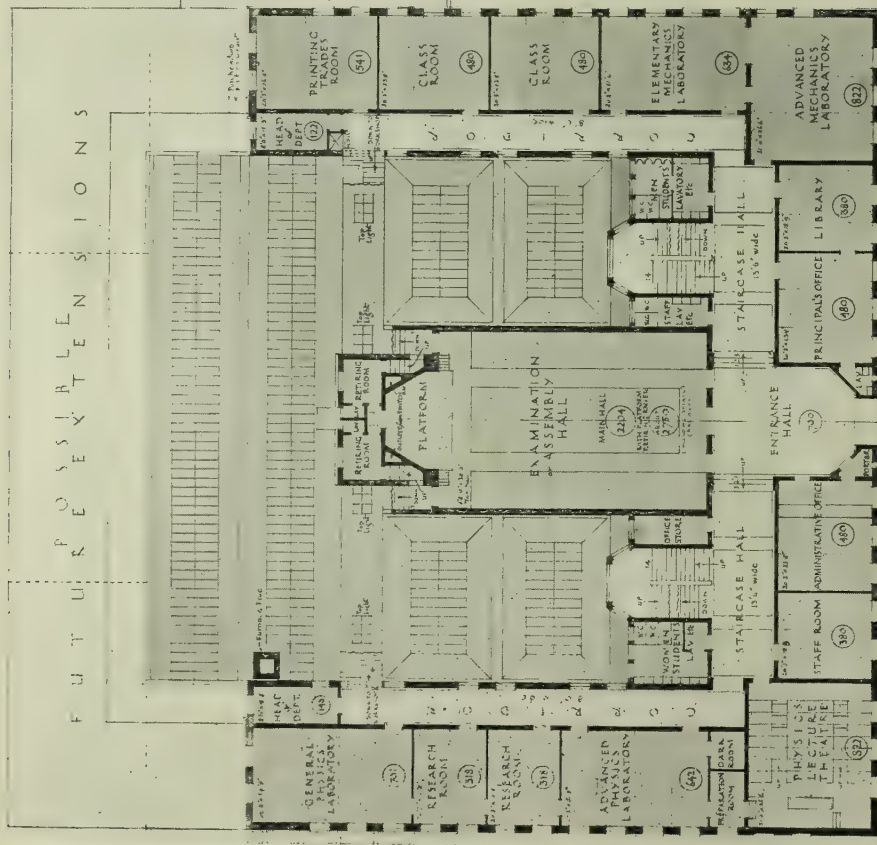


Constantine Technical College Competition, Middlesbrough : First Premiated Design.

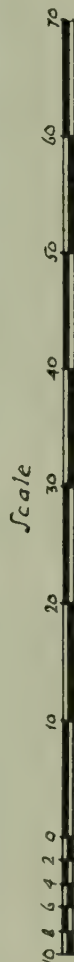
Mr. GRAHAM R. DAWBARN, M.A., A.R.I.B.A., Architect.



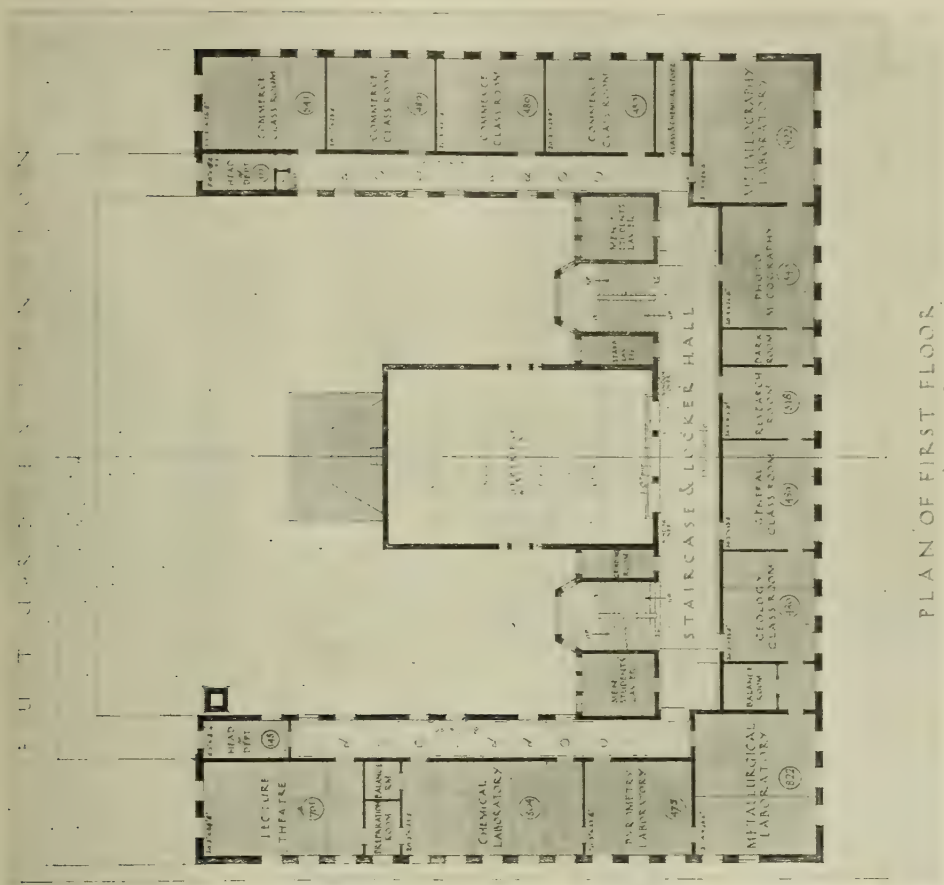
PLAN OF BASEMENT & LOWER GROUND FLOOR
Level of Heating Chamber, Main Cycle Etc. 38.25. Workshops 21.55, down O.D.



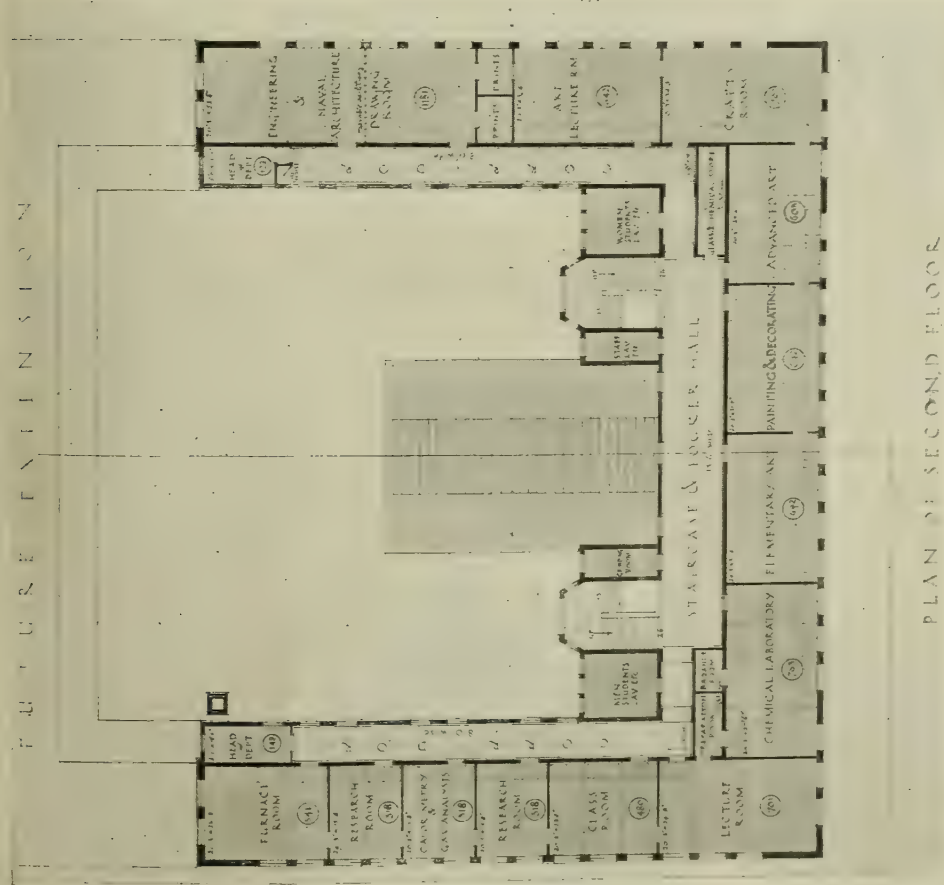
PLAN OF GROUND FLOOR
Level of Entrance Hall Etc. 34.75. Remainder 26.25 above O.D.



Sixteen feet to an inch



PLAN OF FIRST FLOOR



PLAN OF SECOND FLOOR

Constantine Technical College Competition, Middlesbrough : First Premiated Design.

MR. GRAHAM R. DAWBARN, M.A., A.R.I.B.A., Architect.

BRITISH ARCHÆOLOGICAL ASSOCIATION CONGRESS AT NORWICH—II

By P. H. DITCHFIELD, M.A., F.S.A.

Thursday, July 2.

On this day the members journeyed to Yarmouth, where they went to several places of interest, and were received at the Town Hall by the Mayor, Mrs. Leach, and the Mayoress, Miss Leach. The Civic treasures were displayed for their inspection, and from Yarmouth they travelled to Burgh Castle to view the remains of its Roman camp. They next proceeded to St. Olaves Priory, and returning to Norfolk visited Heckingham Church, during brilliant sunshine, the journey through cornland and woodland being delightful. On arrival at Yarmouth the visitors were met by Mr. R. F. E. Ferrier, Deputy-Mayor, President of Yarmouth branch of the Norfolk and Norwich Archæological Society, Mr. R. H. Teasdel, its hon. secretary, and Mr. G. J. H. Poll, assistant secretary, who piloted the party throughout the day.

ST. NICHOLAS' CHURCH, YARMOUTH.

Canon R. Aubrey Aitken, vicar, who received the travellers at Yarmouth parish church, said this fine church, begun in 1121 by Herbert de Losinga, first Bishop of Norwich, was finished in 1330. A feature of the church is the great width of the aisles, 43 ft. compared with the nave, which is about 26 ft. wide. Losinga built this church as part of a penance, fixed by the Pope, for having made a payment to the King to become Bishop of East Anglia. One he built at King's Lynn, one at Norwich, the Cathedral, and the third at Yarmouth. The greatest marks of his handiwork were found in the Norman arches. In 1250 the great aisles were added, and the chancel aisles in 1280, the last addition being the big transepts. Probably a Saxon church stood on the site of the church in the time of Edward the Confessor. When the Puritans got the upper hand they thought the church was too large for the Church of England, and partitioned it off by walls into three sections, one for the Independents or Congregationalists, another for the Presbyterians, and a third for the Church of England. At a time when the Prayer Book could not be used at their services, the most valuable portion of its communion plate was given to the church. In 1805, when the church was falling into decay, it was proposed to build a "beautiful modern church," but wiser counsels prevailed. In 1860, the real restoration of the church began, and over £70,000 has since been spent. Underneath the altar is a pre-Reformation altar stone marked with five crosses. The party next visited the Fishermen's Hospital, a short distance from the parish church.

FISHERMEN'S HOSPITAL.

This picturesque quadrangular low building, Mr. R. F. E. Ferrier said, was erected by the Corporation in 1702, and contains twenty small rooms on the ground floor, each with a sleeping room overhead for "decayed fishermen and their wives" above the age of 60. It was a charity supported by benefactions. King Charles II granted an annuity of £160, paid out of the Excise from the beer duty, as an equivalent for the duty paid by fishermen on the beer they consumed, but this ceased when the duty on beer was removed. In the cobbled yard of the Hospital, on a pedestal, is a figure of Charity, and above the inner gate rises a cupola within which is a figure of St. Peter, patron saint of fishermen. Formerly two wooden effigies of fishermen stood on either side of the entrance gate, but these decayed, and were removed. Each inmate receives 2s. per week in summer and 2s. 6d. in winter. The gate is locked at 9 p.m. by one of the inmates. The upper rooms have gabled fronts, all the windows are diamond paned, and the roof is of pantiles.

Mr. P. M. Johnson said it was a type of interesting buildings now disappearing, and he

felt grateful to Yarmouth for maintaining it in its original condition as nearly as possible. The cupola over the portico and the picture of a Yarmouth fishing boat were good examples of early seventeenth-century art.

TOWN WALL AND TOWERS.

Mr. R. H. Teasdel, in a description of the old town wall, also viewed near the church, said it was begun in the reign of Edward I, and not fully completed till the time of Richard II. The walls were constructed of rubble, composed of Norfolk flints and hard flat bricks, firmly cemented and faced externally with brick. The roofs of the towers were flat and covered with lead. The wall was 23 ft. high and 2,238 yards long, with ten gates and sixteen principal towers, several of which remain, but the gates are all gone. The building of the wall was followed by the sinking of a moat which was of great utility, as it was navigable for boats, and merchandise could be unloaded at any part of the town. The moat was bridged at each gate. In the reign of Henry VIII the Duke of Norfolk ordered all the walls to be "rampired" with earth and sand, and further strengthening works were carried out in 1569. A mount was erected in the centre 222 ft. long, which in 1588 was enclosed with a wall 20 ft. high, built of materials from the ruins of a charnel house in St. Nicholas' Churchyard. An inner wall higher than the town wall was also built, on which pieces of ordnance were placed later, and the gateways arched over inside. A castle or fortress stood in the centre of the town, with four turrets or watch towers, which in 1621 was pulled down. Row 99 formerly was known as Castle Row. In the reign of James I all the guns were removed, as the walls and towers ceased to be of military importance. During the Civil Wars the towers and gateways were used to imprison captured Royalists. The North West tower remains near the bank of the Bure, and the massive wall which adjoined it severely taxed the energies of the iconoclasts who pulled it down some years ago. All the towers and walls are now scheduled as historical monuments.

A REGICIDE'S HOUSE.

Mr. Teasdel pointed out a house in the Market place, which was occupied by Miles Corbett, one of the regicides who signed the death warrant of Charles I. He was Recorder of Yarmouth, and also its member for Parliament. At the Restoration he fled to Holland, but was persuaded to return, and was hanged, drawn, and quartered at Tyburn. He was a Norfolk man, and his parents lived at Sprowston, where on the day Charles was beheaded his father planted a tree to commemorate it.

YARMOUTH TOLL HOUSE.

Passing through Kitty Witches-row, only 2 ft. wide at its western end from King-street, one of



Coln St. Denis.

the hundred and fifty narrow passages that intersect the town, the party arrived at Yarmouth Toll-house, which dates from the thirteenth century. It has an open external staircase from the street to the first floor, where the main hall was, underneath having been the old prison or hold, with its horrible dungeon still preserved, which is a great attraction to visitors. It was here Sarah Martin, from 1819



Castleacre Priory.

to 1842, visited and taught the unfortunate prisoners in cells that were used from 1270-1879. The building was acquired by trustee 40 years ago, and is now used for the Municipal Museum. The Hall was used as a Council Chamber, and also as a police court and Court Court till the present Town Hall was built. Some beautiful windows were uncovered when the building was taken over. The remains of spiral staircase were also discovered, up which the prisoners passed from the dungeons to court for trial. King John granted the right holding a Borough Court, which continued to this day. Many scenes had taken place in the hall, especially with representatives of the Cinque Ports, who claimed authority in connection with the herring fishing, but Yarmouth would tolerate no outside interference and bailiffs, predecessors of the mayors, stoutly maintained their rights until a Cinque Port Baron was killed, and at length the local authority claim ceased. Yarmouth bailiffs held powers of life or death and so had the Record at Quarter Sessions. The death penalty was carried out for petty thefts, and the last man executed at Yarmouth was hanged on the North Denes a hundred and twenty years ago.

CIVIC RECEPTION.

At luncheon the party was joined by the Mayor, who was welcomed by the President and the Vicar. The Mayor expressed her pleasure to see members of the Society in Yarmouth, and the Vicar, who also acknowledged the greetings of the President, said Yarmouth was proud of Parish Church, which was regarded as the Church of all, Nonconformists and Churchmen alike, who were proud of its history. At luncheon at Hill's Restaurant, a visit was paid to Grey Friars Cloisters, part of a Francis establishment, attributed to Sir Wm. Gerbrier, dating from 1271, exhibiting some interesting groining and bosses, one representing a friar in conventual garb. The church occupied the end of Queen-street adjoining. The premises were extensive and reached to the river. First settled here shortly after 1226. Mr. F. R. Haward kindly pointed out the features of the cloisters and traced their history.

At the Town Hall the Mayor, attired in official hat and robes, extended the visitors a hearty welcome. Yarmouth, she said, some old bits that they would find attractive and the town would be glad of any suggestion from them to help to preserve them.

Mr. C. E. Keyser, President of the Association, thanked the Mayor for the opportunity given them to inspect the town's ancient charters, regalia, and plate, which the Town Clerk (W. Edgar Stephens) so interestingly described.

they all knew the great part Yarmouth had played in our history, and they were delighted to be able to visit the town and inspect its treasures.

ROMAN CAMP AT BURGH CASTLE.

Resuming the motor-cars, the party travelled to Burgh Castle, where the Rev. A. Hunt spoke on the Roman remains, imposing in their size and solidity. It formed a military station, known as Gariononum, 640 ft. by 413 ft., with an area of five acres. Its walls were 14 ft. to 5 ft. high and 9 ft. thick with bastions. Excavations had proved that there was a quay constructed at the water side for the landing of troops. Mr. Hunt said the walls were in excellent preservation, and he was deeply grateful to those who had prevented their demolition to secure road material, which had happened in several other instances, notably at Caistor, near Norwich. The Bastion towers were not bonded into the walls, but added later. There were seven or eight of these forts, which materially added to its defensive powers. Ten thousand troops were supposed to have garrisoned this part of the coast from Brancaster down to the Blackwater. An enormous number of burials had taken place behind the walls at Burgh Castle, and numbers of urns and coins had also been dug up. The camp was occupied from A.D. 287 to 410. With the retreat of the Romans in the latter year the buildings fell into desuetude.

ST. OLAVES PRIORY.

At St. Olaves a halt was made to view St. Olaves Priory, an Augustinian Monastery founded by Roger Fitz Osbert about 1236, in the reign of Henry III., and dissolved in 1546 in the reign of Henry VIII. The principal part of the ruins was removed in 1784. Mr. Ernest Kent traced the history of the Monastery, which, he said, was built on the site surrounded by bays and marshes, selected for the greater safety of its occupants. It had great possessions, at one time owning 13 parishes in Norfolk and 14 in Suffolk. Dr. W. A. S. Wynne had done much diligent investigating work from 1904 onward and prepared a fairly complete plan of what the building had been. The Refectory, which is standing, shows the type of architecture, and Mr. Kent pointed out what an immense weight slender columns had supported in wonderful fashion, for 430 tons of masonry had been moved from the roof above. The remains are now under the care of the Board of Works Department.

ST. GREGORY'S CHURCH, HECKINGHAM.

After tea at St. Olaves Hall, the motors were turned, and a last halt made at St. Gregory's Church, Heckingham, a small church with a tower and thatched roof. It has a fifteenth-century font, with a massive bowl, most unornamented, square, supported on a central octagonal pillar, with a square base, and four circular shafts at the corners. It had a tasteless seventeenth-century cover, now decayed and unfit for use. The Bible on the reading desk is a huge volume, dated 1717, which is still used. The principal feature is the Norman doorway at the entrance. The President said it was one of the finest of the series of doorways found in the little churches all the way between Beccles and Norwich. This particular doorway possessed all the special features of such doorways, and he described its ornamentation of a series of medallions, then cone-shaped, and cheese moulding, every part full of ornamentation. If this was a conventional church formerly, it was probably rich, and could thus afford all this carved work. The Rev. P. E. Lance, vicar, showed the visitors round the church. The party then returned to Norwich.

In the evening, at the Technical Institute the Rev. A. Hunt lectured on Burgh Castle and the Roman occupation of Britain. Mr. Hunt said that it would be found that wherever the Romans adopted the river as a frontier. The lecture was illustrated by lantern slides.

Friday, July 3.

On this day the chief object of pilgrimage was Castleacre, with its earthworks, church and priory.

MILEHAM CASTLE.

The first pause of the Association was at the mound of Mileham Castle. It stands a little back from the road, overgrown with nettles and grass, which now wave impertinently in the Norman Keep. The Rev. A. Hunt, M.A., said the ruins were probably a Danish earthwork of the usual horseshoe design, with extended earthworks over some eleven acres of land. Much the same architecture is at Bedford and at Barrow Castle.

GREAT DUNHAM CHURCH.

After the Rev. Dr. Drummond had described Beeston Church, which belongs to the beginning of the fourteenth century, although its very beautiful hammer beam roof is of the fifteenth century, the party visited Great Dunham church, where the Rev. E. C. S. Upcher pointed out its important Saxon features. Probably the church was not built till after the Norman Conquest. The tower, quite definitely, has some very important Saxon features, among these the baluster shafts in the belfry windows. Mr. Upcher said there were originally two churches, the ruins of the other being on the opposite side of the lane passing the church.

SWAFFHAM CHURCH.

After lunch at Swaffham, the President of the Association took occasion to acknowledge the great help which Mr. E. A. Kent and Mr. Rudd had given to the Association during their stay in Norwich. A visit was paid to the church, where the double hammer beam roof with its 200 angels was described by Major Holmes (the churchwarden). There is an interesting history of the roof in that during Cromwell's reign a squad of his soldiers entered the church and, standing in the porch, fired at the angels carved on the roof. It is probable that if Cromwell's mother had not been buried at Swaffham, they would have attempted to do still more damage. Major Holmes also pointed out the vestry at the east end of the north aisle, which has a priest chamber above, with a library of 460 books.

CASTLEACRE.

From Swaffham the visitors went on to Castleacre, where they spent a considerable time in inspecting the earthworks, church and priory, each of which was described by Dr. Astley. The original earthworks are probably prehistoric, while the vallum and fosse of the outer bailey may have been built by the Romans. The keep was erected by Earl de Warenne, but there are now no remains of it, although the curtain wall still exists. The church is, broadly speaking, Perpendicular. The octagonal Perpendicular font has a beautifully carved tabernacle cover, and in the chancel there are some original stalls. The priory ruin is of a Cluniac house dedicated to St. Mary, St. Peter, and St. Paul, and was founded by William de Warenne before 1089. The west Norman front is the principal part remaining, and its south-west tower shows an interesting transition from round to pointed architecture. A Tudor gatehouse and priory buildings on the north-west side are still almost perfect, and other buildings can still be traced by their ruins. They are similar in arrangement to the normal Benedictine plan.

The President of the Association moved a resolution that the attention of the Earl of Leicester should be drawn to the wooden props supporting some parts of the ruins, which are not sufficiently adequate for this purpose, and that immediate steps should be taken to remedy this. The motion was seconded by Dr. Astley, and was passed unanimously.

EAST DEREHAM.

On arrival at East Dereham tea was first served at the Church House, after which the party visited the church where the grave of Cowper is in the north transept. The church has a particularly lovely seven sacrament font and a good example of a brass eagle lectern.

NORMAN FONTS IN WEST NORFOLK.

In the evening, at the Technical Institute, Mr. Edward M. Beloe, F.S.A., lectured on "Norman Fonts in West Norfolk," his remarks being illustrated by numerous slides of photographs taken by the lecturer. The Lord Mayor (Dr. G. S. Pope) and the Lady Mayoress were among the audience.

Mr. Beloe, at the outset, said that a great glut of church building took place in this country during the Norman period, but unfortunately so comparatively little remained. They must, however, be thankful that there was as much left as there was. The Norman fonts of West Norfolk formed a particularly fine group. They were to be found there in larger proportion than in any other part of Norfolk or of other counties, and they were in a very fine state of preservation. The font at Burnham Deepdale Church showed traces of the influence of Byzantine design, and that at Fincham a representation of Magi and the Nativity of Our Lord. The font at Sculthorpe Church also showed the Magi with the Virgin and Child. In the case of the font at Sherborne, the lecturer thought he could trace an unusual representation of the Temptation, where Eve was depicted seated in the tree and receiving the apple from the serpent. This representation differed from the stereotyped form such as was to be seen at Fincham, where our first parents were seen standing on either side of the tree. One act of Mediæval vandalism was visible at Ingoldisthorpe, where the square Norman font had been turned into an eight-sided one by the simple process of cutting off the four corners. Diagrams were shown of the intricate tracery and patterns characteristic of the work of these Norman fonts, and the photographs of many of the fonts themselves were greatly admired.

Saturday, July 4.

A last half-day was spent in Norwich prior to the members returning homewards, and the first place visited was Strangers Hall, which was described by Mr. Leonard G. Bolingbroke. It is a fifteenth-century merchant's house built over an earlier fourteenth-century dwelling. The central hall has a good king-post roof, a fine groined oriel window, and an oak staircase within a large bay window, dated 1627. The building has recently been generously presented by Mr. Bolingbroke to the city, and is now used as an historical museum.

After visiting St. Gregory's church and some old Norwich houses, the members adjourned to the Norwich Castle Museum, and after inspecting many of its treasures under the guidance of the curator they visited the Art Gallery, where they were met by the Lord Mayor, with the Lady Mayoress, who, in a few well-chosen words, bade farewell to the Association, and was cordially thanked by the President for all that he and the citizens and archaeologists of Norfolk had done to make the Congress a success.



Ranworth Church.

THE ARCHITECTURAL ASSOCIATION IN
WILTSHIRE

A Reunion of the Elder Members.

It has long been the ambition of those architects still remaining among the paladins associated with the earlier Victorian records of the A.A. annual excursions during the seventies and eighties to furnish a congenial opportunity for the revival of old and valued friendships. These famous outings which soon became popular among zealous young enthusiasts were started by Edmund Sharpe in 1870, at Lincoln. This reunion idea has now been successfully realised, the rendezvous being decided on at Devizes, where the gathering was hospitably entertained at the Bear Hotel, admirably adapted for such an occasion. Owing to the lapse of time the number inevitably could not be large, and some of the veteran excursionists were prevented from attending from various causes. However, the following members of the old brigade may be reckoned as representative of their fellows, viz., Messrs. H. D. Searles-Wood, for many seasons the hon. secretary; Andrew N. Prentice, Maurice B. Adams, W. Talbot Brown, of Wellingborough; C. E. Bateman, of Birmingham; Arthur W. Hennings, of Manchester (who organised the present proceedings), Alan C. Walker, from Tasmania; and N. P. Cart de Lafontaine.

The itinerary included some of the outstanding buildings and places of architectural interest included in the programme of the Bath excursion in 1887, when the late John Slater was President of the A.A. The facilities afforded by automobiles nowadays presented less difficulty in arranging a comprehensive topographical progression, although owing to the informal character of the proceedings anticipatory provisions, such as insuring permission for access, were obviously impossible, especially in visiting mansions like the beautiful early sixteenth-century house at Littlecote Park Manor, not far from Hungerford, one of the most romantic historic places in Wiltshire. The estate is still owned by the Pophams descended from Sir John Popham, and prior to him was in the possession of the Darrels up to the "great Littlecote tragedy" associated with the days of Queen Elizabeth. The contents of this mansion include splendid furniture and paintings, and the park provides its own private golf course. The red brick façade of the frontispiece presents an unaltered masterpiece of design mellowed by time, but the garden front has been much added to and suggests a series of houses with many gables periodically built.

The first visit of the week was devoted to the noble Collegiate Church at Edington, last seen by the excursionists 37 years ago, when Mr. C. E. Ponting, the architect of its restoration, was engaged upon his excellent work of repair, which has preserved the fabric without interfering with its architectural charms. The church at Edington is too well-known to need description in this necessarily brief epitome, but nothing in Wiltshire competes with this complete and symmetrical uniform example of the Transition period from the Decorated style to the Perpendicular, and it stands unaltered since its erection between 1352-1361 by a designer only second to William of Wykeham.

Not far away, under the White Horse on Bratton Down, the visitors saw the admirable and spacious little cruciform church of early fifteenth-century date, with its charming central tower and clerestoried nave, quite small as a whole but handled in a large way so admirably as to be justly reckoned unique in this country as a really fine work, when the Perpendicular time was at its best. Breadth is shown compatible with a restricted size, and good proportions form the dominating merit of happy art by this instance of the architecture of the fifteenth century, standing well-placed overlooking the valley.

from whence it is approached by 300 steps. Steeple Aston to the south of the Keovil is more familiar in a general sense on account of its once important Staple Market of the "clothiers." Its treasure in chief now is the conspicuous church with a magnificent tower which had a spire 93 feet high injured by lightning in 1670 and never repaired. The nave is roofed with panelled oak, but the aisles and chapels are vaulted and richly sculptured with canopied niches. Seen from the village street the building presents a picture not easily forgotten.

Bromham Church commenced the second day's programme. Less known to most people, it possesses the exquisite Beauchamp Chapel founded by Lord St. Armand as a charity in honour of Our Lady. It is an exact counterpart of the South Chapel in St. John's Devises by the same founder, and deserves the just description of being a truly marvellous example of late Gothic, exquisite in design inside and out, parapeted and panelled and most profusely ornamented, enriched and adorned, while the noble carved roof still retains its ancient gorgeous decoration with gold and colour. Nothing of its quality seen during the week surpassed the beauty of this late addition to the otherwise quite interesting church, which is partly Norman. Lacock Abbey and Corsham occupied the rest of the day. Both were visited in 1887, and since then the former has been partly renovated by Mr. Harold Brakspear, A.R.I.B.A., who with knowledge and no little skill has added new windows to the vaulted Refectory and other ancient apartments of the Nunnery; also he has traced out the extent and remains of their big church, besides repairing the traceried work in the openings of the famous cloisters. Lacock village is perhaps the most remarkable in Wiltshire with its old houses, Tithe Barn and church dedicated to St. Cyriac. The sketcher could scarcely find a greater wealth of subjects anywhere, though so famous a spot here needs little description. The chief subject of notice in the church is the chantry chapel on the north. The Tudor additions to the abbey stable quad are specially attractive to the lover of the picturesque. Of Corsham we may say but little because its Court House, old almshouses and fine church are so well-known. The visitors recalled their previous visit and noticed several appropriate additions to the last-named building. It was badly over restored previously, but Geo. E. Street did his work well and built the tower and spire after the traditional lines of Wiltshire buildings which he wisely adapted. Bishop Canning's church was seen on the way over the Downs to Avebury. It stands on the royal estate associated with the ancient Bishops of Ramsbury. The building is cruciform, of early English character, with clerestory and roof of Perpendicular date. The windows in the west wall of the nave and in the transepts are of their date unequalled in the country, while the general outline and scale of the Church make it quite Cathedral-like in effect. Avebury church is less important but it interests more, in spite of the early 19th century restorations. The manor house adjacent is Elizabethan in origin, the quite queer little village, with some of the cottages opening into the graveyard, made delightful combinations, not forgetting the thall-covered path on the great garden stone wall, and the pigeon round house in the farmyard on the north. The parish, for over 100 years, was without a resident priest but is now well cared for. The rood screen much enhances the interior of the sanctuary. Mr. Fonting did his best with refurbishing the chancel, rebuilt in 1879. The upkeep of Avebury House and its gardens add greatly to the beauty of the place. At Marlborough College the visitors were fortunate in obtaining the hospitable assistance of the well-known musical director, Dr. F. W. Ivimey, who conducted them over the new Memorial

Hall erected from the designs of Mr. William G. Newton, F.R.I.B.A., whose chosen competitor drawings of this building were familiar in the recent Royal Academy exhibitions. The acoustic capabilities of the structure were carefully tested by the accomplished cicerone who rendered a selection for this purpose on an orchestral grand piano and spoke from various positions to the visitors standing at the far distance on the uppermost encircling aisle. Next the segment of the Hall, where the wall is draped with folded hangings. The curtains to the series of windows were also drawn throughout, further to exemplify the capacity and control of the sound. The colour decoration in tones of yellow quietly conceived, is very effective and set off by gilt sconces and the dark blue of the curtains. The electric lighting adds materially to the colour result. The music rooms below, also the practice rooms flanking the stage, were visited and the raft construction explained. The splendid chapel at Marlborough College, designed by G. F. Bodley, R.A., was seen and greatly admired, also the great improvement carried out by the rearrangement of the forecourt at the base of the chapel steps and the front of the colonnaded frontispiece of the New Hall. The old parts of Marlborough College, the common rooms, &c., were most kindly shown, also the grounds at the rear as well as the duelling ground hidden among the shrubs. The recent extensions of the College by Sir Aston Webb, on the other side of the high road, with the bold connecting arched bridge of one span, make an admirable feature of good scale and properly devoid of superfluous ornaments. Sir Aston's work makes a fine foil to Bodley's Gothic chapel close by.

The three old churches called at on the return journey to Devizes, viz., Alton Barnes, Alton Priors and All Cannings, proved of differing interest, but demand no special comment here. West Lavington, Westbury and Trowbridge filled the available time owing to the wet on the following outing. The first-named is "a delicious village," and Bishops Lavington also; one time belonged to the Bishops of Sarum. The purpose of the visit was to see the commodious and well-located old house at West Lavington, now occupied by Mr. Thomas Holloway, the well-known contractor. The party was shown over the premises and garden by Mrs. Henry Holloway, much to the visitor's satisfaction. Erlestoke, near by, is full of typical cottages traditional to the county. Westbury has developed since the railway came, but is not enhanced by the change architecturally. All Saints', amid chestnut trees, is worthy of so important a parish, and may be described as a spacious church of cruciform plan with a fine central Perpendicular tower, the whole fabric being on a Norman foundation and having fine original roofs, the clerestory being later than the nave. By roundabout way through a pleasant country the day's visit ended at "the wide-awake little town of Trowbridge," the third town in Wiltshire, only one strip by Swindon and Salisbury. The church "lightsun and fair," was practically rebuilt in 1845; notwithstanding this, it has its points of interest, dating as it does from 1475. The chief attraction is the lofty stone spire said to date from the time of old John of Gaunt. H. George Crabbe the poet was parson from 1814 to 1832, where he wrote "Tales from the Hall," and was buried in the chancel. The drenching rain persisting precluded further enterprise, and so Devizes afforded the excursion a welcome.

Littlecote was reached next day by way of Hungerford after passing through Savern Forest, partly on the road. The party were impressed very much by the church at Hungerford, where it is proposed to erect three screens and parvise, one to form a choir apse. The quasi-apse in nondescript Gothic is ungainly, with the east window in the curve. I thought the war memorial triptych in the north aisle, in painted wood, with well-carved figures and crucifix, was quite excellent, and to prevent removal at any time this structure should be attached to the fabric permanently. Ramsbury

ARCHITECTURAL SCHOOLS

LIVERPOOL SCHOOL OF ARCHITECTURE.

WE have received a copy of the prospectus of the University of Liverpool School of Architecture for the session 1925-26, which includes an appendix descriptive of the Department of Civic Design. The prospectus sets forth all necessary particulars relating to the courses of study provided, and is illustrated by some excellent specimens of students' work. The work of the school is directed by Professor C. H. Reilly, O.B.E., M.A. Cantab., F.R.I.B.A. (Associate Professor of Architecture), L. B. Budden, M.A., A.R.I.B.A., with Professor L. P. Abercrombie, M.A., A.R.I.B.A. in charge of the Department of Civic Design.

The Liverpool School, founded in 1894, offers courses which are designed to provide a full professional education at a University standard for all who intend to practise as architects and who wish to acquire their training in an atmosphere of liberal studies, side by side with the students of other professions. To meet the varied needs of architectural practice as they have now developed, the School offers courses of study leading, if preceded by matriculation, to the Degree of Bachelor of Architecture (B.Arch.) or, if not so preceded, qualifying for the Diploma in Architecture. These courses, which are identical both for the Degree and for the Diploma, extend for five years and are of three kinds—the Pass course; the course with Honours or Distinction in Architectural Design; and the course with Honours or Distinction in Architectural Construction. The curriculum of the first three years is common to all three courses, whilst that of the fourth and fifth years in the case of students taking honours or Distinction goes beyond the pass type. Each of the courses is devised so as to equip the student with the most efficient training possible for the vocational work he proposes to do. The lecture courses are arranged to run parallel with the work done under instruction in the studios.

Under the regulations governing the courses of study students are required to spend six months of their fourth and fifth years respectively in some approved form of practical work, usually in an architect's office where they can earn a salary. For some time past the School has established connections with certain of the best known architectural offices in New York. In consequence, students during the summer term and long-vacation of their fourth year of study have the opportunity of securing temporary positions as paid assistants in these offices at rates of pay which, with care, cover their passages either way. The School was the first to formulate and to present Degree and Diploma courses of a full professional kind to the Board of Architectural Education of the R.I.B.A., and was the first of the six schools now recognised by the Institute to secure for its graduates exemption from all subjects but one of the Institute's Final Examination.

The Department of Civic Design is intimately connected with the School of Architecture, and the students of both pursue their studies together in the same building. This arrangement tends to exercise a beneficial influence on both; and indicates the belief that artistic design should be concerned with every aspect of town planning. The study of social conditions and the preliminary data upon which development should be based is also encouraged by connection with the School of Social Science and the Regional Survey of the Geographical Department. The University grants a Certificate and a Diploma in Civic Design. The courses leading to a certificate are especially arranged to deal with the basic principles of town planning, and will treat of problems involved in city remodelling, industrial development, traffic, and suburban extension. During the course students will attend lectures on civic development, engineering, law, and landscape design. Studio work will include the plotting of new lines of communication, the sub-division of areas on plans of existing towns, and will deal

exhaustively with the many detailed problems involved in planning the sites for housing schemes. The course extends over two Sessions of two terms each.

CARDIFF TECHNICAL COLLEGE.

Department of Architecture and Civic Design.

At the Technical College, Cardiff, ten scholarships covering tuition fees and maintenance grants of £40 per annum for three years are offered for competition annually. As candidates for entry to the Department of Architecture and Civic Design are eligible to compete for these scholarships, they are of considerable interest to those who contemplate entering the architectural profession. The scholarship examination is a competitive one, and is of about the same standard as matriculation. In the case of candidates for the School of Architecture the subjects of this examination are:—(1) English; (2) mathematics—two papers (a) algebra and arithmetic, (b) geometry and mensuration; (3) a modern language (French, German or Welsh); (4) physics with mechanics, or chemistry, or higher mathematics; (5) history or geography. Candidates must further satisfy the head of the Department of Architecture as to their ability in elementary drawing.

The Department has now been at work for rather more than five years under the charge of Mr. W. S. Purchon, M.A., A.R.I.B.A., the lecturer in Architecture being Mr. R. H. Winder, M.A., A.R.I.B.A., and the assistant lecturer, Mr. Lewis John, M.A., A.R.I.B.A. The following local architects assist in the work of the Advanced Course as Honorary Lecturers:—Messrs. Percy Thomas, F.R.I.B.A., Ivor Jones, A.R.I.B.A., T. Alwyn Lloyd, F.R.I.B.A., H. Teather, F.R.I.B.A., A. L. Thomas, F.S.I., C. S. Thomas, F.R.I.B.A., and J. H. Jones, F.R.I.B.A., and Mr. T. Pierson Frank, M.Inst.C.E., F.S.I., City Engineer, Cardiff. Students in the Department also attend courses in the Departments of Engineering, Technical Chemistry, Mathematics, and the School of Art, all of which are housed in the same building.

The Cardiff school is "recognised" by the Royal Institute of British Architects, which grants exemption from its Intermediate Examination to students who pass successfully through the three years' full-time day course leading to the certificate. In addition to this course the Department provides a Diploma Course consisting of two Sessions, the former of these being of six months' duration only, the intervening six months being spent in architects' offices. There is also an Evening Atelier for architects' assistants who cannot attend the day courses. The Department is in close touch with the South Wales Institute of Architects, representatives of this body being on the Advisory Committee of the school, and students of the school are eligible for the prizes awarded by the Institute. In addition to these awards there are a number of school prizes presented in the main by local architects. The External Examiner for the past session was Professor A. C. Dickie, M.A., F.S.A., A.R.I.B.A.

The school year commences on Tuesday, October 6, but intending students should apply at an early date for particulars of the courses of instruction and of the entrance and scholarship examinations. Application forms for the latter must be completed and submitted by September 14.

New Housing Scheme at Kensington.

Kensington Borough Council has agreed to a scheme by which it will pay to the L.C.C. £4 10s. per house for 40 years on 100 houses to be erected on the Old Oak Common Housing Estate, for families to be selected by the Kensington Council. For this annual contribution of £450 it is estimated that the Council will secure housing accommodation for 500 persons.

after Littlecote, has a church of fewer actions, but the square, handsome brick-t Manor House, a mile beyond the village, in noble park in which the river Kennet feeds lake, is an admirable seventeenth-century mansion replete with refined Renaissance stone rails attributed to John Webb, pupil of Inigo Jones, and his work is thoroughly English, with gates of the same date. The extraordinary wings of Mildenhall, carried out in wood about 16, at great expense, including a west gallery, so elaborated that it seems cruel to say how difficult it would be to conceive anything worse than in plasterer's Gothic. They are so curious that the work has an interest and shows the style of the period when it was done.

The concluding day began at Potterne, a delightful village with a beautiful church on the east and having an unsurpassed approach, with hedges flanked by trimmed shrubs. The building is excellent Early English, and "might have been designed by Elias of Dereham," as Mr. Howard Hutton says. "Porch House" is the chief of attraction in the village; it is suggested was once known as "Pack Horse Inn." This half-timbered building belonged to George Richmond, R.A., who restored it. The interior is replete with its ancient roofs and collection of appropriate furniture, and it has a capital garden at the rear. There is not much to say about Chippenham, because so many know the merits of its great church, the tower of which was rebuilt in 1442; but in 1633 the structure was new and was reconstructed, the steeple rising 15 ft. lower than its predecessor. There is much good glass in the Lady Chapel and church generally, but the best of all is the war memorial window of four archangels in the chancel by the late Christopher Whall, a work of merit, even if the dark blue glass in the very masks the stone work excessively. The church by Wood of Bath, built in 1779, distinguished piece of design and in its way. It is too much like a private chapel, of course, for parochial needs, but architecturally worth seeing at Hardenhuish. Yatton Key has a small manor house of the seventeenth century, and Biddstone village possesses many stone houses set out regardless of continuity of space. The Manor House beyond is a particularly refined and singularly unpretentious building in scale throughout. Castle Combe, north-west Yatton, in the valley of the By Brook, is the loveliest village in Wiltshire, and in way is as unique as Clovelly. The Market Cross building is set off by its surroundings and church, in itself not distinguished, has a sculptured arch to the chancel the like of which we do not recall. The church at Melksham furnished the last stage of the excursion, the note of its having wide windows over the piers in the clerestory has to be added in conclusion because that arrangement is very common and structurally not preferable.

"Harlequinade."

Lord Eustace Percy, at the A.A. prize-giving recently, remarked on the lack of a humorous touch to architecture. It is evident from this that he had not read *Harlequinade*, the A.A. Architects' magazine, of which the last two numbers are before us. Its bright little articles and poems make excellent reading and the sketches with which it is besprinkled are very nicely done. It is rumoured that *Harlequinade* is being discontinued for financial reasons, and that these are probably the last issues. It would be a pity for a magazine to be eclipsed through lack of effort. The price is half-a-crown.

Death of Mr. Arnold W. Brunner

We regret to announce the death of Mr. Arnold W. Brunner, the distinguished American architect. Mr. Brunner always took a keen interest in the American Institute of Architects, and was at one time President of the New York Chapter. He was also a past President of the Architectural League of New York, as well as of the Fine Arts Federation. A great part of Mr. Brunner's practice was confined to governmental and institutional work.



ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting?—*Ed.*

Tiling Phenomenon.

REPLY TO "JERSEY."

SIR,—The Bridgewater, in common with other types of single lapped tile, depends very largely upon its own weight to resist the pressure of a strong gale, and the flatter the pitch, the more does the dead weight of the individual tile operate against the more or less horizontal pressure of the wind, and the less the surface presented normally thereto. This is no doubt the solution of the puzzle. Another strange thing about this form of tiling, which I have myself observed, is that where tiles become blown off, it is generally those on the leeward side that go, the wind passing through the interstices between the tiles on the windward side and directly lifting those on the side that would naturally be considered the more sheltered. This points strongly in favour of well torching the undersides of this form of roofing.

PRACTICE.

Increase in Price of Building.

[REPLY TO "LONDON," AUGUST 7.]

SIR,—The spirit of the R.I.B.A. contract, or any other for that matter, is one of reasonable compromise. If the builder can prove satisfactorily that the item in question is a dead loss, it would be far better for the architect to agree to a reasonable addition on cost. If it were enforced, as suggested, by another contractor doing the job, the situation seems wrong, and one hardly knows where it would end.

G. W. HARRIS.

SIR,—A contractor who has undertaken a contract upon bills of quantities in the usual contract form, and has submitted his priced schedule in the usual way, has no right to charge any but the same schedule rates for variation work, until he has completed his contract. In deciding whether certain extra work can be ruled as merely a variation on the contract, or whether such work is so extensive as to constitute a subject of new contract, it is only possible to judge on the merits of the case. For instance, if the contract for a hospital was increased by a complete additional ward, it would not be possible to force the contractor to undertake this additional work on schedule prices without his consent, and he could claim a new contract; but if a contract included, say, a number of pantry cupboards, and one additional was ordered, such a matter would be purely a variation on the contract, and the contractor could not claim any higher than the schedule rates simply because the originals were priced at a rate that did not pay. Where to draw the exact line is difficult to define, and matters may be so much in the balance that either party might go to law with some confidence. This is, however, always to be avoided where possible, and the architect can often view the matter in a properly judicial manner and determine whether a great hardship may be imposed upon the contractor by rigidly adhering to the schedule. A little advice to both parties may very well settle the matter with satisfaction.

"JUSTICE."

Parquetry Warping.

[REPLY TO "PERFECTO," AUGUST 7.]

SIR,—Where the warping is of old standing and the heat has had the chance to carry its results to their limit, it is quite safe to plane off the parquetry to a new surface which has every likelihood of standing. To avoid this trouble in new work, the heating pipes under should be well wrapped or coated with an

insulating material, and the space below the floor well ventilated. If the floor is then well and truly laid no trouble as to warping need be anticipated.

"EQUABLE."

SIR,—The heating pipe trenches should be so designed that the parquetry coming on top of pipes should be at least three-quarters to 1 in. thick, and intersect into the other part, which is usually only $\frac{1}{4}$ in. thick; furthermore, it should be rebated if intended to be part of the whole floor.

G. W. HARRIS.

Well under House.

SIR,—Under a house which stands on a sand bank in clay soil there is a well for drinking water and washing purposes; rain water is collected from the roof. Is there any means of finding out whether the well would supply sufficient water for washing and cooking in all weathers? The rain water is soon used up in dry weather, but the drinking water never runs dry.

"WATER."

Shuttering.

SIR,—What is the best material to put on boards which are to be used for shuttering for concrete?

R. M. P.

A Girder Question.

SIR,—It is intended to place a box girder, comprising three 12 in. by 5 in. girders plated top and bottom, into an existing 18 in. wall some 13 ft. from floor line, and removing the wall underneath. I believe there is a way of box needling on the present wall instead of using needles and a long strut inside and outside, and should be obliged if any reader could give a rough sketch.

F. G. J.

Preserving Post Ends.

SIRS,—What is the best method of preserving the ends of posts which have to be sunk in the ground? Would crude carbolic acid be suitable for this purpose, either alone or used mixed with creosote or tar?

T. BARTON.

Composition of Bronze.

[REPLY TO "ANTIQUARY," AUGUST 7.]

SIR,—Old bronze usually contained a small proportion of lead which gave a less even quality, though the material was less brittle and better suited to the finish of those parts that were lost in the process of casting. In some cases silver and iron were mixed in the alloy for special purposes of colour.

"BRONZE."

Velocity of Flow in Drains.

[REPLY TO "DESIGNER," AUGUST 7.]

SIR,—Eytelwein's formula will give the information required by your correspondent.

V equals 55 times the square root of H times 2F, where

V is the velocity in feet per minute,

H the hydraulic mean depth in feet,

F the fall in feet per mile.

"FORMULA."

Cleaning Porcelain Enamel Baths.

[REPLIES TO R.P.B., AUGUST 14.]

SIR,—I always advise the following, and find it very satisfactory. Take about a couple of tablespoonfuls of paraffin and a rag and well rub the bath round. Wash off with warm soap and water.

E. B.

A Mortgage Question.

SIR,—A has a house (in which he resides) also several cottages, all tenanted, and so land. He obtains a mortgage on the whole lot from a Building Society, and after a time is unable to meet the capital and interest charges. The Society offer the whole in various lots for sale by auction, for which no bids forthcoming; then they proceed to collect rents from all others except A. They write saying they want him to get out of the house as they are going to offer it for sale with vacant possession. Can they force A to give up house as tenant if he is not in a position to purchase it, he having offered to pay the rent? Does the Rent or Mortgage Act offer no protection in a case of this sort? If A wished to take this lot over again, is there any limited number of years in which he must do so?

"MERSEY."

[From the information given it would appear that the Building Society is in the position of the mortgagee in possession of the whole of the property. It is not made clear why the Building Society has collected rents from the tenants of the property except A, since it was entitled to collect from all, including A. Nevertheless A is in the same position as the other tenants. He has at all times been willing to pay rent, and at the present moment is willing to pay rent and provided the "standing rent" is within the limits of the Rent Restriction and Mortgage Acts, he is protected by those Acts just as much as the other tenants are; and the Building Society cannot treat A in respect of his house differently from the other tenants in respect of their cottages, i.e. it is not entitled to sell A's house with possession of the cottages. As to the second part of the query, A not having complied with the terms of the mortgage deed is not, nor at any time will be, in the position to take the lot over again; except by arrangement on terms he may be able to make with the Building Society. Nor is there any limited number of years in which he is able to do so. He forfeited his rights under the mortgage deed with the Building Society when he failed to comply with its terms.]

Imports of Bricks and Tiles.

SIR,—Will you please give the imports into the United Kingdom of bricks and tiles during the years 1920, 1921, 1922 and 1923, also imports of the same materials for the first months (or such months as may be available) of the current year?

W. G. E.

[The figures are as follows:—

	1920.	1921.	1922.	1923.
Bricks	37,000	3,920,000	535,000	7,372.
Tiles (all except floor tiles and glazed and hearth tiles), in tons—				
	1920.	1921.	1922.	1923.
	1,322	20,614	11,567	16,554

For the seven months of this year ending July, the imports of bricks were 82,829, and 51,341 tons of tile.—*Ed.*

Hard Tennis Court.

SIR,—I shall be obliged if you will give some information on the construction of a hard tennis court—a green surfaced one for reference—or tell me of a book dealing with the subject.

F. P. MERRITT.

Rise and Go of Stairs.

[REPLY TO "PITCH," AUGUST 14.]

SIR,—The average man's pace is a 23 in., and the exertion expended in moving vertically is double that of progressing horizontally. In an "easy" staircase each will approximate to a 23 in. pace. The rise will be "normal exertion," and if deducted from 23 in. will leave double the rise, since rise may be taken as twice "normal exertion."

S. M.

THE BUILDING TRADE.

THE DOMESTIC GRATE

By T. P. BENNETT, F.R.I.B.A., Hon.F.I.O.B.

THE Fuel Research Board has issued an additional Technical Paper on "The Domestic Grate,"* containing details of experimental investigation conducted by Miss Margaret Fishenden, D.Sc., F.Inst.P., whose work in this connection is well known. The domestic grate is a matter of considerable interest to the whole community, since it is evident that it offers the most economical method of heating rooms in small houses, and combines with this economy a cheerfulness and attraction which are universally admitted.

The heating of rooms is one of the prime necessities of living, at any rate under civilised conditions. In the Middle Ages wood was universally employed and remained the principal fuel of the country until the nineteenth century. It is interesting to note that the total output of coal in this country was 10,000,000 tons in 1800 and 215,000,000 tons in 1900. This vast increase coincided with universal coal burning in small grates, and the Victorian grate, familiar to all, was evolved. A considerable revision of the Victorian grate has been experienced during the last twenty-five years, the outstanding change being the use of fire-brick for forming the heating surface in place of the old cast-iron basket and backing. It is the principal merit of the coal fire that heat is obtained from it by direct radiation, radiant heat having proved to be infinitely more pleasant to the human body than convected heat which is received from the radiator. If the coal fire could be made very much more efficient than it is at present, a great boon would be conferred upon the less wealthy portion of the community, and there is unquestionably still room for a very large amount of experimental work in this direction.

Two main paths of inquiry have been investigated: one deals with a fire which is as vertical as possible, and the other, that of a deep fire, a more or less horizontal fire. Miss Fishenden's work proves that, broadly speaking, bars do not reduce seriously the amount of radiation from a fire, and this is brought about by their ability to hold the fire in a vertical position and enable it to present its maximum surface to the room. In the best modern fires, 15 per cent. to 20 per cent. of radiation efficiency is secured, but this obviously leaves room for substantial improvement. It is a question whether a grate will ever be evolved which will enable the user to get complete combustion, and the whole of the advantages of combustion in useful heat in his room. The experiments which have recently been conducted show that the very large quantity of fuel which is capable of being moved across a room by the ordinary coal fire seriously affects the temperature of the room and causes inequality of draught in the fire, as well as seriously retarding the heating-up of the surfaces of the walls and furniture. The two principal factors in efficient coal-fire heating, therefore, are the design of the grate and regulation of the draught. The principal part of Miss Fishenden's present report is concerned with experiments in the reduction of the depth of the grate from front to back, in the introduction of a sloping back, and of sloping sides to a standard grate. It is admitted that the result of these investigations is to prove that a grate with a fair amount of bottom area and with a sloping back gives the whole the best results. If the bars are used, a relatively shallow grate is possible. It does not appear to be a very striking conclusion: in a sense it merely reflects the

statements made by fire-grate manufacturers for the last ten years. It may seem too much to expect the scientist to be able to evolve a perfect article from the consideration of abstract conditions, but this is, after all, the fundamental purpose of scientific study. If it were possible to give a summary of scientific, as opposed to empirical, methods it would probably be said that science substitutes logical deduction for a process of trial and error, and it would, therefore, seem not unreasonable to ask the scientist to consider the fundamental problem of the domestic grate as a heating unit placed in the centre of one side of an apartment, to use the smallest possible quantity of soft coal, and to be so designed that it would be capable of completely consuming this coal and giving 80 per cent. or 90 per cent. of the heat into the room. Progress of grate design has been a matter of evolution: the architect and the public are now asking the scientist to proceed to a method of revolution, and the scientist should be capable of obtaining an achievement which a few years ago would have been impossible.

Miss Fishenden states that 1 lb. of good quality coal in an ordinary open grate is equivalent to a temperature of nearly 200 degrees Fahrenheit in 1,000 cu. ft. of air. In other words, if a room were perfectly insulated, two complete changes of air could be provided by a consumption of 2 lb. of coal an hour for every 1,000 cu. ft. of room space, and this would suffice to maintain the air at a temperature of 60 degrees Fahrenheit with an entering air temperature of 40 degrees Fahrenheit. Open coal fires, as ordinarily installed, frequently induce from five to ten complete changes of air per hour in rooms of moderate size, which would reduce the air temperature to some 48-44 degrees Fahrenheit. Unquestionably draught control is one of the principal elements of efficient grate design, and it would seem that the best method of controlling the air passing through the burning fuel has yet to be found. When found, it must obviously be capable of automatic adjustment by comparatively unintelligent operators, such as residents in houses, or maids.

It is a common cause of complaint against the coal fire that so large a proportion of the heat vanishes up the chimney, and it would seem that Miss Fishenden is reconciled to this excessive waste. She states that "it is doubtful whether the radiation efficiency of open coal fires against a wall can easily be increased beyond some 30 per cent. or 35 per cent. of the theoretical energy of combustion." It may be admitted that an increase beyond these figures is a matter of difficulty, but it should be the object of a Government Research Department to overcome these difficulties and to lay down a theoretical basis which is capable of producing a highly efficient article. The gas fire and the electric stove rely entirely upon their efficiency for their use. The coal fire hitherto has been able to employ cheap fuel, and the urgent need for efficiency has therefore been much smaller. Human nature seems to demand some great incentive before it can produce articles which are advantageous for it, and it may be that the increasing cost of coal will do more to produce efficient grates than scientific investigation or householders' complaints. It might even be possible that the coal industry will make a combined effort to produce a grate capable of emitting this valuable radiant heat at a tithe of the cost of its competitors, gas and electricity. We may finally borrow from the Fuel Research Board's Technical Paper a summary of the conditions

which must be fulfilled by an efficient coal fire. They are as follow:—(1) The use of correctly designed grates, properly fitted; (2) the provision of adequate draught control so that not only may the fire be rapidly adjusted to meet varying requirements, but also the air-flow through the room may be reduced to the minimum consistent with the demands of hygiene and comfort; and (3) efficient insulation of the room.

The problem presented still awaits a solution which would be of universal advantage.

BOND BETWEEN CONCRETE AND STEEL

IN describing the results of his investigations into the relation between the bond between concrete and steel and the factors which govern the compressive strength of concrete, Professor Duff A. Abrams gave the following as his conclusions to a recent meeting of the American Society for Testing Materials. The tests were made by applying a pull on one end of 1 in. plain round steel bars embedded axially in 8 in. by 8 in. cylinders. The concrete specimens were made from a wide range in size and grading of aggregates, quantity of water, and cement, and were tested at ages from seven days to one year.

(1) A steel bar embedded in concrete offers considerable resistance to a pull-out load. Slipping of the bar begins at a bond stress of about 10 to 15 per cent. of the compressive strength of the concrete, but considerable additional load is taken before the ultimate bond resistance is reached. For pull-out tests of the type used, 0.0005 in. end slip of bar occurred at 55 to 60 per cent. of the maximum bond; for mixtures lower than 1:1 the maximum bond was about 24 per cent. of the compressive strength of the concrete and came at an end slip of about 0.01 in.

(2) Bond and compressive strength increased with age of the concrete from seven days to one year. For 1:5 concrete of water-ratio 0.88, the bond at one year was 134 per cent. of the 28-day value, and compressive strength 148 per cent.

(3) Bond responded to changes in water-ratio of the concrete in much the same way as compressive strength; increase in water-ratio due to use of wetter concrete, less cement, or an excess of fine aggregate, resulted in material reductions in both bond and compressive strength. Other tests have shown that the same statement applies to the impermeability, resistance to wear, and resistance to destructive agencies such as weather, sea and sulphate waters, &c.

(4) For mixtures richer than 1:1 the bond fell off, probably due to the greater volume changes during hardening which is characteristic of such mixtures.

(5) The use of 4 per cent. of the 28-day compressive strength of concrete as the working stress in bond for plain bars, as specified by the Joint Committee, is justified; this gives a factor of safety of about 2½ to 3 against first slip.

(6) The use of crude oil to replace mixing water, in general, caused a reduction in both bond and compressive strength of concrete. Five per cent. of oil reduced the bond at 28 days about 20 per cent.; at one year, about 6 per cent.; compressive strength at 28 days and one year was reduced about 3 per cent.

(7) Replacing cement with hydrated lime decreased the compressive strength and bond about 1.2 per cent. for each 1 per cent. of hydrated lime in terms of volume of cement, or about 2.0 per cent. for each 1 per cent. by weight.

*THE DOMESTIC GRATE, by Margaret White Fishenden, D.Sc., F.Inst.P. H.M. Stationery Office. 9d. net.

THE SMALL DWELLINGS ACQUISITION ACT, 1899

It is, perhaps, a matter for regret that the Small Dwellings Acquisition Act, 1899, which for some 20 years attracted so little attention, and which is not referred to in the older text books on housing, should only have been amended "by reference" in the various Housing Acts and still does not appear in the Housing Act, 1925, which is a consolidating Statute. This little Act has thus escaped attention to a great extent and little use was made of it through the pressing housing period from 1914 onward. Its provisions as amended are still somewhat difficult to refer to, so we propose to give a short summary of such as are of primary importance at the present time.

Originally the Small Dwellings Acquisition Act only applied to enable local authorities "to advance money to a resident in any house within the area for enabling him to acquire the ownership of that house," and such advances could only be made "where in the opinion of the local authority the market value of the house" did not exceed £400. The Housing Act, 1919, by section 49 raised the amount of the market value to a sum not exceeding £800, but by the Housing Act, 1923, section 22, para. (b) the sum was again raised and now is £1,200. But an even more important extension of the Small Dwellings Act was made by the Housing Act, 1923, in section 22 paragraph (a) which provides, "The advance under that Act may be made to a person intending to construct a house, and in such case the limitation in that Act requiring that the person to whom the advance is made must be resident in the house, shall be construed as requiring that the person should be a person intending to reside in the house when constructed."

Paragraph (c) also provides that "The statutory condition requiring the proprietor of a house in respect of which an advance has been made to reside in the house shall have effect for a period of three years from the date when the advance is made, or from the date on which the house is completed, whichever is the later, but no longer, and compliance with this condition may at any time be dispensed with by the local authority."

The maximum market value of the house being now £1,200, the next question of interest to the applicant will be what advance can he expect in respect of his particular property?

Section 22 paragraph (d) of the Housing Act, 1923, deals with this point. It provides: "The market value of the ownership of any house in respect of which an advance is to be made under that Act" (the Small Dwellings Act) "shall be ascertained by means of a valuation duly made on behalf of the local authority, and the amount of any such advance shall not exceed 90 per cent. of the market value as so ascertained," and in the case of houses which it is proposed to construct, paragraph (e) provides, "Where an advance is made in respect of a house in course of construction, the advance may be made by instalments from time to time as the building of the house progresses, so that the total advance does not at any time exceed 50 per cent. of the value of the work done up to that time on the construction of the house, including the value of the interest of the person to whom the advance is made in the site thereof." These latter words are very important to persons of limited means who desire to purchase a site.

The above are practically all the amendments introduced into the Small Dwellings Act by the Housing Act, 1923, except as regards Scotland, and as regards the final paragraph in section 22, (f), which provides that the acceptance of an advance is not to disqualify the recipient from being elected as or being a member of the local authority by whom the advance is made, or any committee of such local authority.

The next point of interest will be the terms

on which the advance can be obtained and the period over which it can extend.

By subsection (3) of section 1 of the Small Dwellings Act it was provided that the interest should be "at such rate as may be agreed upon, not exceeding ten shillings above the rate at which the local authority could borrow the money for the advance," . . . but this subsection was repealed by section 5 of the Housing Act, 1921, which provides that "the rate of interest on advances under section 1 of the Small Dwellings Acquisition Act, 1899 . . . shall as regards advances made . . . after the commencement of this Act be such rate as the Minister may, with the approval of the Treasury, from time to time by order fix, and different rates of interest may be fixed for different purposes and in different cases."

As regards the period for repayment, Section 1 subsection (2) of the Small Dwellings Act provides, "Every such advance shall be repaid with interest within such period not exceeding 30 years from the date of the advance as may be agreed upon." Subsection (4) of section 1 provides, "The repayment may be made either by equal instalments of principal or by an annuity of principal and interest combined, and all payments on account of interest and principal shall be made either weekly or at any periods not exceeding a half-year according as may be agreed," and subsection (5) contains provisions enabling the proprietor of a house after one month's written notice to pay off the whole or any part of the advance.

Under section 2, before making an advance, the local authority has to be satisfied (a) that the applicant is a resident or intending resident in the house and is not already the proprietor within the meaning of the Act of a house to which the statutory conditions apply; (b) that the value of the ownership is sufficient; (c) that the title of the ownership is one which an ordinary mortgagee would be willing to accept; (d) that the house is in good sanitary condition and good repair; and (e) that the repayment of the advance is secured by an instrument vesting the ownership (including any interest already held by the purchaser) in the local authority, subject to the right of redemption by the applicant, but such instrument shall not contain anything inconsistent with the provisions of the Act.

By section 3, until the advance is fully paid, the house is held subject to certain conditions (a) the sums due for principal and interest must be punctually paid; (b) the proprietor shall reside in the house; (c) it must be insured against fire; (d) must be kept in good sanitary condition and repair; (e) must not be used for the sale of intoxicating liquors; and (f) power is given to the local authority to enter for inspection.

As we have shown, the condition (a) as to residence, by section 22 of the Housing Act, 1923, has been made to have effect for only three years, and it is important to note that by section 3, subsection (2) of the Small Dwellings Act, power is given, with the permission of the local authority, to the proprietor to transfer his interest in the house, but any such transfer shall be made subject to the statutory conditions. It should also be noticed that by section 7, subsection (2) the local authority may allow a proprietor "to permit by letting or otherwise a house to be occupied as a furnished house by some other person during a period not exceeding four months in the whole of any twelve months, or during absence from the house in the performance of any duty arising from or incidental to any office, service or employment held or undertaken by him."

By section 3, subsection (3), default in complying with the statutory condition as to residence is a ground upon which the local authority can take possession of the house, and breach of other statutory conditions, whether the condition as to residence has or has not been complied with, is a ground upon which the local

authority may either take possession or order a sale without taking possession.

By subsection (4), in the case of the breach of any condition other than that of punctual payment of the principal and interest of the advance, previous to taking possession or ordering a sale, notice in writing has to be delivered by the local authority at the house calling upon the proprietor to comply with the condition, and if the proprietor within fourteen days, or an undertaking in writing to comply with the notice, and within two months complies with the notice, the local authority shall not take possession or order a sale.

The local authorities for the purpose of the Act are defined in section 9 to be the council of any county or county borough, but if the council of any urban district not being a county borough, or of any rural district pass a resolution undertaking to act under this Act, the council shall, subject, in the case of the council of a district containing a population according to the last census of less than 10,000, to the consent of the county council, be the local authority in that district for the purpose of the Act to the exclusion of any other authority. In subsection (4) of section 9 there is a limitation on the sums which may be expended under the Act. The Act has been the subject of amendment in various statutes relating to housing, but we cannot find that this provision has been relaxed. This piecemeal system of amendment is an unfortunate method of dealing with a statute of this kind intended to assist persons of small means, as it makes it extremely difficult to find all the amendments.

In the definitions of residence and ownership contained in section 10, it is stated that: "A person shall not be deemed for the purpose of this Act to be resident in a house unless he is both the occupier of and resident in that house." For the purposes of this Act ownership shall include such interest or combination of interests in a house as, together with the interest of the purchaser of the ownership, will constitute either a fee simple in possession or a leasehold in possession of at least 60 years unexpired from the date of the purchase."

There are 16 sections in the Act, but we have only referred to those which may be of most interest to intending applicants.

In conclusion, as illustrating the extraordinary difficulty of ascertaining what the existing provisions of the Small Dwellings Act, we will refer to one example. Section 49 was as follows: "A local authority for an area may, subject to the provisions of the Act, advance money to a resident in any house within the area for the purpose of enabling him to acquire the ownership of that house provided that any advance shall not exceed—(a) for the fifths of that which in the opinion of the local authority is the market value of the ownership, nor £240; or in the case of a fee simple leasehold of not less than 99 years unexpired at the date of the purchase, £300; and any advance shall not be made for the acquisition of the ownership of a house where in the opinion of the local authority the market value of the house exceeds £400."

Section 49 of the Housing Act, 1919, substituted £800 for £400 in this subsection, and substituted 85 per cent. for the four-fifths paragraph (a), as the limitation of the amount of the advance, and repealed paragraph (c). Section 22 of the Housing Act, 1923, which, as we have shown, enacts that "The Small Dwellings Acquisition Act shall have effect subject to the following amendments," and then follows the paragraphs we have set out in this article, repeals in the Third Schedule which repeals enactments the Act is referred to thus: "Extent of repeal. In section one the words from 'any advance shall not' to 'the ownership nor' and the word 'and.'"

If this repeal is applied to the section, remembering that already paragraph (b) has been repealed by the Housing Act, 1919, it will be seen its effect is only to preserve the words limiting the advance to £400, a provision already enlarged by the Housing Act, 1919, and extended by the Housing Act, 1923. It is thus that the legislature for persons of small means and possibly small education.

THE BUILDING STREETS ACT BUILDING LINE

An important decision has been given by the Court of Appeal in the recent case *Attorney-General v. Fulford* (1925, 1, Ch. 318) on section 3 of the Public Health (Building in Streets) Act, 1888. This section repealed section 156 of the Public Health Act, 1875 and enacted: "That it shall not be lawful in any urban district without the written consent of the urban authority to erect, or bring forward, any house or building in any street, or any part of such house or building, beyond the front main wall of the house on each side hereof in the same street, nor to build any addition to any house or building beyond the front main wall of the house or building on each side of the same." The principal alterations in this section as regards section 156 are that the word "erect" precedes the words "bring forward," and the word "main" is inserted before the words "front wall."

On April 7, 1924, the defendants had deposited plans with the Corporation of Birkenhead for the erection of a house and shop on a corner site fronting Hoylake-road but bounded on the west by Challis-street. According to the plans the house was to be set back from Hoylake-road 2 ft., but the Corporation contended that it should be set back 12 ft., and disapproved of the plans on this ground. The defendants intimated that they should proceed with the erection of the building, and they had done so, and this action was brought by the Attorney-General on the relation of the Birkenhead Corporation for an injunction restraining the defendants from erecting a building within 12 ft. of the road, and for a mandatory injunction to pull down so much of the house as had at the date of the trial been completed. The writ was issued July 7. The Hoylake-road is a thoroughfare carrying traffic from Birkenhead through Bidston to Wirral. It runs from east to west from St. James's Church. At the end close to St. James's Church is a steam laundry which is set back 12 ft. from the unflagged footpath on the north side of the road. The land on the north side of the road was undeveloped between Challis-street and the laundry, the distance between the laundry and the defendant's building being 700 ft. On the same side of the road, but nearly 250 yards from the laundry, is an hotel which has been built some time, but it abuts upon the footpath, which is there flagged. The defendant's house in this respect is in the same position as it abuts on the footpath, which, however, there is unflagged. On the opposite side of Hoylake-road there are no buildings until Mercer-road is reached, which runs south out of Hoylake-road, very nearly opposite Challis-street, but a trifle to the east of it.

The two questions raised by this case were (1) whether the laundry and the building in question were in "the same street" within the meaning of the section, and (2) whether if they were in the same street the relative position of the two buildings was such that the words of the section "the main wall of the house on either side" could be applied. No building line had been fixed by the Corporation; they relied solely on this section. The word "street," by section 2 of this Act, is defined by reference to section 4 of the Public Health Act, 1875, which defines a street as including "any highway and any public bridge (not being a county bridge), and any road, lane, footway, square, court, alley or passage, whether a thoroughfare or not," but is the Master of the Rolls observed, section 4 does not say that all highways are streets, and the meaning of "street" has still to be sought from a consideration of the circumstances and the decided authorities. Whether or not a road is a street has been held to be a question of fact, *Reg. v. Fulford* (1864, 23 L.J. (M.C.) (2)), *Attorney-General v. Siddall* (1898, *The Times*, June 24). In these cases it was also held that a road might be a "street" in one part whilst it was not so in another part, and that

a "street" involves more or less continuous buildings, at any rate on one side of it. The decision in the case, *Reg. v. Fulford*, was upon the Local Government Board (1858) Amendment Act, 1861, where the material words were "any house or building forming part of any street," and Chief Justice Erle is reported as saying: "I think the term 'street' refers to a row of houses in some degree contiguous and in some degree proximate to one another." Lord Blackburn put it: "Within the meaning of the Act, houses form part of a street when the houses and buildings on one side are so contiguous as substantially to form a continuous row." In the case under consideration the trial Judge had held that the defendant's house and the laundry were in the same street, and also that the laundry was a building on one side of the defendant's building within section 3.

On the first point the majority of the Court of Appeal reversed this judgment, holding that the portion of Hoylake-road between Challis-street and the laundry was not a "street." Mr. Justice Astbury, sitting as the third member of the Court of Appeal, felt some doubt upon this point, but expressed no judgment, as the second point covered the decision. This second point, as we have indicated above, was, even assuming this to be a street, could the laundry be expressed as being on one side of the defendant's building within section 3? The trial Judge had treated this question as determined by the first question, that is, having found that the two buildings were in the same street, that concluded the matter; but the Court of Appeal unanimously held that according to a long line of authorities the two questions are separate. In *Ravensthorpe Local Board v. Hinchcliffe* (1899, 24 Q.B.D. 168), the distance between the houses in question was 300 to 400 ft. The case turned on another point, that a house of which the footings were only put in had no main front wall, but the Court intimated that at this distance the section would not apply. In *Reg. v. Middlesbrough Corporation* (1890, *The Times*, July 7), the distance between the houses was 800 ft., and here again the section was held not to apply.

In *Warren v. Mustard* (1891, 61 L.J. (M.C.) 18) the distance was but 64 ft., and the Court held there was evidence to justify a conviction under the section by the magistrates. In *Attorney-General v. Edwards* (1891, 1 Ch. 194) the distance was 57 ft., and we believe the finding was the same as in *Warren v. Mustard*. In *Reg. v. Ormesby Local Board of Health* (43 W.R. 96) the distance was 70 ft., and this was held not sufficient to bring the case within the section; whilst in *In re Ellis and Ruislip-Northwood Urban Council* (1920, 1 K.B. 371, *The Builder*, April 30, 1920), where the distance was 400 ft., it was intimated by the Court of Appeal that the arbitrator should have considered whether there was such proximity as to come within the meaning of the section. These cases were referred to by the Court of Appeal in the case under consideration, mainly with a view to showing that this question of proximity was separate from the question of the buildings being in the same street, and the Court unanimously decided that the defendant's house and the laundry could not be described as one on the side of the other, within the meaning of the section. We may make one or two further observations on this case. Lord Justice Sargant pointed out that section 3 of the Public Health (Building in Streets) Act deals only with cases where there is already an existing street, and the Master of the Rolls referred to *Robinson v. Barton Eccles Local Board* (8 Appeal Cas. 798). There the case related to by-laws made under section 157 of the Public Health Act, 1875, relating to a "new street," its width and construction, and, dealing with the word "street," Lord Selborne said: "In the

natural and popular sense of the word 'street,' or the words 'new street,' I should certainly understand a roadway with buildings on each side (it is unnecessary to say how far they must or may be, continuous or discontinuous); and by 'new street' a place which before had not that character, but which, by the construction of buildings on each side, or possibly on one side, has acquired it."

In *Reg. v. Fulford Blackburn-J.*, as he then was, said that houses on one side would suffice to make them form part of a "street" when they are so contiguous as substantially to form part of a continuous row, and the Master of the Rolls in the case under consideration agreed with this statement that houses on one side would form a "street." The importance of the case, however, lies in the fact that under this section it has now been definitely held by the Court of Appeal that the fact of a road being a street does not by itself enable a local authority to use the section to define a building line, but the question also depends upon the proximity of the houses. The section, unlike its predecessor, section 156 of the Public Health Act, 1875, applies to new houses, but the house must have a house on "either side thereof," the degree of proximity that will suffice, as we have shown, may vary—it is a question of fact—and circumstances may have induced the Courts to take different views as to the degree of proximity, but there must be proximity. Lord Justice Fry, in *Ravensthorpe Local Board v. Hinchcliffe*, expressed the opinion: "I think that the expression 'house . . . on either side thereof' means a house within some near distance, within some degree of proximity and not one standing some considerable distance away." That was only a dictum in that case, but it was approved by the Court of Appeal in this case, and the Master of the Rolls put the position thus: "If you find the house relied upon is so far distant that no person in ordinary parlance would say it was the next house in the same street, you cannot hold that the section has been transgressed. There must be some reasonable measure of continuity and proximity in order to find that there is a house on either side to which the house in question must conform."

WORKMEN'S COMPENSATION

WITH reference to the note, published in our issue August 14, on the case *Briggs v. Thomas Dryden & Son*, a slight correction is required. In the middle column, page 259, it is there stated that between the repeal of the War Additions effected by section 1 of the Amending Act of 1923, and the coming into operation of the new scales of compensation provided by the Act of 1923, there is a gap, as the new provisions only apply as from January 1, 1924, and by the proviso to section 1, the War Additions Acts are only continued in respect of an accident occurring before December 31, 1923.

This is an error; there is no such gap, for the repeal of the War Additions Act in the proviso to section 1 so far as total incapacity is concerned preserves the war additions in cases where the accident occurred "on or before December 31, 1923." A correction of this point reached us too late to be inserted in the article in press, but with the exception that there is no such gap it does not affect the general observations contained in the paragraph in question as to the scales to be applied, which have received confirmation in the case *Glasgow Iron & Steel Co. v. Dickson*, in the House of Lords, which we published August 7, a case reported after the above article was written.

A Correction.

With regard to the paragraph on page 263 of last week's issue, stating that Messrs. A. & H. Crowley, of Croydon, brewers, proposed to carry out alterations to the "White Hart" public-house, North-road, Wimbledon, we are officially informed that no such work is contemplated.

NEW BUILDINGS IN LONDON.

Aldersgate-street.—A site in Aldersgate-street, E.C.1, has been cleared of old buildings preparatory to the erection of a modern block of offices and showrooms. Mr. F. Selby, 44, Chancery-lane, W.C.2, architect.

Balderton-street.—Messrs. F. & H. F. Higgs, Ltd., Station Works, Hinton-road, Herne Hill, S.E., have secured the contract for building a large motor garage and petrol service depot in Balderton-street, W.1, for Messrs. Macy's, Ltd. Messrs. Edmund Wimperis & Simpson, 61, South Molton-street, W.1, architects.

Barnet.—Additional premises are to be erected at the Barnet Girls' Grammar School, at a cost of £14,000. Messrs. Talbot, Brown & Fisher, architects, Burystead-place, Wellesborough.

Battersea.—A commencement is to be made on the conversion of Crosby Hall, on the Embankment, S.W., into a hostel for the British Federation of University Women, 92, Victoria-street, S.W.1. Messrs. Wratten & Godfrey, architects, 18, Queen Anne's Gate, S.W.1.

Becontree.—New shops and flats are to be built in Green-lane, Becontree. The builders are Messrs. F. W. Romaine & Sons, 54, Burnside-road, Chadwell Heath, Essex.

Bishopsgate.—The report in last week's issue under this heading concerning the Midland Bank, Ltd., should relate to the company's premises in Threadneedle-street, E.C.2, and not Bishopsgate.

Charing Cross-road.—The entrance and foyer of the Cinema de Paris in Charing Cross-road, S.W.1, are to be rebuilt and several stories, to be used as offices, added. Messrs. North, Robin & Wilsdon, architects, 35-38, Maddox-street, W.1. Contractors, Messrs. Bovis, Ltd., 43, Upper Berkeley-street, W.1.

Charing Cross-road.—Messrs. Metro-Vick Supplies, Ltd., have acquired premises in Charing Cross-road, W.1, which are to be converted into showrooms, &c. The contractors are Messrs. Foster & Dicksee, Ltd., Manresa-road, S.W.3. Messrs. F. Taperell & Haase, architects, Gower-street, W.C.

Chiswick.—Two new schools are to be erected in Chiswick—one in Beverley-road and the other in Staveley-road—at a cost of £40,000. Plans by Mr. E. Willis, the Council's Surveyor, Town Hall, Chiswick, W.4.

Croydon.—On the site of No. 36, North End, Croydon, Messrs. Montague Burton, Ltd., clothiers, of Leeds, propose to erect a new branch depot and shop. Plans will be prepared by Mr. Harry Wilson, 1, Victoria Park-avenue, Kirkstall, Leeds.

Croydon.—A block of flats containing 12 tenements is to be erected at the rear of Nos. 34-40, Cherry Orchard-road. The contractors are Messrs. Moreton & Sons, 171, Gipsy-road, S.E.27.

East Ham.—East Ham Corporation are to erect a new secondary school on a site in Plashet-grove, E., at a cost of about £45,000. The tender of Mr. H. C. Horswill, 183, Greek-street, Forest Gate, at £38,900, has been accepted.

Enfield.—Over 320 houses are to be erected on the Ponders End and Bush Hill Park estates at Enfield, and contracts have been placed with Mr. J. W. Rowley, Belmont-road, Tottenham, N.15, and Messrs. Kirk & Randall, Grosvenor-road, S.W.1.

Epsom.—An expenditure of some £20,000 is projected by the Epsom Board of Guardians at their hospital, on extensions to wards and a new nurses' home. Mr. H. C. Williams, architect, Ashley-road, Epsom.

Fetter-lane.—New offices are to be built in Fetter-lane, E.C.4, for Messrs. *Daily Mirror* Newspapers, Ltd., 23, Bouverie-street, E.C.4. The contractors are Messrs. Killby & Gayford, Ltd., 87, Worship-street, E.C.2. Messrs. Herbert O. Ellis & Clarke, architects, 3, Old Queen-street, S.W.1.

Holborn.—A comprehensive scheme of internal reconstruction is to be carried out at the premises of Messrs. Thomas Wallis & Co., Ltd., drapers, Messrs. Yetts, Sturdy & Usher, architects, 115, Moorgate, E.C.2.

Hounslow.—An estate at Hounslow has been acquired by Messrs. Wm. Harbrow, Ltd., 214, Rotherhithe New road, S.E.16, who intend to begin development at an early date.

Hoxton.—It is proposed to add 40 tenements to the Whitmore estate, Ware-street, E. Mr. G. Topham Forrest, F.R.I.B.A., architect, County Hall, S.E.1.

King William-street.—New office premises are being erected on a site in Abchurch-lane, E.C.3, to plans prepared by Mr. W. A. Lewis, A.R.I.B.A., 11, Finsbury-square, E.C.2. The builders are Messrs. Ashby & Horner, Ltd., 8, Aldgate, E.1.

Kingston-on-Thames.—The board of governors of the Tiffin's Boys' School have decided to erect additional accommodation. Messrs. Jarvis & Richards, 60, Tufton-street, S.W.1, architects, have submitted plans for approval.

Lombard-street.—The premises at the corner of Lombard-street and Gracechurch-street, E.C.3, are to be pulled down in order to provide for a large extension to the offices of Messrs. Barclays Bank, Ltd. The architects are Messrs. Campbell Jones, Son & Smithers, 9, Dowgate-hill, Cannon-street, E.C.4.

New Kent-road.—Plans have been prepared by Mr. J. Rawlinson, 11, Adam-street, Strand, W.C.2, for the erection of a new hall at St. George's Church, New Kent-road, S.E.1. The builder is Mr. W. G. Cearns, Carpenter's-road, Stratford, E.

New Oxford-street.—The premises at Nos. 36-8, New Oxford-street, W.1, are to be converted by Messrs. Joseph Lyons & Co., Ltd., into a branch restaurant and depot. The work will be executed by the company's building department, at Cadby Hall, W.

North Deptford.—Work has now started on the new public baths and hall in Evelyn-street, Deptford North. The contractors are Messrs. Wylie & Lockhead, Ltd., 45, Buchanan-street, Glasgow. Messrs. A. W. S. & K. M. B. Cross, architects, 45-46, New Bond-street, W.1. Quantities by Messrs. Rault & Young, 17, Southampton-street, W.C.1.

Regent-street.—The site at the corner of Regent-street and Cavendish-place, W.1, has been allocated for a new block of offices to be called "Marcol House." Plans have been prepared by Mr. Walter J. Fryer, 288, Regent-street, W.1.

Rotherhithe.—A 3-story jam factory is to be built in Stirley-street, E.15, for Messrs. Coombs, Bros. & Sons, Ltd., wholesale provision merchants, 37, Rathbone-street, E.16. The contractors are Messrs. John Mowlem & Co., Ltd., Ebury Bridge-road, S.W.1. Mr. G. N. Kent, Lic.R.I.B.A., F.S.I., architect, £21, Barking-road, E.13.

St. Marylebone.—The Governors of the St. Marylebone Grammar School, W.1, intend to rebuild their school at a cost of £44,025. Mr. G. Topham Forrest, F.R.I.B.A., architect, County Hall, S.E.1.

St. Pancras.—The L.C.C. have decided to make a grant of £50,000 to the governors of the proposed North-Western Polytechnic, which is to be erected at St. Pancras, N.W.1. The total cost is estimated by the architect, Mr. W. E. Riley, F.R.I.B.A. (Messrs. Riley and Glanfield, 6, Raymond Buildings, Gray's Inn, W.C.1), at £112,745.

Stamford-street.—Plans have been prepared by Mr. Thomas John Fox, 1, Museum-street, W.C., for the erection of an office building in Stamford-street, S.E.1, for occupation by the Cornwall Press, Ltd., Paris-gardens, S.E.1.

Strand.—Plans have been prepared by Messrs. W. & E. Hunt, F.F.R.I.B.A., 30, Norfolk-street, Strand, W.C.2, for extensions to the Howard Hotel in Norfolk-street, Strand, W.C., which is to be completely modernised.

Stratford.—An addition is to be built at printing ink works, in Sugar House-lane, E.15. Messrs. B. Winstone & Sons, Ltd., Shoe-lane, E.15. Messrs. Fairbrother, Ellis & Co., architects, 29, Fleet-street, E.C.4.

Streatham.—The Crooke-Ellison Estate, Greyhound-lane, S.W., has been acquired by Messrs. R. H. Miller & Son, Ltd., Ravenstone-street, S.W.12. A large number of streets are to be laid out prior to the erection of houses of different classes.

Tooting.—A row of seven shops is to be erected on a corner site, Upper Tooting-road, S.W., Messrs. E. Mortimer (London) Ltd., 9, N. Bridge-street, E.C.4. Messrs. Burdwood Michell, architects, 80, George-street, Hanover-square, W.1.

Westminster.—Mr. F. E. Williams, architect, 34, Henrietta-street, W.C.2, has prepared plans for the erection of two town residences in Tufton-street, Westminster.

Woolwich.—A large building of six floors is to be erected in Westfield-street, S.E.18, Messrs. Siemens Bros. and Co., Ltd., electrical engineers. The contractors are Messrs. Humphreys, Ltd., Knightsbridge, S.W.1. Plans have been prepared by Messrs. Siemens Bros.

TRADE NEWS

We are informed that Mr. Ormerod Mitchell has now taken up his position as General Manager of the Ransome Machinery Company (1920) Limited.

We understand that the Lamson Pneumatic Tube Co., Ltd., have recently received contracts for cash tubes from several leading firms, among these being Messrs. Swan & Edgar, Ltd., Messrs. Lewis's, Ltd., Manchester, Messrs. H. Binns & Co., Ltd., of Sunderland, Darlington, Middlesbrough, Messrs. Marshalls, Ltd., Leeds, and Messrs. Bainbridge & Co., Ltd., Newcastle.

Rock Asphalt.

We have received a booklet dealing with rock asphalt produced by Messrs. J. Dickinson & Co., Ltd., Bolton. This patent material, virtually "mineral rubber," and its makers claim that its characteristics include watertightness, dustlessness, noiselessness under traffic, resiliency, good appearance, fire resistance, and hygienic properties generally. Rock asphalt consists mainly of a limestone aggregate impregnated with a high-grade bitumen of natural pitch, the rock being ground and graded and cooked with the bitumen. The booklet describes, and illustrates with actual photographs, typical instances where the asphalt has been satisfactorily used; these include playgrounds, roads, drill-hall, factory and mill floor, flat roofs, tank work, damp-courses, &c. It also gives a short treatise on the repairing of broken concrete or flagged floors by an ordinary handyman, and another on the lining of tanks.

Safety (Ladder) Brackets.

Messrs. Hall, Phillipson & Co., Ltd., 1, Victoria-street, London, S.W.1, have introduced to the British market the Seaman safety (ladder) brackets of which thirty thousand sets are now in daily use in America alone. The brackets are made from special drop forged steel, tensile strength 14,000 lbs., average load at elastic limit 6,500 lbs., safety working load 2,700 lbs. and weight 5 lbs. 10 ozs. per pair. One bracket is fitted to each side of the top of the ladder, upright, the socket being so arranged that it slips over, and a few turns of the two forged steel screws engage and rigidly fix the bracket to any size of ladder. When attached to a ladder the brackets have a span of 42 inches and hold the ladder out from the wall 14 inches. It is claimed that in addition to affording security these brackets have the virtue of being a time and labour-saving device. We are informed that they are recommended by the "Safety First" Councils, and that Insurance Companies advocate their use wherever ladders are employed.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors

	Masons.	Bricklayers.	C'pters. Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bedford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Birkenhead	1/9	1/9	1/8 1/2	1/9	1/9	1/9	1/8 1/2	1/4
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bournemouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Brentwood	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Bridgewater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Brighton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Cambridge	1/3	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chatham	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Chelmsford	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Colchester	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Coveentry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Crewe	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
E. Glam.(Mon. Vall)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Eastbourne	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Folkestone	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/1 1/2
Gloicester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Grantham	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Grays	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Grimby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Great Yarmouth	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Guildford	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Hallifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Harrrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hartlepool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hastings	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/1 1/2
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Ipswich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Launceston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leamington Spa	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Lichfield	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Liverpool	1/9	1/9	1/8 1/2	1/9	1/9	1/9	1/8 1/2	1/4
Llanelli	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
London (12 m. radius)	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
London (12-15 m. radius)	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Maldstone	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Newport Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Norwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Oakham	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Oldham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Rochester	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
St. Albans	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Scarborough	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/1 1/2
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Shrewsbury	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Southend-on-Sea	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stroud	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Swansea	1/2	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Taunton	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Tunbridge Wells	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Worcester	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2

(For rates of wages in the Building Trade in Scotland, see page 303.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

AUGUST 24.—Aberfeldy.—HOUSES.—Works in connection with the erection of one block of four four-apartment houses at Chapel-street, Aberfeldy. Allan & Friskin, A.R.I.B.A., architects, 28, Castle-street, Dundee. Quantities prepared by W. Forbes Campbell, F.N.A.A., Surveyor, 36, North Lindsay-street, Dundee. Apply Town Clerk, Architects or Surveyor.

AUGUST 24.—Dublin.—FLOORING, &c.—Please note that the date for the receipt of tenders for roofing, flooring, and other works to the central portion of the south front of the Custom House, Dublin, has been extended from the 7th instant till 12 o'clock on August 24. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £5.

AUGUST 24.—Farnedale.—ALTERATIONS.—And extensions to the Farnedale Imperial Club. J. H. Walter, Secretary.

AUGUST 24.—Glamorgan.—SCHOOLS, &c.—The Glamorgan Education Committee desire to contract for the following works:—1. New school for 376 scholars, including Domestic Science and Handicraft, at Tynyberth (Pengar). 2. Additional classrooms, &c., at Tymeinwr, near Blaengarw. 3. Fencing, &c., at Tondy Boys' Council School. 4. Levelling playground, &c., at Blaengarw Boys' Council School. 5. New windows and repairs at Tonyrefail Infants' Council School. 6. Rebuilding boundary retaining wall and various repairs at Penybanc (near Fochriw) Council School. 7. Cutting through walls and providing and fixing two large windows at Albert-road, Penarth Council School. 8. Various repairs at Rhydygwyn (near Machen). 9. Painting internally the Coedybrain Girls' Council School, Llanbradach. 10. Painting internally and externally the Pantywaun Council School. 11. Additions to temporary buildings, &c., at Tonnawr (Pont-rhydyfen) Council School. 12. Extension of dining-rooms at Ystalyfera Intermediate School. 13. Relevelling playgrounds, building retaining walls, sloping ways, &c., at Craigein park (Clydach-on-Tawe) Council School. 14. Improving approaches to Wern (Ystalyfera) Council School. The Secretary, Glamorgan County Hall.

AUGUST 24.—Hull.—V.D. CLINIC.—Erection of a V.D. Clinic in Mill-street, Hull, for the Corporation. Chairman of the Committee, Town Hall. Deposit £2 2s.

AUGUST 24.—London.—COAL STORES, &c.—Erection of a boiler coal stores; also for breaking up and excavating the tar paving and renewing same to the Girls' playground, and forming an asphalted roadway through the latter, at their schools in Andover-row, Hornsey-road, N., for the Guardians of the Poor of St. Mary, Islington. Edmund J. Harrison, L.R.I.B.A., 23, Berkeley-road, Crouch End, N.S. Deposit £2.

AUGUST 24.—Lytham St. Anne's.—FILTRATION PLANT.—Construction of Filtration Plant at the new Cemetery in the Lytham Hall Park, comprising Pump House and Suction Tank, Pumping Machinery, Balancing Tank, Percolating Filters, and other Works. Borough Surveyor, Town Hall. Deposit £2 2s.

AUGUST 24.—Sheffield.—TIMBER STORE.—Erection of timber store, Queen's-road, for the Tramways and Motors Committee. F. E. P. Edwards, F.R.I.B.A., City Architect, Town Hall.

AUGUST 25.—Blackpool.—ALTERATIONS.—Carrying out alterations to and redecorating offices of the borough treasurer. Borough Surveyor, Municipal Buildings, Town Hall-street, Blackpool.

★AUGUST 25.—Bowdon.—HORSES.—Erection of 36 houses in Priory-road, Bowdon, for the U.D.C. Halliday, Paterson & Agate, 14, John Dalton-street, Manchester. Deposit £2.

AUGUST 25.—Leeds.—FILTRATION SHED.—Erection of a shed for filtration plant at Holbeck Baths, Leeds, for the Property Committee. Town Clerk's Office, Great George-street.

AUGUST 25.—Leeds.—DANCING FLOOR.—Construction of a dancing floor at Cookridge-street Baths, for the Property Committee. Town Clerk's Office, Great George-street.

AUGUST 25.—Leeds.—WASHHOUSES.—Works in connection with proposed erection of public washhouses and slipper baths at Stocks Hill, Holbeck, Leeds, for the Property Committee. Town Clerk's Office, Great George-street, Leeds.

AUGUST 25.—Manchester.—EXTENSIONS.—Erection and completion of extensions to the Relief Department at the Union Offices, Green-lane, Patricroft, for the Guardians. C. Faulkner, Clerk of the Guardians, Union Offices.

AUGUST 25.—Norwich.—HOUSES.—Erection of 250 houses on the Drayton-road Estate for the Corporation of Norwich. Stanley G. Livock, A. F. Scott & Sons, George J. Skipper, Stanley J. Wearing, all of Norwich. Deposit £1.

AUGUST 25.—Tullamore.—RECONSTRUCTION.—Of the Courthouse. T. F. McNamara, M.R.I.A.I., architect, 192, Pearse-street, Dublin. Apply A. Edward Smith, F.S.I., 5, St. Andrew-street, Dublin. Deposit £10 10s.

AUGUST 25.—Wigan.—SCHOOL.—To accommodate 768 scholars, at Whalley, for the C.B. R. B. Donald, Borough and Water Engineer. Deposit £2 2s.

AUGUST 25.—Worcester.—HOUSES.—Erection of the following houses:—Goodrest sites—14 parlour type houses; Rowley Hill-street—eight parlour type houses, 20 non-parlour type houses (three bedrooms), 20 non-parlour type houses (two bedrooms); Diglis-lane—eight non-parlour type houses (three bedrooms), William Ransom, M.I.C.E., City Surveyor, Guildhall, Worcester.

AUGUST 26.—Camberwell.—For (a) the supply, delivery and erection of Portland stone piers; or (b) the supply, delivery and erection of artificial Portland stone piers; or alternatively (c) the supply and delivery only of Portland stone piers; or (d) the supply and delivery only of artificial Portland stone piers; and (e) the supply and delivery only of approximately 600 yards run of artificial Portland stone coping. William Bell, A.M.Inst.C.E., P.A.S.I., Borough Engineer and Surveyor, Town Hall, Camberwell, S.E.5.

AUGUST 26.—Dartford.—RETORTS.—Pulling down and rebuilding one bench of eight retorts, at Darent Training Colony Gas Works, Dartford, Kent, for the Met. Asylums Board. T. Cooper, M.Inst.C.E., M.I. Mech.E., Engineer-in-Chief, Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

AUGUST 26.—Edmonton.—HEATING APPARATUS.—Installation of a hot-water warming apparatus and other works at the infirmary, Chase Farm Schools, Enfield, Middlesex. J. C. S. Mummery, A.R.I.B.A., architect, 34, Bloomsbury-square, W.C.1.

AUGUST 26.—Hemsworth.—HOUSE, &C.—Erection and completion of a Master's house and a porter's lodge at the Poor Law Institution, for the B.C. W. T. Lynam, F.S.I., Union Offices, Hemsworth. Deposit £1 1s.

AUGUST 26.—Hemsworth.—Pulling down of existing conveniences, and the erection and completion of four new w.c.'s at Nos. 8, 9, 10, and 11, Back Chapel-street, Grimethorpe. W. T. Lynam, A.M.I.C.E., Engineer and Surveyor to the Council, Union Offices.

AUGUST 26.—London, S.W.6.—UNDERGROUND COAL STORE.—Erection of underground coal store at Western Hospital, Seagrave-road, Fulham, S.W.6, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

AUGUST 26.—London, S.W.—CLEANING AND PAINTING.—Cleaning and painting and repairs at Chelsea Casual Ward, Milman's-street, Chelsea, S.W., for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

AUGUST 26.—London, E.C.4.—The M.A.B. invite separate tenders for (a) Installation of additional electric lighting in wards of the North-Eastern Fever Hospital, St. Anne's-road, Tottenham; (b) installation of three washing machines in the laundry at Caterham Mental Hospital, near Caterham, Surrey; (c) installation of four washing machines at the South-Western Fever Hospital, Landor-road, Stockwell, S.W.9 Mr. T. Cooper, M.Inst.C.E., M.I. Mech.E., Engineer-in-Chief, Office of the Board, Victoria-embankment, E.C.4. Deposit £1 each.

AUGUST 27.—London, S.E.0.—REINSTATEMENTS.—Reinstallments after fire at premises known as "The Limes, at the Children's Homes, Sidcup, Kent, for the Guardians of the Greenw Union. W. C. Cornish, Clerk, Guardians' Offices, Board Room, East Greenwich, S.E.10. Deposit £2 2s.

AUGUST 27.—London, W.6.—SHELTERS, &C.—Erection of male, female and children's shelters, lavatory accommodation, sun platforms and chalet, and the preparation of the site of the old Casual Wards, now removed, for the formation of a sun treatment area at the Hospital, St. Dunstan's-road, Fulham Palace-road, W.6, for the Guardians of the Parish of Fulham. A. Saxon Snell & Phillips, Guardians' Architects, 9, Bentinck-street, Manchester-square, W.1, on the 24th, 25th, 26th and 27th, from 10 a.m. to 4 p.m. Deposit £2.

AUGUST 27.—Middleton.—HOUSES.—Erection of 52 houses in various blocks. The Borough Engineer and Surveyor, Town Hall, Middleton, Lancs. Deposit £2 2s.

AUGUST 27.—Whitehall.—For external painting of various Government buildings, S.W. Separate tenders for each building will be considered. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

AUGUST 27.—Widnes.—ROOFING.—Covering the Open Market, Alford-street, with a roof constructed with mild steel principals, &c., carried on iron columns, for the T.C. J. S. Sinclair, A.M.I.C.E., Borough Surveyor, Town Hall. Deposit £2 2s.

AUGUST 28.—Doncaster.—SCHOOL.—Erection of proposed open-air school at Warmsworth, for the Doncaster Education Committee. Walker & Thompson, architects, Carbon Chambers, Hall Gate, Doncaster. Deposit £2 2s.

AUGUST 28.—Shoreditch, E.2.—ACCOMMODATION.—For the conversion of the "New Block" to provide additional accommodation for the Sick at St. Leonard's Hospital, Hoxton-street, N.1. for the Guardians of the Parish of St. Leonard. Mr. F. Danby Smith, F.R.I.B.A., Parliament Mansions, Victoria-street, S.W.1. Deposit £2.

AUGUST 28.—Swansea.—ALTERATIONS AND ENLARGEMENTS.—Alterations and enlargements to the existing Municipal Secondary School for Boys, the erection of a new Municipal Secondary School for Girls, new gymnasiums, and other works, &c., in Dynevor-place, and De la Beche-street, Swansea, for the County Borough Council. Borough Architect, 3, Prospect-place, Swansea. Deposit £5 5s.

AUGUST 29.—Kettering.—FIRE STATION.—Erection of fire station in Market-street, together with

fireman's house, hose tower, &c., for the U.D.C. T. Reader Smith, surveyor, Market-place, Kettering. Deposit £2 2s.

AUGUST 29.—Kingston-on-Thames.—HOUSES.—Erection of 50 non-parlour type houses and 20 parlour type houses, for the Corporation. Borough Surveyor, Municipal Offices, Kingston-upon-Thames. Deposit £1 1s.

AUGUST 29.—Oswestry.—HOUSES.—Erection of 26 non-parlour type houses on the Llwyn Estate, for the Borough Council. P. Ridge, A.R.I.B.A., Bailey-street, Oswestry. Deposit £1 1s.

AUGUST 29.—Southampton.—COTTAGES.—Erection of five new cottages (Contract No. 1) in Lyndinch-road, Totton, and for the pulling down of old cottages and alterations at Redbridge (Contract No. 2), for the County of Southampton. The County Architect, The Castle, Winchester. Deposit £1 1s. (cheques payable to Hants County Council, and crossed Lloyds Bank, Ltd., Capital and Counties Branch, Winchester).

AUGUST 29.—Tadcaster.—Erection of 306 non-parlour houses in the following parishes, viz.:—120 at Allerton Bywater, 60 at Mickelfield, 42 at Kippax, 48 at Swillington, 12 at Church Fenton, 24 at Sherburn. Office of the Council's Housing Inspector, 23, Park-avenue, Swillington, Woodlesford, near Leeds.

AUGUST 29.—Wands-worth, S.W.18.—HOUSES.—Erection and completion of, on Southfields Housing estate:—(a) Group of 40 houses, (b) two small flats, on Furzedown housing estate, (c) group of 43 houses, (d) 68 houses, (e) 55 houses, for the Wandsworth Borough Council. Tender may be submitted in respect of any group or groups, or for the whole. D. A. Nicholl, Town Clerk, Council House, Wandsworth, S.W.18. Deposit £2 2s.

AUGUST 29.—Watford.—HOUSES.—The Corporation invite tenders for the erection of houses on their Wiggan-hall Housing Estate, Watford, as follows: Section 2, 74 houses (40 "A" type and 34 "B" type); Section 3, 48 houses (26 "C" type and 22 "D" type); total, 122. The total number of houses is divided into the following contracts, viz.: Contract No. 1, 26 houses (2 "A" type and 24 "B" type); Contract No. 2, 24 houses (22 "A" type and 2 "B" type); Contract No. 3, 24 houses (16 "A" type and 8 "B" type); Contract No. 4, 26 houses ("C" type); Contract No. 5, 22 houses ("D" type). (Builders may tender for one or more contracts.) W. W. Newman, A.M.Inst.C.E., Borough Engineer. Deposit, £2 2s.

AUGUST 31.—Bedwas.—BRIDGES.—(1) Reconstructing, rebuilding and repairing the abutments and centre pier of Pwll-y-Pant Bridge, Bedwas, and making the approach roads and platform thereto, for the U.D.C.; (2) supplying material for and erecting a steel bridge on prepared stonework, for the U.D.C. The Surveyor to U.D.C., Council Offices, Bedwas.

AUGUST 31.—Carlisle.—BRIDGE.—Reconstruction and improvement of St. Nicholas Bridge; the work comprises the reconstruction and widening of five bridge spans carrying the road over the railways, also the widening of the road, and includes the building of all new retaining walls, abutments and buttresses, the complete formation of the new road surface, and raising of all approaches. Henry C. Marks, M.Inst.C.E., City Engineer and Surveyor, 18, Fisher-street, Carlisle. Deposit £2 2s.

AUGUST 31.—Chell.—PUMPING PLANT.—Installation of an electrically-driven pumping plant to cold water service at the Turnhurst-road Institution, Chell, for the Stoke and Wolstanton Union. T. Wood, Clerk to the Guardians, Union Offices, Stoke-on-Trent.

AUGUST 31.—Gellygaer.—CONVENIENCE.—Construction of an Underground convenience at Bargoed, for the U.D.C. F. Read, Assoc. M.Inst.C.E., Engineer and Surveyor, Council Offices, Hengoed, near Cardiff. Deposit £1 1s.

AUGUST 31.—Harrogate.—HOUSES.—Erection of 58 houses and the construction of footpaths in connection with their housing scheme on the Bilton Grange Estate, Harrogate, for the Corporation. C. E. Rivers, A.M.Inst.C.E., Borough Engineer and Surveyor, Municipal Offices, Harrogate.

AUGUST 31.—Havant.—22 houses together with drainage and fencing at West-street for the U.D.C. Mr. Ronald J. Cork, architect, South-street, Havant.

AUGUST 31.—Hull.—ALTERATIONS.—And additions to the running depot, Liverpool-street, for the Tramways Committee of the Corporation. Chairman of the Committee, Town Clerk's Office, Hull. Deposit £2 2s.

AUGUST 31.—Ilfracombe.—HOUSES.—Erection of 48 houses of three types. Fred. B. Goodman, Council's Architect and Surveyor, Council Offices. Deposit £2 2s.

AUGUST 31.—Kilmarnock.—HALL.—New Masonic Hall. T. C. Stewart, F.F.S., Clydesdale Bank Chambers, Kilmarnock.

AUGUST 31.—London, E.11.—ROOF LIGHTS.—Erection of a new roof and lantern light over the existing main kitchen at the Central Home, Union-road, Leytonstone, E.11, for the West Ham Union. Thomas Smith, Clerk to the Guardians, Board Room, Union-road, Leytonstone, E.11. Deposit £1 Treasury Note.

AUGUST 31.—Nottingham.—GYMNASIUM.—Additions to cloak and staff rooms, and erection of gymnasium at Mundella Secondary School, The Meadows, Nottingham, for the E.C. T. Wallis Gordon, City Engineer, Guildhall.

AUGUST 31.—Ryton.—HOUSES.—Erection of a further 50 non-parlour type houses, in pairs, at Ooze-wood, Ryton, for the U.D.C. Surveyor's Office. Deposit £3 3s.

AUGUST 31.—Wolstanton.—SCHOOL.—Erection and completion of a new Secondary School for about 500 boys, in Milehouse-lane, Wolstanton. Graham Balfour, Director of Education, County Education Offices, Stafford. Deposit £5 5s.

SEPTEMBER 1.—Hammersmith, W.6.—STONWORK CLEANING AND REPAIRING.—Work and materials

required in the repairs, cleaning down and restoring the stonework at the Passmore Edwards Library, Shepherd's Bush, London, W.12, for the Metropolitan Borough of Hammersmith. The Borough Engineer and Surveyor, Town Hall, Hammersmith, W.6.

SEPTEMBER 1.—Liverpool.—Demolition and Reinstatement of Ministry of Pensions Hospital at Knotty Ash. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

SEPTEMBER 1.—Sussex.—HOUSES.—Erection of 58 Class "A" houses, in pairs, in various parishes, for the R.D.C. Arthur Parker, architect, Parkhurst House, Meath Green, Horley, Surrey. Deposit £1 Treasury Note.

SEPTEMBER 1.—Washington.—HOUSES.—Erection of 42 houses on the Council's Spout-lane site in blocks of six, for the U.D.C. R. J. Swaddle, architect, Council Chambers, New Washington. Deposit £3 3s.

SEPTEMBER 2.—Hemsworth.—HOUSES.—Erection and completion of 112 non-parlour type houses at Wortley-place Housing estate, Barnsley-road, Hemsworth. Council Offices, Barnsley-road, Hemsworth. Deposit £1 1s.

SEPTEMBER 2.—Kiveton Park.—HOUSE.—Erection of a house for their sewage works manager near the sewage works at Dinington, for the R.D.C. B. D. Thompson, L.R.I.B.A., Council's Architect, 73, Bridge-street, Workson.

SEPTEMBER 2.—London, S.W.19.—PAVILION.—Erection of a pavilion on the Joseph Hood Recreation Ground, Canon Hill-lane, Merton, S.W.19, for the U.D.C. G. Jerram, surveyor, Council Offices, Merton, S.W.19. Deposit £2.

SEPTEMBER 4.—Berks.—DRAINAGE AND BUILDING WORK.—(a) Re-drainage work; and (b) extension of airing courts at Broadmoor Asylum, Berks. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

SEPTEMBER 4.—Hampstead, N.W.—TENEMENTS.—Erection of 16 tenements in one block at Sheriff-road, Hampstead, for the Borough Council. Arthur R. Johnson, Town Clerk, Town Hall, Haverstock Hill, N.W. Deposit £2 2s.

SEPTEMBER 4.—Merthyr Tydfil.—HOUSES.—Erection of six pairs of one-storied brick houses at Celliafaelg, Merthyr Tydfil. Alternative tenders for concrete-slab houses will be considered. Borough Architect, Town Hall.

SEPTEMBER 4.—Shoreditch, E.2.—REDECORATION.—The redecoration of the Maternity and Child Welfare Centre, for the B.C. Borough Surveyor, Town Hall, Old-street, E.C.2. Deposit £2 2s.

SEPTEMBER 5.—Cornwall.—EXTENSIONS.—Extensions to Torpoint Albion-road Council School. B. C. Andrew, Architect to the Education Committee, New Inn Chambers, St. Austell. Deposit £1 1s.

SEPTEMBER 5.—Grimsby.—STORE, &C.—The Corporation are prepared to receive tenders for the following:—Specification No. 196, battery room building; Specification No. 202, mains and oil store, &c.; Specification No. 203, cooling tower tank. Tenders will only be considered from persons or firms who are holding the certificate of membership of the King's National Roll (national scheme for disabled men). W. A. Vignoles, M.I.E.E., Borough Electrical Engineer, Corporation Electricity Works. Deposit £1 1s.

SEPTEMBER 5.—Preston.—ALTERATIONS.—Alterations to a building to adapt same for use as an Engineering school in connection with the Accrington Technical School, for the Lancashire E.C. Henry Little, 16, Ribblesdale-place, Preston. Deposit £2.

SEPTEMBER 5.—Torquay.—NEW SCHOOL.—Erection of a new school for 600 children at Westhill, in the Borough of Torquay. Geo. H. Widdows, Architect, County Offices, St. Mary's Gate, Derby, or the Clerk, Education Offices, Town Hall, Torquay. Deposit £1 1s.

SEPTEMBER 5.—Truro.—EXTENSION.—Extensions to Torpoint Albion-road Council School, for the Cornwall E.C. B. C. Andrew, Architect to the Committee, New Inn Chambers, St. Austell. Deposit £1 1s.

SEPTEMBER 7.—Croydon.—HOUSES.—Erection of two houses on the sites known as 81 and 82, Welford-road, for the B.C. Borough Engineer, Town Hall, Croydon. Deposit £2 2s.

SEPTEMBER 7.—Hitchin.—PUBLIC CONVENIENCE.—Building a public convenience near Bancroft, for the U.D.C. Surveyor's Department, Old Town Hall, Hitchin.

SEPTEMBER 7.—London, W.6.—KEEPER'S LODGE.—Materials required in the erection of a wharkeeper's lodge, Chancellor-road, W.6, for the Hammersmith Borough Council. R. Hampton Lucas, Borough Engineer and Surveyor, Town Hall, Hammersmith, W.6. Deposit £1 1s.

SEPTEMBER 7.—Newcastle-upon-Tyne.—SECONDARY SCHOOLS.—Erection of secondary schools to provide for 1,000 pupils, subject to the sanction of the loan by the Ministry of Health, for the Education Committee. Director of Education, Education Office, Northumberland-road, Newcastle-upon-Tyne. Deposit £5.

SEPTEMBER 7.—Sevenoaks.—COTTAGES.—Tenders for the erection of 10 pairs of cottages at Seal-road, for the U.D.C. Geo. T. Bradbury, Clerk of the Council. Council Offices, Argyle-road. Deposit £1 1s.

SEPTEMBER 7.—Surbiton.—HOUSES.—Erection of 50 houses at Tolworth, forming an extension to the housing scheme, for the U.D.C. C. Edgar Shelly, Clerk to the Council, Council Offices, Ewell-road, Surbiton. Deposit £1 1s.

SEPTEMBER 8.—London.—PAINTING.—For internal painting, &c., at the Patent Office, Chancery-lane, W.C. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners.)

SEPTEMBER 8.—London, E.C.—REDECORATION.—For the redecoration of Mount Pleasant Letters and Parcel Office, E.C. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners.)

SEPTEMBER 8.—Mountain Ash District.—HOUSES.—Planning for the Mountain Ash U.D.C. houses, as follows:—Contract F: Forty-eight houses (40 non-parlour and eight parlour types) at Pontycymon site. Contract G: Forty non-parlour houses at Penrhosceiber. Tenders to be on fixed basis for materials and is stable to wage alterations. W. H. Williams, architect, Council Offices, Mountain Ash.

SEPTEMBER 8.—Newbury.—HOUSES.—Erection of non-parlour dwelling-houses in St. George's and St. Olaf-roads, Newbury (contractors can tender for whole or any part of the proposed scheme), for the Council. Borough Surveyor, Municipal Buildings, Newbury.

SEPTEMBER 8.—Shrewsbury.—ADDITIONS, &C.—(1) Extension and additions to Cotton Hill House; (2) pulling down and rebuilding No. 12, Wyle Cop, for the A. W. Ward, A.M.Inst.C.E., Borough Surveyor, Guildhall, Shrewsbury.

SEPTEMBER 8.—Waltham-on-Thames.—BUILDING.—The extension of Walton-on-Thames P.O. Central branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners).

SEPTEMBER 9.—Essex.—SECONDARY SCHOOL.—Erection of a secondary school at Walthamstow for pupils, for the Essex C.C. County Architect, Angfield Old Court, Chelmsford. Deposit £2 2s.

SEPTEMBER 9.—London.—ALTERATIONS.—For the alterations at the Queen Victoria-street block of the G.P.O. South E.C. Contracts Branch, Office of Works, King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners).

SEPTEMBER 9.—Rotherham.—FILTERS, &C.—Labour materials required in the construction of three slating filters 54 ft. 6 in. diameter, precipitation tank, Humus tanks, engine house and pump well, sludge drying beds, and alterations to existing works, R.D.C. C. O. Rawstron, Engineer and Surveyor, Rotherham Office, Grove-road, Moorgate, Rotherham, S.E. 1925.

SEPTEMBER 9.—Rotherham.—FILTERS, &C.—Labour materials required in the construction of two slating filters 24 ft. diameter, tanks, sludge beds, house, &c. for the R.D.C. C. O. Rawstron, Engineer and Surveyor, Engineer's Office, Grove-road, Moorgate, Rotherham. Deposit £1 ls.

SEPTEMBER 10.—London, W.C.—PAINTING.—For mural painting at the British Museum, and external painting of No. 39, Russell-square, W.C. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners).

SEPTEMBER 10.—Rowley Regis.—HOUSES.—(a) Building 30 parlour type houses (four blocks of four and seven blocks each semi-detached), sewerage, drains, &c. (b) Erecting 22 non-parlour type houses (blocks each semi-detached), road, footpath, &c. Clerk, Council House, Old Hill, Rowley Regis.

SEPTEMBER 10.—Various Districts.—REPAIRS.—Erection of ordinary works, and repairs to buildings in the charge of the Commissioners, H.M.O.W. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit 10s. 6d. in respect of each district. (Cheques payable to the Commissioners).

SEPTEMBER 14.—London.—BUILDING.—For the erection of two blocks of dwellings: (a) on the Wapping estate, (b) on the Holland estate, Spitalfields, for the R.D.C. The Architect of the Council, the County Hall, London No. 3, Westminster Bridge, S.E.1. Deposit in respect of each block.

SEPTEMBER 15.—London, E.C.1.—SANITARY CONVENIENCE.—Certain work in connection with the erection of the new underground sanitary conveniences, and renewals of existing sanitary work, &c., at the situation, Shepherdess-walk, City-road, N.1, for the Guardians of the Poor of the Holborn Union. Clerk to Guardians, Administrative Offices, 53, Clerkenwell-street, E.C.1. Deposit £1 ls.

SEPTEMBER 16.—Mansfield.—SCHOOL.—For erection of a new Central School for 720 children, at High Cham, Nottingham. Borough Engineer and Surveyor, Market-street, Mansfield. Deposit £2 2s.

SEPTEMBER 16.—Sunderland.—HOUSES.—Erection of four-roomed houses and 58 three-roomed houses the Spark Farm estate, under the terms of the Housing (Financial Provisions) Act, 1924, for the County Borough. Borough Engineer's Office, Town Hall. Deposit £2 2s.

SEPTEMBER 18.—West Riding.—POLICE STATION.—Erection of new Police Station at Saddleshill (Upper), near Oldham. Percy O. Platts, A.R.I.B.A., City Architect, County Hall, Wakefield.

SEPTEMBER 23.—Wanstead.—SCHOOL.—For the erection of a secondary school, for the Essex County Council. The County Architect, Springfield Old Court, Innsford. Deposit £2 2s.

NO DATE.—Bewick.—DAIRY.—Proposed new dairy shop alterations, for the Bewick Co-operative Society. A. H. Walsingham, architect, Market-street, Chester. Society's Offices, Rowsley-street.

NO DATE.—Dublin.—ROOFING, &C.—Roofing, floor and other works to the central portion of the south end of the Custom House, Dublin. Commissioners of Public Works, Dublin.

NO DATE.—Leeds.—EXTENSIONS.—At the factory of Messrs. G. F. Bowman & Son, architects, Leeds.

NO DATE.—Leeds.—SHOPS.—New shops and offices, Montague Burton, Ltd., at Blackpool Central, to be pulled down and existing buildings to be demolished. Architect, Mr. H. Wilson, Victoria Park-avenue, Kirkstall, Leeds.

NO DATE.—North Wales.—BRICKWORK, &C.—(1) setting in connection with installation of additional boiler; (2) raising present stack 20 ft.; (3) for new boiler. Medical Superintendent, North Wales Sanatorium, Denbigh.

NO DATE.—Stoke.—VILLA.—Villa for Messrs. R. W. J. Nicholls at Vallerford-road. H. J. Hammick, B.A., architect, 7, Cornwall-street, Plymouth.

MATERIALS. etc.

AUGUST 26.—Bournemouth.—RAILS.—600 tons rails, for the C.B. I. Bulfin, General Manager. Deposit £2 2s.

AUGUST 26.—Ilkley.—FENCING.—About 1,900 lin. yards of creosoted (under pressure) wood fencing. J. M. Gameson, Chartered Civil Engineer, Surveyor, Town Hall, Ilkley.

AUGUST 26.—Manchester.—TIMBER.—The Electricity Committee of the Manchester Corporation invite tenders for the supply of timber during the period ending June 30, 1926. H. C. Lamb, Manager, Electricity Department, Town Hall, Manchester.

AUGUST 26.—Whitley and Monkseaton.—KERBING.—1,600 yards of best quality 9 in. by 6 in. chisel dressed flat Whinstone kerbing, delivered at Monkseaton siding. Arthur Barker, Clerk to the Council, Council Offices, Whitley Bay.

AUGUST 27.—Lambeth.—CEMENT, &C.—The B.C. invites tenders for a period of six months ending March 31, 1926, for the following:—(a) Ham River sand, (b) kerb and paving setts, (c) Portland cement and lime, (d) creosoted deal blocks, (e) stock and Fletton bricks, (f) timber for sewer works. Osmond Cattlin, M.Inst. C.E., Borough Engineer, Town Hall, Brixton-hill, S.W.2.

AUGUST 28.—Hampstead Heath.—FENCING.—Erection of open pale oak fencing to shrubberies. Chief Officer, Parks Department, County Hall, Westminster Bridge, S.E.1.

AUGUST 28.—London.—LOCKS, &C.—The Directors of the South Indian Railway Co., Ltd., are prepared to receive tenders for the supply of:—1, Wood handles; 2, locks; 3, structural steelwork (forge and smiths' shop). Company's Offices, 91, Petty France, Westminster, S.W.1. Deposit 2s. 6d. for Nos. 1 and 2, and £1 for No. 3.

AUGUST 29.—Eccles.—KERBING.—Supply of the following materials:—(a) 980 lineal yards 12 in. by 6 in. straight granite kerb, 148 lineal yards 12 in. by 6 in. circular granite kerb; (b) 200 tons ½ in. or ¾ in. cubical granite chippings; (c) 700 tons sand or gravel; (d) 2,700 super. yards concrete flags; (e) 5,600 super. yards reinforcement; (f) cast-iron street name plates, for the Corporation. Borough Surveyor's Office, Town Hall, Eccles.

AUGUST 29.—Warrington.—PIPES.—Supply of 8 in., 6 in., and 3 in., cast-iron water-pipes, for the C.B. James Gray, Waterworks Engineer, Waterworks Offices.

AUGUST 31.—Huyton-with-Roby.—KERBING.—Supply of 700 lineal yards of 12 in. by 6 in. concrete kerbing delivered to Huyton railway station. H. Finister, F.A.S.I. Surveyor, Public Offices, Huyton.

SEPTEMBER 2.—Willes, MISCELLANEOUS.—For the supply of road metal, coal, oils, petrol and waste, tar and road tools, for the T.C. J. George Powell, County Surveyor, Trowbridge.

SEPTEMBER 4.—London.—TELEGRAPH POLES.—Supply of Swedish, Norwegian, Finnish or Baltic red fir and home-grown Scots fir telegraph poles, to be felled during the winter of 1925-26 and delivered during the following summer, for the Government. The Controller, Post Office Stores Department, 17-19, Bedford-street, W.C.2.

SEPTEMBER 9.—Cairo.—MACHINERY.—For the supply of one 50 h.p. Diesel engine, generator, electric motors and machine tools, for the M.E. Department of Overseas Trade, 35, Old Queen-street, London, S.W.1.

SEPTEMBER 11.—Durban.—MATERIALS.—Steel, cast-iron pipes and specials, and sluice and air valves, for the T.C. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

SEPTEMBER 17.—South Africa.—FOOTBRIDGE.—Supply and delivery only of structural steel and woodwork for a footbridge at Nottingham-road, Natal Province, the approximate weight of the material being 37 tons. 35, Old Queen-street, S.W.1.

SEPTEMBER 30.—Melbourne.—RAILS.—Victorian Government Railways. Supply of manganese steel rails, 100 lb. A.S. section, and of manganese steel cross-over for 5 ft. 3 in. gauge railway. (D.O.T.)

OCTOBER 13.—South Africa.—ELECTRICAL EQUIPMENT.—The Electricity Supply Commission invite tenders as follows for plant and equipment and buildings for an electric power station at Durban:—(1) Complete boiler-house equipment, also other plant and piping; (2) complete boiler-house installation including pulverised fuel equipment with buildings, piping and other plant; (3) steel frame buildings, including overhead electric travelling crane; (4) coal and ash handling plant; (5) two 12,000 kilowatt turbo alternators; (6) condensing plant and auxiliary apparatus; (7) transformers for power station; (8) switchgear and auxiliary plant. Separate specifications and forms of tender for each of the above sections may be obtained on and after August 10, 1925, at the offices of:—(a) The Electricity Supply Commission, 82, Marshall-street, Johannesburg; (b) the Commission's Local Manager, Dock-road, Cape-town; (c) the Commission's Local Manager, Office of the Borough Electrical Engineer, City Hall, Durban; (d) the High Commissioner for the Union of South Africa, Trafalgar-square, London; and (e) the National Bank for South Africa, 44, Beaver-street, New York. Applications for further information may be made to the Commission or its Consulting Engineers, Messrs. Merz & McLellan, 32, Victoria-street, London, S.W.1. Contractors may tender for any or all of the above sections. The charge for specifications relating to each section of the work is 2s. 8d. for the first two copies and £2 2s. each for any further copies. Sums paid for any number of each specification up to three will be refunded.

ENGINEERING. IRON AND STEEL.

AUGUST 24.—Bolton.—BRIDGES.—Construction of three bridges at Bolton, viz.:—(a) Bridge over the Eagle Brook; (b) bridge under the L.M. & S. Railway Blackburn line at Tonge Moor; (c) road widening at Toftill Bridge, Bury-road. The works are divided into two portions, viz.:—Contract No. 1: Abutments and general contractor's work; Contract 2: Steelwork. Samuel Parker, Town Clerk, Town Hall. Deposit £2 2s.

AUGUST 24.—Glasgow.—BOILER.—New heating boiler at St. Conval's R.C. school, Pollokshaws, for the E.C. Education Offices (Property Department), 129, Bath-street, Glasgow. Deposit 10s. 6d.

AUGUST 25.—Carnarvonshire.—BRIDGE.—For the reconstruction in ferro-concrete of the superstructure of bridge over the River Glaslyn, and strengthening of piers, for the T.C. Mr. T. Owen, County Surveyor, County Offices, Carnarvon.

AUGUST 26.—Bournemouth.—RECONSTRUCTION.—Of the permanent way, for the C.B. I. Bulfin, General Manager, Tramways Offices, Wootton-gardens. Deposit £2 2s.

AUGUST 26.—Essex.—REPAIRING CAUSEWAY.—Repairing timber causeway at the Shore buildings of T.S. Emmons, Grays, Essex, for the Metropolitan Asylums Board, Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

AUGUST 26.—Various Places.—CLEANING AND PAINTING.—Cleaning and painting works and repairs at various places and buildings for the Metropolitan Asylums Board, Office of the Board, Embankment, E.C.4. Deposit £1 in respect of each work.

SEPTEMBER 5.—Stockport.—LIFT.—Conversion of the passenger and goods lift at the Stepping Hill Hospital, Stockport, from hydraulic to electric motive power. Steward of the Hospital, Union Offices, Shaw Heath, Stockport.

SEPTEMBER 16.—Cornwall.—BRIDGE.—Construction of a large floating bridge propelled by steam for use on ferry service between Devon and Cornwall, for the C.C. W. L. Platts, Clerk of the County Council, County Hall, Truro. Deposit £2 2s.

SEPTEMBER 21.—Hong Kong.—HARBOUR CROSSING.—The Crown Agents for the Colonies, acting on behalf of the Government of Hong Kong, invite tenders from experienced and approved firms for the construction of two lines of steel pipe main across Hong Kong Harbour, between Kowloon and the city of Victoria, with all works in connection therewith. The Crown Agents for the Colonies, Z Department, 4, Millbank, Westminster, S.W.1. Deposit £5.

NO DATE.—Kirkcudbright.—ENGINE SHED.—Erection of steel frame and corrugated iron engine shed. James Sheppard, District Surveyor, Creetown.

ROAD, SEWERAGE, AND WATER WORKS

AUGUST 22.—Newport (MON.).—ROAD WORKS.—Carrying out of kerb and paving laying to house frontage in Corporation-road, for the B.C. Borough Surveyor, Corn-street, Newport.

AUGUST 24.—Catherington.—MAINS.—Providing and laying about 4,100 lin. yds. of 6 in. cast-iron water mains, also 4,850 yds. of 4 in. and 2,700 yds. of 3 in. ditto, with hydrants, sluice valves and fittings, also for the construction of two concrete reservoirs and a pumping station, for the R.D.C. G. C. Vernon-Inken, engineer, 40, Commercial-road, Portsmouth. Deposit £10 10s.

AUGUST 24.—Edinburgh.—ROADS.—Laying new concrete kerbs and channels, metalling, rolling, and finishing roads, and forming new tar macadam footpaths, &c., on the Lochend housing area. Burgh Engineer, City Chambers, Edinburgh.

AUGUST 24.—Gloucester.—RESURFACING.—Resurfacing with roller-finished asphalt a total length of 949 yards of the Stroud and Painswick roads. City Surveyor.

AUGUST 24.—Islington, N.13.—BOILER COAL STORE AND TAR PAVING.—Erection of a boiler coal store; also for breaking up and excavating the tar paving and renewing same to the girls' playground, and forming an asphalt roadway through the latter, at their schools in Andover-row, Hornsey-road, N., for the Guardians of the Parish of St. Mary, Islington. Edmund J. Harrison, architect, 23, Berkeley-road, Crouch End, N.8. Deposit £2.

AUGUST 24.—Marazion.—PIPING.—Supply, laying, and jointing of approximately 200 yards of 8 in. cast-iron pipes over the foreshore, including one manhole, excavation in rock, concrete supports to pipes, anchoring down pipes, and other works incidental thereto for the R.D.C. T. H. Cornish, 8, Parade-street, Penzance. Deposit £2 2s.

AUGUST 24.—Mid-Glamorgan.—PIPES.—Providing and laying about 4,500 yards of 7 in. diameter cast-iron pipes between the Service Reservoir now under construction at Cefn Forest, Windmill Farm, in the parish of Llansannor, along the District-road, through the village of Llanharby to Dolau, Llanharan, including all appurtenant works, and the construction of two mass concrete service reservoirs, one near the "Red Cow" Inn, Maesteg, and one at Caerau, Maesteg, together with provision and laying of about 2,300 yards of 12 in. diameter cast-iron pipes, 120 yards of 9 in. diameter cast-iron pipes, 100 yards of 7 in. diameter cast-iron pipes, and 400 yards of 6 in. diameter cast-iron pipes, for the Water Board. Thomas & Morgan & Partners, Civil Engineers, Pontypridd. Deposit £10 10s. each.

AUGUST 24.—Stockton-on-Tees.—PAVING.—Supplying and laying asphalt paving on carriageways within the Borough, as under:—Approximate 8,800 sq. yds. on 6 in. reinforced concrete foundation; approximate 9,700 sq. yds. on prepared macadam foundation, for the Corporation. J. P. Wakeford, M.Inst.C.E., Victoria Buildings, Stockton-on-Tees.

AUGUST 24.—Walsingham.—SLUDGE BEDS.—Construction of two sludge drying beds and other works of reconstruction, at the Melton Constable sewerage, for the R.D.C. W. C. Humphrey, Engineer and Surveyor to Council, Fakenham, Norfolk.

AUGUST 25.—Bathgate.—PIPES.—Cutting tracks and laying and jointing about 3½ miles of 24-inch cast iron pipes from Baddingsgill to North Slippfield, West Linton. J. & A. Leslie and Reed, 724, George-street, Edinburgh. Deposit £1.

AUGUST 25.—Devon.—**ROADS.**—Construction of new by-pass roads at Buckfastleigh and South Brent Mill, to include bridges and culverts, for the C.C. A. Warren, County Surveyor, Avenue-road, Newton Abbot. Deposit £10 10s.

AUGUST 25.—Titchhurst.—**SEWERS, &c.**—Making-up and sewerage Western-road, Wadhurst. For making-up apply Mr. F. Laurens, District Surveyor, Sparrows Green, and for sewerage apply Mr. A. E. Harris, Sanitary Surveyor, Sparrows Green.

AUGUST 26.—Guiseley.—**RECONSTRUCTION.**—The Guiseley U.D.C. invite tenders for the following works: (1) Flagging, kerbing, paving of crossings, and foundation of kerb; (2) excavating of tramway margins and concrete foundations for lithocrete; (3) provide and lay lithocrete, for the U.D.C. Surveyor, Town Hall, Guiseley.

AUGUST 26.—Wallasey.—**RECONSTRUCTION.**—Reconstruction of the following roads, namely, (1) Penkett-road, Stringhey-road, part of Trafalgar-road; (2) part of Mill-lane; (3) Parkside and Hampstead-road; (4) Martin's-lane, for the T.C. Borough Engineer and Surveyor, Town Hall, Wallasey.

AUGUST 27.—Horsforth.—**ROADS.**—Roads, sewers, and water mains, Broadgate-lane improvement and water mains. Jas. E. Aldersley, Engineer to the Council, Council Offices, Horsforth. Deposit £2 2s.

AUGUST 27.—Pembroke.—**WIDENING.**—Widening and reconstructing parts of the Milford-Waterstone-Neyland road between Port Scoveston and Coybush Gate. H. R. Judd, Highway Surveyor, Pembroke R.D.C., Main-street, Pembroke. Deposit £5 5s.

AUGUST 27.—Rutland.—**RECONSTRUCTION.**—The County Council of Rutland invite tenders for foundation, &c., work required in the reconstruction of about 4 miles of the Great North road, commencing at the milestone 6 miles from Stamford and terminating at the Rutland and Kesteven County Boundary, for the C.C. Office of the Divisional Road Engineer, Eastern Division, Ministry of Transport, 6, Whitehall-gardens, Whitehall, London, S.W.1. Deposit £5.

AUGUST 28.—Gatley.—**SEWERS.**—Construction of 480 yards of 12 in. sewer, 335 yards of 9 in. sewer, and 83 yards of 6 in. surface water sewers, with necessary gullies, branches, drains and manholes, &c., for the Cheadle and Gatley U.D.C. P. H. Molyneux, Council Offices, Cheadle, Cheshire.

AUGUST 28.—Dunfermline.—**RECONSTRUCTION.**—Excavator and reinforced concrete and kindred works required in the reconstruction of the southern portion of Queensferry-road, extending to 10,000 sq. yds., for the T.C. Burgh Engineer, City Chambers, Dunfermline. Deposit £2 2s.

AUGUST 28.—Sutherland.—**CONSTRUCTION.**—Bonar Bridge—Ord-road—Construction, reconstruction and surfacing, earthworks, bottoming, surfacing and drainage—Section 1: From Bonar Bridge to the fourth milestone east of Bonar Bridge. Section 2: From the sixth milestone east of Bonar Bridge to the tenth milestone east of Bonar Bridge. Tenders are invited for the construction of the above sections of the Bonar Bridge—Ord-road, length 8 miles or thereby. John Robertson, County Road Surveyor, Golspie. Deposit £3 3s. (Cheques payable to the County Council of Sutherland).

AUGUST 29.—Margate.—**SEWER.**—Supplying the necessary pipes, excavating for and constructing about 252 yards of 15 in. cast-iron sewer in road in rear of Marine-terrace, for the T.C. Borough Engineer's Office, 13, Grosvenor-place, Margate.

AUGUST 29.—Tadcaster.—**ROADWAYS, &c.**—Construction of new roadways, footpaths, and soil and surface water sewers on the Allerton Bywater and Micklefield housing sites, for the R.D.C. Council's Housing Inspector, 23, Park-avenue, Swillington, Woodlesford, near Leeds.

AUGUST 31.—Ilfracombe.—**RESURFACING.**—Resurfacing of approximately 15,000 yds. super. of roads, in four sections. Council's Engineer and Surveyor, Town Hall.

AUGUST 31.—Ilfracombe.—**ROADS.**—Making of roads in connection with the Highfield Housing scheme, for the U.D.C. Council's Surveyor, Town Hall.

AUGUST 31.—Nuneaton.—**STREET WORKS.**—Completion of the street works comprised in the various roads on the Attleborough Housing Estate, for the Town Council. Borough Engineer and Surveyor, Municipal Offices, Nuneaton. Deposit £2 2s.

AUGUST 31.—Ossett.—**FOOTPATHS.**—Concrete the footpaths at the Northfield-road, Sowood-avenue, Wilson's-avenue, and Manor-road and Teal-street housing sites, and for providing and laying concrete edging, for the Corporation. Borough Surveyor, Town Hall, Ossett.

AUGUST 31.—Rochester.—**SEWERS.**—Construction of stoneware pipe sewers and other relative works included in Contract No. 3. The works included in the contract comprise the laying of approximately 6,543 lineal yards 7 in. sewers, 2,059 lineal yards 9 in. sewers, 2,244 lineal yards 12 in. sewers, 356 lineal yards 15 in. sewers, and 92 lineal yards 18 in. sewers, and the necessary manholes and subsidiary works. William Law, A.M.I.C.E., City Surveyor and Engineer for the Sewerage scheme. Deposit £5 5s.

AUGUST 31.—Somerset.—**RECONSTRUCTION.**—Of the trunk Bristol-Exeter road, for the C.C. Edward Stead, County Surveyor, 49, High-street, Weston-super-Mare. Deposit £5.

SEPTEMBER 1.—Haverfordwest.—**TRUNK ROAD.**—The Main Roads and Bridges Committee of the Pembrokeshire C.C. invite tenders for a diversion of the road at Nantecoy. Arthur H. Thomas, County Surveyor, Council Offices. Deposit £10.

SEPTEMBER 1.—Nantecoy.—**ROAD DIVERSION.**—Diversion of Nantecoy of the Haverfordwest-Fishguard road, for the Pembrokeshire C.C. N. H. Thomas, County Surveyor, County Offices, Haverfordwest. Deposit £10.

SEPTEMBER 1.—Neath.—**PRIVATE STREET WORKS.**—Constructing storm water sewers, laying and jointing earthenware pipes, erection of manholes and gullies, fixing gully grating, paving, channelling, ballasting and metalling, &c., in connection with the reconstruction of Greenfield-terrace, Heathfield-avenue,

Lock-street, New-street, and Oddfellows-street, for the R.D.C. D. M. Davies, surveyor, Council Offices, Neath. Deposit £2 2s.

SEPTEMBER 2.—Cardiff.—**WIDENING.**—Widening and improvement of Church-road and Penlline-road corner, in the Parish of Whitechurch. W. Farrow, Park House, 20, Park-place, Cardiff.

SEPTEMBER 2.—East Grinstead.—**RECONSTRUCTION.**—Execution of street works under the Private Street Works Act, 1892, in each of the following roads, namely:—Crescent-road, Garland-road, Grosvenor-road, Park-road, and Stockwell-road, East Grinstead, for the U.D.C. H. Campbell Golding, Acting Surveyor, Engineer and Surveyor's Office, London-road. Deposit £2 2s.

SEPTEMBER 2.—Whitchurch (GLAM.).—**IMPROVEMENT.**—Improving the Church and Penlline roads corner at Whitchurch, for the Cardiff R.D.C. William Farrow, surveyor, 20, Park-place, Cardiff.

SEPTEMBER 3.—Southend-on-Sea.—**MAKING-UP.**—Of the following roads: Quebec-avenue and Baltic-avenue, Section 1; Canvey-road, Section 2; Grange Park-drive, Harley-street, Holyrood-drive, and incidental works in connection thereto, for the Corporation. Robert H. Dyer, Borough Engineer and Surveyor.

SEPTEMBER 5.—Wimbledon.—**ROADS.**—Street works in each of the following roads, namely, Worcester-road and Compton-road (Section III), Wimbledon, for the B.C. Borough Engineer and Surveyor, Town Hall, Wimbledon.

SEPTEMBER 7.—Wandsworth.—**PAVING.**—Of Aberfoyle-road, Abercain-road (part), Broadview-road, Carnforth-road, Donnybrook-road (part), Penistone-road, Leithcote-gardens, Walrand-street (part), and Ribblesdale-road (part), Streatham; Hillbrook-road and Ravenfield-road, Balham and Tooting; Longstaff-road (part), Mapleton-road and Granville-road (part), Southfield; and Burntwood-lane (part), Springfield, for the B.C. E. J. Elford, M.Inst.C.E., Borough Engineer, Town Hall. Deposit £1 1s.

SEPTEMBER 9.—Rotherham.—**MAKING-UP.**—Labour and materials required in the making-up of a private street on the south-east side of Old Gate-lane, Dalton, including surface water drains, manholes, &c., for the R.D.C. Oxley & Coward, Clerks to the Council, Council Offices, Grove-road, Moorgate, Rotherham. Deposit £1 1s.

SEPTEMBER 14.—Paddington.—**PAVING.**—With reinforced concrete, the carriageway, and, with artificial flags and gravel, the footways of Ashworth-road, between Lauderdale-road and a line drawn across Ashworth-road from the party fence of Nos. 7 and 9, Ashworth-road, to the north fence of the garage of No. 24, Ashworth-road, for the Paddington T.C. Borough Engineer's Office, Town Hall, Paddington, W.2. Deposit £1 1s.

SEPTEMBER 16.—Chichester.—**RESERVOIR.**—Construction of a ferro-concrete reservoir of 2,000,000 gallons capacity or thereabouts at the Chalk Pit-lane Plantation, Lavant, near Chichester, to be constructed upon the Hennebelle or other approved system of Ferro-concrete. City Engineer's Office, North-street. Deposit £2 2s.

SEPTEMBER.—**Epsom.**—**WIDENING.**—Of Sutton-lane, Banstead, for the R.D.C. T. E. Ware, surveyor, Waterloo-road, Epsom.

Competitions.

(See Competition News, page 276.)

Auction Sales, Tenders, etc.

AUGUST 25.—Fleet-street, E.C.—J. F. Skelding & Co. will sell, *re* Bargmans, Ltd. (by order of the Receiver), on the premises, 21, Bride-lane, Ludgate-circus, E.C. 4, stock and plant of the above firm of builders and contractors. Auctioneers, 48, Gresham-street, Guildhall, E.C. 2.

AUGUST 26.—Gloucester.—Henry Butcher & Co., in conjunction with John A. Bloss, will sell, *re* Messrs. Hartwells, Ltd., without reserve, at "Broadlands," Bourton-on-the-Water, agricultural and motor engineers' plant, machinery and stock motor and agricultural engineer. Auctioneers, H. Butcher & Co., 63 and 64, Chancery-lane, W.C. 2; J. A. Bloss, Bourton-on-the-Water, Gloucester.

AUGUST 27.—Northwood (Middlesex).—J. T. Skelding & Co. (in conjunction with W. G. Carter & Co.), *re* the estate of the late A. E. Wilson, will sell, without reserve, on the premises, 38, The Pavement, Northwood, builders' and contractors' stock and plant, woodworking machinery, timber, buildings, and Ford touring car, &c. Auctioneers: J. T. Skelding & Co., 48, Gresham-street, Guildhall, E.C. 2; W. G. Carter & Co., 89, The Grove, E. 15.

AUGUST 29.—Isle of Wight.—Henry J. Way & Son will sell at The Wheatheaf Hotel, Newport, freehold premises known as the Ningwood Brick and Tile Works, with modern buildings, the whole containing an area of about 70 acres, 3 roads, 2 perches. Auctioneers, Newport and Freshwater, I.W.

AUGUST 31.—London, E.—Vervard & Yates will sell, without reserve, at Lea Bridge-road, E. (close Lea Bridge and Clapton Stations), at Middlesex Wharf (foot of Lea Bridge), new timber of various kinds. Auctioneers, 365, Norwood-road, S.E. 27.

AUGUST 31.—London, E.C.—Farebrother, Ellis & Co. will sell, by order of the liquidator, in voluntary liquidation, British Portland Cement Research Association, at the London Auction Mart, Queen Victoria-street, E.C., freehold property, Rosherville-court, Burch-road, Gravesend. Auctioneers, 29, Fleet-street, E.C., and 26, Dover-street, W.

SEPTEMBER 8.—London, E.—Joseph Hibbard & Sons will sell, without reserve, by order of the Trustee, Mr. F. H. Agar, F.C.A., under a Deed of Assignment, *re* Yates & Co., upon the premises, No. 3, Rivington-street, Great Eastern-street, Shoreditch, dry stock of imported hardwoods. Auctioneers, 15, Newington Green, Islington, N.16.

SEPTEMBER 9 AND FOLLOWING DAYS.—**North Devon.**—J. T. Skelding & Co. will sell, *re* P. & W. Anderson, Ltd. (in liquidation), by order of the Receiver, for the Debenture Holders, at The Dump, adjoining the North Devon Clay Co.'s sidings (by their kind permission), Peter's Marland, Dunsbar Station, North Devon, contractors' plant and machinery, tools, buildings, and effects used in the construction of the new line from Torrington to Halwill. Auctioneers, 48, Gresham-street, London, E.C. 2.

SEPTEMBER 10.—Bucks.—Knight, Frank & Rutley (in conjunction with Hamnett, Raffety & Co.) will sell, in the Mansion, Hedsor, Bourne End (unusually sold privately), the remaining portions of the freehold residential building estate, Hedsor, including the Mansion. Auctioneers, Knight, Frank & Rutley, 20, Hanover-square, W. 1; Hamnett, Raffety & Co., 30, High-street, High Wycombe.

Public Appointments.

AUGUST 24.—Wakefield.—Four Architectural Assistants in the office of the Education Architect required by the West Riding Education Committee. Education Department, County Hall, Wakefield.

AUGUST 24.—Middlesbrough.—**TEMPORARY CLERK OF WORKS.**—Required by the Education Committee, to superintend the erection of the Marton-grove Council School. Director of Education, Education Office, Middlesbrough.

AUGUST 28.—Blackpool.—Town Planning Assistant required in the office of the Borough Engineer and Surveyor, for the administration only of the Corporation's Town Planning scheme. The Town Clerk, Town Hall, Blackpool (endorsed "Town Planning Assistant").

AUGUST 28.—Walsall.—(1) Architectural Assistant (2) Temporary Architectural Assistant required by the County Borough Council. Applications, endorsed as above, to be sent to the Borough Engineer and Surveyor, Council House, Walsall.

AUGUST 29.—Norwich.—Estate Surveyor in the City Engineer's Office required by the City Council City Engineer, Guildhall, Norwich.

AUGUST 31.—London, E. 8.—**VISITING TEACHERS OF BUILDING CONSTRUCTION** (Stages 1, 2 and 3).—On three evenings weekly (Mondays, Tuesdays, and Fridays), for the L.C.C. Education Officer (T.J.A.), The County Hall, Westminster Bridge, S.E. 1. (Stamped addressed foolscap envelope necessary), for form.

AUGUST 31.—Newcastle-under-Lyme.—Architectural Assistant required in the Borough Engineer and Surveyor's Department. The Borough Engineer, Municipal Offices, Newcastle-under-Lyme, Staffs.

SEPTEMBER 3.—London, S.W.1.—**EVENING CLASSES.**—Lecturers required in various branches of the building trade for session 1925-26, commencing September 21, 1925, for the Technical Institute, Glaston-road, Wimbledon, S.W. 19. The Principal.

SEPTEMBER 5.—Portsmouth.—One permanent General Assistant, and one permanent Architectural Assistant in the Borough Engineer's Department. Borough Engineer, Town Hall, Portsmouth.

SEPTEMBER 25.—Manchester.—Assistant Lecturer in Building Construction in the College of Technology. The Registrar, College of Technology, Manchester.

SEPTEMBER 30.—Newcastle-upon-Tyne.—Clerk of Works required for the proposed secondary schools at Heaton. Director of Education, Education Office, Northumberland-road, Newcastle-upon-Tyne.

***NO DATE.—Sudan.**—Architectural and Civil Engineering Draughtsmen required by the Sudan Government. The Advisory Engineer, Sudan Government, London Office, Wellington House, Buckingham Gate, S.W. 1.

***NO DATE.—Tanganyika.**—Inspector of Works required by the Government of Tanganyika for the Railway Department for a tour of 20 to 30 months continuous service, with possible extension. Apply once, Crown Agents for the Colonies, 4, Millban Westminister, S.W. 1, quoting at head of application M/13559.

***NO DATE.—Tanganyika.**—Skilled carpenters (two) required by the Government of the Tanganyika Territory, for appointment as Industrial Instructors in the Education Department, for a tour of 20 to 30 months' service with possible extension. Apply once, Crown Agents for the Colonies, 4, Millban S.W. 1, quoting M/12896.

The Smoke Nuisance : Winter's Campaign.

A Smoke Abatement Conference is to be held at the Palace Hotel, Buxton, from Friday evening, October 2 to Monday morning October 5. The meeting is being arranged by the Smoke Abatement League of Great Britain, and support has been promised from many influential quarters. Certain practical proposals for reducing both domestic and industrial smoke are being prepared by the League for full consideration by those attending, and prominent individuals have agreed to open the discussion at the various sessions. It is hoped that a constructive programme of useful work will be initiated the results of which can be reviewed at the Smoke Abatement Exhibition and Conference at Birmingham in 1926. The headquarters of the Smoke Abatement League are at 33, Blackfriars-street, Manchester.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ALDERSHOT.—Hampshire E.C. are to borrow £3,550 for the provision of temporary school buildings for the Aldershot secondary school.

ALLERTON.—The Parish Council has received notification from the West Riding C.C. of their intention to erect a new Public Elementary school, at Great Preston. The school will be available for Great and Little Preston, Kippax, Swillington, and Allerton Bywater, and will provide accommodation for 450 children.

ALTRINGHAM.—Plans have been submitted for the erection of 24 houses at Ellesmere-road and Hawarden-road.

ASHBOURNE.—The U.D.C. are to apply for permission to proceed with the erection of 22 houses on the housing site, and for sanction to borrow £12,000 for the scheme.

ASHTON-UNDER-LYNE.—The Housing Committee propose to erect 51 houses in Pelham-street and Birch road, West End. The E.C. have approved plans for alterations to Christ Church Schools, Littlemoss, estimated to cost £1,450.

AUDENSHAW.—Messrs. Roberts Nobletts, Ltd., propose to erect 12 houses in Ashworth-street and Sidmouth-street.

BARNOLDSWICK.—Plans have been approved for 18 houses in Mill-street for Mr. J. Briggs; 20 houses, in Bank-avenue, for H. Clegg; 16 houses in Dickens-street, and Frederick-street, for Mr. T. W. Parker; and 2 houses off Richmond-road, for Mr. Parker.

BATLEY.—The Batley Co-operative Society, Ltd., has decided to erect new branch stores at Eeland-road. Plans are being prepared by Messrs. W. Hanstock Sons, architects, Branch-avenue.

BEDLINGTON.—The U.D.C. has agreed in principle to the erection of a joint smallpox hospital for the 17th, Morpeth, Ashington, Bedlington and Newington districts.

BEDWORTH.—Warwick County E.C. has decided to provide an elementary school for 160 children.

BIRMINGHAM.—The Rev. W. Memnagh, of St. Vincent's Church, has acquired a site for the erection of new church and schools.

BLACKBURN.—The Corporation are seeking powers to borrow £87,600 to erect municipal houses and flats at the Brownhill Park site.

BLACKHALL.—The B.E. has approved plans of the urban County E.C. for the erection of an elementary school.

BLACKPOOL.—The Building Plans Committee have approved 30 plans, which include 60 proposed new houses.

BLTYP.—The T.C. has approved a scheme for the construction of a bathing pool 200 ft. long by 80 ft. wide, at a cost of about £7,000.

BOLTON.—The E.C. have decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

BOLTON.—The E.C. has decided to provide accommodation for 80 boarders and 80 day scholars at the proposed Lostock open-air school. The Ministry of Health has held an inquiry into the scheme for the extension of the Hacken sewage works, to cost £132,294.

to borrow £41,356 for the proposed reconstruction of Burnley-lane.—The E.C. are to acquire a site of 14½ acres of land in South Ward for the proposed erection of a senior elementary school.

CHESTERFIELD.—The R.D.C. has approved of an estimate amounting to £90,913 for a joint sewage scheme for the districts of Brington, Staveley, and Sutton-cum-Duckmanton. Tenders have been provisionally accepted for the erection of 32 houses at Grassmoor, and 18 houses at Tupton. Application for sanction to borrow £29,095 is being made to the M.H. A site has been acquired at North Wingfield upon which it is proposed to erect 200 houses, and a further site is to be acquired at the northern side of Chesterfield.

CLAYTON-LE-MOORS.—The Council have approved the plans for new bank premises to be erected at the corner of Whalley and Burnley-roads, for the Manchester and County Bank.

CLITHROE.—The Borough Surveyor has been instructed to get out plans for a new fire station and garage to be erected in the grounds of "Lowfield," recently acquired by the Corporation. The residence is to be divided into dwellings.—It is reported that the proposal to erect a new post office in King-street has been revised, and the full amount for the work is understood to exceed £9,000.

COOKSTOWN.—The R.D.C. has a scheme for the erection of 99 cottages at a total cost of £36,905.

CROMPTON.—Crompton House is to be adapted for a central school for the Church of England authorities. The Diocesan Architect, Mr. R. Martin, 90, Deansgate, Manchester, is preparing a scheme.

DONCASTER.—The T.C. has borrowed £17,533 for the erection of 40 houses at Hexthorpe for tenants displaced by the demolition of slums.

DOVER.—The T.C. are to borrow £12,300 for housing purposes.—The Council are proposing to build 178 houses.—Application is to be made to the M.T. for sanction to borrow £7,184 for the renewal of the tramway track in Northampton-street, Snargate-street, and Strand-street.

DROGHEDA.—The Corporation has decided to build ten houses.

EASTBOURNE.—The Corporation has sanctioned a scheme for the lay-out of the Compton estate. The Borough Engineer estimates that the cost of the Willington-road scheme will be £7,800, exclusive of the cost of land. The M.H. have sanctioned a loan of £1,350 for the construction of a convenience at Archery recreation ground.

EDWINSTOWE.—Notts County E.C. are seeking permission to borrow £22,000 for the erection of an elementary school.

EPPLETON.—Durham County E.C. has submitted to the B.E. preliminary plans for an elementary school.

EPSOM.—The Board of Education have approved of the plans of the Surrey E.C. for the erection of a secondary school for girls at Epsom. Accommodation is to be provided for 305 pupils and the cost will be £36,472.

EWELL.—Surrey E.C. has acquired a site at Fairview-road, for the erection of a central school for the districts of Ewell and Epsom.

FAIRFORTH.—Proposed alterations and extension, estimated to cost £16,000, to the Minor-street Council school has been approved by the Ashton E.C.

PELTON.—Durham County E.C. are inquiring for a site for the erection of an elementary school.

FITCHLEY.—A loan of £10,000 is to be obtained for the central depot scheme. Plans passed: 18 garages, Hutton-grove, for Mr. William Daniel.

FOLESBELL.—Warwick County E.C. has decided that the proposed elementary school shall be for 400 instead of 250 children.

GARSTANG.—Plans have been approved for a proposed new common lodging-house in Buck-lane.

GREAT HARWOOD.—The U.D.C. has made application to the M.H. for sanction to a scheme for the erection of 16 houses on a site near Waverley Mill.

GUILDFORD.—The T.C. passed plans, for 8 houses and 14 bungalows, Elmside, Onslow Village, submitted by Knapp, Fisher, Powell and Russell, for the Onslow Village, Ltd.

GUNNERSBURY.—The M.H. has intimated that it is willing to allow Acton and Ealing to borrow £125,000 to purchase Gunnersbury Park as an open space of nearly 200 acres, provided that the two boroughs allow Chiswick and Brentford to purchase 13½ acres for housing purposes.

HARTLEPOOL.—A lighthouse is to be erected at an estimated cost of £6,000.

HAVERTON HILL.—Approval has been given by the B.E. to the plans of the Durham County E.C. for the extension of the elementary school.

HAYDOCK.—The C.C. has approved the recommendation to erect a new central Council school with accommodation for 250 scholars.

HEMEL HEMPSTEAD.—The Corporation has approved plans for an estate of 600 concrete houses.

HEMSWORTH.—The R.D.C. are arranging to build 250 houses for South Kirkby.

HIGHFIELD.—Plans have been prepared by the Durham E.C. for the extension of the elementary school.

HILLMORTON.—A site for a new elementary school has been acquired by the Warwick County E.C.

HOUGHTON-LE-SPRING.—Durham County E.C. are negotiating for a site for the erection of an elementary school.

HUDDERSFIELD.—The Board of Governors of the

Huddersfield Royal Infirmary has purchased the Green Lea estate at Lindley, near Huddersfield, for the purpose of erecting a Recovery Hospital thereon, at an estimated total cost of £10,000.

HYDE.—It was reported at the T.C. meeting that 8 acres of land in Bennett-street, Newton, had been acquired by the Housing Committee with the option to purchase additional land on which to erect 117 houses.

KINGSTON.—Surrey C.C. has decided to convert stables at Holmbury, Kingston, for the purpose of a central book store and office for the County Librarian at a cost of £438.

KIVETON PARK.—The M.H. has approved erection of 100 houses for the R.D.C.

KNOWLE.—The Warwickshire C.C. are considering a scheme for the construction of a subsidiary road at Knowle.

KNOTSFORD.—The U.D.C. propose to erect 12 houses on land at Racefield-road.

LANCASTER.—The Corporation have decided to erect a further 26 houses on the Bulk estate. A scheme for extensions at the gasworks has been approved, the cost being estimated at £54,100. The service reservoir in Wyresdale-road is to be extended.

LEES.—The T.C. have approved (a) the plan of a bridge which the London Midland & Scottish Railway propose to erect in connection with the construction of the portion of the ring road from Gelderd-road to Whitehall-road; (b) 16 semi-detached houses at Parkside View, Meanwood, for Mr. F. Holmes; (c) 20 houses at Upland-road, Harehills, for C. H. & F. Sax; (d) 18 houses at the East End Park estate, for the East End Park Estate Co.—The old toll bridge across the River Aire, near Cardigan Fields, Leeds, is to be replaced by a new one by the T.C.

LEICESTER.—The City Council has approved of the erection of 400 brick houses at a total cost of £290,831 15s. The question has been raised as to the sewerage of the Park Estate. The total expenditure of this scheme is estimated to be £30,603.

LIVERPOOL.—The T.C. have resolved to (a) apply to the M.H. for sanction to the borrowing of the sum of £2,459 in respect of alterations, consequent upon reorganisation, at the Anfield-road Council School; (b) proceed with the erection of a section of a permanent school for 400 children on the Broadgreen Road School site; and (c) proceed forthwith with the provision of the third (and last) section of the Duncombe-road Council School, which will provide accommodation for 400 children.—At a meeting of the Housing Committee it was stated that the Corporation had 2,000 houses in process of building, in contract 4,800 houses, and 500 in contemplation; in addition, private enterprise was producing 1,400 houses.

LONDON (FITCHLEY).—The parish church is to be enlarged at an estimated cost of £12,000.

LONDON (STEPNEY).—The M.H. has intimated that they are prepared to sanction a loan of £5,000 for the purchase of land at Mile End and Stayners-roads, for the erection of public baths for the B.C.

LONDON (WOOLWICH).—The B.C. are to spend £6,800 on Turkish and Russian vapour baths at Plumstead.

LUDWORTH.—Plans for an elementary school are being prepared by the Durham County E.C.

LYMM.—The D.C. propose to acquire additional land for housing purposes on the Barrs Bank site.

MARSDEN.—Preliminary plans for an elementary school are being prepared by the Durham County E.C.

MERTON.—Merton and Morden U.D.C. are to construct a surface water culvert in lieu of the existing open watercourse along the side of Merton-road at a cost of £7,000.

MIDDLETON.—The T.C. have decided to purchase the tramway depot in Hilton Fold-lane for conversion to public baths. The alterations will cost £11,000. Fifty-two houses are to be erected at Boarshaw, and tenders will be invited for a bridge across Wince Brook at Kirkway.

MILNROW.—The D.C. has received the sanction of the M.H. to the borrowing of the money required for the building of 52 houses on the Holt estate.

MITCHAM.—Working drawings of the proposed central school at Mitcham to be erected by the Surrey E.C. have been approved by the B.E., the revised estimate of the cost now being £38,965.

MORTLAKE.—Surrey E.C. have asked the architect to report as to the possibility of enlarging the Mortlake Junior Mixed School by 50 places.

MOXLEY.—The Wednesbury T.C. has approved plans for the erection of a new school, and they instructed the Town Clerk to apply to the M.H. for sanction to borrow the sum of £6,384.

MYNDDISLWYN.—The U.D.C. is to proceed immediately to erect 20 houses, and is asking for sanction to erect a further 30 houses.

NETTLEWORTH.—A site at Nettlesworth has been acquired by the Durham County E.C. for the erection of an elementary school, plans for which are now being prepared.

NEW FERRY.—Cheshire County E.C. are purchasing a site for the erection of a school.

NEWFIELD.—Durham County E.C. have prepared plans for an elementary school.

NEWTON.—A new school is to be erected on a site at the rear of Newtown schools, for the Wilts C.C.

NORTHWOOD.—The reconstruction of Vicarage Bridge is to cost £1,470.

OLDHAM.—Sanction has been received from the E.C. for the establishment of the proposed electricity works in the Chadderton area. The scheme is estimated to cost £1,500,000.—The B.G. propose to go forward with a scheme for a new nurses' home.

OMAGH.—The Tyrone C.C. has approved a proposal to borrow £2,500 for repairing broken-down bridges in the rural district.

PANNAL.—Messrs. Wm. Whittaker & Co., Ltd., Old Brewery, Bradford, have decided upon a scheme of extensions at their Spacey Houses Hotel, at Pannal, plans for which have been prepared by Messrs. Chippingdale & Sunderland, of Guiseley, near Leeds.

(Continued on p 333.)

* The information given on this page has been specifically compiled for THE BUILDER and is copyright. Our aim in this list is to give, as far as possible, the average price of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

CURRENT OF MATERIALS (contd.)

GLASS.

GLASS SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
fourths ... 3 1/4 d.	32 oz.	fourths ... 8 1/4 d.	8 1/4 d.
thirds ... 4 d.	32	thirds ... 10 1/4 d.	10 1/4 d.
fourths ... 4 1/4 d.	Obscured Sheet.	5 1/4 d.	5 1/4 d.
thirds ... 5 1/4 d.		21	21
fourths ... 5 1/4 d.	Fluted 15oz.	6 1/4 d.	6 1/4 d.
thirds ... 7 1/4 d.	En'led 15oz.	5 1/4 d.	5 1/4 d.
		21 oz.	21 oz.

price according to size and substance for squares from stock.

GLASS BOLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
rolled plate	4 1/4 d.
ough rolled	5 1/4 d.
ough rolled	5 1/4 d.
figured Rolled, Baltic, Oceanic, Arctic, Stippled, and small and large Flemish white.	6 1/4 d.
Do, tinted	9d.
Do, Sheet	6d.
White Rolled Cathedral	5 1/4 d.
Do, do.	7 1/4 d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

	Per gallon.
Outside	5 1/4 d.
ditto	0 14 0
ditto	0 18 0
ditto	1 0 0
ditto	1 4 0
ditto	1 12 0
ditto	0 18 0
ditto	0 18 0
ditto	1 2 6
ditto	1 0 6
ditto	0 18 0
ditto	0 19 0
ditto	1 0 0
ditto	1 2 0
ditto	1 12 0
ditto	0 12 6
ditto	0 10 6
ditto	0 12 0
ditto	0 7 6
ditto	0 14 6
ditto	1 5 0
ditto	0 17 0
ditto	0 9 0
ditto	0 7 0

NEW BUILDINGS IN SCOTLAND

BURGH.—The Dean of Guild Court passed following plans at their last meeting:—four houses at Hutchison Crossway; electricity sub-station at Chesser-avenue; alterations at fire station, Laurieston, per the City Architect; eight flatted villas at Averockbank-avenue, for Holiday Real Estate Co., Ltd.; 10 semi-detached houses at Rosebank-road and Rosebank-road, for Edinburgh Urban Building Society; sausage factory at Moor-road-lane, Leith, for Leith Provident Co-operative Society, Ltd.; shop and eight flats at St. John's-road, Corstorphine, for St. John's Co-operative Association, Ltd., per Mr. Marwick, architect.

GLASGOW.—The Dean of Guild Court has passed the erection of five blocks of two-tenement houses, four houses in each tenement, estimated cost of £7,900.

GLASGOW.—The Ashton U.F. congregation have passed plans for the erection of a church in place of that destroyed by fire. The estimated cost of the building is £11,000.

GLASGOW.—Houses.—A private company has started a scheme for the erection of 152 houses in the Arbroath-road and the Broughty road. The plans have been approved of by the City Engineer.

GLASGOW.—CHURCH.—The Presbytery of Arbroath proposing to provide a new church at Prestwick. The U.F. Church Presbytery will be asked to discuss the question.

GLASGOW.—Triangular Construction Co., Ltd. staff and employees of this company spent an enjoyable day in a trip by motor-coaches to Hastings. Throughout the day the deuce was available of the most friendly ship between the management, staff, and employees.

A Correction.

In reference to a paragraph on page 156 of the issue for July 24, stating that an addition to be built at their works, we are asked by The Kenbar Engineering Co., of Kilburn, to state that no such work is contemplated.

PROPOSED NEW BUILDINGS

(Continued from page 301).

PRESTON.—The T.C. have resolved that application be made to the Ministry of Health to borrow the sum of £19,700 for the re-surfacing of cobble-paved streets.

RADCLIFFE.—The U.D.C. propose to acquire the Bealey Convalescent Hospital for use as a maternity home. The cost of equipment and electric light installation is estimated at £1,450.

RAMSBOTTOM.—The U.D.C. resolved that the houses to be erected on the Bolton-road, Northside, be of the non-parlour type and semi-detached; that the work be carried out by contract, and that Mr. T. H. Bell be appointed architect for the scheme.

RATHMINES.—The U.D.C. has decided on the laying of a water main from Bohernabreena to Ballyboden and the erection of another filter bed, at a total cost of £26,500.

RAYNES PARK.—Surrey E.C. are in negotiation for a site in the vicinity of Raynes Park Golf Club-house for the erection of a school to replace the Ashton-road temporary school, and for future developments.

READING.—St. James' Church is to be enlarged at an estimated cost of £6,500.

REigate.—A secondary school is to be erected for girls at a cost of £38,000.

RETford.—At the meeting of the T.C. it was agreed that the remaining portion of the undeveloped part of the Hallcroft Housing estate at Retford be proceeded with, and the Borough Surveyor prepare plans and obtain estimates for 24 non-parlour type houses which the Council propose to erect.

ROYTON.—The D.C. have decided to apply to the M.H. to borrow £28,000 for housing purposes.

RYTON.—Preliminary plans for a new elementary school are being prepared by the Durham County E.C.

SACRISTON.—Further consideration is being given by the Durham County E.C. to plans for extensions at the elementary school.

SADDLEWORTH.—The W.R. Council are to invite tenders for the erection of a new police station at Upper Mill to the plans of the County Architect.

SALFORD.—The North Salford Labour Party has decided to purchase "Victoria Lodge," Lower Broughton, for the purposes of a new club.

SHOTTERMILL.—Surrey E.C. now propose to proceed with the erection of an elementary school.

SIDMOUTH.—The U.D.C. are proposing to carry out a scheme for the erection of a breakwater at an estimated cost of £60,000.

SOLIHULL.—The Solihull United Charities have prepared a scheme for new buildings at the Solihull Shire Church of England School.

SOUTHPORT.—The Town-Planning Committee have decided to apply to the M.H. for sanction to borrow over £102,000 for the acquisition of land and erection of houses.

SPLSBY.—The M.H. has approved a scheme proposed by the R.D.C. for the erection of 22 houses in various villages in the area.

STOCKTON.—The T.C. has instructed the Borough Engineer to prepare an estimate of the cost of providing a new small-pox hospital, embracing an administration block, accommodation for 36 patients, and foundations for two further blocks, each to hold twelve beds.—The Council has obtained sanction from the M.H. to raise £49,211 for the erection of 120 houses on the Blue Hall Estate.

STYNDERLAND.—The Health Committee recommend the erection of 45 houses.

TANFIELD.—The U.D.C. has obtained sanction from the M.H. to purchase land at Crookgate, near Burnopfield, for the erection of 46 houses.

TRURO.—The Corporation have decided to give the subsidy to the Great Western Railway (Truro) Housing Society for 36 houses proposed to be erected. Messrs. Cowill, Drewitt & Wheatley have prepared a scheme for the development of building land at Green-lane and Falmouth-road.

TYNEMOUTH.—The T.C. are proposing additions and improvements to the bathing pool at a cost of £15,000.

USWORTH.—Arrangements have been made by the Durham County E.C. for the purchase of a site at Usworth Colliery for the erection of an elementary school.

WANSTEAD.—A site has been acquired in Cambridge-road for the erection of a proposed new R.C. church.

WARMSWORTH (SOUTH YORKS.).—Plans have been prepared for the erection of a new open-air school at an estimated cost of £19,500. Plans have been prepared by the architects' section of the West Riding C.C.

WARWICK.—Warwick County Architect has prepared plans for a school, and accommodation for stores, steward's quarters, &c., at the King Edward Memorial Sanatorium, and these have been submitted to the M.H. for approval.

WEST ACKLAND.—Durham County E.C. are preparing plans for an elementary school.

WEST HARTLEPOOL.—The T.C. has prepared plans for the erection of 278 houses at Rift House, and is making application to the M.H. for sanction to erect 113 houses by direct labour on the north side of Oxford-road, at an estimated cost of £435 each for parlour type, and £380 for kitchen houses.

WEST RIDING.—The C.C. are to carry out several important schemes as follows:—Extensions at Temple-street Council school, Castleford; new secondary school at Malby, for 300 pupils; extensions to the Doncaster Technical College, at an estimated cost of £20,000; provision of new temporary accommodation at the Doncaster Grammar School; extensions to Normanton Grammar School, at an estimated total cost of £20,000; a new Mining College and Institute to be erected at Dinnington, at an estimated cost of £21,500. Tenders amounting to £18,208 have been accepted for carrying out a scheme of extensions at Otley Grammar School. The Council also proposed to provide a new "middle" school at Featherstone, with accommodation for 360 pupils.

WETHERBY.—The West Riding C.C. has secured option to purchase a site comprising 122 acres at Linton, near Wetherby, for the erection of a sanatorium for treatment of tuberculosis.

WHITEFIELD.—The D.C. are to acquire land fronting Bury New-road for use as playing fields. A new road is to be constructed from Old England, Bury New-road to Bury Old-road, Kirkhams, to relieve the main road traffic.

WOKING.—Surrey E.C. has decided to proceed with the scheme for the erection of an elementary school at Westfield.

WOLVERHAMPTON.—It has now been arranged to buy the present Telephone Exchange adjoining the Town Hall—the site for the new Public Hall—for £4,800, and a site for the new Exchange is being found by the Corporation in Red Lion-street.—Mitre Fold is to be demolished, and a new street constructed so as to provide an island site for the new Public Hall.—Fourteen new houses for the police are to be erected on land in Red Lion-street, which is to be widened to 36 ft.

WOOTTON.—Warwick County E.C. have decided to erect a school for 100 children.

BUILDING TRADE WAGES IN SCOTLAND.*

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Brick-layers' Labourers.
Aberdeen	1/3	1/8 1/2	1/8	1/8	1/3	1/3	1/7	1/0 1/2
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6 1/2	1/3
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2 to 1/3 1/2
Arbroath	1/7	1/7	1/7	1/7 1/2	1/7	1/7	1/5 1/2	1/2 1/2
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/8 1/2	1/3
Bathgate	1/8	1/8	1/8	1/8 1/2	1/8	1/8	1/6 1/2	1/2 to 1/3
Blairstown	1/7	1/7	1/7	1/7 1/2	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Coatbridge	1/8	1/8	1/8	1/8	1/8	—	1/8 1/2	1/3 to 1/3 1/2
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Dumfries	1/8 1/2	1/6 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/2
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Edinburgh	1/3	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Falkirk	1/7 1/2	1/7 1/2	1/7	1/8	1/7	1/7	1/6 1/2	1/2 1/2
Fort William	1/6	1/8	1/8	1/8	1/8	1/8	1/8	1/2
Glasgow	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Greenock	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/0 to 1/3 1/2
Hamilton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hawick	1/7	1/7	1/7	1/7 1/2	1/7	1/7	1/7	1/2 1/2
Helensburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/2 1/2
Inverness	1/5	—	1/5	1/5	1/5	1/5	1/4	1/- to 1/2
Kilmarnock	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Kirkwall	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/-
Lanark	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Motherwell	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Perth	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3 1/2
Stirling	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3 1/2
Stirlingshire (Eastern District)	1/3-1/10	1/3-1/10	1/3	1/3	1/3	1/3	1/3	1/3 1/2
Wishaw	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2

* The information given in this table is copyright. The rates of wages in the various towns in England are given on page 297.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	s. d.
Add if in clay	" "	1 0
Add for every additional depth of 6 ft.	" "	0 6
Planking and strutting to trenches	per foot super	0 5
Do. to sides of excavation, including shoring	" "	1 0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	s. d.
Add if in underpinning in short lengths	" "	7 0
Add if in floors 6 in. thick	" "	3 3
Add if in beams	" "	3 9
Add if aggregate 1: 2: 4	" "	10 0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2 6

BRICKLAYER.

Reduced brickwork in lime mortar and Fletton bricks	per rod	£ s. d.
Add if in stocks	" "	7 10 0
Add if in Staffordshire blues	" "	22 0 0
Add if in Portland cement and sand	" "	1 10 0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0 0 1½
--	---------------	--------

POINTING.

Neat flat struck or weathered joint	" "	0 0 3
-------------------------------------	-----	-------

ARCHES.

Extra only to the price of ordinary brickwork:—		
Fair external in half brick rings	" "	0 0 10
Axed in stocks	" "	0 1 9
Rubbed and gauged jointed in putty camber or segmental	" "	0 6 0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0 1 0
Setting ordinary register grates and stoves	each	1 0 0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	" "	4 15 0

ASPHALTER.

Half-inch horizontal damp course	per yard sup.	s. d.
Three-quarter-inch vertical damp course	" "	4 3
¾ inch on flats in two thicknesses	" "	8 6
Angle fillet	per foot run	6 3
Skirting and fillet 6 in. high	" "	0 3
	" "	1 2

MASON.

York stone templates fixed	per foot cube	s. d.
York stone sills fixed	" "	13 0
Bath stone and all labour fixed	" "	22 0
Portland stone fixed	" "	10 6
	" "	20 0

SLATER.

Welsh 16 in. x 8 in. 3 in. lap, including nails	per square	s. d.
Do. 20 in. x 10 in. Do. Do.	" "	72 9
Do. 24 in. x 12 in. Do. Do.	" "	80 9
	" "	90 0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	s. d.
Do. joists	" "	5 0
Do. roofs, floors and partitions	" "	5 6
Do. trusses	" "	6 0
	" "	8 6

Deal rough close boarding	per sq.	35/6	1' 40/-	1½ 45/-	2' 72/-
Flat centering for concrete floor, including struts or hangers	" "				s. d.
Do. to beams	per ft. sup.				50 0
Centres for arches	" "				1 0
Gutter boards and bearers	" "				1 6
	" "				1 0

FLOORING.

Deal-edges shot	per sq.	3" 44/6	1" 53/-	1½ 57/6	1½ 60/6
Do. tongued and grooved	" "	45/-	49/-	51/-	65/-
Do. matchings	" "				
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

One-and-a-half moulded sashes or casements	per foot super	s. d.
Two Do. Do. Do.	" "	1 10
Add for fitting and fixing	" "	2 1
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	0 3
	" "	3 9

DOORS.

Two-panel square framed	per ft. sup.	1½ 2/1	1½ 2/4	2' 2/6
Four-panel Do.	" "	2/5	2/8	2/11
Two-panel moulded both sides	" "	2/8	2/11	3/2
Four-panel Do.	" "	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

Deal wrot moulded and rebated	per foot cube	s. d.
Plain deal jamb linings framed	per ft. sup.	1' 1 1/7 1 1/8 1 1/4 1 1/6 2d. 2d.
Deal shelves and bearers	" "	
Add if cross tongued	" "	

STAIRCASES.

Deal treads and risers in and including rough brackets	1' 2/1	1½ 2/4	2' 2/9	2½ —	3' —
Deal strings wrot on both sides and framed	1/8	2/	2/2	2/8	

Housings for steps and risers	each	0 1
Deal balusters, 1 in. x 1½ in.	per ft. run.	0 1
Mahogany handrail; average 3 in. x 3 in.	" "	11 1
Add if ramped	" "	23
Add if wreathed	" "	

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/
Sash fasteners	11½d.	Mortice locks	4/
Casement fasteners	1/5	Patent spring hinges and letting in to floor and	
Casement stays	1/2	Cupboard locks	1/5 making good

FOUNDER AND SMITH.

Rolled steel joists	per cwt.	18
Plain compound girders	" "	19
Do. stanchions	" "	21
In roof work	" "	27

RAIN-WATER GOODS.

Half-round plain rebated joints	ft. run	3" 1/6	4" 1/9	5" 2/-	6" 2/
Ogee Do. Do.	" "	1/9	2/-	2/6	3/
Rain-water pipes with ears	" "	1/9	2/7		
Extra for shoes and bends	each	4/4	5/11		
Do. stopped ends	" "	1/11	2/4½	3/7	4/
Do. nozzles for inlets	" "	2/2	2/7	3/10	4/

PLUMBER.

Milled lead and laying in flashings and gutters	per cwt.	63
Do. Do. in flats	" "	62
Extra labour and solder in coated cesspools	each	
Weld joint	per ft. run.	
Soldered seam	" "	
Copper nailing	" "	

Drawn lead waste per ft. run	1/2	1/9	2/0	3/4	4/0
Do. service	1/8	2/2	3/7	3/10	
Do. soil					
Bends in lead pipe	each				3/3
Soldered stop ends	" "	1/2	1/8	2/1	2/10 3/6
Red lead joints	" "	11d.	1/-	1/3	1/11 2/4
Wiped soldered joints	" "	2/10	3/6	4/-	4/11 6/6
Lead traps and cleaning screws	" "				14/7 19/6
Bib cocks and joints	" "	6/4	9/7	15/4	41/-
Stop cocks and joints	" "	15/4	17/2	25/8	64/-

PLASTERER.

Render, float and set in lime and hair	per yard sup.	s. d.
Do. Do. Sirapite	" "	2
Do. Do. Keen's	" "	3
Add sawn lathing	" "	1
Add metal lathing	" "	2
Portland cement screed	" "	2
Do. plain face	" "	3
Mouldings in plaster	per l girth	0
One-and-a-half granolithic pavings	per yard sup.	5

GLAZIER.

21 oz. sheet plain	per foot sup.	0
26 oz. Do.	" "	1
Obscured sheet	" "	1
½ in. rolled plate	" "	0
½ in. rough rolled or cast plate	" "	0
½ in. wired cast plate	" "	1

PAINTER.

Preparing and distempering, 2 coats	per yard sup.	0
Knotting and priming	" "	0
Plain painting 1 coat	" "	0
Do. 2 coats	" "	1
Do. 3 coats	" "	1
Do. 4 coats	" "	2
Graining	" "	2
Varnishing twice	" "	1
Sizing	" "	1
Flattening	" "	1
Enamel	" "	1
Wax polishing	per foot sup.	1
French polishing	" "	1
Preparing for and hanging paper	per piece 2/- to	

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. Percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of information given on this page is copyright. Prices include both materials and labour.



TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

Notes accepted. † Denotes provisionally accepted. Notes recommended for acceptance. Notes accepted subject to modification.

ERDARE.—The U.D.C. has accepted the following tenders:—

Extending electricity supply to Cwmbach and Cwmmamman—
*Pirelli, Ltd. £4,634 10 7
Supply of iron pipes in various gauges—
*Stanton Iron Works, near Nottingham £441 15 6

ON, W.3.—Fifty houses on the extension of road, Acton, for the Great Western (London) Village Society, Ltd. (30 non-parlour, 20 parlours). Mr. T. Alwyn Lloyd, F.R.I.B.A., architect:—
Building & Public Works Construction Co., Ltd., Swindon £27,534

TON-IN-MAKERFIELD.—For the erection of memorial Reading Room, for the trustees of the Lane Chapel:—
Luton & Lane.

ESBURY.—Thirty-eight houses on the South-estate, for the T.C.:—
Webster & Cannon, Aylesbury .. £18,788

BASINGSTOKE.—Seventy-four houses, for the B.C.:—

	per pair	£	s	d	Paths.	Fencing.
Harris, Basingstoke.....		1,265	0	0	—	—
ts & Holland, Arundel.....		1,239	19	9	£309	547
all & Son, Basingstoke.....		1,233	0	0	114	397
igwell, Basingstoke.....		1,208	0	0	198	499
Blake, Tadley, Basingstoke.....		1,205	15	0	263	509
adderley, Basingstoke.....		1,142	0	0	—	—
uglas, Southampton.....		1,036	0	0	Included with houses.	—
ing & Public Works Construction Co., Swindon.....		948	0	0	133	399

NSLEY.—For erection of a new parade of shops offices at junction of Regent-street South and ay-street, Mr. C. F. Moxon, architect, ley:—
y. Hibbert & Sons, Barnsley.

CKBURN.—Construction of ferro-concrete over L.M. & S. Ry., for the C.B.:—
ray's Ferro-Concrete Co., Glasgow.

CKBURN.—Four houses at Samlesbury, for B. Mr. A. T. Goosman, Borough Engineer:—
ohn Cronshaw & Sons, Ltd., Blackburn.

CKPOOL.—Erection of new banking premises ices above, for Messrs. Williams Deacons Bank, n Talbot-square. Mr. F. H. Gorst, architect, ey-street, Blackpool:—
herton Bros., Blackpool.

TON.—For the erection of additions to Sunday for the trustees of Fall Birch Wesleyan Church. H. W. Higson, L.R.I.B.A., and A. W. Barker, rts.:—
William Makinson & Sons, Ltd., Horwich £2,400

TON (LINES).—For construction of an addi-Sale Ring at the Cattle Market, for the T.C.:—
Darby £662 10

DFORD.—For extension to the bottling stores Leeds and Wakefield Breweries, Ltd., at Sackville- Mesrs. James Young & Co., architects, rd:—
Wray & Co.

AMDEAN.—Alterations and additions at ers," for Major W. N. Aitken, D.S.O. Mr. Wm. Roles, architect:—
ussellwhite & Son, Basingstoke.
Read & Sons, West Mon.

CON.—Erecting the Breconshire County War al Hospital at Brecon, for the Hospital Com- atkin, Williams & Son, Llanishen, Glam. £27,065

NTFORD.—Sixteen bungalows in pairs, on the r King's-road:—
Saunders, Brentwood £6,215 15

LTH.—Improvement of the Strand approach h Bridge, for the Breconshire C.C.:—
D. Davies, Talgarth £1,123 8 2

LEFORD.—For various sanitation schemes at treet, Wellington-street and Chapel-street, for D.C.:—
L. Rodgers & Sons £386 4

PPING WYCOMBE.—Ninety houses on the an site, for the T.C. Mr. T. J. Rushbrooke, h Surveyor, Great Wycombe:—
gs & Son, Great Kingshill £46,330 0
C. Dean, High Wycombe £2,846 15
J. Kear, Broadwell, Coleford,
Glos. 42,601 0
sh & Son, High Wycombe 41,788 0
S. Howard, West Wycombe 41,309 0
H. Gibson & Sons, High
Wycombe 41,523 0

LMSFORD.—Engine house and other building the Admirals Park Waterworks, for the T.C. J. Miles, A.M.I.C.E., Borough Surveyor and r:—
Potter, Chelmsford £2,597 0 0
J. Hawkes & Sons, Chelms-
ford 2,212 10 0
per & Black, Chelmsford .. 2,072 14 6

CHESTERFIELD.—For the works required in the completion of the first portion of a technical college in Infirmary-road, Mr. P. B. Houghton, F.R.I.B.A., architect, Farnival Chambers:—
*G. F. Kirk, Ltd.

CONGLETON.—Additions to the Congleton War Memorial Hospital, Mr. J. H. Walters, L.R.I.B.A., Moody Chambers, Congleton, architect:—
James Standeven, Congleton .. £398 0 0
*George Wood, Congleton 346 5 6

CONGLETON.—Additions to Bridge Mills, for Messrs. W. H. Cliffe & Sons. Mr. J. H. Walters, L.R.I.B.A., Moody Chambers, Congleton, architect:—
T. & E. Cooke, Congleton £255
*James Standeven, Congleton 212

CWMAMMAN.—Laying of ten miles of sewers, for the U.D.C.:—
*Watson & Horrocks, Ltd., Bridgend £33,600

DOVER.—Fifty houses on the Astor-avenue estate, for the Corporation. The Panel of Architects (Mr. A. H. Steele, Chairman), architects. Quantities by Mr. A. H. Steele:—
*Hayward & Paramor, Ltd., Dover—
Four blocks of six non-parlour
houses £10,997
*Lewis & Sons (Dover), Ltd., Dover—
Two blocks of six parlour houses,
and six pairs of non-parlour
13,078
*J. W. Morgan, Dover—
One pair of non-parlour, and two
pairs of parlour 3,221

DONCASTER.—For erection of a new hotel at Highfields, for Messrs. John Smith's Tadcaster Brewery Co., Ltd. The Industrial Housing Association, Ltd., Architects:—
*B. Groves, Rotherham.
FEATHERSTONE.—102 houses in Ackworth-road, Purston, for the U.D.C.:—
*H. Hurst, Birkinshaw £43,300
FINCHLEY.—Erection of proposed additions and alterations to Christ's College, for the Middlesex C.C.:—
*W. J. Maddison, Ltd., Minorities £32,925
FINCHLEY.—Erection of the proposed additions and the alterations to Woodhouse Secondary School, Finchley, in accordance with the plans prepared by the County Architect, for the Middlesex C.C.:—
Turner & Payne, Finchley, N. £9,233

GLASGOW.—Concrete work in connection with the provision of sand-pits and paddling pools in four parks, for the T.C.:—
†Alexander W. Paterson £1,784 9 1
GLASGOW.—Construction of concrete path at Rutherglen-road, for the T.C.:—
*John Drysdale £518 2 6

GOLBORNE.—For the erection of 20 houses for the U.D.C. Mr. J. Ford, surveyor:—
*J. Ashcroft & Sons.

GOWER (GLAM.).—The Gower R.D.C. has accepted tenders as follows:—
Construction of new road at Kittle Hill—
*D. J. Thorne, Reynoldston .. £10,101 10
Improvement of Penclawdd-Llanrhiddian road—
*Thomas & Lewis, Pen-
clawdd £10,454 16 10

HALIFAX.—For foundations for cooling towers at electricity power station, for the C.B.:—
*P. Fulcher, New-road, Halifax.

HUDDERSFIELD.—Heating work in connection with the extension at the Royds Hall Secondary School, for the T.C. Borough Architect:—
*Milans, Ltd., Lockwood, Huddersfield.

HUDDERSFIELD.—Eighteen houses off Long-lane, Dalton, for the C.B. Borough Architect, 26, Ramsden-street:—
*Masons.—J. Wimpenny & Co., Linthwaite.
*Joiners.—G. Ainley & Sons, Crosland Moor.
*Plumbers.—E. Boulton & Sons, Huddersfield.
*Plasterers.—Broadbent Bros., Moldgreen.
*Slaters.—Ellis Partridge & Co., Leicester.
*Painters.—Sykes & Robinson, Paddock.
*Electrician.—Edward Rayner, Minsbridge.
*Concretor.—E. H. White, Brierley Wood.

INVERNESS.—For reconstruction of the third section of the Inverness to Perth main road, for the Inverness C.C.:—
*Wm. Shepherd & Son, Ltd., Rochdale £103,000

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

KIRKCALDY.—Forty houses at Thornton, and thirty at Glencraig, for the D.C. Mr. W. Williamson, F.R.I.B.A., Royal Bank Buildings:—
Thornton site—
Brickwork—
*Alex. Fraser, Kirkcaldy £6,191 7 4
Joiner—
*Robt. Wood, Thornton 2,236 14 6
*D. Mitchell & Son, Leslie 1,809 16 0

Slater.—
*Wm. Currie, Kirkcaldy £718 15 0
*J. Lawson & Son, Kirkcaldy .. 601 13 4
Glazier.—
*J. Haxton & Co., Kirkcaldy ... 96 16 4
Painter.—
*Wm. Russell, Dunfermline ... 348 18 4
Fencing.—
*P. & R. Fleming & Co., Glasgow 163 14 9
*Wm. Gilchrist, Ladybank 169 17 8

Glencraig site.—
Brickwork.—
*James, Ramsay, Leslie 4,477 13 6
Joiner.—
*T. & R. Barclay & Son, Loch-
gelly 2,951 12 10
Plumber.—
*A. Thomson & Co., Dunfermline 1,518 11 0
Plaster.—
*Wm. Stewart & Son, Crossgates 1,084 3 9
Slater.—
*Wm. Stewart & Son, Crossgates 914 19 6
Glazier.—
*J. Haxton & Co., Kirkcaldy 68 3 0
Painter.—
*Wm. Russell, Dunfermline 242 13 1
Fencing.—
*P. & R. Fleming & Co., Glasgow 190 8 2

LANCASHIRE.—Alteration of the farm buildings, for Lancashire C.C.:—
*W. & J. Hart, of Langton—
Titebarn Farm £168 15
Stanley Farm 190 0
Middle Grange Farm 148 0
Pollard's Farm 261 12

LEEDS.—Granited rock asphalt paving in Otley road, for the Highways Committee:—
*Tunstall's Rock Asphalt Co., Ltd., Leeds.

LEEDS.—Painting at the Town Hall, for the T.C.:—
*Carter & Frankland £398

LEWISHAM.—Installation of filtration plant at Forest Hill Baths, with duplicate motors and pumps:—
*Bell Bros., Ltd., Manchester £2,373

LIVERPOOL.—For alterations to 90, Allerton road:—
*S. Hill & Co., 4, Bennison-drive,
Grassendale £2,987

LIVERPOOL.—For the erection of an electric sub- station on Field-lane, for the Corporation. Plans by the Land Steward and Surveyor:—
*Bragg & Collins, Walton.

LONDON.—Erection of temporary structure for use as chapel at the Hospital in Cambridge-road, Bethnal-road:—
*W. J. Cearn, London £389

LONGBENTON.—Fifty-six semi-detached houses at Glebe-road, Forest Hall, for the U.D.C. Mr. W. Bean, surveyor:—
*Thos. E. Ridley, Gosforth, Newcastle.

LYMM.—For the erection of 40 houses, for the D.C. Mr. D. Mort, surveyor:—
*Brew Bros., Cadishead—10 houses.
*H. Thomason & Sons—30 houses.

LYTHAM ST. ANNES.—Reconstruction of Liggard Brook bridge (revised scheme), for Lancashire C.C.:—
*J. M. Firth, Todmorden £2,559 10

MAIDSTONE (KENT).—Erection of County House at Dartford, for the Kent C.C.:—
Skinner & Son, Chatham £8,781 0 0
W. F. Blay, Ltd., Dartford ... 8,650 0 0
Davis & Teaney, Goudhurst... 8,169 19 6
Ellingham, Ltd., Dartford ... 7,956 0 0
*Wallis & Sons, Ltd., Maidstone 7,337 0 0

MIDDLETON.—For the painting of Dunnford- street Council school, for the T.C.:—
*Colson Bros., Ltd., Oldham £452 10

OSSETT.—Erection of school at Gawthorpe, for the E.C.:—
Excavator, mason and bricklayer.—
*H. Oldroyd, Ossett £7,196 18 7
Carpeteer and joiner.—
*M. Lockwood & Son, Ossett .. 2,184 15 0

Slater.—
*John Kellet, Morley 816 0 0
Plasterer.—
*R. H. Lockwood, Horbury... 805 1 7
Plumber and glazier.—
*J. A. Fawcett, Osset 984 0 0

Painter and decorator.—
*J. Hancock & Son, Horbury.. 246 6 9

OSSETT.—Decorating Town Hall, for the T.C.:—
*Albert Wilkinson £698 1 5

PAIGNTON.—Construction of roads and sewers at Preston housing estate, for the U.D.C.:—
*H. T. Drew £5,335

PETERBOROUGH.—Fourteen parlour houses on the South View housing site, for the T.C.:—
*S. J. Hicks.

PETERBOROUGH.—Twenty-eight houses on the Burnier-road and Thistle-moor-road estate, for the T.C.:—
*W. Sallabanks.

PETERBOROUGH.—Eighteen non-parlour houses on the Star-road estate, for the T.C.:—
*J. Cracknell, Ltd.

PLYMOUTH.—Four houses at Mount Gould-terrace, Lower Mount Gould estate, for the C.B. Mr. J. Wibberley, architect:—
*Wakeham Bros., Plymouth £2,340

(Subject to the approval of the Ministry.)



RADNORSHIRE.—The C.C. has accepted the following tenders:

Erecting new bridge at Penybont—
*A. E. Farr, London £5,682
Erecting new bridge at Llanwyre—
*A. E. Farr £6,563
Repairing Glanestry Bridge—
*J. L. Griffiths, Llandrindod Wells.. £620

RICHMOND (YORKS.).—Concrete retaining wall, river protection works, and works of drainage adjacent to the Richmond and Rect's main road, near Thorpe House, for the North Riding C.C. County Surveyor, County Hall, Northallerton:—
*Jno. Bushfield, Ltd., Leeds.

SALE.—For the erection of a further 12 houses on Clarendon-crescent, for the U.D.C.:—
*J. E. Dean & Sons, Ashton-on-Mersey.

SALFORD.—Foundation for boilers at power station, for the T.C.:—
*E. B. Jones & Rawlinson, Ltd.
Salford..... £1,689 13 10

SALFORD.—Sewering six streets on the Littleton-road housing estate, for the T.C.:—
*Wilson & Wickenson, Pendleton £1,090 16 10

SALFORD.—Erection of 126 houses at Littleton estate, for the T.C.:—
*Co-operative Wholesale Society .. £60,296

SEAFOORD.—Twenty parlour type houses, for the U.D.C. Surveyor, Council Offices, 3, Clinton-place:—
*Harding Bros., Seaford £10,400

PORTABLE PARQUET DANCE FLOORS

In OAK, or OAK and WALNUT.
For PUBLIC or PRIVATE DANCE ROOMS
As supplied to the leading Hotels, etc.

Write or Phone (Park 1885) for particulars to
TURPIN'S PARQUET FLOORING CO.
25 Notting Hill Gate, London, W.11

J. GLIKSTEN & SON

LIMITED

Specialities in

SEASONED

HARDWOODS

MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.

REGISTERED OFFICE AND WHARF

CARPENTERS RD.
STRATFORD
LONDON E.15

Telephone:
EAST 3771
(5 lines)

Telegrams
GLIKSTEN 'PHONE
LONDON

SHEFFIELD.—Internal and external painting and clearing the Corone's Court and mortuary in Nursery-street, for the T.C. Mr. F. E. P. Edwards, F.R.I.B.A., City Architect:—

*Sheffield & Ecclesall Co-operative Society, Ltd., Sheffield.

SHEFFIELD.—Alterations at Brightside Branch Library, for the T.C. Mr. F. E. P. Edwards, F.R.I.B.A., architect:—

*Ash, Son, & Biggin, Ltd., Sheffield.

SHEFFIELD.—Internal painting at the Central Reference Library, Surrey-street, for the T.C. Mr. F. E. P. Edwards, City architect:—

*Bodsworth Bros., Sheffield.

SHEFFIELD.—For rebuilding of the Pheasant Inn at Attercliffe Common, for Messrs. Duncan Gilmour & Co., Ltd. Mr. W. C. Fenton, F.R.I.B.A., architect:—

*John Middleton, Ltd., Sharon.

SOUTHEND-ON-SEA.—Thirty-eight parlour and 51 non-parlour type houses, for the Corporation. Borough Engineer:—

*Johns Bros., Woolwich £44,220 1 9

SOUTHWELL.—Sinking of pump well, erection of pumping station, and the carting, excavation and laying of about 1½ miles of 8 in., 4 in., and 3 in. cast-iron pipes and specials, for the R.D.C.:—

C. S. Tomlinson, South Nor-
manton, near Alfreton,
Derbyshire £5,100 0 0

W. Rollinson & Sons, Basford,
Nottingham 5,045 0 0

J. Clark, Netherfield, Notts 4,083 3 0

Porter & Sons, Barnby Dun,
Doncaster 3,746 16 10

*H. Ashley, Mansfield, Notts 3,479 12 8

STOKE.—Alterations to the engine room at the Furnhurst-road Institution, for the B.G.:—
*Naylor & Nutt, Tunstall..... £430

WALKER.—Repainting externally of 310 houses on the Walker housing estate, and 41 houses at Tynevale-terrace, Walker:—

H. J. Sinclair, Newcastle £1,358 0 0

E. S. Smith, Heaton, Newcastle 1,180 0 0

J. S. Grabbam, Sunderland... 755 10 0

Alexander & Sons, Newcastle.. 750 12 0

W. B. Cato, Newcastle..... 695 2 6

T. & R. Stephenson, Fenham,
Newcastle 671 5 9

*Alex. Anderson, Heaton, New-
castle 655 9 6

WOKING.—Fifty-two houses at Westfield, for the U.D.C.:—
†— Jones £25,237

WOKING.—Six pairs of flats at Knaphill, and two pairs at Kirby-road, for the U.D.C.:—
†Triangular Construction Co. £17,110

YORK.—Library, for the Corporation, Messrs. Brierley & Rutherford, architects, 13, Lendal, York. Quantities by Messrs. Thos. Priestley & Sons, Oxford Chambers, Victoria-road, Leeds:—

*F. Shepherd & Son, York..... £22,839 10

J. J. ETRIDGE, J. Ltd

SLATING AND TILING

SLATE MERCHANTS

CONTRACTORS.

Inspections and Reports made on
OLD OR FAULTY ROOFS
in any part of the country.

Telephone: Bishopsgate 1944/5, or write,

Bethnal Green Slate Works,

BETHNAL GREEN, LONDON, E.

BEST SEASONED

OAK FLOORING

AUSTRIAN
RUSSIAN
JAPANESE

PREPARATION TO ANY SECTION
CAN BE UNDERTAKEN AT ONCE

SYDNEY PRIDAY & SONS

WAINSCOT OAK MERCHANTS (EST. 1880)

Phone
CLISSOLD
6254
(2 lines)

OAK WHARF
RAVENSDALE ROAD
LONDON, N.16.

FITZPATRICK & SON

Masons and Paviors,

455, OLD FORD ROAD, BOW, E.3

Phone: EAST 4808.

Granite Setts and Kerb (redressed and second hand), York Paving Spur Stones, Granite Chippings, and Granolithic and Sett Paving.

School & Hospital Stoves

MAKERS OF

WRIGHT'S IMPROVED and also SHORLAND PATENT
WARM AIR VENTILATING PATTERNS.

GEO. WRIGHT (LONDON LIMITED)

19, Newman St., Oxford St., London, W.1
Burton Weir Works, Rotherham.

HIGH-CLASS

FLOORINGS

of every description in

WOOD BLOCKS. PARQUET
SEASONED T. & G. WAINSCOT OAK
TEAK AND MAPLE.

FACTORY AND ROADWAY PAVING

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASANT
WANDSWORTH, S.W.18.
(Phones: Putney 1700 & 24)

COPPER ROOFING WITH CONICAL ROLLS

ABSOLUTELY WATERTIGHT. VERY DURABLE

ESTIMATES FREE

F. BRABY & CO. LTD. 352-364 EUSTON RD. N.W.1.

AND AT DEPTFORD, LIVERPOOL, BRISTOL, GLASGOW, FALKIRK & BELFAST.

THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

CXXIX.—No. 4,308

AUGUST 28, 1925

"OVERCROWDING"

There are to-day some 12,000 architects and students in England and Wales.

THIS is the outstanding fact by which the recent excellent report of the Special Joint Committee on the alleged overcrowding in the architectural profession will be remembered. That this figure, alarming as it appears, has not been forced up by the popularity of architectural schools is an important corollary which immediately follows; without the schools we might have less qualified architects but more men in practice. While few will disagree there exists sufficient scope for qualified men—if those built were prepared to recognise the necessity of employing architects—still the figure 12,000 remains and must cause much anxious thought to parents and to many men already in the profession. Put quite frankly, what are the prospects of a man without capital or special interest of becoming reasonably self-supporting at the age of thirty-five, let alone of keeping a family and providing for the future? Surely the answer, if made to a student who consulted one as to a lad's future, cannot be optimistic. Architecture as a profession for the man of average ability is certainly precarious: it may be disappointing, and may end in a complete failure. First, there is the long and expensive training, then a period of employment—probably temporary from office to office, with gaps between; this may be succeeded by permanent work and perhaps a share in a business that would amount to little more than an uncertain salary. As an alternative there is the job abroad, often only a cul-de-sac, but the prospect of even a small assured future is not one that can be looked for, and the more truthful we can be on this point the better for all concerned.

If a young architect cannot call upon hereditary influence or an established firm or depend upon outside influence for a steady practice," says a correspondent, "he can only be an underling and he cannot expect to earn more in the open market than would any reasonably well-trained clerk after a short time at the Polytechnic and a small practical experience. In brief, architecture—and the sooner we face this the better—is not a profession, and it holds no attraction for the average bread-winner. That average men, and men above the average, have done extremely well for themselves in architecture is not to be denied, and miles of our cities and suburbs exist as monuments to their successful mediocrity; but if we look into it we shall find that those men have had openings in existing practices or that they grafted their architecture to property management, surveying, and speculation. They were cogs in a larger wheel, professional men who were concerned with buildings. It was as business men and not as architects that they made good, and with the passing of time their estate as a paying concern their opportunities have been diminished and will diminish still further." The health of architecture appears to depend first upon the vitality of this quasi-architectural business element better trained than the average of the schools comes in. We cannot force a commercial man to make his surveyor, engineer, or builder. Let an architect, but we can encourage surveyors, engineers, and builders to let their sons study architectural principles and if the course is short, to learn where architectural pitfalls lie. A strict trade union attitude is hardly likely to help matters; it certainly will not help architecture. The vital element to a sound body appears to lie in the heaven within the man, represented by those men—architects in the fullest sense—who are above the average and who are ready to risk everything for good. Men such as these, who care enough for the profession to face uncertainty and sacrifice, deserve the reward

if the opportunity is won. In this spirit architecture is only taking her place with the other fine arts, none of which have ever been regarded by parents as assured careers. Artists may be successful—extremely so—but their callings are not thereby scheduled as suitable for average men or for men who have failed in other directions. This neglect has spared the other arts the load of well-meaning mediocrity common to professions, although it may have increased their proportion of cranks and egoists. It is only as an adventure that art can keep her spirit keen; she offers uncertain opportunity for fulfilment in exchange for deliberate routine and safety, and her reward is in herself. It is because architecture is so closely associated with the practical side of life and living, with law, mathematics, and sanitation, that she has allowed herself to become a profession, however honourable, and not a calling in the vocational sense. In so doing she has lost caste, and architects—despite their practical qualifications—find that they are not consulted. Before accepting this charge let us meet the objection that many clients only consult architects over the mundane details, while they reserve the important side of decoration to themselves, although they generally add the remark that "architects build pretty houses but they know nothing about the practical side." Surely this contradiction springs from the same error—that architectural values in everyday life have been allowed to fall, and are regarded as an applied extra, subject at best to the caprice of taste?

It is a curious anomaly, peculiar to priests as well as to artists, that their power and influence in common dealings with common men depends upon their own uncommon outlook. The athletic East End parson does not owe his influence among men to the habit of wearing flannel trousers and talking heartily of "fish and chips"; the artist whom men follow is he who puts the message of his art in front. Architects have to make people see that good building and beauty are interdependent, and that the unity to be sought is far higher than practicality or decoration alone, but to do this effectively they must bear witness to the reality and the intrinsic value of art; they must show that it cannot be encompassed by the ignorant. What well-dressed woman without a course of training would presume to make her own ball gown or to cut out her husband's new suit? Yet the same woman would think it a foolish extravagance to pay for architectural advice over the alterations to her home. You would find her deferring humbly to the suggestions of someone on the proposed bow window, or object before the expert dating her period drawing-room suite, but these oracles would be dealing with recognised data, not with taste, and taste (she believes) is her own.

Until architects as a body emphasise the vocational significance of their art they will not ignite public imagination. Ugliness will be tolerated and architects will only be employed to ward off the attacks of supposedly rapacious tradesmen. But how, it may be asked, are architects to do the insisting? Perhaps the answer is not so complicated—by believing in the vocation themselves. Conviction carries itself, and no one with an acquaintance of architecture to-day can doubt the zeal and enthusiasm of the young men and women who are leaving the schools and invading the offices throughout the country. The corporate influence of these centres has created an impetus which must push architecture into touch or into conflict with ordinary life and other professions. Even granting this new enthusiasm, the end is not yet in view, although we may say that public feeling is looking up. For the man of venture with only himself to keep architecture can hold out possibilities and openings; it introduces more delightful by-ways than any other calling, it invites the widest culture and the widest response, but its favours are uneven and can never be assured. Facing this without illusions we can recommend the adventure to our bolder spirits, offering them the consolation that the less the certainty the greater the virtue and the value of the end.

NOTES.

The Oxford Colleges. INTERESTING building operations are being conducted at present on several of the Oxford Colleges, of which members of the R.I.B.A. Conference last year will have happy memories. A block of buildings at Magdalen, close to the Deer Park, erected in 1735, is being refaced with bath-stone, as the stone from local quarries has crumbled away. Similar work is in progress at All Souls, New College, St. John's and Christ Church. At Worcester, writes a correspondent, "where the local stone has suffered very seriously, an experiment has been tried on the advice of a well-known architect of inserting in the decaying stone pegs made of pieces of red tile. These are covered over and surrounded with cement. This is of course far more economical than replacing with new stone, and the other Colleges are watching to see if this method is satisfactory."

The Amenities of Oxford. JAZZ electric signs, we are informed, are not to be allowed in the City of Oxford under a Town Planning scheme that is at present under consideration. It is felt that night signs having the appearance of intermittent illumination and roof signs are quite out of place in the University City, and accordingly it is proposed under the preliminary scheme to prohibit these. Power is also to be taken to

prevent the erection of buildings of a height greater than 50 ft., exclusive of chimneys, towers and turrets. The area, as approved by the Ministry of Health, covers nearly 20,000 acres in all, and if confirmed Oxford will be the first city in Great Britain to obtain powers to control her built-up area. At present a cinema could be put up next to Christ Church, or a mammoth store opposite Magdalen, or a galvanised sheet iron garage close to Balliol. In view of the immense number of American and other visitors during the summer the City Council consider it imperative for commercial as well as for æsthetic reasons to safeguard the character of their City and to improve its amenities.

East Kent Coal Fields. THE bitter experiences arising out of industrial development in Lancashire, the Potteries and the Black Country has led to a report being prepared by Professor Abercrombie, of the Department of Civic Design in Liverpool University. This report has in view to suggest how the transformation of East Kent into a busy mining and industrial area from an agricultural countryside can be effected without destruction of its rural and traditional character, and grave injury to historic towns such as Canterbury. That much can be done in that way we are inclined to doubt, at the same time the use of electricity for power for the mines and other industries, and also some considered plan for housing may

mitigate the worst of the evils of the side of industrialism. The destruction of this fair domain of Kent and the injury to historic cities such as Canterbury is a very serious matter. After all, the country side and its traditional associations have their value to trade also, and to exploit the mineral resources to the destruction of much else may have it serious loss as well as gain.

Village Industries. AN account in *The Times* of a village industry, which quite a number of disabled men are occupying, is part of a very wholesome quickening of country-life. There is much scope for the development of rural prosperity in adding to agriculture other sources of livelihood, for which the winter months provide plenty of time. No doubt in spring and summer the allotment or garden occupy a great part of the leisure after working hours, but even then, were the training forthcoming there is a good deal that could be done, and we hope that the efforts towards establishing small workshops and home industries will extend themselves in such a way, and retaining the local character which is, in other words, retaining the freedom for personal idiosyncrasy—craftsmanship however humble at the start—may yet prove the way to a better tradition of craftsmanship, which should gradually supersede mechanical alternatives. It does not pay to make cheap goods on a small scale, nor is it possible



THE "BERKELEY" CHAPEL FROM S.E.



THE "BERKELEY" CHAPEL AND SACRISTY FROM S.W.

Bristol Cathedral Renovation. MR. ROLAND W. PAUL, F.S.A., Architect. (See p. 313)

the village industry to sell on competitive terms with the mass producers, but work itself being better, justifies a more being paid for it, and if it is to the locality supplying its own needs in these directions, we should not see that variation of character, stamp of locality, once more taking place of the dullness of standardisation.

Richborough. A STRONG case is made out in a letter signed Leslie E. Ludlow Jones, for the careful exploration of the site at Richborough. There are all definite traces of the Romano-British occupation here are lost to us. There seems quite sufficient evidence ready to hand to suggest the great interest which would accrue from a systematic and careful oversight of the site and before it is too late.

The Foundling Hospital. ONE by one the old landmarks pass away, but not without regret or more compunction than was the case when the restorer had his way, and we are glad to see the suggestion made that some should be taken to preserve the buildings of the Foundling Hospital. These buildings have historic interest, and are associated with the London of the 17th and 18th centuries, the features of which it should be an object to retain as much as possible. The house and grounds were laid out to retain for the locality the features of the old place, it would be of much advantage to the associations of London. Not some compromise possible by which some of the land would be taken over for the buildings and the rest of the land reserved? We do not know whether the London Society has in view to promote action to this effect, but we feel sure that if public opinion mobilised there would be found much support for the proposal. London commercial enterprise is not sensitive to the claims of beauty and associations where its interests are concerned; it therefore requires those who have the public interests at heart to bestir themselves.

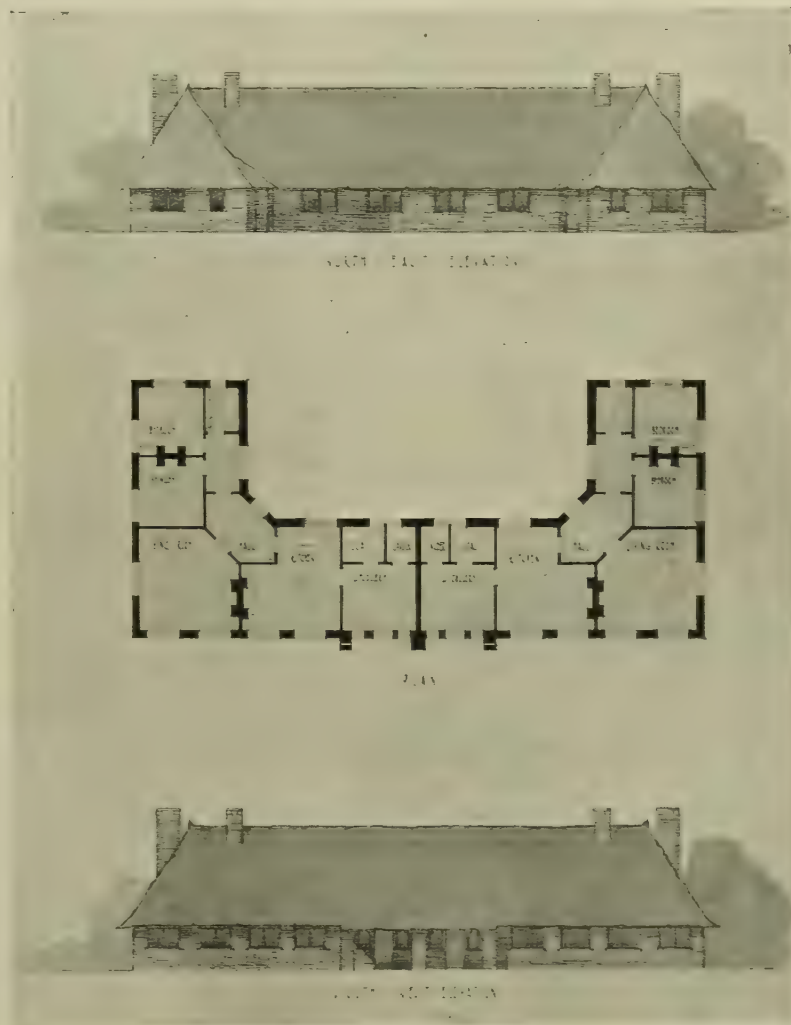
District Surveyors' Fees. A CORRESPONDENT writes:—"Builders' estimates for works in the County of London will be affected from October by a further reduction of 10 per cent. on District Surveyors' fees. This means that the scale of fees as finally provided in the several Acts and By-laws in force will be increased by 10 per cent. instead of 37½ per cent., as at present. Thus will calculation be simplified and a small benefit will accrue to everyone concerned, except District Surveyors."

Forthcoming Exhibition. It has been arranged to hold a collected exhibition of the work of Mr. Reginald Hallward in the Galleries of the R.I.B.A. this autumn. The exhibition will remain open from October 1st to the 17th, and will include

examples of the artist's work in its various directions—pictures, studies, drawings, cartoons for stained glass, mural painting, &c., and also the original completed models of the Imperial Memorial Tablets executed by him in collaboration with Lt.-Col. H. P. Cart de Lafontaine, some of which have already appeared in our pages. The note of personality in Mr. Hallward's work is its chief characteristic, and we look forward with interest to the exhibition in October.

Town-Planning Institute. THE seventh annual country meeting of this Institute will be held at Canterbury from October 2 to 4 inclusive. The meeting will open on Friday. A detailed programme will be issued in due course, but it is proposed to devote most of the time available to the study of a question which we have already discussed from time to time, *i.e.*, the future development of the Kent Coalfields area, both by discussion and inspection. The meeting is not confined to men and members only. Particulars can be obtained from the Secretary, Mr. Alfred R. Potter, 11, Arundel-street, Strand, W.C.2.

Notes on Slate. ONE of the best little handbooks of its kind which we have seen is the "Slates of Wales" which has been written by Dr. J. F. North on behalf of the Press Board of the University of Wales. The information in this monograph is well arranged and well conveyed, and should be of real value. The University has done well to issue such an informing treatise on one of the commercial assets of the principality. Amongst the illustrations is a remarkable one of the Dinorwic Quarry, Llanberis. We notice amongst the various uses of slate the author has apparently overlooked its great value as a material for decorative carving, as some of our finest old memorials are of carved slate. As to the great value of slate as a roofing material, Dr. North points out that the best Welsh slate absorbs less than one six-thousandth of its own weight of water; it is practically impervious to water, and consequently not liable to be spoilt by frost; whilst it is incombustible and a poor conductor of heat, and practically unaffected by air charged with corrosive gas.



London University School of Architecture: A Double Bungalow.

By MR. H. JOHNSON (Fourth Year). (See p. 326.)

GENERAL NEWS

Professional Announcement.

Messrs. Norris & Slattock have moved from 26, Buckingham-gate to 14, Victoria-street, London, S.W.1.

Capt. W. D. Roderick, D.S.O., M.C., architect and surveyor, Borough Chambers, Wharton-street, Cardiff, has moved to Alexandra Chambers, 119, Queen-street (entrance Windsor-place), Cardiff. Tel. 7475.

The Foundling Hospital.

The Foundling Hospital site and estate in Bloomsbury, comprising in all about fifty-six acres, have been sold at a price of £1,650,000.

Strand.

The Roads Committee of the L.C.C. propose to experiment in the near future with one-way traffic in the Strand.

Manchester Housing Problem.

There were 6,000 applications for the 842 houses which the Manchester Corporation propose building.

R.I.B.A. Examinations.

The questions set at the Intermediate and Final (or Special) Examinations held in May and July, 1925, have been published, and are on sale at the Royal Institute, price 1s. 6d. (exclusive of postage).

Empire Theatre Site.

The Metro-Goldwyn Film Corporation of America and the Jury Metro-Goldwyn Company of London propose to buy the Empire Theatre in Leicester-square, with a view to demolishing it and erecting on the site a super-cinema, at an estimated cost of £1,000,000.

Architect's Estate.

Mr. James Franklin Fuller, of 51, Eglinton-road, Donnybrook, Dublin, Architect to the Representative Body of the Church of Ireland, the Benchers of the King's Inns and the National Board of Education, Ireland, left personal property in England and the Irish Free State valued £32,216.

The Organ of St. Paul's.

The great organ of St. Paul's, which has had to be taken down from its position within the choir to make room for the work of strengthening the fabric of the Cathedral, is about to be rebuilt on the north side of the nave, where, since the closing of the choir, the services are being held.

Oxford Town Planning.

After next Friday the City Council of Oxford propose to consider a resolution adopting a preliminary statement of proposals for town planning an area within three miles of Carfax. This area has been approved by the Ministry of Health. If the town-planning scheme is adopted it is hoped that it will not only protect the character of the University city, but will also improve the approaches, which are at present extremely unsightly. The whole of the area covers 19,004 acres.

Shannon Power Works.

Preliminary work on the Siemens-Schuckert Shannon scheme has begun in Co. Limerick. Railway connections must be built between the harbour and Limerick Railway Station and also from Long Pavement to Ardnacrusha, where the power station is to be erected. The railway work is expected to be finished by December and it will employ some 600 men.

St. Michael Royal Reopened.

The church of St. Michael Royal, College Hill, E.C., one of Wren's churches in the City, after having been closed for renovation for nearly seven weeks, was reopened recently. The renovation scheme included the painting of the walls and ceilings and the moving of the heavy altar railings forward to form a chair screen. The statuettes of Moses and

Aaron, which originally stood on pedestals beside the altar, have been accommodated in niches in the walls some few feet above their former location.

Roman Pavement at Colchester.

A Roman tessellated pavement has been presented to the Borough of Colchester by Mr. H. Lazell. It was discovered in a garden at the rear of a residence on North Hill, within the walls of the original Roman city. The markings are extensive and of unique design, the centrepiece being in the form of a circular medallion. Colourings of black, white, and red have been introduced. The whole nine feet square is practically complete and will be moved to the museum.

Sea Erosion at Lyme Regis.

The coast district at Lyme Regis is again imperilled by the sea, and already a considerable section of the coast road, which is the main artery from London to Devon, has been rendered useless. A serious feature of the erosion in the borough of Lyme Regis itself is the menace to the old parish church and churchyard. There is a protecting wall, but this is now insufficient, and Sir Francis Fox has written to the Parish Church Protection Committee urging that the wall be extended.

Building Surveyors' Association.

We have received a copy of the syllabus of the Building Surveyors' Association examination which will be held in October in London. For the purpose of providing educational advancement and means of organisation for all building surveyors and inspectors or others engaged by local authorities in a supervisory capacity in connection with building works, this Association was formed. Members of the association are classified as "Members," "Associates," and "Students," according to their qualifications. Intending candidates should apply for the syllabus and permission to sit to the Secretary, Mr. Morris Crossland, A.M.I. Struct. E., 42, Highfield-road, Bramley, Leeds.

The Roman Site, Richborough.

Mr. J. P. Bushe-Fox, Inspector of Ancient Monuments, Office of Works, who is directing the work of excavation which is going on at Richborough, the site of the reputed Roman city of Rutupiae and the port of Roman England, near Sandwich, Kent, agrees with the opinion expressed by Mr. Ladlow Jones in his letter to *The Times* recently, that exploration of the area of land outside the walled fortification would furnish valuable information of the system of town planning in vogue in a Roman-British town. It appears that the owner of the land is willing to sell it for building purposes, and the feeling of antiquaries, impressed with the importance of the Roman remains found within the walled fortification, is that it would be a disaster if houses were put up there until at least the ground was explored first.

Road Works, Bond-street, W.

In the course of road repairing works in Bond-street, under the old roadway cavities more than a yard deep have been discovered, and these show that for some time past the omnibuses passing along this street have been supported merely by a layer of concrete 6 in. thick. It is suggested that hidden water currents may have drained away the earth on which the concrete rested, or that old trenches which formerly crossed the site were carelessly filled. At the request of the Bond-street Traders' Association the authorities have agreed to carry out the repairs very rapidly. Only five weeks are allowed for the contractors to complete their task of breaking up, deepening, and relaying about 9,000 square yards of roadway. The new concrete foundation, 12 in. thick, will be made with the new rapid-hardening cement which reduces the period of hardening to about one-seventh the time formerly required.

STUDIOS, GLEBE-PLACE, CHELSEA

These two studios, which were built for Derwent Wood, R.A., are situated at the bottom of Glebe-place, facing King's-road, and designed to harmonise with the rep. Henry VIII's hunting lodge, which adjoins. The architects' chief concern in this case was to provide as much light as possible, as they realised that light is among the most important parts of an artist's equipment. Each studio has a gallery on one side, on the lines of "souponte" of the Parisian atelier, and has in addition a model's room with a bath adjoining. Hand-made, sand-faced, multi-coloured bricks laid with a flush joint were for the outside walling, and hand-made, sand-faced pantiles for the roofs, which were of construction. The architects were Messrs. P. Tubbs, Son & Duncan, F. and A.A.R.I.B.A., the following is a list of the sub-contractors: General contractors, Messrs. Edcatter, 199A, Goldhawk-road, Shepherd's Bush, W. bricks, Messrs. Thomas Lawrence, Brackley Berks; door and grate furniture, Messrs. J. Gibbons, Ltd., Fisher-street, Southampton-W.C.; electric lighting, Messrs. Bell Bros., South Molton-street, W.; studio windows, British Challenge Glazing Co., Stratford, E. grates, Messrs. Bratt, Colbran & Co., Mortimer-street, W.; heating, Messrs. Mulliner, Ltd., 72, Harrow-road, W.2.; rain-water heads, Messrs. Cashmore; steelwork, Messrs. Moreland, Hayne & Co., Ltd., Goswell-road, E.C.; tiles, Messrs. William Br & Son, Redhill, Surrey.

COMPETITION NEW

	Particulars published in "Builder."	
Copenhagen Bridge. Three premiums, highest 15,000 kroner. Apply C. Eng's Office, Town Hall, Copenhagen. Dep. 100 kroner		April 24 .. Sept
Wolverhampton Hospital. Premiums: £200, £150, £110. Mr. T. R. Milburn, F.R.I.B.A., Assessor		May 22 .. Sep
Drammen Bridge (Drammenselven). Premiums: 10,000 Norwegian crms., 8,000, 6,000. Apply Gov. Eng., Drammen ..		May 29 .. Oc
Newcastle Fire and Police Station. Premiums: £500, £300, £100. Mr. P. S. Worthington, F.R.I.B.A., Assessor ..		June 12 .. Oc
Town Hall, &c., Pretoria. Open to architects residing in South Africa or Registered under Architects' Act, of 1909, Transvaal. Assessor to be appointed by R.I.B.A. Premiums: £250, £150, £100 ..		.. No
Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply parties, 35, Old Queen-street, S.W.1		April 24 .. Dec
New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool		Aug 7 .. Jan
Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London ..		Aug. 14 .. Ma
*Enlargement of Carnegie Hall, Dingwall		..
* Competitions when "warned" or vetoed by R.I.B.A. are Starred.		

Books Received.

DAMP WALLS. By Ernest G. Blake. (Long Crosby Lockwood & Son.) Price 8s. 6d. net.

THE NEW CONVEYANCING. By Sir Ar Underhill, assisted by Lilian Mabel St. (London: Butterworth & Co.) Price 37s. 6d.

THE A B C HISTORY OF ANTIQUE ENGLISH FURNITURE. By H. Stanley-Barrett. (Long The Old-World Galleries, Ltd.) Price 2s. 6d.



Studio.



Two Studios, Glebe-place, Chelsea, for Mr. F. Derwent Wood, R.A.
MESSRS. PERCY TUBES, SON & DUNCAN, F. & A.A.R.I.B.A., Architects. (See p. 310.)

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

The New York Cathedral and Some Theories.

SIR,—Referring to your correspondent's reply to my letter, I should like to say that, in spite of his disclaimer, his attitude as further defined still seems to me to amount to an entire disavowal of modern Gothic, against which he amasses all kinds of adjectives and objections. If I may be allowed to expatiate a little on my own thesis, I think I can incidentally counter these objections. But first let me deal with his suggestions towards an alternative. I must confess that I find them, as indicated, far too nebulous to be useful. But I should much like to learn what higher inspiration is offered by this exotic idealism of his than by our own native Christian tradition; how he is going to get a "corporate impulse" behind it, as far as we are concerned; and how going to placate the industrialism that he (rightly) considers so hostile to mediævalism. There are those, of course, who base their hopes upon the said industrialism itself, associated with such inherently inferior materials as steel and concrete. I own I can see but little promise of artistic results in this direction. Ferro-concrete optimists may well be referred to certain designs (some of them ecclesiastical) at present on view at the Paris Exhibition. However, let the new art (whatever it be) evolve—a lengthy process in any case—and let it justify itself in a chapel before it adventures on a cathedral; or, to take a glance at a kindred matter now engaging your columns, in a tenement before it embarks upon a thoroughfare, lest the "revelation" be one of oddity instead of Art.

In the meantime we are, as stated, without any living common tradition in design and craftsmanship; the Blessed Renaissance and the Blessed Industrial Revolution between them saw to this. It is the misfortune of the age. But we cannot, therefore, cease our activities; we must proceed somehow. My own contention is that mediæval architecture offers, in highly important aspects, a suitable vehicle or basis for modern work. Now I am far from forgetting or denying (as suggested) the irrecoverable elements of ancient art—what one may describe as those of temperament and circumstance, with all their singular charm. But these are by no means all that go to the making of an architecture. "Gothic" has the peculiar advantage (especially as against "Classic") of being a coherent organic mode of building, affording, I repeat, permanent inspiration and example. I hold that those who have the needful gifts can so assimilate and treat this precedent as to produce works of art possessing merits both independent and derived; adaptive and interpretative work rather than imitative, and hence neither shams, nor unrealities, nor copyism, nor caricature, to select a few of the copious question-begging terms in use by critics in the other camp. Can it be denied in fact that the later masters of the Revival have produced works of this order, and notably in religious buildings? A Gothic not necessarily of the complete original brand, but a Gothic eminently worth while, and often recapturing to a remarkable extent both the form and feeling of its exemplar. One might almost argue that the Gothic Revival partook of the nature of a "corporate impulse." In this connection, however, those who insist on the paramount importance of this factor may be reminded that mediæval architecture was not altogether the impersonal, elusive, quasi-automatic kind of art they seem to suppose it—a thing, as it were, independent of definite principles and leadership. The individual, the school, even the "drawing office" in some shape, certainly counted for much in its development.

What kind of taboo then is this which would forbid us, in our penury—our admitted penury—to draw upon the treasury of the

past? Is posterity to be denied the use of such and such forms and themes and methods just because it has not discovered them for itself? Would your correspondent impose this disability upon artists, sculptors, musicians, engineers? The notion is surely absurd. Why, then, should architecture be thus penalised and impoverished, unless in virtue of what I must still consider a prejudice or an obsession? Apologising for lengthiness,

W. RANDOLPH.

Clay Lump for House Building.

SIR,—Having recently had occasion to build an additional story over a century-old building constructed of clay lump, I am at a loss to understand why the use of this admirable and cheap substitute for brickwork continues to be neglected.

Some six years ago, when efforts were being made to revive the sound and economic building methods of our forefathers, and much attention was drawn to cob and pisé construction, letters from Mr. C. J. Skipper, Mr. Colin Bateman and others extolling the virtues of clay lump were published in *The Builder*, but they appear to have excited so little interest that public funds continue needlessly to be expended upon the building of dwellings with far more costly and less durable materials.

Clay lump, formerly in general use for the walls of dwellings in certain parts of Norfolk, where it is still occasionally thus employed, possesses for this purpose every virtue of brickwork except its appearance, and while offering greater protection from heat and cold, is readily obtainable in any district where the clay and straw of which it is composed are to be found.

The method of making the lumps is as follows, and involves no skilled labour or plant beyond a wooden box 18 in. by 9 in. by 6 in. without bottom or top; ordinary stiff clay is deposited on a piece of level ground, and, while being trodden by a horse, is brought to the consistency of putty by sprinkling it with water, during which process short lengths of straw, or other

fibrous material, are liberally added to the mixture, which is then moulded into blocks in the box mentioned above, and left to dry.

These blocks can then be laid as masonry by any able-bodied persons of ordinary intelligence, and require no mortar, but are bedded in the wet clay from which they are made, and can readily be cut by a saw to any required shape or size.

External walls of this material 9 in. in thickness are amply strong for two-storied buildings, and if their outer surface be protected from rain are everlasting. Clay lump is free from the objections which attend the employment of Cob or Pisé, both of which excellent materials depend for their stability upon the judgment and skill of those who handle them. They entail, moreover, an extravagant thickness of walls and take longer in building, which can only proceed during suitable weather; moreover, the occupation of cob or pisé buildings has to be postponed for some considerable time after they have been completed.

Those who contemplate the employment of clay lump should be prepared for discouragement from Trade Unions, whose policy is to obstruct building operations by unfettered labour, and from authorities opposed to all but late Victorian methods of construction. They may, however, rest assured that, should they succeed in overcoming such opposition, their buildings will shelter families in comfort generations after the steel and iron houses now in course of construction have found unlamented repose upon the scrap-heap.

JAMES RANSOME.

21, Suffolk-street, S.W.1.

Constantine Technical College.

SIR,—This award is open to little criticism, possibly none; but with a cornice overhanging 3 ft. 3 in. it will be necessary to top-light all the second floor rooms. Of what is that cornice constructed?

A. HENTHORN STOTT.

Manchester.

[** Other letters are held over until next week.—ED.]



Hortensia House, Chelsea.

MESSRS. PERCY TUBBS, SON, & DUNCAN, F. & AA.R.I.B.A., Architects.

EXTENSION TO THE SHIREHOUSE, NORWICH

THE Norfolk County Council recently invited designs for additions to the Shirehouse, Norwich, and appointed Mr. Godfrey Pinkerton, F.R.I.B.A., to advise them in the conduct of the competition, and to act as their assessor. His award was given in our last issue, and we illustrate this week the winning design, by Mr. A. Dunbar Smith, F.R.I.B.A. Mr. Dunbar Smith, who is the architect of several important works, including the Welsh National Museum with his late partner, Mr. Cecil Brewer, and recently the Newcastle Library, both won in competition, is at the present time engaged in carrying out extensive additions to the Fitzwilliam Museum, Cambridge. These are all important works of considerable architectural character, and the Norwich Council are to be congratulated on the result of the competition for their Shirehouse extension. The new building asked for was to comprise a semi-basement floor, with ground, first and second floors over. The semi-basement, to extend under the whole of the buildings and to contain detention cells, warders' rooms, accommodation for caretaker, boiler room, fuel and storage. The ground floor, devoted to the finance branch and local taxation branch, with access to the present Shirehouse from the new building, with a general and telephone office near the entrance. The first floor to be allocated to the County Surveyor's department. This department might be placed on either the ground or first floor, subject to the proviso that the County Department shall have a priority claim to be situated on the ground floor. The accommodation on the second floor was to be taken as following generally that of the first floor, except that in the event of the committee room, ante-room and convenience for women being placed on the first floor, their repetition on this floor would not be required.

It will easily be seen that the site was not a easy one to deal with. It is extremely limited on all sides by existing buildings on the south-west and north-east, and the Castle round at the rear, as well as the awkward approach towards the Castle Meadow-road. These limitations make it a difficult problem to get the site the large office accommodation asked for. The author of the selected design has overcome these difficulties and produced a compact plan and a well balanced façade of character towards the Castle Meadow-road and the Shirehouse. The grouping of the main entrance with its twin bays is a pleasing feature; the blank walls at the extreme ends of this frontage enhance the value of the central feature, as well as the return ends on the south-west, which are treated in a similar manner. As will be seen, the plan generally is simple and direct, all the rooms are of a good shape, and the type of access—so essential in a building of this size.

The circular hall is well lighted and pleasing, with its main staircase facing the entrance. Generally, the elevations are dignified and treated with a reticence which in no way competes with the surrounding buildings, and they are eminently suited to such a City as Norwich, which is so full of historic buildings. In execution it may be found desirable to make some minor alterations in the plan to secure better lighting to the accountant's department facing the Prince of Wales'-road. The architect, in the course of his report, states:—

"In order to make the fullest use of the site, the front of the building follows closely its old outline, except that the end nearest the Shirehouse is kept far enough back to leave a space between the boundary railings and the caretaker's quarters. This arrangement too, gives a larger area at the back. The accommodation for the County Accountant's Department has been placed on the ground floor as desired, with a separate entrance internally for the local Taxation Branch. A doorway at the foot of a short flight of steps at the south-east end

of the ground floor corridor, gives access to the door into the Shirehouse. A few steps, opposite the prisoners' passage to court, lead down to the detention cells. The circular hall is top lit with balconies carried round on the upper floors. In order to save space, the corridors have not been run through and as they are quite short, they would be fairly well lit from the hall, while ample borrowed light can be provided. The committee room has been placed at the back, away from the street noises and the windows to the principal officials' rooms have also been kept away from the main front, but double casement windows can be provided quite easily.

The materials used externally would conform with those of the present Shirehouse, the walls being faced with thin, handmade, sandfaced bricks, with Ancaster stone dressings and the roof covered with Delabole, or slates laid in graduated courses. The windows would be of lead glazing and the external doors of oak. Internally, the floors would be of ferro concrete, or hollow brick construction supported on steel framing and all internal walls above the ground floor, except those surrounding the staircase and circular hall being 3 in. partition blocks, thereby gaining floor area and adding to the flexibility of the plan, as it would be comparatively easy to move a partition if required. It is proposed that the main staircase and the floors of the entrance and circular hall should be of travertine, or Hopton Wood stone, and that the walls in hall, up to 7 ft. high, should be finished in the same material, which would also be carried up the stairs to the first floor as a dado. The floors of corridors to be of rubuleum with travertine margins and the walls of Keene's cement.

The floors of detention cells would be of terrazzo, those in the caretaker's quarters and storerooms of wood block and the remainder of granolithic. The heating would be by radiators placed under the windows, with fresh air inlets behind; also in recesses in corridors and elsewhere where required."

It is thought that the building could be very well built for 2s. 9d. per foot, which brings the total cost to £45,885.

BRISTOL CATHEDRAL

ONE of the most interesting items in the renovation carried out during the last two years at the Cathedral, has been that of the "Berkeley" Chapel.

Although closely associated in many ways with the Berkeley family, it is in Newland's Chronicle referred to as "the Vestry" and it formed part of Abbot Knowles' great work of rebuilding the Eastern arm of the Church at the end of the thirteenth and beginning of the fourteenth century. The date of its completion may be approximately fixed in the early years of the fourteenth century. Lady Joan Berkeley, wife of Thomas Lord Berkeley, was buried in 1309 "in the arch between the vestry and the South aisle": her husband was buried in the same tomb in 1321. The beautiful little Sacristy through which the Chapel is approached from the South aisle of the Presbytery, with its skeleton vaulting and much elaborate detail, is perhaps contemporary with the chapel, although the windows in the South wall appear later, and may be insertions. The Chapel is about 26 ft. in length and 17 ft. 6 in. in breadth, vaulted in two bays with two 3-light windows on the East side and one large one of 4 lights on the South. An altar stood in each eastern recess and there are still traces of frescoes in the southern one. Piscinae and aumbries are in the N.E. and South walls, in the centre of the North side is the Berkeley tomb already referred to, and in the South-west angle a stair-turret leading to a room over the vaulting, and the leads.

On the removal of the unsightly tile paving dating from about 1860, the original floor level was discovered eighteen inches below, with the remains of a stone seat on the West, North, and South sides. This has been restored on the old lines, adding much to the beautiful proportions

of the Chapel. There is a shallow step down from the South aisle to the Sacristy, and with the five steps from the Sacristy to the Chapel, the floor level of the latter is about 3 ft. below that of the South aisle of the Church. In addition to the restoration of the stone seat, two simply-treated stone reredoses have been set up in the eastern recesses, with oak altar tables in front of them, raised on two steps above the floor of the chapel. York stone has been used for both Sacristy and Chapel, some Pennant of a slightly darker grey being introduced on the altar platforms: the steps are of Portland stone, and the reredoses of Monk's Park Bath stone. Each altar has a cross and two candlesticks in silver. Electric light is supplied by four pendants, and the heating by three radiators, one behind each reredos, and a third on the cill of the South window.

Between the altar platforms and in spaces between them and the stone seats, a number of ancient encaustic paving tiles, found during the progress of the work, have been laid: unfortunately much of this ancient tiling was found to have been broken up and mixed with the concrete supporting the modern tiling of the last century, the fragments being too small to re-use. The unsightly modern glazing has been removed and figures of St. Christopher, and St. Anne teaching the Virgin placed in the centre lights of the windows on the East side: in the large window on the South side are four scenes in the childhood of Christ, the intention being that the Chapels shall be used by the children of the Diocese. They have been designed and executed by Mr. A. W. Robinson and Mr. Board (Messrs. Joseph Bell & Son of Bristol) who have also provided the altar crosses and candlesticks from the architect's designs.

The general works of restoring the Chapel, and the provision of the prayer desks are by Messrs. Wm. Cowlin & Son, Ltd., of Bristol, the two altar tables by Mr. W. H. Saunders of Cirencester, the heating by Messrs. Haden & Sons, Ltd. of Trowbridge, the electric lighting by the Colston Electrical Company of Bristol, all under the personal superintendence of the architect Mr. Roland Paul, F.S.A.

We illustrate this week the work by two photographs of the interior (by Mr. F. Bromhead of Clifton) and smaller views of the exterior and a ground plan. Measured drawings of the Sacristy were published in the *BUILDER*, August 8th, 1885, and a general view of the Cathedral in which the "Berkeley" Chapel is prominent in the foreground, in the *BUILDER* Cathedral Series, August 1st, 1891, both from drawings by the architect of the present work.

Excavations near Cissbury Ring.

Excavations on Park Brow, to the north-east of Cissbury Ring, which was lately acquired by the National Trust, has resulted in the discovery of remains of villages of the bronze and iron ages. Included among the discoveries are Roman tiles, Roman tile nails, fragments of walls with coloured distemper, Roman glass, and many remains of pottery.

Waterloo Bridge.

In a letter to the *Times*, Mr. Arthur Keen points out that "in addition to the five who made separate reports showing that underpinning the old bridge was both possible, safe, and economical, there were fourteen more who studied the matter exhaustively and made a joint report to the same effect which was embodied in the main report to the L.C.C. They went farther and dealt with the question of the quality of the granite and produced actual tests which show that there is not the slightest ground for saying that the granite is unreliable. Further, there were three more engineers of wide experience who endorsed all the nine "conclusions" of the fourteen who signed the report—twenty-two altogether. The simple fact appears to be that to strengthen the foundations of a massive structure like Waterloo Bridge is a matter of every-day practice and can be done by any one of the three or four or more methods."

LIFTING A TOWN

BY J. HEMBROW.

Those of us who have been much abroad, particularly in our Colonies, will have been accustomed to the sight of a wooden church or meeting room, or a small house being calmly towed along the street by a tractor, from its original site to a new one; but few would believe that much more wonderful things than this have been done in this country, where the buildings are not of studs and weather-board, but of substantial brick and stone.

The town of Northwich, in the salt district of Cheshire, owing to the continual pumping of brine, steadily sinks, and periodically has to be lifted! The last occasion was only recently, when the writer was connected with some work there. The streets themselves at some points were raised six feet, and the work of lifting affected buildings proceeded almost without intermission, and is still proceeding.

The "Bull Ring," or what is really the central part of the town, had then sunk so nearly to the level of the river that frequent flooding occurred and worse was feared, and the bridge (a moving one) was so close to the water that it was becoming impossible to carry on with the ordinary work of the stream. It was, therefore, decided to raise the "Bull Ring" six feet odd, and the affected portions of the town proportionately. A photograph shows the "Bull Ring" before the work was begun. It is rather sad that the old building shown has had to go. The authorities determined the new levels of the main streets, and this level was marked on each of the building fronts.

The problem of raising a building is an old one in this town, and certain of the houses are constructed with a view to being raised later. Others have been prepared for the ordeal by having a steel or heavy timber base frame introduced, on which they are supported when lifted. Some buildings have to be prepared, and some, of course, at times are found unsuitable altogether and have to make way for new. Under the new regulations I believe all buildings have now to be of steel or timber-framing of such a kind as to allow of their being raised in the future.

The actual work of raising is done by manual hydraulic jacks, which are placed in suitable positions under the steel or wooden bases, and the buildings raised gradually. Each of the jacks is worked co-ordinately with others to ensure that the building being raised is lifted in a perfectly regular and even manner. Any carelessness or accident in this might cause torsion, which would mean at least that the windows would be broken, and perhaps rendered useless; doors would become immovable owing to the alteration of the shape of the opening; plaster or tile work would be cracked, or even a serious accident might result. When it is remembered that

business is carried on in most of the buildings during the whole time this work is going on, it will be realised how delicately the raising is performed. People are being served at the shop counters, and are sitting having tea, while the whole of the building, perhaps several stories high, is being bodily lifted, the occu-



Shop Below Level of Roadway.

pants with it. Of course, the process is slow—perhaps 1½ in. to 3 in. per day.

Each time the limit of the thrust of the jack is reached the building is supported on timber packing, the jack itself packed up or built, and the lifting renewed.

Through long experience the contractors

understand this packing so well that, as the writer knows, no accident has occurred. Many people must have felt a tender towards panic to find a building weighing scores or hundreds of tons dizzily perched on the top of what look to the observer to be crazy piles of wood, but what are, in reality, very carefully constructed supports. The building shown, with half-timbered upper story, always give one this sensation. The ground floor here was unsuitable to the purpose for which the place was to be used, after the upper portion had been raised, seen in the photograph, the whole of the lower portion of the building was removed and another one substituted.

Where buildings are found to be unsuitable for lifting or are not worth the expense involved, the first floor is used as the ground floor, and the second floor or attic, as the case may be, takes its place. The old ground floor becomes a cellar, but is usually filled in on account of the nearness of the river level. One sometimes goes up a wooden staircase to a particular shop and down stairs to the shop next door. As the raising is raised the number of steps up to the high shop is decreased, and the low level shop increased or abandoned, and it is quite possible to enter a shop by means of a short ladder like a staircase to-day and in a week to walk straight into the same shop the road level or go down a ladder. One may also well lose a shop altogether, and find it is now so much below the new street level that it has been abandoned, and that the proprietors are pursuing their trade in some other building.

The effect of the settlement is wide, and appears to be felt most in the portion of the district near the bridge. It does not, of course, only affect the buildings and streets themselves; all the gas mains, water mains and particularly the sewers, are interfered with by the slow settlement. At the time these notes refer to, they were all being replaced. The old sewers are abandoned, and new drains laid at suitable levels in the new position. The roads are raised by piling hundred tons of coke breeze and other hard core on top of the old road, the new surface being when time for consolidation has been allowed.

All this causes great expense, and a special tax on the brine-pumping companies to cover the work, which is held to be caused by their activities, is called for by the Council and used locally. When any work to be performed on a building is undertaken the need for which has arisen out of the sinking of its site, the Council counts for the work done are submitted with a claim to the brine pumpers, who, so far as they deem their responsibility goes.

Anyone motoring through the town at any time within recent years must, if possessed of a keen sense of humour, have been amused at some of the quaintnesses caused by



Dane Bridge.

lowly and unequally sinking streets. On the first occasion the writer visited it, it gave the impression of one of those drawings which set out to portray how the intemperate reveller sees a street at three o'clock in the morning. The buildings, as one approaches the affected part, seem to be at all angles and all levels.

The one item out of the many that impressed the writer most during the street work was probably a very trivial one—it was the rather tall lamp standard at the Bull Ring corner. This is a very high and aloof lamp-post indeed, but week by week the rising road swallowed more and more of its lofty dignity, and when last seen before being raised it appeared to endanger the headgear of the good-natured policemen on duty under it. It gave me the eerie sensation of a town sinking out of sight; the cinders of the new road might have been the volcanic cinders which enveloped Pompeii. One had a vision of some dimly distant archaeologist excavating through strata after strata of a town, and saying, "What race of moral giants was this which planted its feet upon a shifting stance and refused to yield or leave?"

RAMSGATE LAY-OUT COMPETITION

THE competition open to landscape architects and surveyors recently promoted by the Borough of Ramsgate for the lay-out of approximately 60 acres of agricultural land, chiefly as a sports centre, has been won by Major R. Hardy-Syms, F.S.I., M.T.P.I., of 3, Gray's Inn-place, London, W.C.I., to whom the prize of £100 will be awarded. We publish the winning lay-out design, together with a plan showing the contours of the land at 5 ft. intervals (see p. 317).

The principal problem was to solve the method of treatment of the rights of way crossing the land, and competitors were required to prepare alternative schemes (a) showing the

rights of way undisturbed; and (b) with the rights of way diverted in a specified manner, together with advice as to the advantages in having the said roads diverted.

The selected design advocates the preservation of the rights of way as there are several practical and economic disadvantages attendant upon any re-arrangement. The main vehicular approach to the ground is from the Ramsgate Margate road on the north east at the "Hare and Hounds," Northwood, by an existing narrow lane to the level crossing over the Southern Railway at Jackey Baker's Farm House. Mr. Hardy-Syms' report draws attention to the inadequacy of this approach, and certain road widenings are suggested, and in order to deal successfully with the increase in

traffic to be expected a motor park with garages and bicycle sheds is provided at the farm to the east of the railway.

The whole of the educational facilities, which include boys and girls' school, playgrounds, playing fields, and school gardens, are kept on the east side of the railway so that few children will have to cross it. To the west of the railway the major portion of the land is laid out for sports with certain portions on the south as allotments.

The sports facilities provided for are:—

Summer Sports.—A first-class cricket ground some 5 acres in extent, together with four permanent cricket creases between the football and hockey pitches, kept fenced off during winter, for less important matches; while second and third rate creases can be provided where it is not possible permanently to protect creases. The dotted circles indicate the normal field of play of cricket, and there is ample space outside these circles for practice nets.

Eight hard courts and seven grass courts for tennis.

Two bowling greens.

The running and cycling track is five-eighths of a mile in length and 15 ft. wide. The existence of this track is useful in introducing an element of regularity into the plan.

These facilities provide for a simultaneous playing population of approximately 300.

Winter Games.—Eight football pitches of international size. The firm lines indicate the positions of these areas. The four principal pitches are arranged south of the right of way in the area defined by the running track.

Any of the football pitches can be utilised for hockey, though the hockey pitch is, of course, smaller. This, with the hard tennis courts and running track in addition, would allow a winter playing population of some 250.

Buildings.—Football and cricket pavilions and tea rooms are designed for and recommended to be in reinforced concrete. The other accessory buildings suggested, *i.e.*, tennis and bowling pavilions, spectators' shelters in positions for viewing the games, or sports on the track at a distance from the main pavilions, groundsmen's workshop, sports equipment stores, tool sheds on the allotments, &c., are designed for and recommended to be of steel frame and concrete construction.

Tree Planting and Landscaping.—The whole of the boundaries are planted with quick growing protection trees. The general effect to be aimed at is a broad one of green sward backed by trees and the sky. A little ornamental "gardening" should be done at the tea rooms, but otherwise, if the tree planting is done with the practical idea of obtaining wind screens and the demarcation of boundaries, as in the case of the isolated trees and clumps in the permanent cricket ground, the general effect will look after itself.



Showing a Northwich subsidence of olden days.



A Building Being Raised, Northwich.

LEADING CONTENTS. PAGE

OVERCROWDING	307
NOTES	308
GENERAL NEWS	310
COMPETITION NEWS	310
CORRESPONDENCE	312
EXTENSION TO THE SHIREHOUSE, NORWICH	313
LIFTING A TOWN	314
RAMSGATE LAY-OUT COMPETITION	315
ART TREASURES IN SOVIET RUSSIA	325
UNIVERSITY COLLEGE SCHOOL OF ARCHITECTURE	326
LEGAL SECTION	327
ARCHITECTS' AND BUILDERS' INQUIRY BUREAU	329
THE BUILDING TRADE	330
NEW BUILDINGS IN LONDON	331
NEW COMPANIES	333
CONTRACTS, COMPETITIONS, ETC.	334
PROPOSED NEW BUILDINGS AND OTHER WORKS	336
NEW BUILDINGS IN SCOTLAND	339
THE SCOTTISH BUILDER	339
TENDERS	341



ILLUSTRATIONS

Extension to the Shirehouse, Norwich.

We illustrate Mr. A. Dunbar Smith's design for this building. A large number of designs were submitted, Mr. Godfrey Pinkerton, F.R.I.B.A., being the assessor.

Oak Tree School, Dorking.

This is a mixed Home School, also designed to accommodate about fifty day boarders. The peculiar plan is dictated by the importance of securing S.E. and S.W. aspects for all the rooms, the corridors occupying the N.W. and N.E. sides of the wings, which radiate from the Central Hall.

Messrs. Seth-Smith & Monro are the architects and Mr. R. Mansell, of Croydon, the general contractor. Heating and hot water by Messrs. Comyn Ching & Co.; electric light by Messrs. Tamplin & Makovsky; steel casement by Messrs. Williams & Williams.

Hortensia House, for the Chelsea Borough Council.

The scheme, which was started under the Addison Housing Act, is situated in Hortensia-road, Chelsea, on a site of approximately 1½ acres. It consists of 56 flats in three blocks, arranged to form a kind of a courtyard. The accommodation is as follows:—

In the larger flats there is a living room, three

bedrooms, scullery-kitchen, larder and bathroom containing a w.c., and a combined bath and lavatory basin, an open lobby and large cupboard and coal store. The smaller flats have one less bedroom. No range has been provided in the living room, but a gas cooker is installed in the scullery. The scullery is fitted with a gas heated copper and an enclosed dresser. Hot water is supplied from a central boiler under the middle block, which supplies bath, sink and lavatory basin in each flat. The hot water scheme was designed by Mr. Walter Nobbs, and is on the gravity system, no artificial acceleration being provided. Each room is wired for electric light, and a "current limiter" is fitted to each flat. This device is much used in the East, but it has not yet come into general use in this country. The idea is that each flat is allowed to use so many candle power only at any one time. If more light than this is used, all the lights flicker until one or more are turned out, to bring the total candle power down to that allowed.

This system obviates the expense of providing separate meters in each flat.

The buildings are faced with hand-made, sand faced, multi-coloured bricks, laid with a fluted joint, except the back of the main block, which is of stocks with grey hand-made bricks for the staircase towers and the plinth; the roofs are covered with hand-made tiles. The cornice and the surrounds of the entrance doors are made of artificial stone. The stairs are of concrete and the floors of light hollow tiles, constructed to take a load of 86 lb. per square foot. The passage and the floors of the kitchens and bathrooms are of jointless flooring, but the living room floors are of boards nailed to breeze concrete. The walls of the staircase are finished in cement rendering and painted, the dado being blue with bright yellow above; the walls of the flats are distempered.

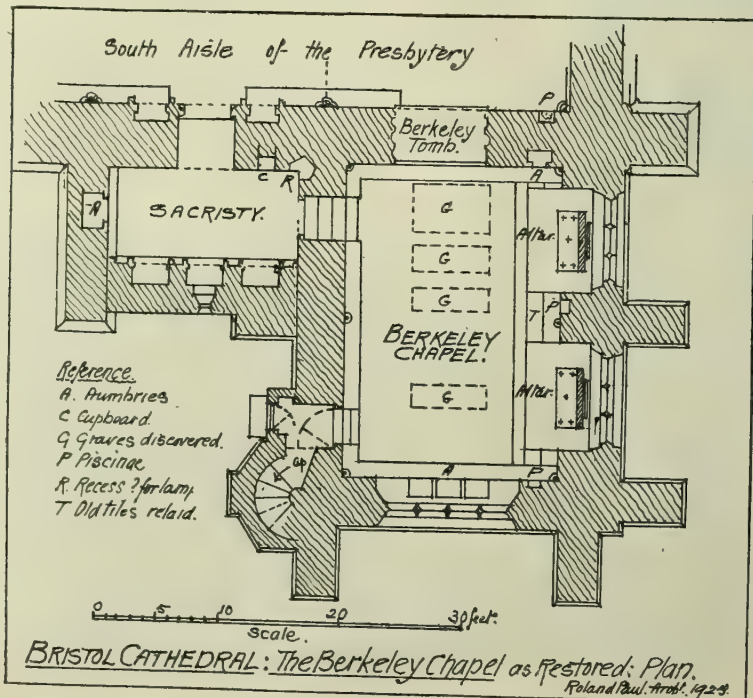
The roads are constructed of patent reinforced concrete blocks, but the roads taking light traffic are of tar-macadam. There are four independent pram-stores so placed that they complete the central courtyard. Under the central block next to the boiler room is a common drying room.

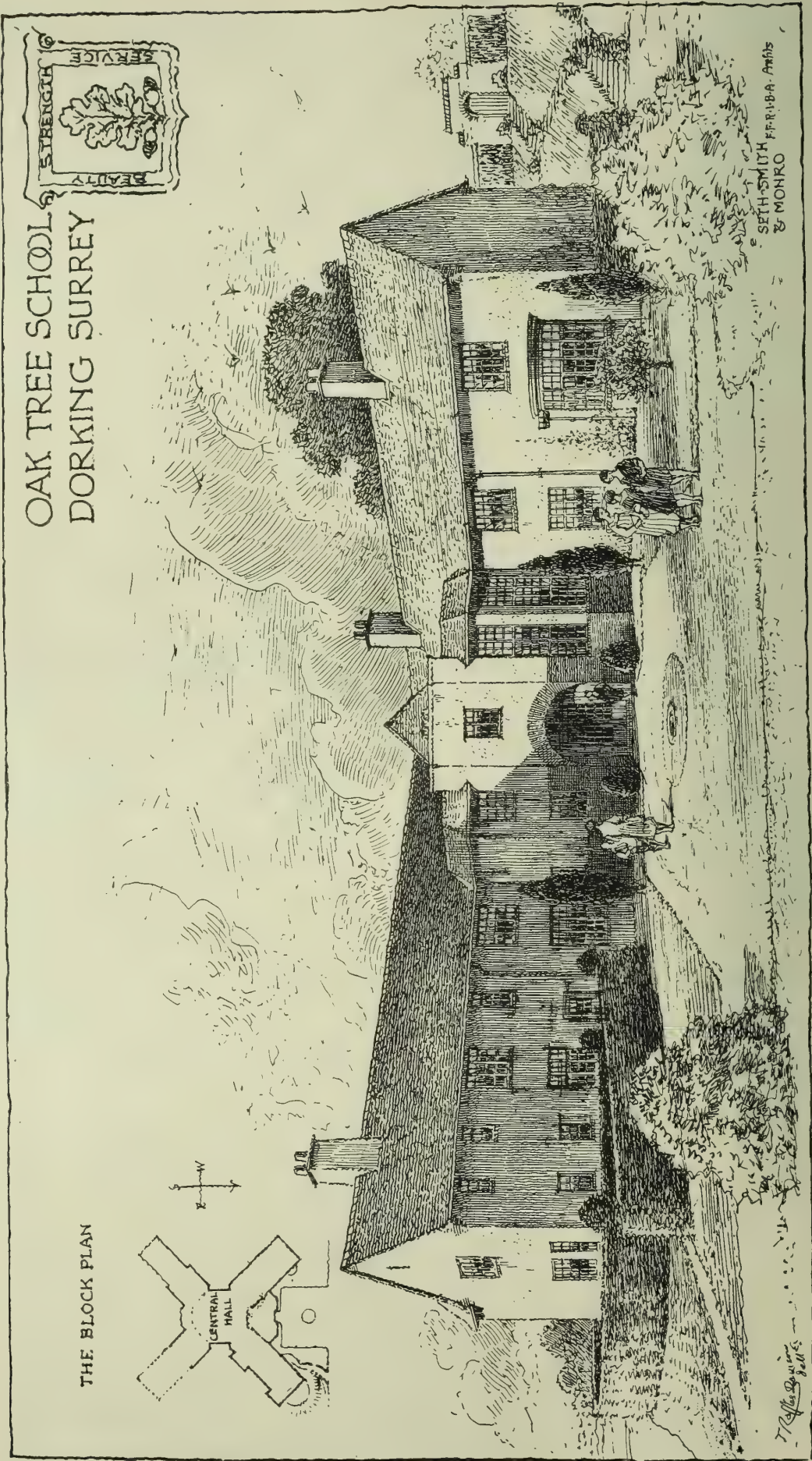
The contract was entered into in July, 1924, and amounted to £42,000, but it is anticipated that considerable economies will be effected so that the scheme will cost slightly under 1s. per foot cube, including the roads and boundary walls.

The architects for the scheme are Messrs. Percy Tubbs, Son, & Duncan, F.R.I.B.A., and the contractors:—General contractors, Messrs. William Moss & Sons, Ltd., London and Loughborough; hollow tile floor ditto; bricks, Messrs. Thomas Lawrenson, Bracknell, Berks; tiles, Messrs. William Brown, Redhill, Surrey; artificial stone, Messrs. Malec MacCloud & Co., Ltd., London; central heating water system, Messrs. G. N. Haden & Sons, Ltd., London; electric installation, Messrs. Ozon Ltd., London; jointless flooring, Messrs. Burkenite, Ltd., London; roads, Spagnoli Grunspan, London; paint, Hadfields, "Heolite" hardware, Nettlefolds, London.

Tudor Fireplace Revealed.

The removing of some panelling at Welleslands, Tenterden, Kent, revealed a well-served Tudor fireplace composed of Bethers marble. It is 7 ft. high, 8½ ft. wide, weighs nearly a ton.





SETH SMITH
F.R.I.B.A. ARCHT.
& MONRO

Messrs. SETH SMITH & MONRO, Architects.



Hortensia House, Chelsea. MESSRS. PERCY TUBBS, SON, & DUNCAN, F. & A.A.R.I.B.A., Architects.



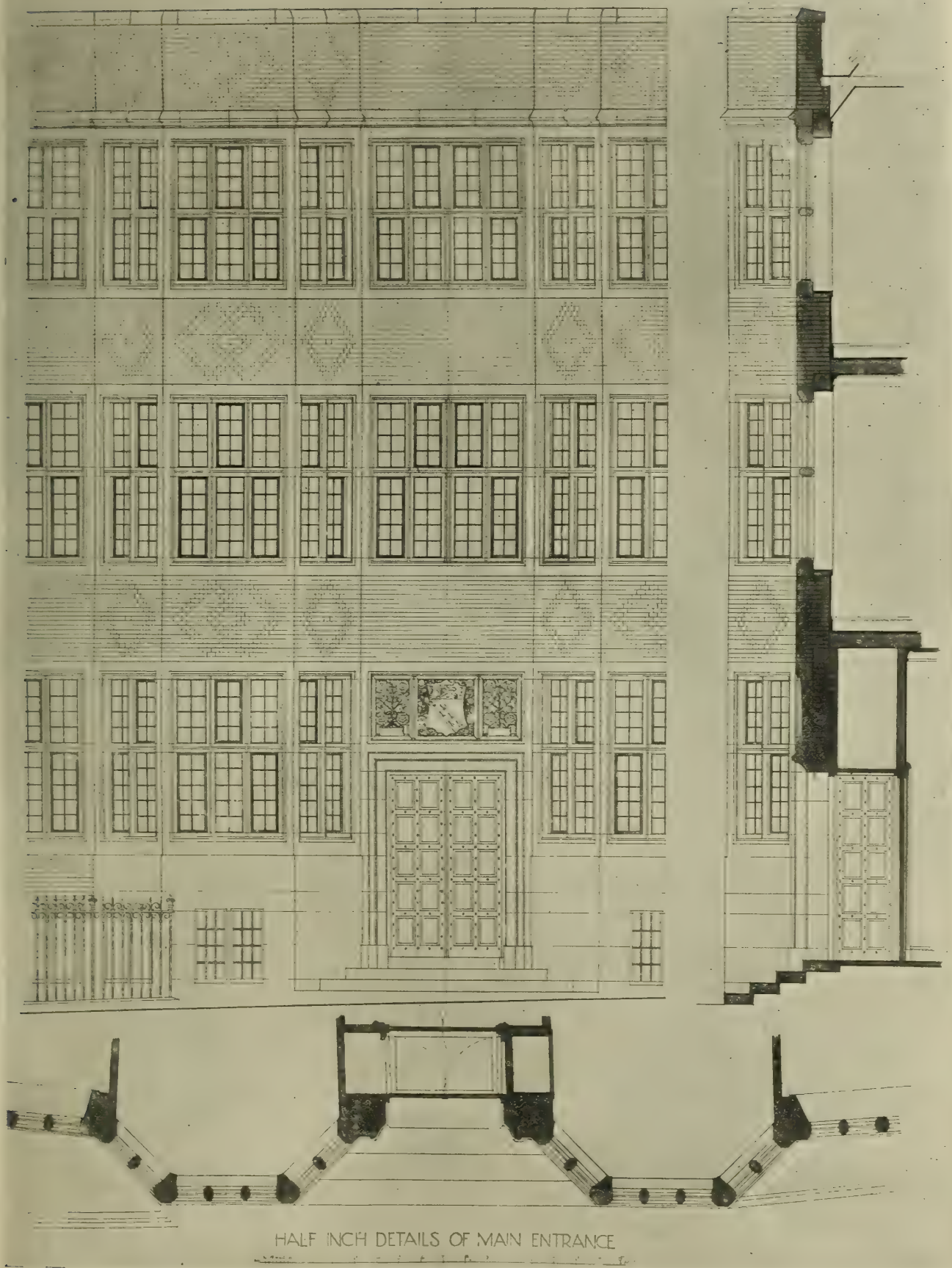
Bristol Cathedral Renovation : The " Berkeley " Chapel.

MR. ROLAND W. PAUL, F.S.A., Architect.



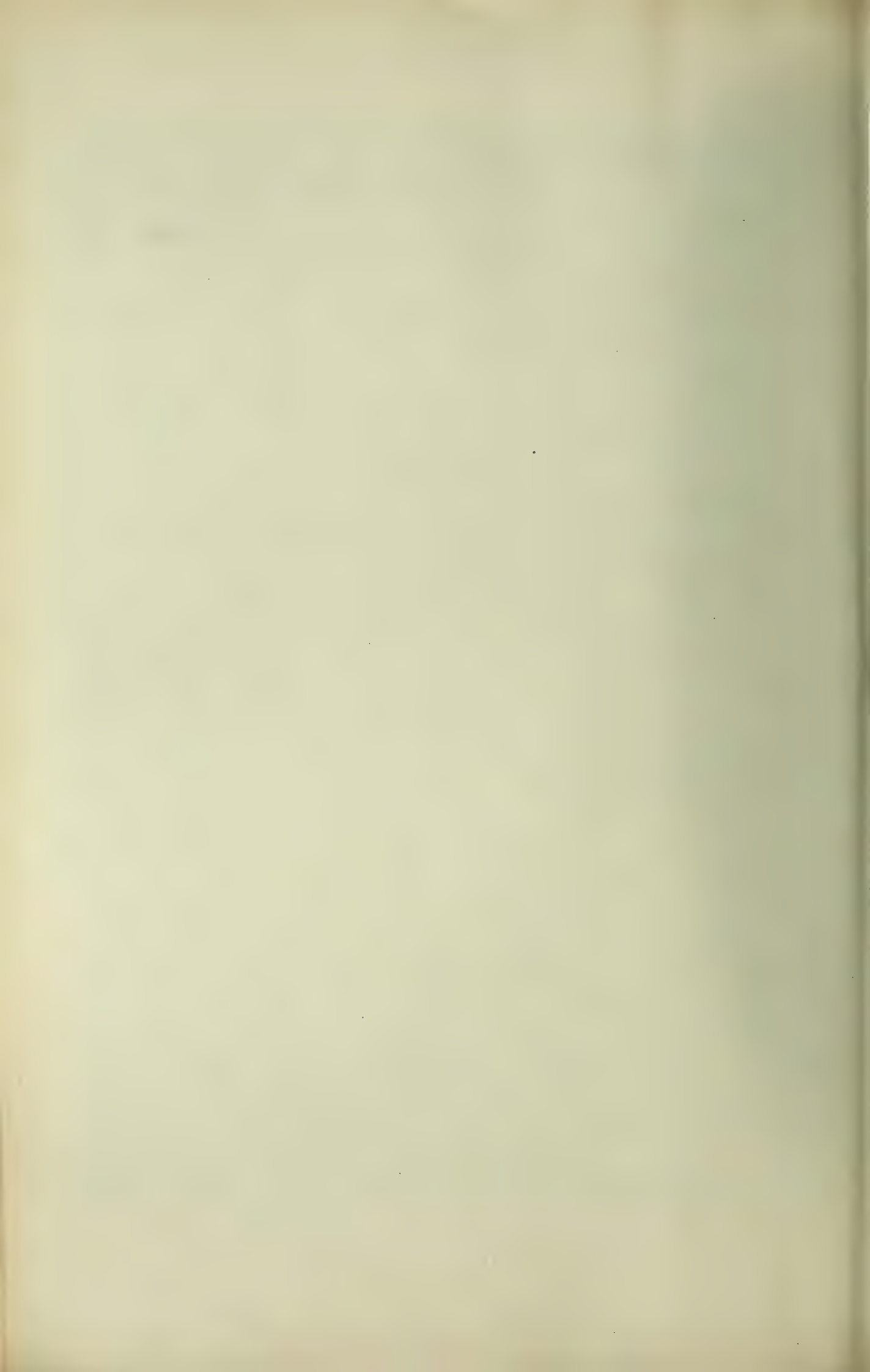
Bristol Cathedral Renovation: The "Berkeley" Chapel.

MR. ROLAND W. PAUL, F.S.A., Architect.



Competition for Proposed Extension to the Shirehouse, Norwich.

WINNING DESIGN, BY MR. A. DUNBAR SMITH, F.R.I.B.A.

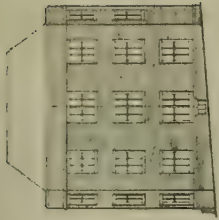




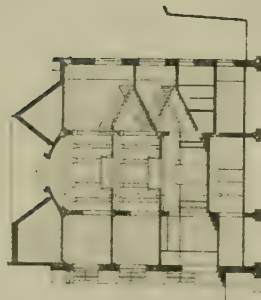
EAST ELEVATION



FRONT ELEVATION



WEST ELEVATION



LONGITUDINAL SECTION A A



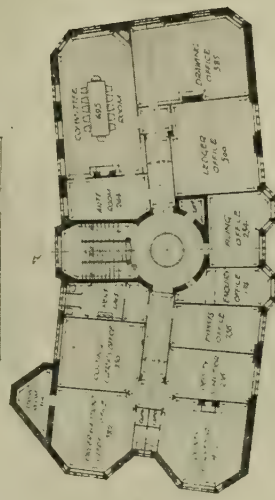
BASEMENT PLAN

COMPARATIVE OF COSTS, FIRST FLOOR	
ORIGINAL	4,408
PROPOSED	4,408
TOTAL	8,816

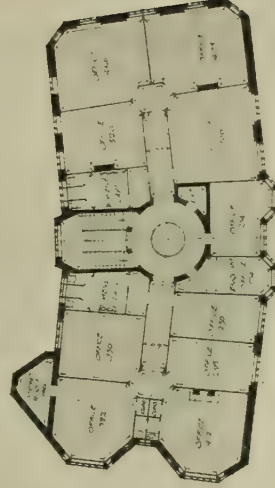
LONGITUDINAL SECTION B B



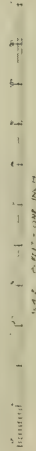
FIRST FLOOR PLAN



FIRST FLOOR PLAN



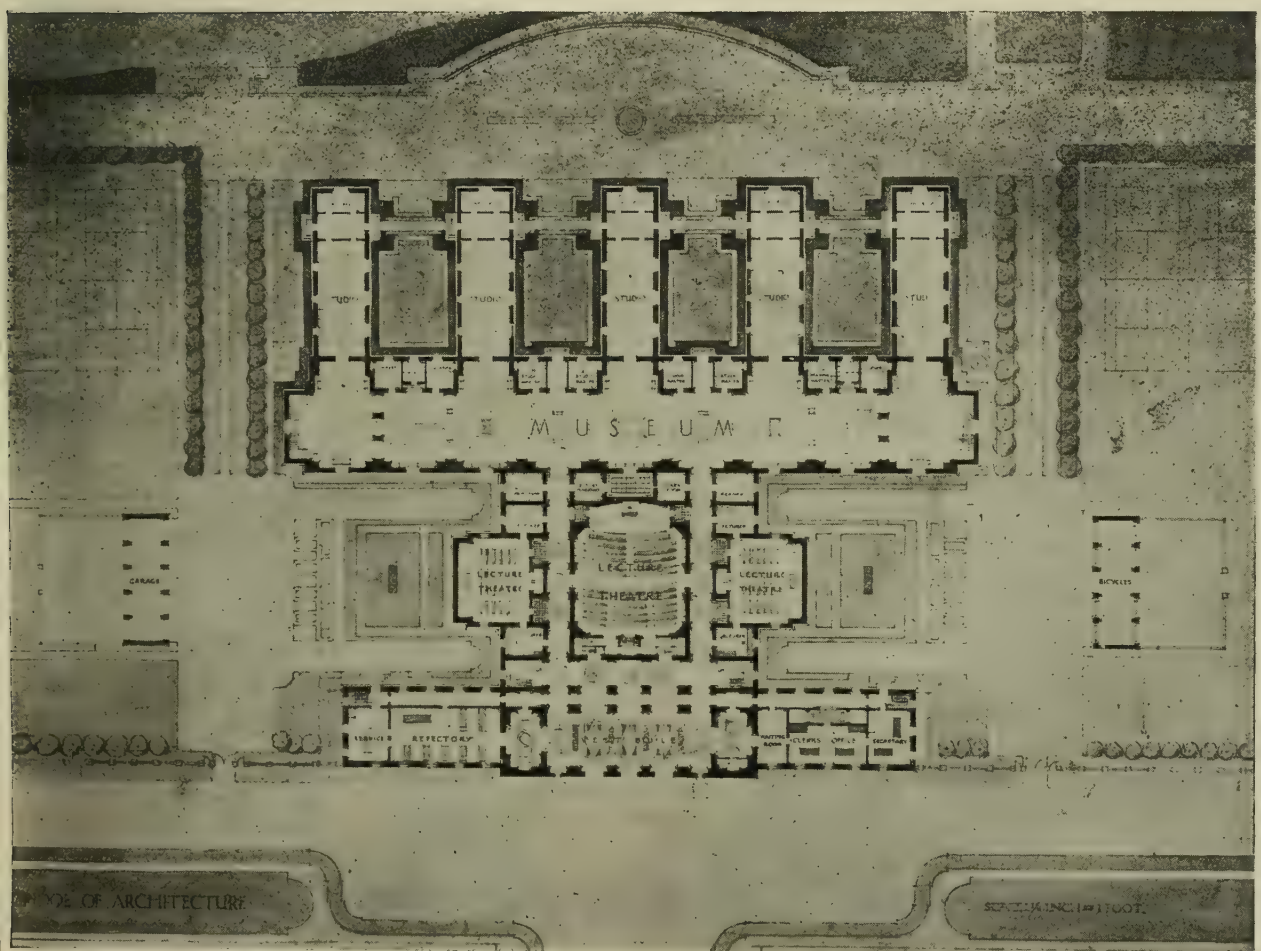
SECOND FLOOR PLAN



A SCHOOL OF ARCHITECTURE

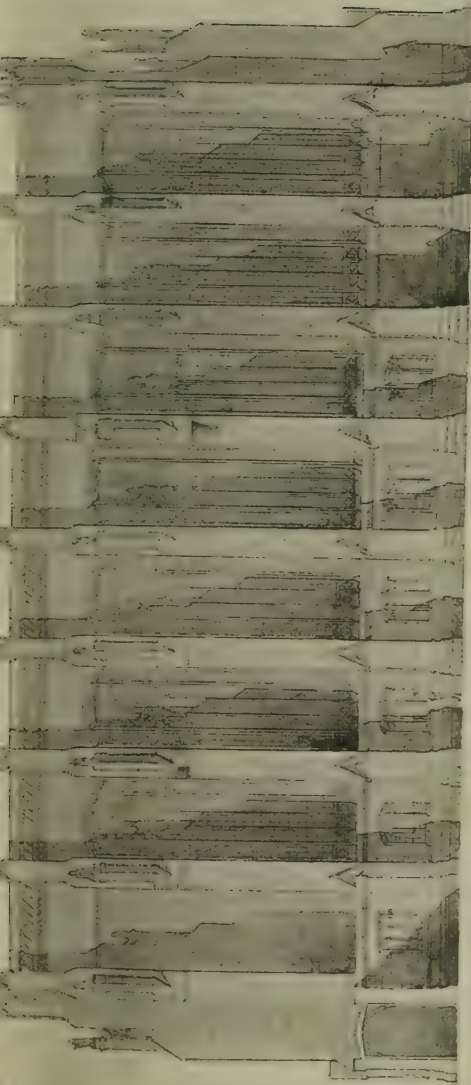


FRONT ELEVATION.



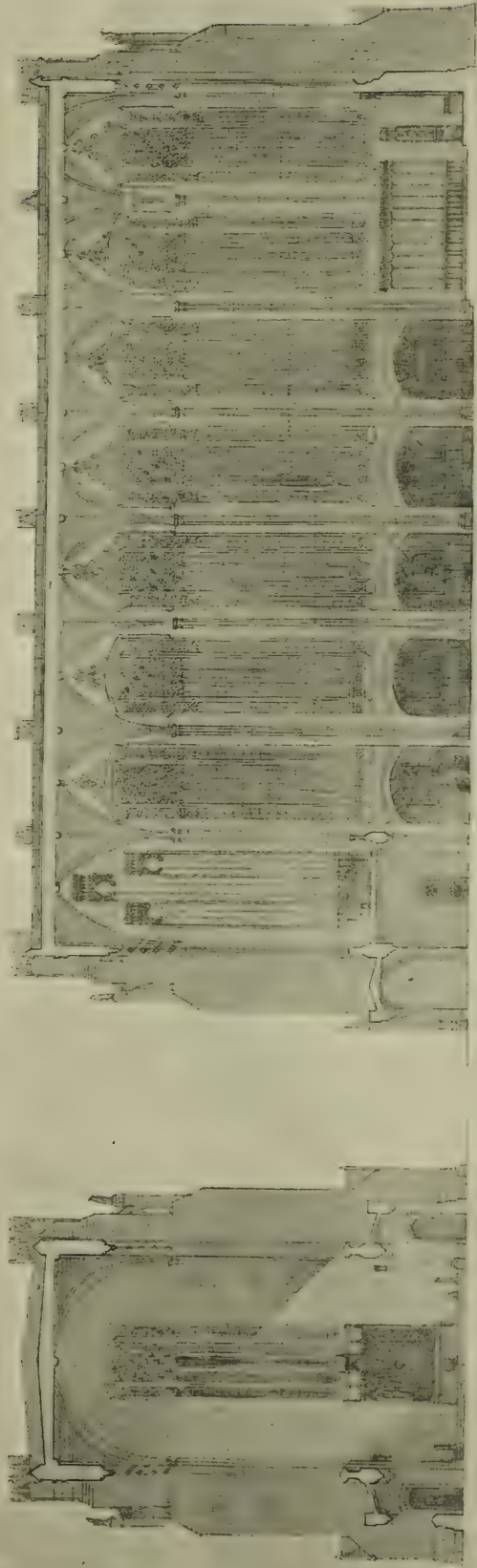
A School of Architecture. DESIGN by MR. F. S. BARDELL (Third Year).

Students' Work, London University School of Architecture. (See p. 326.)



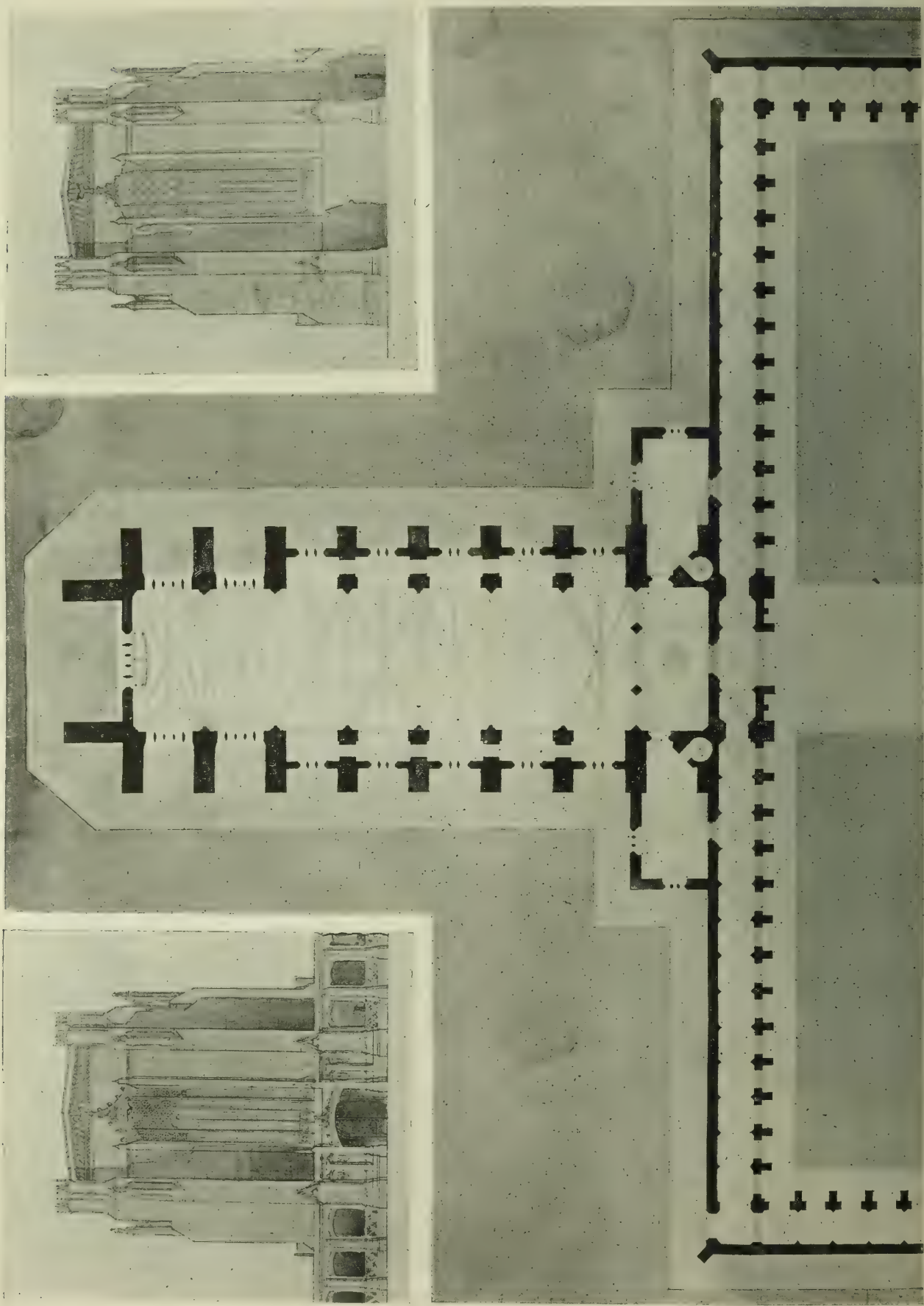
J. Summerson
1925

ELEVATION.

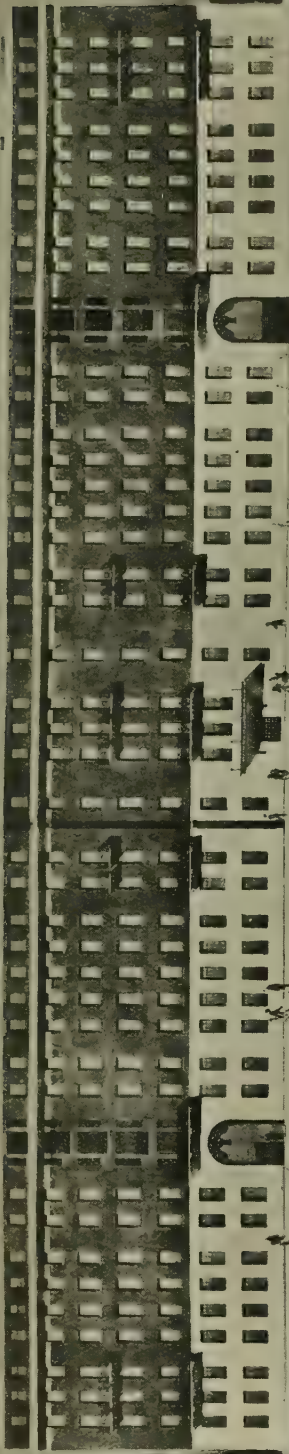


SECTIONS.

London University School of Architecture: A College Chapel. By Mr. J. SUMMERSON (Third Year).



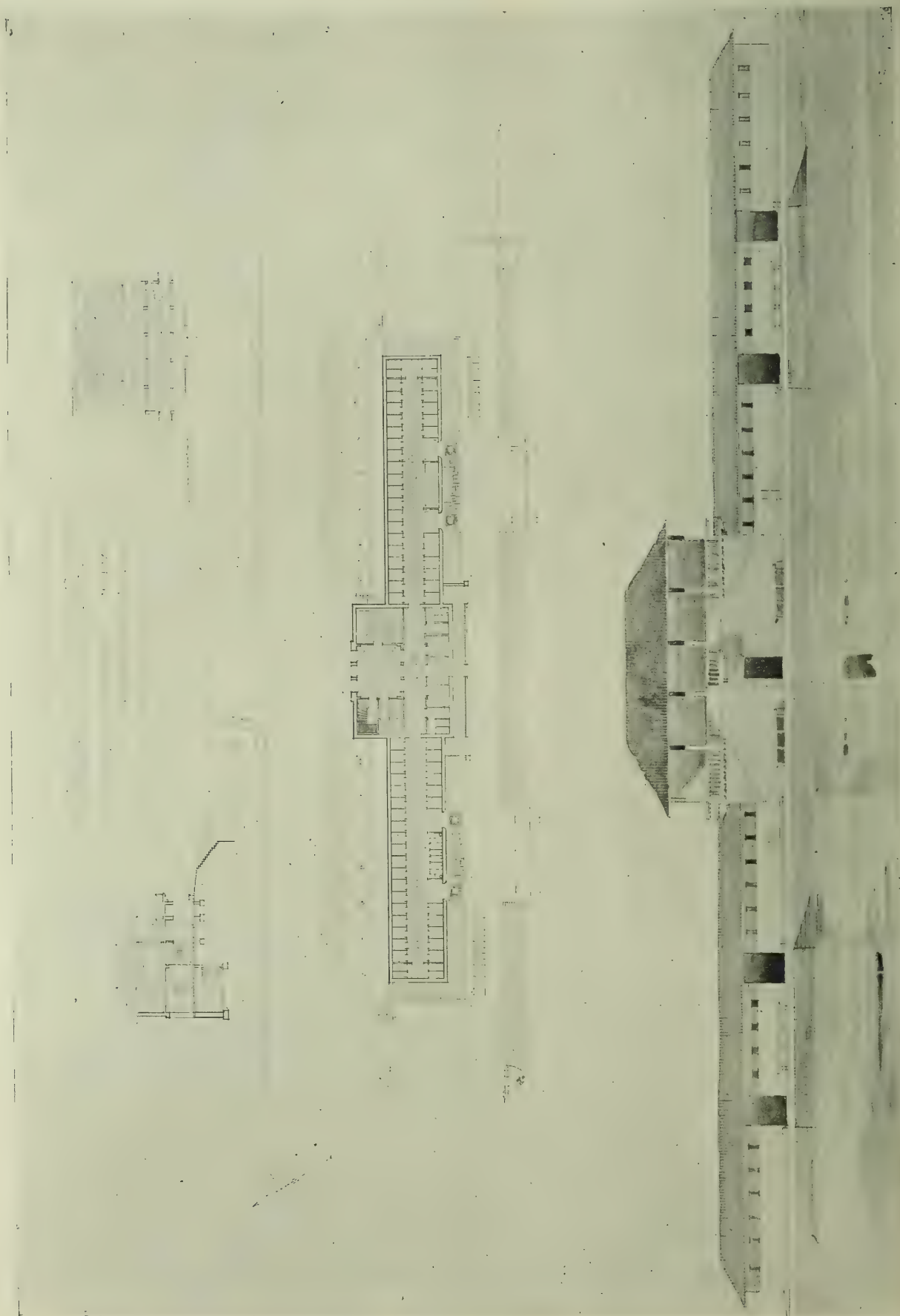
London University School of Architecture : A College Chapel. Plan and Elevations, By Mr. J. SUMMERSON (Third Year).



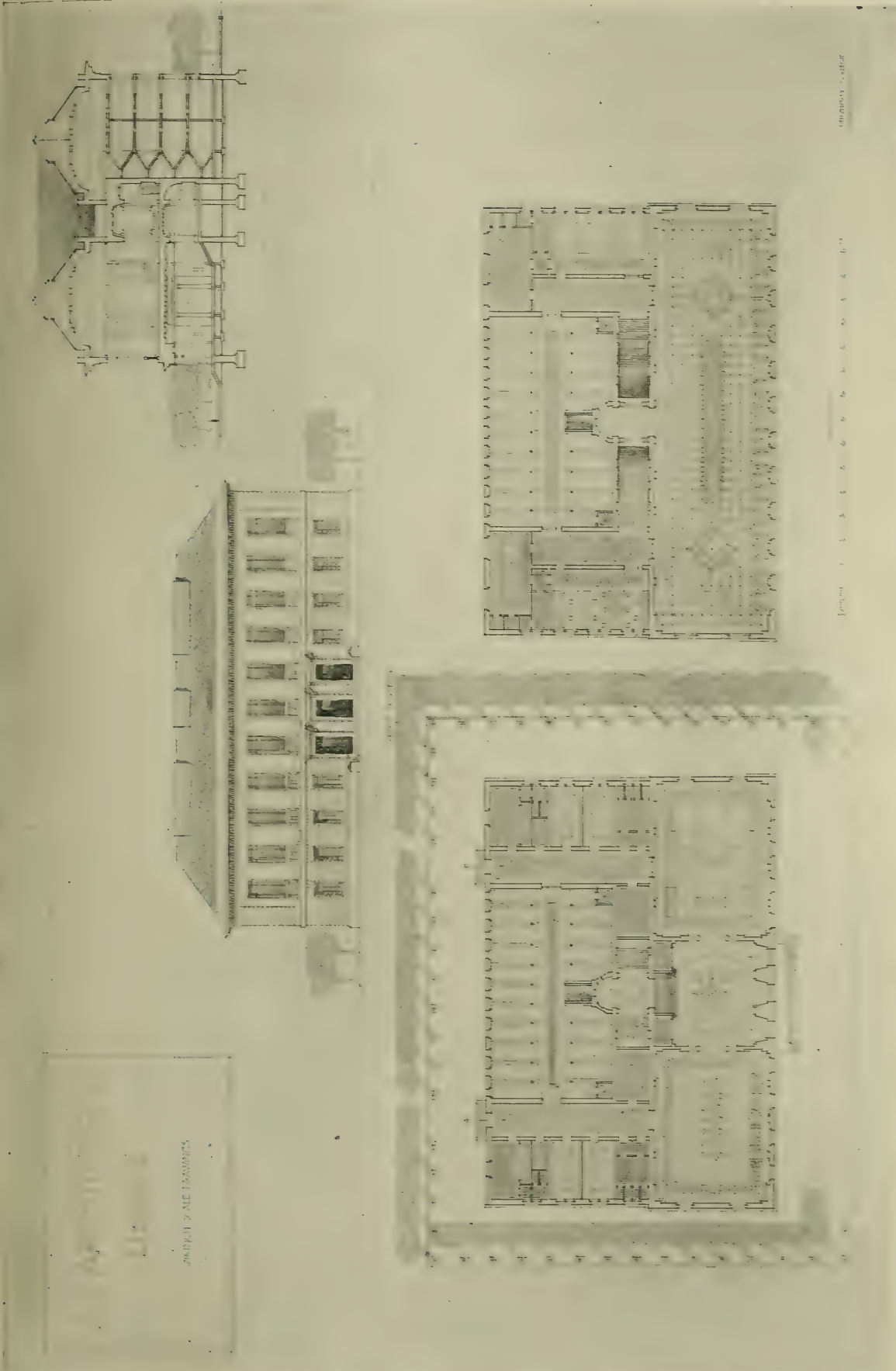
PROPOSED SCHEME FOR FLATS IN BLOOMSBURY
EIGHTH SCALE: FIFTEEN FEET TO AN INCH SQUARE



London University School of Architecture: Scheme for Flats in Bloomsbury. By Mr. S. Ellicott (Fourth Year).

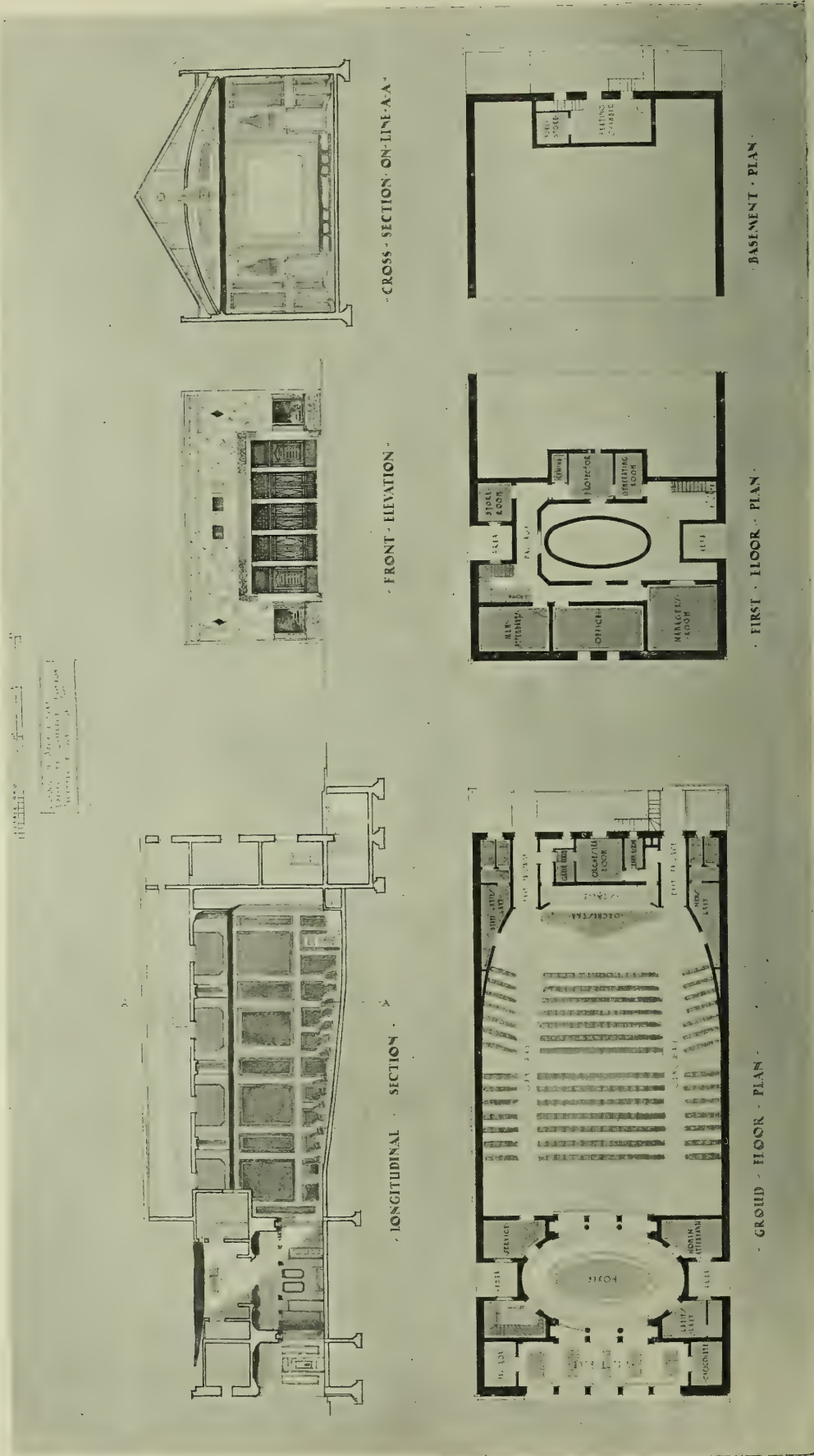


London University School of Architecture: A Riverside Bathing Pool.
By Mr. F. B. (Course of Third Year)



London University School of Architecture: An Architectural Library.

BY MR. J. B. COCHRANE.



London University School of Architecture : Design for a Cinema.

By MR. H. T. DYER (Third Year).

ART TREASURES IN SOVIET RUSSIA*

By HUNTLY CARTER.

NOWADAYS the fashion is to explore Soviet Russia in search of oases instead of ruins. A year ago Sir Martin Conway, Professor of Art and Director of the War Museum, returned from a visit to Russia with a fairly large oasis in his pocket. Its nature and value now appears in a book which tells us that the author's "sole concern in Russia was the works of art, and especially those that had been in public possession or the property of the Tsars before the revolution. There were also the private collections, the palaces and great houses, the cathedrals and monasteries and their treasures, as to the fate of which the English public, at any rate, was entirely uninformed." He adds some startling figures which convey an idea of what Russia contains in the way of "treasures." All the places he visited were packed with works of art. There were "70,000 pieces of plate" waiting for accommodation, and vast collections of all sorts including "upwards of 20,000 pictures," and "10,000 objects of gold."

Though the author is at great pains to make it known that he was concerned with works of art as such to the exclusion of all else, there is plenty of evidence in his book to show that his mind was busy with the social meaning, value, and consequences of the nationalization of private property, or expropriation, as socialists call it. "The wholesale Russian confiscation proved to me how little the public gains by this vast multiplication of individual losses" (p. 29). But though he seems to deplore this gathering together of fine things for the pleasure of the general public, elsewhere he shows that the Royal family occupied palaces containing superb collections of works of art from which no one derived benefit. "But far more interesting than the State apartments are the rooms in which the Tsars actually lived. . . . They possessed endless treasures of matchless beauty and rarity. . . . They could have hung their living-rooms with pictures by Raphael or Rembrandt. . . . What they actually did was to hunt out some

* "Art Treasures in Soviet Russia." By Sir Martin Conway. Illustrated. (Arnold.) Price 16s.

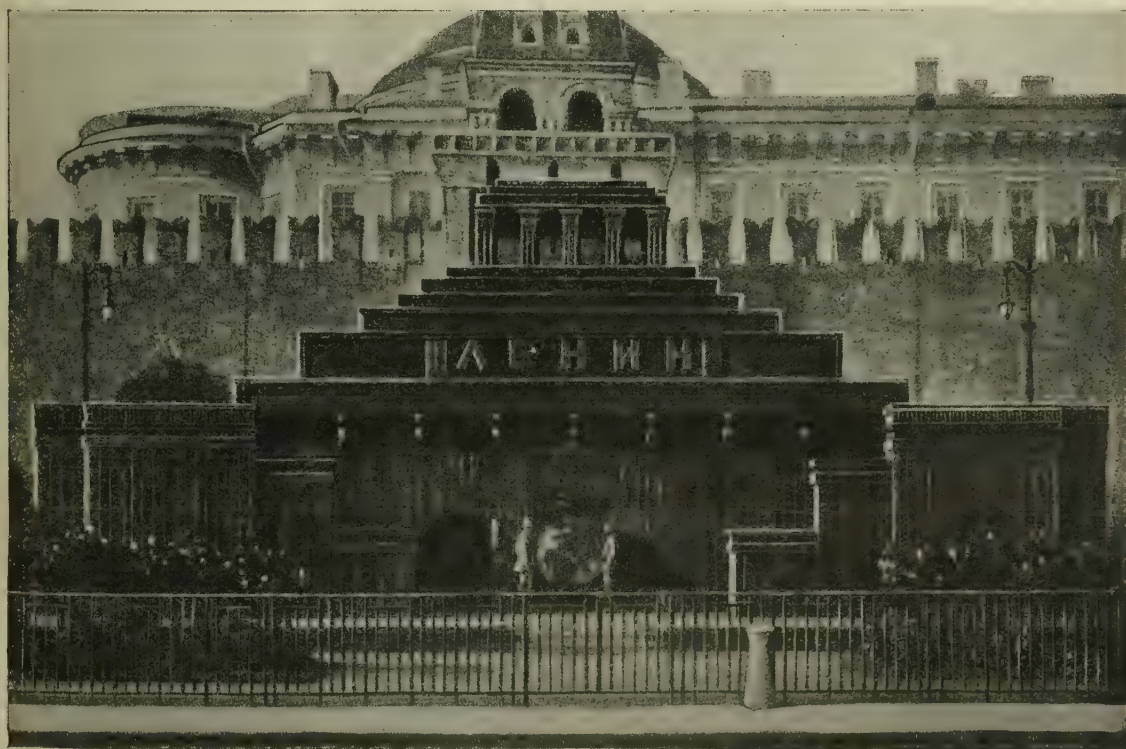
obscure set of small rooms in some remote corner of a huge building and to furnish them in the simplest, least tasteful, and most bourgeois style of their day" (p. 111). Then follows a description of a set of apartments of the size and atmosphere of that of a small Bloomsbury boarding-house "in which Nicholas I lived, worked and apparently ate." In an interesting chapter on "Confiscated Houses," the author describes the new use to which private houses containing valuable collections of works of art have been put. The most important private palaces in Petersburg (now Leningrad)—he insists on retaining the old name—with their contents, were protected, and have now been turned into museums" (p. 136). The owners are permitted to remain and to become caretakers. One expropriated landlord was set to work to turn a large house into a toy museum for children. The result was a great success. "Children come by hundreds and he shows them round." They call him "Uncle Museum." "Life for him at any rate is still full of interest."

Sir Martin devotes a great deal of space to a description of the confiscated treasures. There is no doubt that he was impressed favourably, even enthusiastically, not only with their extreme beauty and extraordinary abundance, but with the respect shown by the Russians for their inheritance and the care taken to preserve and restore them. But mixed with his pleasing sensations there is, perhaps inevitably, a note of regret that these things were turned over for the use of the people in the way they were. It is a pity that he has taken advantage of his peculiar position of an art lover let loose, as it were, to inspect and enjoy at leisure, with expert assistance, world-famous pictures and other works of art contained in palaces, houses, churches and monasteries, to make endless notes of everything, or so it seems, that he saw. True, he remarks that there were great heaps of things at which he could not do more than merely glance. As a result of this method he has unloaded a mass of bare statements of fact which makes his book look like a hastily com-

pleted inventory. A far better method would have been to concentrate on some of the great masterpieces such as those the Hermitage contains, and to call attention to the general mass of pictures, icons, plate, etc., which have been preserved. For instance, the palace of the Hermitage to-day contains some of the greatest pictures in the world. In my opinion it is superior to the Prado at Milan, the Louvre, the Hague, and it makes the National Gallery look like a dealer's assortment of fakes and false attributions. It takes about four hours merely to walk through it. If one were to stop and carefully examine each object in it, this would take five years—if one's eyes lasted.

This hustled method of doing any one side of Russia to-day is apt to cause important omissions. It is so in Sir Martin's case. He omits facts that are worth knowing, and entirely avoids showing the relation of historical Russia to contemporary Russia. In his chapter on the History of Russian Art he commences with Byzantine influences of the tenth century, but says nothing about the Tartar influences of the eleventh century.

These two influences may be traced in present-day architecture, costume, theatrical decoration, public ceremonies, and so on. Indeed, the proletarian style and æsthetic is a mixture of pre-Peter the Great style and that suggested by modern scientific industrialism. The new worker's blouse is cut on Greek lines, the new Army uniform goes back 1,000 years or more. The shape of the helmet is similar to the shape of "The Helmet of the Son of John the Terrible," illustrated on p. 86. Likewise in architecture, like the Kazan station, there is a return to the pure Russian style, if such exists. At any rate, it is a break-away from German and French influences. Sir Martin traces a French influence in palace and domestic architecture, but not a German one. Indeed, there is very little said about architecture, although Moscow, like Reval and Prague, is a museum of architectural styles. One would have welcomed a chapter on the Kremlin architecture with its fine specimens of Byzantine style and developments therefrom, together with an account of the restoration work which has been carried on with great success since 1917. He glances briefly at Lenin's tomb and notes its Egyptian



Lenin's Tomb.

style. Perhaps it would be more correct to say Egyptian crowned with a Greek sarco-phagus. Much more could be said about this structure, seeing that it is a symbol of New Russia and largely determined by the intentions of the Government and the needs of the new population. In designing it the architect was faced with three problems—political, social and civic propaganda—a building that credits Lenin with being the founder of the Soviet State and a symbol of Soviet power; one that satisfies a public sentiment of hero-worship; and one that adorns and harmonises with the surroundings. As an embellishment it cannot be said to be a success. It certainly does not harmonise with the Chinese battle-mented wall and the Renaissance building in the background. It was designed by M. Alexander Schoussev, the leader of the revivalists, and designer of the imposing Kazan station at Moscow. It should be said it is only a trial design and its present purpose is to exhibit the embalmed body of Lenin.

Kazan station is said to be a pure Russian style, but I doubt whether there is a pure Russian style. In any case, Russian forms of art are of Mi-Byzantine and Mi-Tartar origins, as illustrated by the vaudeville entertainment called Chauve-Souris, now going the round of the European theatres. The new theatrical ceremonies of State—pageants, parades, mass performances—have a relation to the historical Russia with which Sir Martin is concerned. But he does not appear to have noticed anything of the kind.

There are certain points not mentioned which, I think, go to the credit of the Government. The author refers to the superb works of art in the monasteries and churches. Some of these places are being turned into museums. The Russian cathedrals and churches are more richly endowed with works of art than even the Italian ones. The book contains many descriptions of their amazing beauty. But how many lovers of art can inspect these treasures while people have and exercise the right of praying in these places of worship at all hours of the day as well as Sundays? In my experience of Russian chapels there is a continual stream of people kissing icons. Churches, of course, are intended for worship. I do not know whether they ought to be hiding-places for priceless works of art.

Sir Martin has practically nothing to say about the new standards of culture and the new æsthetic which have emerged during the seven years' struggle for a new form of society. It is true he has a chapter on Modern Russian Painting, which serves to illustrate his admission that he knows little or nothing about the new symbols and forms which are rapidly harmonising with or replacing the old ones. There is in Moscow a large room full of significant models of rationalistic forms of architecture designed by proletarian architects. There is the Russian theatre with which I deal in my book, "The New Theatre of Soviet Russia." This theatre is an outcome of the working-class society, and is inextricably bound up with the memory and aspiration of that society. The author describes his visit to the Little Theatre at Moscow where not only did he have the uncommon experience of "a woman of the people" slipping into his box and occupying the best seat uninvited, but he saw scenery of which he could make nothing. Against it the actors appeared giants. What he saw was a new scenic principle at work. By being placed against dwarf scenery actors appear gigantic in size. The effect experienced was "that the drama was lifted above the level of everyday life and put on an heroic plane" (p. 240).

On the whole, however, this survey of art treasures in Soviet Russia is important and interesting from start to finish. It is written in a spirit of tolerance, and will probably produce a demand by art-lovers and connoisseurs for visas which the Soviet Government may find embarrassing. It contains eighteen illustrations of "treasures" reproduced on art paper.

UNIVERSITY COLLEGE SCHOOL OF ARCHITECTURE

THAT the art of building is one of the most complicated there is no doubt. That a modern architect must be well trained and have an encyclopædic knowledge of other different sciences, such as engineering, electricity, hygiene, sociology, economics, archæology, etc., which are closely associated to architecture, is a necessity *sine non que*. It is therefore well understood that a practitioner worthy of the name of architect cannot very well acquire by himself, as before, the necessary knowledge to enable him to carry successfully an art which modern requirements render more and more difficult. Not a long time ago an architect was acquiring his experience at the expense of his client: that is to say, at the risk of offending the public. Nowadays numerous schools have been founded aiming to provide the would-be architect with sufficient ammunition to start the fight fully equipped.

The London University School of Architecture is one of the oldest established schools in the country. Since the year 1848, which saw its birth, numerous improvements following step by step the progress of modern science have been introduced, thus providing the student with every facility. Having its seat in University College, and in close touch with other departments of this College, mainly the Slade School, the Faculty of Engineering and the Faculty of Art, which deals with literature, history and archæology, the School of Architecture in its course of five years gives the maximum efficiency in the shortest time. Upon entering the School, the freshman in his first year is acquainted with the handling of instruments and how to use them properly, special attention being given to the draughtsmanship and value of colour in composition. The teaching of architecture to a freshman is a very delicate thing. He is taught the first basis of architecture, from examples taken in the past; but the teaching must be in such a way as not to choke any future personality that the student may develop. Drawings of the three orders, one of which must be a measured drawing usually taken from the court in the British Museum, and small and easy designs illustrating these orders, are the first architectural steps of the student. Conjointly, the freshman follows lectures on history, presentation, elementary design and mainly construction, with weekly exercises under the personal supervision of the lecturer in building construction. A course of decoration under a special master is also included in this year. Mr. Lovett's (first year degree student) Greek compositions and Museum studies have particularly satisfied the R.I.B.A. examiners.

The second year is devoted to the study of domestic architecture, and for the first two terms a design of this type of architecture has to be carried out to a complete stage of working drawings, including half-inch and full-sized, thus acquainting the student with office routine. Colour decoration, freehand drawing, history and building construction are the other main subjects included in this year. In the exhibition of the work of the School, held at University College last July, one noticed with satisfaction Mr. Light's design and excellent working drawings for a farmhouse. Students in the third year have different design problems to solve in the traditional manner, as it seems logical that they should first acquire the knowledge of the past and have a solid ground which will enable them little by little to free themselves from traditionalism, if they wish, later on, in the last year of their studies. The R.I.B.A. examiners for the certificate delivered at the end of the third year were particularly satisfied with Mr. Dyer's and Mr. Summerton's beautiful designs for a College chapel, and they congratulated Mr. Cochrane, whose general

standard in draughtsmanship and design received special comment. The subject set out in this year are varied, and in the last exhibition many good designs of an architectural library, a bathing establishment, a factory (with working drawings comprising steel calculations), etc., were noticeable.

In the fourth year, students have already more liberty of taste in the designs they have to set out. These are of a more difficult order and range from a geological institute and a reinforced concrete warehouse to a block of flats. The latter problem has given some very interesting solutions, and many good plans, where lighting, ventilation, circulations, and all considerations of hygiene, comfort and interior artistic treatment were well considered. Miss Jessie Gray's and Mr. Alicott's designs for a block of flats have particularly satisfied the R.I.B.A. examiners, who awarded them first mentions.

Students in the fifth year have to enter an office, thus still maintaining the traditional way of pupilage education. In the night they follow courses of advanced design in the atelier. Mr. Connell exhibited some remarkable designs, expressed in a modern way, which denoted the good taste and thorough knowledge of classical architecture of the author. Mr. Stokes showed great skill in sketch-designs, and Mr. Short and Mr. Alabaster exhibited designs which showed that their authors are not easily satisfied.

In their fifth year students take courses of town planning, professional practice, theory of design, etc.

SCHOOL PROSPECTUS

West Ham Municipal College.

WE have received a copy of the prospectus of the West Ham Municipal College for the session 1925-1926, which includes the programme of the architectural and building crafts departments. The college does not profess to do more than instil into its pupils a rudimentary knowledge of architecture, which is taught in conjunction with the other forms of art, and for which a collective certificate is awarded. There is a two-hour lecture and some simple exercises in design each Wednesday evening, which are intended to give preliminary training to those studying architecture as a profession. In addition to this Mr. W. H. Ansell, M.C. F.R.I.B.A., A.R.E., will lecture every Tuesday evening on "Architecture in the Making."

The building trades are dealt with more fully. Course M.1 instructs a beginner in practical mathematics for builders and gives an elementary knowledge of building construction. Course M.2 is more advanced, dealing with materials and graphics; and Course M.3 includes planning and design and buildings, use of modern materials, information relating to building Acts, and by-laws, and building quantities. Courses N.1 and N.2 deal extensively with plumbing and sanitary science and actual practice in the workshop.

Mr. T. C. Baillie, M.A., D.Sc., is the principal of the college; Messrs. F. Gould Wil F.R.I.B.A., and C. T. Bloodworth, B.A. and A.R.I.B.A., lecture on building construction. Mr. H. Warren, A.R.San.Inst., A.R.I.B.A., lectures on sanitary science; and Mr. W. H. Thurstone, A.R.San.Inst., R.P., M.V.O.P.A., instructs in plumbing class. This session commences on September 16.

Southchurch Hall, Southend.

Southchurch Hall, with five acres of ground surrounding it, has been given to Southend Corporation by the family of the late Mr. Dowsett, first Mayor of the town. The conditions are that the ground shall be preserved an open space, and the Hall used as a museum or some other similar purpose.

LEGAL SECTION.

NOTES ON CURRENT CASES

Rent Restriction and Flats Rateable Value.

The case *Barrett and Evans v. Hardy Brothers (Alnwick), Ltd.*, which we were able to note only very briefly in our issue May 22, is now reported in the Law Reports (1925, K.B. 220), and as it raised an entirely new point and by apportioning the rateable value of a building in Pall Mall brought a flat rented at £200 per annum within the Rent Acts, it requires further consideration.

The tenants of a second floor flat in Pall Mall had applied to the County Court for the apportionment, not of the rent, but of the rateable value, and the Divisional Court, constituted of two Lords Justices of Appeal, Lord Justice Bankes and Lord Justice Scrutton, decided this was the first case to come before them which raised the point as to apportioning the rateable value.

The facts were that on August 17, 1917, the tenants had let to the plaintiff, Mr. Barrett, a flat on the second floor for a term of five years from September 29 at a yearly rent of £55 for the first three years, and £200 for the last two years. On October 11, 1922, this period having expired the defendants let the same flat to Mr. Barrett, the other plaintiff, on a quarterly tenancy from September 29, 1922, at a rent of £53 15s. a quarter. The application to apportion the rateable value was made under section 12, subsection (3), of the Rent Act, 1920.

Before August, 1917, the floor in question had been let as business premises at an annual rent of £150. The floor had never been separately rated, and on August 3, 1914, the basement and first floor were assessed together at £375 gross and £313 rateable, the second, third, fourth, and fifth floors being assessed together at £240 gross and £200 rateable. At a later date these floors had been assessed together at £240 gross and £200 net, the shop and the first floor at £650 gross and £592 net, and the basement at £450 gross and £375 net. The County Court judge had apportioned the rateable value of the flat at £60, and the Divisional Court, which although constituted of two Lords Justices of Appeal, only possessed the powers of a Divisional Court, has felt constrained by previous decisions to uphold the apportionment although the date from which apportionment had to be assessed was varied, but this made no difference as the rateable values remained the same from August, 1914, to the date of the letting in question, August, 1917.

The surprising effects of the decision cannot, however, be gathered from expressions used in the judgments of the two Lords Justices; Lord Justice Bankes is reported as saying that the effect of the decisions which had been directed at stopping obvious holes in the Act through which a landlord might escape, had been to create a chasm in which even a house in Pall Mall became engulfed, and Lord Justice Scrutton is reported as saying, "That these premises should be within the Rent Restriction Acts seems at first sight absurd. The rent of this flat has not since March, 1914, been more than £150 per annum, the superior limit for rent restricted houses in London having never been more than £105. At present under the 1920 assessment the whole building is rated at £1,100 gross, £967 net, the part which comprises this flat, apparently three floors, being valued at £450 gross, £375 net. The language of the Rent Restriction Acts makes it very difficult to say what the legal position is."

Even in the light of the judgments now delivered it is almost impossible to see clearly the matter stands. The finding of the court may be summarised in the words of Lord Justice Bankes, who, after citing *Woodhead v. Samuel* (1920, 89 L.J. (K.B.) 689;

The Builder, February 27, 1920); *Sinclair v. Powell* (1922, 1 K.B. 393; *The Builder*, April 28, 1922); *Woodhead v. Putnam* (1923, 1 K.B. 252; *The Builder*, December 8, 1922); *Marchbank v. Campbell* (1923, 1 K.B. 245, *The Builder*, December 8, 1922); *Rex v. Judge of Marylebone County Court* (1923, 1 K.B. 365, *The Builder*, February 23, 1923); *Sutton v. Begley* (1923, 2 K.B. 694; *The Builder*, June 6, 1924), and *Joy v. Eppner* (1925, 1 K.B. 362; *The Builder*, January 2, 1925), said "The result of these decisions undoubtedly is, to use Mr. Justice Salter's language in *Woodhead v. Putnam*, that to entitle a tenant to apportionment under section 12, subsection (3), it is not necessary that the property in which the applicant's dwelling house is comprised should itself be a dwelling house or should be subject to the Act."

The question was, is the apportionment only applicable where the whole house is within the Act as was the case in *Woodward v. Samuels (ubi sup)*, or is it applicable where as in *Sinclair v. Powell (ubi sup)* (or where as in this case Lord Justice Scrutton says was the case in *Sutton v. Begley (ubi sup)*), the whole house is not within the Act?

On the above cases the Court held in the case under consideration that the latter is the case as regards the rental and also (this being the first case as to apportionment of rateable value) as regards rateable value.

Now *Lelyveld v. Peppercorn* (1924, 2 K.B. 638; *The Builder*, June 27, 1924) would appear to be an authority to the contrary, because in that case, where parts of a house had been let separately before August, 1914, but in 1922 rooms differently grouped were let to the applicant for apportionment, it was held, the only standard rent applicable was the rent at which these rooms were let in 1922; but the Divisional Court in the case under consideration intimated that that case did not apply, and it might be a question whether the decision was consistent with the earlier decisions cited above.

This case raises such very important questions and embraces properties of such value that having stated what the finding of the court was, we venture in the abstract to analyse the statute; but before leaving the case as decided, we may point out that the court held that there was no question as to apportionment of rent here, as the premises were first let as a dwelling-house in 1917 at a rental of £185, and therefore, to quote Lord Justice Scrutton: "No question of apportionment of rent, therefore, arises; and as far as rent is concerned, this flat is not a dwelling-house to which the Act applies."

That is to say, it being known that the rent of the part of the house let as a separate dwelling exceeded the rental limits laid down in the Act no apportionment could be asked for; but the rateable value as regards that portion being unknown, an inquiry can be instituted as to its amount even although it is known that the rateable value of the house as a whole exceeds the limits prescribed in the Act, on the same principle that has been applied where rent is in question.

Lord Justice Bankes dates the origin of this difficulty from the decision delivered by the Court of Appeal (to which he was party) in *Sinclair v. Powell (ubi sup)*. There the house as a whole was not within the Rent Acts then in force, and the Divisional Court held, this being the case, when parts were let off in flats the standard rent of each flat would be that at which it was first let. The Court of Appeal upheld this finding, but on another ground, that there had been such a reconstruction of the house as to make it lose its identity. Lord Justice Scrutton, who was a member of the

Court, however, dissented, and adopted the view taken by the Divisional Court. Lord Justice Bankes, in the case under consideration, admitted that it would have been better had the majority of the Court at that time adopted the view taken by the Divisional Court and supported by Lord Justice Scrutton. In *Barrett's* case Lord Justice Scrutton criticised section 12, subsection (3), as follows: "The statutory authority for apportionment is to be found, if at all, in section 12, subsection (3), of the Act of 1920. This begins: 'Where for the purposes of determining the standard rent or rateable value of any dwelling-house to which this Act applies. . . .' As whether a house is within the Act depends on whether its standard rent or rateable value exceeds a certain limit, this section literally read runs round in a useless circle. If you have not determined these items, there is no proof that the Act applies to it. It is said that you must read the words as if they said, 'Where in order to determine the standard rent or rateable value of any dwelling-house for the purpose of seeing whether this Act applies to it, it is necessary to apportion,' &c. The words obviously do not say that in their ordinary meaning. The definitions do not help the matter. . . ." The definitions do not help the definitions of standard rent and rateable value contained in section 12 subsection (1) (a) and (e).

Lord Justice Bankes said: "A construction of the subsection" (3) "has been established which reads 'standard rent' in a sense other than the sense in which it is defined by the Act, and gives to the expression 'dwelling-house' to which this Act applies 'not the full sense of a dwelling-house the rent or rateable value of which is within the statutory limit, but merely the sense of being a house or part of a house let as a separate dwelling.'"

The decision even in the opinion of the Court itself has had such unexpected results—Lord Justice Bankes is reported as saying that the result of the decisions had been to give opportunities to unscrupulous tenants to evade quite legitimate obligations—that it is clear the matter must be altered either by a decision in a case carried to the House of Lords, or failing that by legislation.

It is to be noted that in the above observations we have quoted no mention is made of subsection (2) of section 12, which precedes the subsection (3) which was under consideration. By this subsection the Act is to apply "to a house, or part of a house let as a separate dwelling, where either the annual amount of the standard rent or the rateable value does not exceed" the limits prescribed, "and every such house or part of a house shall be deemed to be a dwelling-house to which this Act applies." Then subsection (3) provides "where for the purpose of determining the standard rent or rateable value of any dwelling-house to which this Act applies it is necessary to apportion the rent at the date in relation to which the standard rent is to be fixed, or the rateable value of the property in which that dwelling-house is comprised, the county court may on application by either party make such an apportionment as seems just. . . ."

It seems almost impertinent even to suggest a reading of these subsections which may obviate the present difficulty, but apart from the decided cases it would appear that a logical reading of the Act would be as follows:—Subsection (2) defines the scope of the Act it applies to a house, or part of a house let as a separate dwelling, but this is disjunctive as neither the whole house nor part of the house to be within the Act must exceed the limits of rental or rateable value laid down. If the whole house is within those limits, then if part of it is let as a separate dwelling, to ascertain the standard rent or the rateable

value "it is necessary," as subsection (3) says, to apportion the rent as on August 3, 1914, or the rateable value "of the property in which that dwelling-house" (let separately) "is comprised," but if the whole house exceeds the limits prescribed, that house as a whole is outside the Act altogether, it has not to be considered at all, but the part let separately may be a dwelling-house by itself within the Act, in which case its standard rent will be the rent at which it was first let separately.

The rateable value raises a question of greater difficulty in adopting this reading because not only may that not be determined at the date of the separate letting, but the Act in subsection (3) specially mentions "the rateable value of the property in which that dwelling-house" i.e., a dwelling-house to which the Act applies "is comprised." In this connection there is a curious difference between the definition of "standard rent" and "rateable value." The definition of standard rent only refers to the dwelling-house as such. "The expression 'standard rent' means the rent at which the dwelling-house was let on August 3, 1914, or where the dwelling-house was not let on that date, the rent at which it was last let before that date, or in the case of a dwelling-house first let after the said August 3 the rent at which it was first let."

Rateable value is defined: "The expression 'rateable value' means the rateable value on August 3, 1914, or in the case of a dwelling-house or a part of a dwelling-house first assessed after that date the rateable value at which it was first assessed." The introduction of the words "or part of a dwelling-house" in this connection are significant. Do they imply that if a part of a house steps into the Act as a separate dwelling it must be separately rated? There appears to be an omission and uncertainty in the Act in this respect, but the judgments delivered in the case we are considering show the dangers of the Courts supplying omissions. It appears to be conceded that the Legislature never intended houses to be brought within the Acts by reference to assessments made on houses outside the Acts, which has been the effect of the decided cases, and a remedial measure appears urgently to be required.

WORKMEN'S COMPENSATION

As we have shown in our note on two cases which were decided in the House of Lords, *Glasgow Iron and Steel Co. v. Dickson and Coltness Iron Company v. Dagleish* (*The Builder*, August 7), there has been some difficulty in ascertaining the effect of the provisions of the Workmen's Compensation Act, 1923, where the accident causing the injury has occurred before the date on which that Act came into force, January 1, 1924.

Another point of this description arose in two cases, *Briggs v. Thomas Dryden & Son* and *Talbot v. Vickers, Ltd.* (*Weekly Notes*, June 30), before the Court of Appeal. We only set out the facts in the first of these two cases, as the same principle was involved in both cases. The applicant, then a lad of about seventeen years of age, on April 4, 1918, had met with an accident arising out of and in the course of his employment, through which he had lost the greater part of his forefinger. He received compensation, 10s. a week, until September 13, 1918, when he resumed work, but on November 6 a declaration of liability was filed. The applicant attained the age of twenty-one on December 7, 1923. On September 29, 1924, he underwent an operation to remove the stump of the finger and was totally incapacitated until January 13, 1925. During this period of incapacity he was paid compensation at the rate of 17s. 6d. a week, this being the 10s. plus the War Additions. The applicant in these proceedings was applying for a review, and an increase of the compensa-

tion as from the date of the operation to 35s., under the First Schedule of the Act of 1906, para. 16, which provides: "Provided that where the workman was at the date of the accident under twenty-one years of age, and the review takes place more than twelve months after the accident, the amount of the weekly payment may be increased to any amount not exceeding 50 per cent. of the weekly sum which the workman would probably have been earning at the date of the review if he had remained uninjured, but not in any case exceeding £1." These latter words are modified by the War Additions Acts.

The Act of 1923 has repealed this proviso in paragraph 16 of the Act of 1920 and substituted the following proviso for it in section 24, subsection (6): "Provided that, where the workman was at the date of the accident under twenty-one years of age, and the review takes place more than six months after the accident and before the age of twenty-one years, the amount of the weekly payment may be increased to such an amount as would have been awarded if the workman had at the time of the accident been earning the weekly sum which he would probably have been earning at the date of the review if he had remained uninjured."

It will be seen this new proviso had no application to the case in question, because the workman had attained twenty-one years before the review took place, and it had been contended, therefore, that the workman had no right to the increased benefit either under the new Act or the repealed provision in the Act of 1920. The Court of Appeal held that as the result of the declaration of liability the workman had an accrued right to have his compensation fixed on review by reference to the provisions contained in Schedule I, para. 16, of the Act of 1920, a right which was preserved by section 38, subsection (2) (e), of the Interpretation Act, 1889, which provides: "Where this Act, or any Act passed after the commencement of this Act, repeals any other enactment, then, unless the contrary intention appears, the appeal shall not affect any right, privilege, obligation or liability acquired, accrued or incurred under any enactment so repealed," and no "contrary intention" appeared in section 24, subsection (6), of the Act of 1923.

This is an extremely important point to bear in mind in connection with the provisions of the Workmen's Compensation Act, 1923, for many of the provisions contained in that Act are expressly not made to apply where the accident happened before the commencement of that Act. Thus by section 30 it is provided that the provisions contained in sections 2 to 10 are not to apply in such circumstances. In such cases, therefore, it may be taken that far from a "contrary intention being expressed" that the repealed sections shall not apply to cases excluded from the new Act, there is an implication they still apply, for it was never intended to leave workmen without remedy either under one Act or the other. It will be remembered that a Divisional Court in the case of *Clemmens Aluminium Co.* (*The Builder*, December 12, 1924) gave a similar interpretation in regard to another provision of the Act as has now been given by the Court of Appeal in the case we have been considering.

Scott Memorial, Devonport.

The National Memorial to Captain R. F. Scott and his four companions, who died on the return journey from the South Pole in February-March, 1912, was unveiled at Devonport recently. The monument has been erected on Mount Wise, and overlooks Plymouth Sound. It is in the form of a granite pylon surmounted by a bronze group representing Courage, sustained by Patriotism, spurning Fear, Despair, and Death. The figure Courage is being crowned by Immortality. The memorial was designed by the late Mr. Albert H. Hodge, R.B.S.

THE RATING AND ASSESSMENT BILL

THE Rating and Assessment Bill makes slow progress in Committee, but at the resuming sitting recently the Minister of Health expressed the firm intention of the Government to carry it through. Opposition in Committee to any Bill does not in itself indicate much, as may be the result of opposition by a small party, but there are indications that this Bill not favoured by large sections of the community and a large amount of Parliamentary time being expended on a measure which, if called for at all, is certainly not deemed one of the most pressing reforms to be hurried on.

At the recent meeting of the representatives Assessment Committees and Rating Authorities for England and Wales, dissent from the Bill was strongly expressed, and there are few bodies which are prepared to recommend it as it stands as a whole. At the sitting of the Committee on Tuesday the Minister withdrew clause 10, which relates to the rating of owners and the collection of rates by them, but on apparently that there might be more opportunity of considering suggestions that the Government has received from local authorities since the Bill was introduced, as this clause did not appear in the "draft Bill," and had not therefore received the same amount of criticism or suggestion as clauses submitted in the draft Bill.

Clause 11, which deals with rating of houses let out in parts was also withdrawn, but on the Minister stated, to re-appear in Part II of the Bill. This clause was also not in the draft Bill. Clause 15, the first clause in Part II, was also reached. This clause appeared in the Draft Bill, but there have been certain alterations in it since it was submitted in that form. It deals with "valuation areas and authorities and subclauses (1) and (2) are as in the draft where the clause was numbered 11.

To an amendment proposing that no rating area should be in more than one valuation area the Minister said that there was nothing in the Bill which would make any change in five-sixths of the present areas and the Bill was only a step towards further legislation which would be directed to the reform of the Poor Law; which connection it would be proposed that the functions of the Boards of Guardians should be transferred to other local authorities, and it was desired to avoid duplication and re-duplication of local authorities and to avoid elections where the issue would turn solely on the amount of relief. The question of large boroughs of 50,000 population and upwards was discussed, it being pointed out that these might be county boroughs but for the fact that such applications had been suspended pending the report of the Royal Commission on Local Government, and so promise of consideration was given and amendment was withdrawn.

The only amendment carried, or conceded, in this clause appears to have been in sub-clause 5 which was in the "draft Bill" the time was altered from three to six months within which, if the council of any county wished to submit a scheme after such period, permission is given to the Minister to make the scheme himself.

The principal difference in this clause from what it stood in the draft Bill occurs in sub-clause (4), which has been redrafted as follows: "No scheme submitted to the Minister under section shall be of effect unless and until approved by the Minister." After these words the draft Bill provided, "and the Minister approve a scheme with or without modifications"; but in the present Bill the clause continues "and the Minister after considering any representations with respect to the scheme which may be submitted to him by the rating authorities (which representations rating authorities are hereby authorised to make) may approve the scheme with or without modifications."

Clause 16, which was numbered clause 12 in the draft Bill, is in much the same terms as in

Bill with the exception of subclause (5), reads: "There shall be included among members of every assessment committee persons who are Commissioners for the local purposes of the Income Tax acting for the division which, or some part of which, is comprised in the valuation area, and the said members shall be appointed in the case of a valuation area constituted by a joint scheme in any manner as may be provided by the scheme, or in any other case by the Council of the borough or the council of the county as may be."

The Committee the principal discussion ranged on subclause (3), which provides: "In the case of a valuation area being a county borough, an assessment committee shall, subject to the provisions of this section, consist of such number of persons to be appointed by the Council of the borough as may be determined by the council, and the council shall appoint an assessment committee such number of members, not being in any case less than one-fifth of the total number of the members of the committee, as they think fit, to represent the boards of guardians of any unions any part of which are comprised in the area of the valuation area, and the persons so appointed to represent the boards of guardians shall be persons nominated by the boards." The proceedings of the committee have not been very clearly reported in the press, for although it is stated that Sir Kingsley Wood, on behalf of the Government, accepted an amendment moved by Mr. Sandeman Allen, in terms of that amendment have not been reported, but from the context we gather that the representatives of Labour desired all members appointed to be members of the boards of guardians the amendment in question provided that 20 per cent. should be appointed from the boards of the Councils and guardians.

A further amendment, moved by Mr. Rye, in terms that no member of the assessment committee should be a member of the valuation committee, was adopted, which he said had been adopted by the Westminster City Council, was also accepted on behalf of the Government. At the conclusion of the Committee, only sixteen amendments had been considered out of the seventy-five comprised in the Bill, and there are 400 pages of amendments still to be considered.

WAR MEMORIALS.

The Nicholson Memorial, Leek.

The Nicholson Memorial clock tower at Leek was unveiled recently. The architects were Messrs. Thomas Worthington & Sons, Manchester.

Eccles War Memorial.

The Eccles War Memorial, erected at Eccles, Lancashire, recently unveiled at Leek, is a memorial to the men of that town who died in the war. It was designed by Mr. John Birrell, of Manchester, and stands in a commanding position near the Town Hall. It consists of a pyramid of Portland stone 24 ft. high, surmounted by a bronze figure 4 ft. high symbolizing "Peace." On the column is an inscription and a panel representing a soldier's reversed arms.

Earl Kitchener Monument.

The Earl Kitchener Monument, which has been erected on the rocky western coast of the mainland of Anglesey, near the spot where Earl Kitchener was killed in the "Hampshire," has been completed, and will be unveiled next month.

Heywood War Memorial.

The Heywood War Memorial, erected at a cost of £1,000, was unveiled recently. It is a horizontal mass of granite in the form of a sarcophagus, on the sides of which are four wreaths.

Shipyards War Memorial.

The Shipyards War Memorial and hall, erected at Wallsend, is a memorial to the directors, staff, and employees of Swan Hunter, Wigham Richardson & Co., shipbuilders, to the memory of 216 employees who fell in the war, were unveiled recently. The hall and memorial have cost £15,000.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting!—ED.

Dry Rot.

SIR,—Can any of your readers suggest a cure for or preventive of dry rot. I am continually having to lay new floors on my ground floor, fungus forming every few days. It is not for want of ventilation as air bricks were placed all round the house, and the joists are at least 2 ft. from the ground.

"ANXIOUS."

A Boundary Wall Question.

SIR,—I shall be glad to have your ruling on the following point. "A" built a boundary wall before the war, "B" has just built a house adjoining. According to the titles the wall is mutual and consequently "B" is bound to pay "A" for half the cost of the wall. In making up "A's" claim, should pre-war or present-day rates be taken?

J.

Well Under House.

[REPLY TO WATER, AUGUST 21.]

SIR,—With reference to this question, one should take accurate account of the amount of water drawn over a dry period for the purpose of cooking and washing, and on the maximum that the household would use. This would then prove whether the rain-water could be dispensed with, because the supply would be equal to the greatest demand and taken at the very worst time for record.

G. W. HARRIS.

"Reduced White Lead."

[ANSWER TO "PIGMENT," AUGUST 14.]

SIR,—This term means ordinary hydrocarbonate white lead to which has been added a proportion of sulphate of barium (usually in the form of natural barytes) or other "reducers." This pigment cannot be properly termed an adulterant when its presence is indicated by the use of the word "reduced," and if used in a moderate proportion, say, up to 8 or 10 per cent., is certainly not detrimental to the durability of the paint, because barytes is quite inert and is not affected by alkali or acid. Its defect, however, is lack of "body" or opacity—in other words, it is semi-transparent when made into paint. I have had natural barytes ground in oil and applied on wood in as many as eight coats without the knots and grain being hidden. Genuine lead paint has, of course, excellent body, and it is because of this that a small percentage of barytes can be added without much disadvantage. Some 25 years ago a great deal of adulterated white lead was sold as "pure" or, to use the correct trade term, as "genuine." To put a stop to this objectionable practice, the White Lead Corroders Section of the London Chamber of Commerce appointed an inspector, who prosecuted in many cases where analysis proved adulteration, and insisted upon the use of the word "reduced" in all cases where any substance was added to the white lead. These prosecutions have almost wholly done away with the practice of selling the adulterated lead as pure, and purchasers may now be reasonably certain of obtaining genuine white lead when the package is so marked. Unfortunately, the actual proportion of barytes or other "reducer" used in reduced white lead is not uniform, and it would be a good thing for all concerned if it were. Formerly packages of reduced white lead were sold as No. 1, No. 2, No. 3, &c., the object being to indicate to some extent the reduction or relative amount of barytes added, No. 1 having less than No. 2, but this practice has also been stopped. I cannot understand your correspondent's remark that "it (reduced white lead) appears to be considerably more expensive than the ordinary type." It should be cheaper, as barytes costs considerably less than white lead.

ARTHUR S. JENNINGS.

Cleaning Porcelain Enamel Baths.

[REPLY TO R. P. B., AUGUST 14.]

SIR,—Your correspondent will find that petrol makes an excellent solvent for the greasy dirt that collects on the side of a bath or lavatory basin, and it has the advantage of containing nothing of a gritty or scratchy nature that will damage the enamel.

AUTO.

Shuttering.

[REPLY TO "R. M. P.," AUGUST 21.]

SIR,—In reply to R. M. P., I have had good results from mixing soft-soap and lime in equal quantities, both, of course, diluted with water to the consistency of cream, and then put on the shuttering with a distemper brush.

G. W. HARRIS.

Red Ash Tennis Court.

[REPLY TO NORTH COUNTRY READERS, AUGUST 14.]

SIR,—The best surface for a hard court is undoubtedly asphaltic limestone, supplied by several well-known merchants ready for laying, and it is applied in three layers of reducing gauge from 1 in. down to dust, each layer being well rolled in. For a cheaper surface I can think of no better medium than the ashes from a brick kiln. Though I do not know of any hard court made of this material, I have recently examined some of it from a neighbouring brickfield and have seen paths made of it where it has become well bound together and of an excellent surface. The ashes are partly ashes from the coal and partly well-baked clay dust, and the two ingredients seem to "marry" well. I am intending to lay a court of this material and shall simply roll two 1 in. layers of this dust on a good, well-levelled foundation such as your correspondents mention.

EXPERIMENT.

Wind-driven Electric Lighting Plant.

[REPLY TO MR. P. EDWIN STEPHENS, AUGUST 14.]

SIR,—I should strongly advise against a wind-driven electric lighting plant. Wind is such a fickle means of power that the extent of the storage batteries will cost a figure which will represent an annual outlay far in excess of that expended upon fuel for an internal combustion engine. It is actually found that except in the most favourable cases the latter type of power will beat the water-driven plant for economy, and after all, water, if worth the choosing at all, is far more constant than wind.

PETROL.

Preserving Post-ends.

[REPLY TO MR. T. BURTON, AUGUST 21.]

SIR,—A very good method, specially for oak or other hard wood, is thoroughly to char (burn partially) the stump of post, or the part buried in the earth or concrete, as the case may be. This is a good method of preserving.

G. W. HARRIS.

Sand-lime Bricks.

[REPLY TO MR. CHARLES ANDERTON, A.R.I.B.A., AUGUST 14.]

SIR,—I would refer your correspondent to the Government pamphlet upon the subject of sand-lime bricks, published by H.M. Stationery Office, where very complete information will be found. The sand-lime brick is merely a lime-concrete brick, and it is extremely doubtful if it can compete with the ordinary burnt clay brick for price. Actually, of course, lime is a manufactured article, while clay is a raw material, so that the sand-lime brick starts with a disadvantage in a free and open market.

BRICKS.

B.T.U.

[REPLY TO "CERCHER," AUGUST 14.]

SIR,—A British Thermal Unit is the amount of heat required to raise 1 lb. of water through a temperature of 1 deg. Fahr.

TROUVER.

THE BUILDING TRADE

HINTS TO BUILDERS

By J. H. BARNES, F.I.O.B.

APPROXIMATE ESTIMATES (contd.)

Following on the approximate cost of a window a door will be dealt with on similar lines.

External door about 3 ft. by 7 ft. opening.

	£	s.	d.
18 ft. 4 in. by 3 in. deal door frame at 1s. 2d.	1	1	0
19 ft. sup. 2 in. deal door at 3s.	2	17	0
Hinges, lock, &c.	12	0	
Painting, say 6½ yards at 2s. 6d.	16	3	
Arch and lintol, say	8	0	
Threshold	12	0	
	£6	6	3

Deduct.	£	s.	d.
21 ft. sup. 1½ brick wall	2	9	0
21 ft. sup. red facings and pointing at 8d.	14	0	
21 ft. sup. plastering at 2s. 4d. yard	5	5	
Distempering, &c.	1	9	
	£2	16	1

Thus it would seem that the extra cost of an external door over and above the cost of the wall would be about £2 16s. If an imported door were used the cost would be about 25s. less.

The cost of internal partitions per yard could be approximated as follows:—

Slab partitions plastered and distempered complete.	s.	d.
1 yd. sup. 2 in. slab partition	4	6
2 yd. sup. plastering (both sides measured) at 2s. 4d.	4	8
2 yd. sup. distempering (both sides measured) at 9d. per yard sup.	1	6
	10	8

The cost of partition slabs will depend upon the kind specified. If doors are required in these slab partitions the extra cost of these over and above the cost of the partition mentioned above could be arrived at as follows: Cost of internal door, say 3 ft. by 7 ft. opening in slab partition.

	£	s.	d.
18 ft. run 3 in. by 3 in. door frame at 11d.	16	6	
19 ft. sup. 1½ in. deal four panel square framed door, at 2s. 6d.	2	7	6
Hinges, lock, &c.	12	0	
Painting as before	16	3	
Lintol, &c.	2	6	
38 ft. architrave	15	0	

Cost of door £5 9 9

Deduct.	s.	d.
21 ft. sup. 2 in. slab partition at 4s. 6d.	10	6
4½ yd. plastering (both sides measured) at 2s. 4d.	11	1
4½ yd. distempering (both sides measured) at 9d.	3	7
6 ft. run skirting painted, at 10d.	5	0
	1	10 2

Extra cost of Internal Door . . . £3 19 7
If an imported door were used the cost would be about 25s. less.

Roofs.

The approximate cost of a yard super of roofing could be arrived at as follows:—

	s.	d.
Say—2 ft. cube fir in rafters (6 in. by 2 in.)	11	0
9 ft. sup. batten for slating	6	
9 ft. sup. slating (plus, say, 10 per cent. for cuttings), sq. 80/-	8	0
Say, per yd.	19	6

If with 1 in. boarding fixed to rafters under slating battens, add 40s. per square, or 3s. 4d. per yd. If underside of rafters lathed, plastered and distempered, add 4s. 8d. per yd. To the above must be added the cost of roof trusses, purlins, or similar supports to roofing.

APPROXIMATE AND COMPARATIVE COSTS OF FLAT ROOFS PER YARD SUPER.

For Lead Flat.

	£	s.	d.
2 ft. cube fir in joists, &c. (say, 6 in. by 2 in.), 5s. 6d.	11	0	
1 yd. sup. 1 in. boarding	3	8	
1 yd. sup. 5 lb. lead and labour to flat with additional measure for rolls, &c., say, ½ cwt. (82s. cwt.)	2	1	0
3 ft. run deal roll	1	6	

Per yard £2 17 2

For Zinc Flat.

	s.	d.
2 ft. cube fir in joists, &c. (5s. 6d.)	11	0
1 yd. sup. 1 in. boarding	3	8
1 yd. sup. 12 gauge zinc and labour to flat, with additional measure for rolls, &c., say	7	0
3 ft. deal roll	1	6

Per yd. £1 3 2

For Asphaltic Flat on Boarding, &c.

	£	s.	d.
2 ft. cube fir in joists, &c. (5s. 6d.)	11	0	
1 yd. super 1 in. boarding	3	8	
1 yd. super ¾ in. asphaltic in two thicknesses (6s. 3d.), and wire mesh (1s.)	7	3	

Per yd. £1 1 11

Each form of flat roofing will require some kind of skirting, the cost of which should be added to the prices mentioned above. The joists and boarding to carry flats are taken to be the same size for each kind of covering, so that the comparative cost of each can readily be seen, but it should be remembered that in practice the bearers to flat should be calculated in accordance with the span of the flat, &c. It will be observed that the small detailed labours have not been measured, and it is presumed that the prices quoted should cover these.

The advantage of preparing approximate estimates by the square or yard is that it is a simple matter to form a schedule of prices for any straightforward work, and the prices so decided upon are capable of easy revision in the not infrequent event of a change in prices of labour or materials, and no great labour would be involved in keeping your approximate prices up to date, whereas in the case of estimating for buildings by the cubic foot, any small variation in the detail prices would be a somewhat difficult matter to adjust.

A grave objection to preparing estimates for buildings by the cubic foot is that the persons using the prices may after a time forget the basic rate of wages and materials upon which the price was originally founded and thus tend to make the approximate price still less to be relied on.

Cost per Unit of Accommodation.

When an estimate has been prepared for a building it may be necessary to put the figures before the proposed building owners or clients in a form of "cost of per unit of accommodation." This is sometimes done in the case of Hospitals, to show the cost "per bed" and the cost so stated should mention whether the price quoted includes for administration or other block or whether the prices for these are rated separately. Similarly for theatres and such buildings, it is not unusual to be asked for the cost per seat.

A simple method is to divide the cost of the proposed building by the proposed seating accommodation and thus obtain the price per seat. Of course, these figures, would not include the furniture or theatrical fitter.

Repetition in Building Work.

It is not unusual in the case of repetition for the customer to ask if a builder is willing to erect a similar building at the same price per cubic foot as the one he may have just completed, as if it is possible to adjust the figures of lines the customer would save his own cost. The Bills of Quantities required for the preparation of the estimate. Where the premises are exactly identical the method suggested very well be adopted, but it is hardly likely that two buildings would be exactly alike in details of size and site and general construction and any considerable difference in the construction of the building might affect the cost per cubic foot. For instance, if the proposed building is slightly smaller than the building which is to be taken as the basis of comparison, the smaller building might require almost as much labour and material to do the work as the larger building, but they would be spread over a smaller number of cubic feet, and therefore the price per cubic foot may be higher.

On the other hand, if the proposed building were larger than the building which it is proposed to take as a basis, the increased size may require a more expensive system of construction, as stronger girders, thicker walls, &c., and the price per cubic foot may be higher than the one it is desired to take as a basis. In such considerations go to show that it is very unsafe for the builder only to accept comparisons which are based on an estimate prepared from Bills of Quantities measured by a method in the orthodox way.

TRADE NEWS

We have received this quarter's issue of *Shepherd's N.E.W.S.*, published by W. Shepherd & Sons, Ltd., Rochdale. This compact magazine should be of value to all architects, builders as well as actual road contractors. It contains short, pithy and practical articles by authorities on all subjects dealing with the building trade. In this number there are several contributions of interest.

Messrs. Everseal Products, Ltd., of New Works, Goldsmith-street, London, W.C.2, inform us that Messrs. Major & Co., Ltd., have called their attention to the fact that the "Preservol" has been already registered by themselves. In future, therefore, the seal product of that name will be known as Omniseal. The firm ask us to express regret that they should have inadvertently used a name already in use.

Institute of Builders.

The following candidates successfully elected to the Institute of Builders Licentiate examination in May, 1925:—

Messrs. J. M. Atkinson (Leeds); Barnard (Merstham); A. W. Birch (York); W. N. Birch (York); H. C. V. Brown (London); J. E. Cox (London); J. L. I. (Glasgow); R. Eggleton (London); W. Wood (St. Helens); J. S. Groves (London); T. E. Hall (Newton-le-Willows); M. C. (Ilford); T. H. Howard (St. Helens); Laycock (Keighley); W. H. Lee (London); L. V. Luton (Honours in Book-keeping (London); H. A. Maxfield (Waltham Cross); I. E. Meredith (Birmingham); J. A. (St. Helens); C. W. Moore (London); Peacock (London); H. Roberts (Thames Heath); W. A. Y. Sandow (London); Smith (Cardiff); A. Stevenson (Wales); R. D. Teague (Cardiff); M. Ton (Leeds); C. M. Turton (Barnsley); Wheatley (Thornton Heath).

NEW BUILDINGS IN LONDON.

Gate.—A contract has been placed with The Pitcher Construction Co., Ltd., 57, Burton-grove, N.7, for the rebuilding of the on and buildings on the Metropolitan Rail-line. The architect is Mr. C. W. Clarke, r-street Station, W.1.

erton-street.—The new garage, repair and petrol service station will accommodate 350 cars. Work has just started on the by Messrs. F. & H. F. Higgs, Ltd., Herne S.E. The plans have been prepared by s. Edmund Wimperis & Simpson, .B.A., 61, South Molton-street, W.1.

king.—Messrs. Staddon, Ltd., drapers, are ve further extensions made to their business ises in Balham-street. The contractors are s. Harris & Wardrop, 10, Wallwood-street, . The plans have been prepared by s. T. Jay Evans & Son, 1, Newton-street, .

tersea.—Factory premises in Elcho-street, d by Messrs. Aplin & Barrett, and Western ies Creameries, Ltd., are to be extended. architect is Mr. Edgar S. Underwood, .B.A., 3, Queen-street, E.C.4.

esford-square.—Upon the completion of inter season it is expected that the Beres-square Cinema will be closed for extensive rs and improvements. Plans, which in an enlargement of the hall's capacity, have prepared by Mr. Bertie Crewe, 75, Shaftes-avenue, W.1.

shopgate.—The Anglo-American Oil Co., 36, Queen Anne's Gate, S.W.1, have led to build an extensive petrol storage and ce depot in Bishopsgate, E.C.3, and have uded negotiations with the L.C.C. for the ase of a site in Norton Folgate, E.C.3.

ckingham Palace-road.—Excavation of the or foundations for the new "King's Head" c-house is now being carried out by the actors, Messrs. Prestige & Co., Ltd., 149, enor-road, S.W.1. Plans have been pre-l by Messrs. Petch & Fermand, 12, Buck-ingham Palace-road, S.W.1, acting for Messrs. ey, Combe, Reid & Co., Ltd., the owners.

sh Hill Park.—The Edmonton E.C. have ed to build an elementary school, including ties for manual and cookery classes, bly hall, &c., Plans have been prepared Messrs. Talbot Brown & Fisher, Burystead-, Wellingborough.

amberwell.—The L.C.C. have passed plans, nted by Camberwell Productions, Ltd., for tions and additions to the Camberwell re, S.E., including the remodelling of the ing and extension on an adjoining site. have been prepared by Mr. Clifford Aish, edford-street, W.C.2.

herine-street.—Alterations and additions be made to the premises at Nos. 25-27, rine-street, S.W.1, on behalf of the owner, . Barlow. Plans have been prepared by s. Boddy & Dempster, 19, Falace-street,

pton.—Extensions are to be made to the of Messrs. The International Chemical Co., whose factories are in Oxhill-street, E.

london.—The Westminster Bank, Ltd., pro- to build a branch bank on a site at the of The Avenue and Brighton-road. Mr. ddock Perkin, F.R.I.B.A., 25, Alkham- N.16, is the architect.

london.—A large number of houses are to it by Messrs. H. Bacon & Son, Chipstead- ouldson, at a cost estimated at £44,918.

don.—Work is shortly to be put in hand on construction of a new telephone exchange. have been prepared by H.M. Office of , Storey's Gate, S.W.

nton.—Messrs. E. Rodgers & Son, 3, -road, Islington, N.1, have in hand the g of three shops with flat accommodation at Nos. 157, 159, and 161, Fore-street, N.,

the site having been sold by Messrs. Waite & Waite. Plans have been prepared by Mr. W. A. Lewis, A.R.I.B.A., 11, Finsbury-square, E.C.2.

Finsbury-square.—Work has now started on the site at the corner of Finsbury-square and Wilson-street, E.C., where a large block of offices is to be erected for the Maypole Dairy Co., Ltd. The contractors are Messrs. Prestige & Co., Ltd., 149, Grosvenor-road, S.W.1. The plans have been prepared by Mr. W. A. Lewis, A.R.I.B.A., 11-12, Finsbury-square, E.C.2.

Greenwich.—A large site at Maze Hill, Wool- wich, S.E., has been acquired by the governors of the Roan School for Boys, Greenwich, for the building of three proposed new scholastic institu- tions. Estimated to cost £63,000, the new building will accommodate 500 boys and has been designed by Sir Banister Fletcher, F.R.I.B.A., 1, King's Bench Walk, E.C.4.

Holloway-road.—The L.C.C. have decided to make a grant of £21,500 towards the cost, esti- mated at £73,000, of extending the Northern Polytechnic in Holloway-road, N.7. It has been decided to put the work in hand forthwith. The additions, divided into three separate schemes, have been planned by Messrs. T. P. Bennett & Son, 41, Bedford-row, W.C.

Islington.—Alterations and additions are to be made to the premises at the St. Mary's Parish Schools in Andover-row, Hornsey-road, N. Plans have been prepared by Mr. E. J. Harrison, Lic.R.I.B.A., 23, Berkeley-road, Crouch End, N.8.

Kensington.—It was stated in our issue for July 31 that Messrs. J. Greenham, Ltd., of Isleworth, are the builders for the new offices and showrooms for Messrs. John Baker & Co., but we are informed this is an error, as the firm are doing the demolition and excavation work.

Leyton.—A new school to accommodate 300 children is to be erected at Sybourn-street, Leyton, at a cost of £10,000. The contractors are Messrs. F. J. Coxhead, 45, Bulwer-road, E.11, the plans being prepared by Messrs. Newman & Jacques, 61, West Ham-lane, E.13.

Moorgate.—The large corner premises at Moorgate and Lothbury, E.C.2, have been pur- chased by the Caledonian Insurance Co., Ltd., 81, Coleman-street, E.C.2, and a complete recon- struction, including a new story, is proposed. Plans have been prepared by Messrs. A. M. Blomfield & Driver, Grocers' Hall, Princes- street, E.C.2, and the work will be carried out by Messrs. Howell J. Williams, Ltd., 11, Bermondsey-street, S.E.1.

Mortlake.—A new garage is to be erected for Mr. C. A. Benoke, 165, Lower Richmond- road, S.W.14, to plans prepared by Mr. R. B. Rowell, A.R.I.B.A., 5, The Triangle, Upper Richmond-road, S.W. The steelwork will be supplied by Messrs. T. C. Jones & Co., Ltd., 95, Wood-lane, W.12.

Nelson-street.—An application is to be made to the licensing bench for sanction to plans providing for the rebuilding of the "Lord Nelson" public house. Plans have been prepared by Mr. M. T. Saunders, architect to Messrs. Watney, Combe, Reid & Co., Ltd., West- minster.

Oxford-street.—A new building to be used as shops and offices is to be erected on the site at the corner of Oxford-street and Duke-street, W.1. The contractors, Messrs. Higgs & Hill, Ltd., Crown Works, South Lambeth-road, S.W.8, are engaged on the excavation works. The agents are Messrs. Garrett, White & Poland, 17, Hanover-street, W.1.

Poplar.—The Poplar Lending and Reference Library is to be extended at a cost of about £3,500. The contractor is Mr. W. Simms, 137, Brook-street, Stepney.

Regent-street.—Under the direction of H.M. Office of Woods and Forests 112, Regent-street, owned by the Goldsmiths' & Silversmiths' Co., is to be rebuilt. Plans are being prepared by Messrs. North, Robin & Wilsdon, F.R.I.B.A., 35-39, Maddox-street, W.1.

St. Marylebone.—On the large site bounded by St. John's Wood-road, Maida Vale, Aberdeen-

place and Northwick-terrace, W., blocks of self- contained flats are to be erected. Plans are being prepared by the Central London Building Co., Ltd., 24, Grove End-road, N.W.8, who will carry out the building work.

Tottenham.—The plans now approved for the development of the White Hart estate provide for the erection of 346 houses and nine shops. The architect is Mr. G. Topham Forrest, F.R.I.B.A., County Hall, S.E.1.

Tottenham.—New slipper baths are to be erected at the rear of the old Fire Station in Conway-road, N.15, which itself is also to be considerably altered. The contractors are Messrs. H. Knight & Sons, 16, Bruce-grove, N.17.

Tottenham.—An extension is to be erected at the factory at Leswin-place, N.16, owned by Messrs. Price & Co. (Bakers), Ltd., Brixton, S.E.5. Plans have been prepared by Mr. M. W. Hudson, 9, Northumberland-avenue, E.8.

Victoria Park.—Alterations and improvements costing about £12,000, are to be made to the "Morpeth Castle" public house, for Messrs. Truman, Hanbury, Buxton & Co., Ltd. The contractor is Mr. H. V. Clogg, 81, Vallance- road, E.1. The plans have been prepared by Mr. A. E. Sewell, the brewery company's archi- tect, and the quantities by Mr. W. Gilbert, 74, Broad-street-avenue, E.C.2.

Westminster.—Detailed plans and quantities are being prepared by Messrs. Ashley & Winton Newman, 14, Gray's Inn-square, W.C.1, for the erection of the proposed block of tenements in Escher-street, S.W.1, for the Westminster C.C.

Westminster.—Extensive alterations, includ- ing new shop fronts, are to be carried out at No. 129, Victoria-street, S.W.1, by Messrs. Hickman, Ltd., 10, Great Russell-street, W.C.

Westminster.—The steelwork is being erected by Messrs. Dorman, Long and Co., Ltd., 4, Central Buildings, Westminster, S.W., for the large office building in Victoria-street and Arlington-street, S.W.1. The general contractors are Messrs. Holliday & Greenwood, Ltd., Stewart's-road, Battersea, S.W. The architect is Mr. J. Stanley Beard, M.S.A., 52, Baker- street, W.1.

Westminster.—Plans have been prepared by Mr. J. Ninian Cowper, 228, Knight's Hill, S.E.17, for the conversion of the enclosure at the south westerly corner of the nave of West- minster Cathedral into a chapel.

Woolwich.—New erecting shops and machine rooms are to be added to the works in Night- ingale Vale, S.E.18, of Messrs. Lister Bros., engineers. Plans have been prepared by Messrs. Whincop & Channer, 47, Thomas-street, Woolwich.

New Building Crafts School, Liverpool.

The Liverpool Education Committee has re- cently opened a new day school for instruction in the building crafts at the premises in Fontenoy-street which were, until lately, known as the Lord Roberts' Memorial Work- shops. The classes will be attended by appren- tices in the various sections of the building trade, and the programme of instruction will be so shaped as to make students at the end of their course, much more thorough masters of their craft than they could ordinarily hope to become by merely doing the work which falls to the lot of apprentices in the workshops of their masters.

Concrete Sleepers Experiment.

It is stated that one of the leading railway groups is negotiating for the purchase of concrete sleepers with which to experiment on a stretch of main line out of London. The new sleeper consists of two blocks of concrete joined together by a tie-rod of mild steel, each block is 24 in. long and 7 in. thick, and holds three plugs to take the screws of the chair carrying the rail. The chair rests on a layer of felt, and the inventor claims that this deadens the noise to a considerable extent.

OLD MONUMENTS.

THE fifth list of monuments prepared by the Commissioners of Works in pursuance of Section 12 of the Ancient Monuments Consolidation and Amendment Act, 1913, has been published by His Majesty's Stationery Office, from whom it may be obtained at Adastral House, Kingsway, W.C.2, or through any bookseller, price 3d. net. These are monuments of which the preservation is a matter of national importance, and they include the following:—

ENGLAND.

BUCKINGHAMSHIRE.—Ickford Bridge.
CHESHIRE.—Baguley Hall, Northenden.
CUMBERLAND.—Hardknot Castle, Roman fort, Birker; Old Penrith (Voreda) Roman fort, Plumpton; Barnscar British Settlement, Muncaster; Shouthwaite Gill hill fort, near Thirlmere; Old Carlisle Roman fort, Wigton.

DEVONSHIRE.—Sourton Down Cross; Holne New Bridge; Fingle Bridge, Drewsteignton; Bideford Bridge; Beckford Bridge, Membury; Lambert's Castle, Hawkhurst.

DORSETSHIRE.—Shaftesbury Abbey; the Conduit Cross, Sherborne; Stalbridge Cross; "Rolls" Bridge, Sturminster Newton; Fifehead Neville packhorse bridge; St. Aldhelm's Chapel, Purbeck; Powerstock Castle; Crawford Bridge, Spettisbury; St. Julian's Bridge, Wimborne; the site of Cerne Abbey, including the gatehouse, guest house, wine house and barn, Cerne Abbas; the Helstone burial chamber, Portesham; Abbey Barn and dovecot, Abbotsbury; Rufus Castle, Portland; Wool Bridge; Bindon Abbey, Wool; Holme Bridge, East Stoke; St. Martin's Church, Wareham; Preston Roman Villa; Preston footbridge.

HUNTINGDONSHIRE.—St. Ives Bridge; Wansford Bridge; St. Neots Bridge; Alconbury Bridge; Spaldwick Bridge; Nun's Bridge, Huntingdon; Huntingdon Bridge.

LANCASHIRE.—Eadsford (or Edisford) Bridge, Clitheroe; Cartmel Priory Gatehouse; Wraysholme Tower, Ulverston; Urswick British settlement; Gleaston Castle; Piel Castle, Piel Island, Barrow-in-Furness; Castle Hill, Pennington; Newby Bridge, Colton.

LEICESTERSHIRE.—Belgrave Bridge, near Leicester; the Raw Dykes, Aylestone, Leicester; Anstey packhorse bridge.

LINCOLNSHIRE.—The Newport Arch, Lincoln.

NORFOLK.—Castle Hill, Hunworth; Buckenham Priory and Castle site; the Gate House at Manor House, East Barham; Drayton Wayside Cross; Horsford Castle; Gresham Castle; Baconsthorpe Castle; Mileham Castle; Great Yarmouth Town Walls and Towers.

NORTHAMPTONSHIRE.—Geddington Bridge; Charwelton Bridge.

NORTHUMBRIA.—Section of Roman Wall east of Heddon on the Wall; section of Roman Wall east of Denton Burn, East Denton.

NOTTINGHAMSHIRE.—Margidunum, Roman station, East Bridgford.

SOMERSETSHIRE.—Bury Bridge, Dulverton; the Tithe Barn, Preston Plucknett; Congresbury Cross; Market Cross, Somerton; Castle Neroche, Culland; Market Cross, Cheddar; the Tithe Barn, Glastonbury; the Tithe Barn, Douling, near Shepton Mallet; Bishop's Tithe Barn, Wells.

SUFFOLK.—Eye Castle; Brandon Bridge; Market Cross, Mildenhall.

SUSSEX.—Stopham Bridge, Pulborough; the Land Gate, Rye; the Strand Gate, Winchelsea; the Ferry Gate, Winchelsea; the New Gate, Winchelsea.

WARWICKSHIRE.—Water Orton Bridge; Cook-street Gate, Coventry; Caludon Castle, near Coventry; Clopton Bridge, Stratford-on-Avon; Biddford Bridge; Furnace End Bridge, Shustoke; Colehill Bridge; Huningham Bridge; Perry Bridge, Handsworth; Castle Hills Castle, Fillongley; Polesworth Bridge; Marton Bridge.

WESTMORLAND.—Castlesteads British settlement, the Helm, near Kendal; Scalford British settlement, near Kirkby Lonsdale; Millrigg British settlement, Kentmere; Huggill British settlement, near High Borran; Eweclose British settlement, Crosby Ravensworth.

YORKSHIRE.—Catterick Bridge, Brough; Wakefield Bridge; Town End Bridge, Sowerby; Old Bridge over the Hebben Water, Hebben Bridge; Yarm Bridge; Beggar's Bridge, Glaisdale; Thorsgill Beck packhorse bridge, Barnard Castle; Greta Bridge, Rokeby; Kildwick Bridge; Tanfield Bridge, West Tanfield; Wensley Bridge; Romanby packhorse bridge; Rotherham Old Bridge.

WALES.

CARMARTHENSHIRE.—Carmarthen Castle (ancient portions).

CARNARVONSHIRE.—Carnarvon Town Walls.

MONMOUTHSHIRE.—Usk Castle (unoccupied portions).

MONTGOMERYSHIRE.—The Old Town Hall, Llanidloes.

PEMPROKESHIRE.—St. Patrick's Chapel, St. David's; St. Non's Chapel, St. David's; St. Justinian's Chapel, St. David's; Pembroke Town Walls; the Gatehouse known as Porth y Twr, St. David's; Haverfordwest Priory; the Close Wall, St. David's.

SCOTLAND.

WIGTOWNSHIRE.—Teroy broch, Craigcaffie, Inch; Invernesside, Inch; Boreland mote, Kirkcowan; Ring Hill fort, North Balfern, Kirkcubbin; High Drummore mote, Kirkcubbin; "Doon of May" vitrified fort, May; Cruise Back Fell fort, Upper Galdenoch; "Cairn Kenny" chambered cairn, High Murdoonoch; Bennan of Garvilland fort, New Luce; Stairhaven broch, Old Luce; Skaithe mote, Penninghame; Cairn Pat hill fort, Port Patrick; Doon Castle, broch, Ardwell; Torhousekie fort, Wigtown; "Castle Feather" fort, Burrow Head, Whithorn; "Burrow Head forts, Whithorn.

THE NEW LAW OF PROPERTY.*

Few people except lawyers realise the change that is taking place in the law relating to land. Mr. Topham commenced his first edition of *The New Law of Property* with these words: "The law relating to land has been entirely changed by the Law of Property Act, 1922." The reason for a new edition is made apparent by the first paragraph in the introduction, for the author has to say, "The law relating to land was entirely changed by the Law of Property Act, 1922," and then to explain that since that Act was passed the law of property has been codified in six statutes all bearing date this year, viz., The Law of Property Act, 1925; The Settled Land Act, 1925; The Land Registration Act, 1925; The Land Charges Act, 1925; The Administration of Estates Act, 1925, and The Trustee Act, 1925. This mass of legislation recalls to our mind a line in a nursery rhyme, "Wasn't that a dainty dish to set before a king?" for the Law of Property Act, 1925, which practically takes the place of that of 1922, consists of 209 sections and seven schedules; the Settled Land Act, 1925, of 120 sections and five schedules, and the Trustee Act, 1925, of 71 sections and two schedules.

It is hardly surprising that the author, in his preface, remarks, "The whole legal profession, except those who specialise in branches of law unconnected with property, must now become students again." Consolidating Statutes have many drawbacks as well as advantages; for instance, we consider it highly advantageous when legislating on such subjects as Workmen's Compensation, Factories, etc., to consolidate the law as soon as possible, giving those concerned in such domestic legislation one code which they can consult without the endless references to still partly existing Statutes, but even then the drawback may be that by a slight alteration used in the wording of the sections in the consolidating statute, the effect of decided cases may be rendered uncertain. This, however, can be avoided by adhering to the original wording of sections not repealed, a fact the draftsman sometimes loses sight of. Such wholesale consolidation of the law as has taken place in the above six statutes is quite unprecedented, and future generations may reap some benefit, but the layman turning for advice to his "student" legal adviser may have some misgivings on the costs involved by both teaching the law by affording practice as well as receiving instruction or advice upon it. The present edition of this work follows the same lines as that adopted in the first edition, and it is unnecessary for us in these pages to say more than if anyone is qualified to explain this mass of legislation no one can be better qualified than the Author. This work forms the fifth edition to his "Law of Property"; to his qualification as a writer on the subject he adds those of a Reader or teacher of the Law for the Council of Legal Education at the Inns of Court, and he was a member of the Sub-Committee appointed by Lord Birkenhead to take some part in bringing about the reforms embodied in the Law of Property Act.

We notice on his title page the author retains the reference to the "changes effected by the Law of Property Act, 1922." The greater portion of this Act has been repealed by the Law of Property Act, 1925, and we imagine those sections of the Act of 1922 which in the seventh schedule of the Act of 1925 are stated to be retained will be found to be repealed in one or other of the six consolidating statutes. It is certainly so in some cases, but we have not been able to go into this question exhaustively. In our ignorance we should have been glad if the author had

* Second Edition, being a Fifth Edition of "Topham's Real Property" (An introductory explanation of the Law Relating to Land), showing the changes effected by the Law of Property Act, 1922, and the six new Consolidating Statutes. By ALFRED F. TOPHAM, LL.M., K.C., formerly Whewell Scholar and Chancellor's Maillist in the University of Cambridge; Reader in the Law of Real Property and Conveyancing to the Council of Legal Education. (London: Butterworth & Co.) 1925. 15s. net.

dealt with this point in his introductory marks, for without going through the text it is difficult to ascertain at a glance whether or not any portion of the Property Act, 1922, remains in force. Perhaps as they are consolidating Statutes the author has not considered the point obvious, but a practitioner, consulting the Acts themselves, will at the outset be confronted with this culty and in the admirable index to volume we cannot find any reference under heading "Repeal."

PATENTS.

APPLICATIONS PUBLISHED.*

235,631.—R. T. Piscicelli: Slab building.
236,652.—R. W. Spencer: Pipe joints.
235,665.—Leabank Manufacturing Co., Ltd. and F. W. Kent: Garages, railway and vehicles.

235,671.—C. Fitzsimon, jun.: Moulding concrete blocks.

235,703.—F. J. Harrington and C. P. Harrington: Method of and apparatus for constructing temporary models of survey in relief.

235,713.—J. G. Fleming and D. K. Edge: Portable buildings.

235,714.—A. J. Hodgkinson: Pre-cast concrete blocks for reinforced concrete structures and buildings.

235,729.—R. R. Downie and Keystone Driller Co.: Excavating machines.

235,735.—A. A. Byrd: Monolithic concrete building construction.

235,757.—E. Canz: Work-benches, cut surfaces or blocks.

235,766.—W. J. Taylor and C. W. Cayle: Scaffolding and staging.

234,863.—Victaulic Co., Ltd., and F. Johnson, and H. R. Morgan: Spigot and socket pipe joints.

234,865.—J. Parsons: Building of houses.

234,987.—R. R. Gordon-Barrett: Windows.

235,005.—G. A. Ure: Domestic boiler places.

235,006.—J. A. Eriksson: Method for manufacturing porous concrete.

235,033.—A. H. Richards: Drains.

235,067.—W. K. Couch: Block flooring.

235,080.—R. H. Kirk and H. Martin: Equipment for the manufacture of concrete paving flags or slabs.

236,604.—T. White & Sons, Ltd., and White: Sandpapering machines.

236,625.—F. Von Niedmann: Locks.

236,676.—L. J. Hancock and Hancock Co. (Engineers), Ltd.: Blowpipe machines cutting metal.

236,732.—M. Bretos Y Claveria: Folding doors and shutters.

236,746.—Hume Pipe Co. (Australia), Ltd. and W. R. Hume: Manufacture of concrete slabs.

236,809.—G. H. Shaw: Casement window frames.

236,838.—O. F. V. Piper and C. D. S. Door stops, buffers, or silencers.

236,878.—T. White & Sons, Ltd., and White: Sandpapering machines.

236,879.—T. White & Sons, Ltd., and White: Sand-papering machines.

236,050.—J. Radcliffe: Road making.

236,259.—Sir E. Airey: Construction of concrete buildings and pillars or piers therefor.

236,262.—S. G. Turner: Briquette or loading machine.

236,278.—J. Temperley: Concrete and mixers.

236,279.—J. Allen & Sons (Oxford) Ltd. E. H. Stevenson: Apparatus suitable distributing road-binding liquid on to a road.

236,311.—R. Hickton and W. Baggett: Dies on pug-mills.

236,322.—L. Grote: Furnaces for kiln the production of cement.

* All these applications are now in the state which opposition to the grant of Patents upon may be made.



NEW COMPANIES

THE particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116, & 119, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

JACOB WARD & SONS, LTD. (206,548). Registered June 10. Springfield Saw Mills, Oswaldtwistle, Lancs. Joiners, contractors, &c. Nominal capital, £3,500.

NEW AVENUE ESTATE CO. (LAINDON), LTD. (206,530). Registered June 9. 618, Romford-road, Manor Park, E.12. Builders and contractors, &c. Nominal capital, £1,000.

W. MOONEY & SONS, LTD. (206,466). Registered June 5. 11, Manestys-lane, School-lane, Liverpool. General builders and contractors. Nominal capital, £5,000.

LESLIES (BLACKPOOL), LTD. (206,454). Registered June 5. 37 and 37A, Clifton-street, Blackpool. Builders, furnishing and general ironmongers, outfitters and hardware dealers, &c. Nominal capital, £2,000.

AMERSHAM BRICK & TILE CO., LTD. (206,445). Registered June 5. Brick and tile manufacturers, &c. Nominal capital, £1,000.

STURBRIDGE BRICK CO., LTD. (206,442). Registered June 4. To acquire the premises of the Sturbridge Brick Co., and to carry on the business of brickmakers, &c. Nominal capital, £2,000.

WILLIAM KAY & CO. (MANCHESTER), LTD. (206,402). Registered June 3. 95, Corporation-street, Manchester. Builders' merchant. Nominal capital, £3,500.

W. SMITH (WOODTURNERS), LTD. (205,436). Registered June 4. 99, Rockingham-lane, Sheffield. Woodturners, joiners, builders and contractors, &c. Nominal capital, £1,000.

CANTLEY, DEAN & GUNNING, LTD. (206,370). Registered June 3. The Tile and Marble Works, Davigdor-road, Hove. Builders and contractors, &c. Nominal capital, £10,000.

NORWOOD GREEN ESTATES, LTD. (206,356). Registered June 2. Broadway Chambers, South-road, Southall. Builders, contractors, &c. Nominal capital, £6,000.

ANDERSON, ARMSTRONG & CO., LTD. (206,332). Registered June 2. 13, Upton-lane, Forest Gate, E.7. Building contractors, &c. Nominal capital, £700.

GODDARD & SON (BUILDERS), LTD. (206,787). Registered June 22. 36, Camomile-street, Bishopsgate, E.C.3. Builders, builders' merchants, &c. Nominal capital, £3,000.

D. & J. RANKEN, LTD. (206,810). Registered June 23. Builders and contractors. Nominal capital, £8,000.

NOEL REES, LTD. (206,813). Registered June 23. 21, College-hill, E.C.3. Manufacture and deal in concrete slabs, blocks, tiles, &c. Nominal capital, £2,600.

SOUTHERN COUNTIES BUILDING CO., LTD. (206,892). Registered June 26. 91, High-street, Chatham. Builders, contractors, &c. Nominal capital, £1,000.

RUGBY PORTLAND CEMENT CO., LTD. (206,971). Registered June 30. Cement and lime manufacturers and dealers. Nominal capital, £120,000.

PETERS & EVANS, LTD. (206,838). Registered June 24. Old Park-avenue, Enfield, Middlesex. Builders and general contractors, &c. Nominal capital, £100.

OLD TIMES CONSTRUCTION CO., LTD. (206,860). Registered June 25. Under Elm, Lay-lane, Kingsbury, N.W.9. Builders, decorators, contractors, &c. Nominal capital, £50.

WARREN & CO. (WANSTEAD), LTD. (206,973). Registered June 29. Cambridge Park, Wanstead. Builders, contractors, &c. Nominal capital, £500.

R. D. LOWN & SONS, LTD. (206,958). Registered June 29. 12, Ashbrook-road, St. John's Villas, Upper Holloway. Builder, &c. Nominal capital, £5,000.

W. A. WRIGHT (SHEFFIELD), LTD. (206,688). Registered June 17. Builder and public works contractor. Nominal capital, £100.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	C'pters. Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers
Aberdare.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3 1/4
Accrington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Altrincham.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3 1/4
Ashton-under-Lyne.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3 1/4
Barnsley.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Barrow-in-Furness.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Barry.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Bath.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bedford.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Birkenhead.....	1/9	1/9	1/8 1/2	1/9	1/9	1/9	1/9	1/4
Birmingham.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3 1/4
Bishop Auckland.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3 1/4
Blackburn.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Blackpool.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Bolton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Bournemouth.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bradford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Brentwood.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Brightwater.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Brighton.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bristol.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Burnley.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Burton-on-Trent.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Bury.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Cambridge.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Cardiff.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Chatham.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Chelmsford.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Cheltenham.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Chester.....	1/5	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Chesterfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Colchester.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Coventry.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Crawley.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Darlington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Derby.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Doncaster.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Dudley.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Durham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
E. Glam. (Mon. Vall.).....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Eastbourne.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Exeter.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Folkestone.....	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/1 1/2
Gloucester.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Grantham.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Grays.....	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/3 1/4
Grimby.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Great Yarmouth.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Guildford.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Hallifax.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Harrogate.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Hartlepool.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Hastings.....	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/1 1/2
Hereford.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Huddersfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Hull.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Ipswich.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Launceston.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Leamington Spa.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Leeds.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Leicester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Lichfield.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Lincoln.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Liverpool.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Llanelli.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
London (12 m. radius).....	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
Loughborough.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Luton.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Maidstone.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Manchester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Manfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Merthyr Tydfil.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Middlesbrough.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Newcastle-on-Tyne.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Newport Mon.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Northampton.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Norwich.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Nottingham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Oakham.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Oldham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Oxford.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Plymouth.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Pontypridd.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Portsmouth.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Preston.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Reading.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Rochdale.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Rochester.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Rugby.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
St. Albans.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
St. Helens.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Scarborough.....	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/2 1/2
Sheffield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Shrewsbury.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Southampton.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Southend-on-Sea.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Southport.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
South Shields.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Stockport.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Stockton-on-Tees.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Stoke-on-Trent.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Stroud.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Sunderland.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Swansea.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Swindon.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Taunton.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Torquay.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Tunbridge Wells.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Wakefield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Walsall.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Warrington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
West Bromwich.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Wigan.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Windsor.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4
Wolverhampton.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Worcester.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
York.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/4

SEPTEMBER 10.—Carrigaholt.—STATION.—For the Siochana at Carrigaholt, Co. Clare, for the Commissioners of Public Works. J. J. Healey, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

SEPTEMBER 10.—Llantrisant and Llantwit Fardre.—HOUSES.—56 houses at Tonteg, road and sewer work connection with the layout of the site. 42 houses at Llantrisant, road and sewer work in connection with the site, for the R.D.C. Thomas & Morgan & Partners, architects and engineers, 23, Gelliwastad, Pontypridd. Deposit £5.

SEPTEMBER 10.—London.—PAINTING.—For internal painting at the British Museum, and external painting of No. 39, Russell-square, W.C. Contracts awarded to H.M. Office of Works, King Charles-street, W.1. Deposit £1 1s. (cheques payable to the Commissioners).

SEPTEMBER 10.—Poulton-le-Fylde.—HOUSES.—Four houses, in pairs, on the Big Field housing site, Lower end, for the U.D.C. Ernest Prescott, Surveyor to the Council, Council Offices, Poulton-le-Fylde, Blackpool. Deposit £1 1s.

SEPTEMBER 10.—Rowley Regis.—HOUSES.—(a) Erecting 30 parlour type houses (four blocks of four each and seven blocks each semi-detached), sewerage, drains, &c. (b) Erecting 22 non-parlour type houses (two blocks each semi-detached), road, footpath, &c. Clerk, Council House, Old Hill, Rowley Regis.

SEPTEMBER 10.—Various Districts.—REPAIRS.—Execution of ordinary works, and repairs to buildings in the charge of the Commissioners, H.M.O.W. Contracts awarded to H.M. Office of Works, King Charles-street, S.W.1. Deposit 10s. 6d. in respect of each district (cheques payable to the Commissioners).

SEPTEMBER 11.—Ballinrobe.—RESTORATION.—Of a portion of the old military barracks at Ballinrobe, Co. Mayo, for the Commissioner of Public Works. J. J. Healey, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

SEPTEMBER 12.—Halifax.—BUILDING.—Sale Ring at new auction mart, Victoria Cattle Market, for the B. Borough Engineer. Deposit £1 1s.

SEPTEMBER 14.—Adwick-le-Street.—ELECTRIC LIGHTING.—Internal wiring for electric lighting of council houses, for the U.D.C. W. M. Selvey, consulting engineer, Independent Buildings, Sheffield.

SEPTEMBER 14.—Bedwas and Machen.—HOUSES.—Twenty semi-detached parlour type houses and the completion of roads and sewers on a site near the pools at Maesycwmmer, for the U.D.C. Housing Committee, Council Offices, Bedwas. Deposit £3 3s.

SEPTEMBER 14.—London.—BUILDING.—For the erection of two blocks of dwellings: (a) on the Wapping estate, (b) on the Holland estate, Spitalfields, for the C.C. The Architect of the Council, the County Hall, London No. 3, Westminster Bridge, S.E.1. Deposit in respect of each block.

SEPTEMBER 14.—London, N.W.—The following works for the Hendon U.D.C.:—(1) Public convenience joining "The Castle" P.H., Hermitage-lane, Hendon, N.W.2; (2) alterations to miniature rifle range and new convenience, Child's Hill, Recreation Ground, N.W.2. Mr. A. O. Knight, A.M.I.C.E., Engineer to the Council, Town Hall, Hendon, N.W.4.

SEPTEMBER 14.—Manchester.—BUILDING WORK.—Building work, including all trades, in the superstructure of the Company's new offices, situate on the east side of King-street, Manchester. F. A. Eyre, Secretary, Manchester Ship Canal Co., 41, Spring Gardens, Manchester.

SEPTEMBER 14.—Manchester.—OFFICES.—Superstructure of the Company's new offices, situate on the east side of King-street, for the Ship Canal Co. H. S. Thurston, A.R.I.B.A., architect and surveyor, 14, Newry-lane, Spring-gardens. Deposit £2 2s.

SEPTEMBER 14.—Rotherham.—HOUSES.—Thirty houses on the East Dene estate, for the C.B. S. A. Broadhead, architect, Devonshire House, Moorgate. Deposit £2 2s.

SEPTEMBER 15.—Borris.—RESTORATION.—Of Borris R.I.C. Barracks, Co. Carlow, for the Commissioners of Public Works. J. J. Healey, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

SEPTEMBER 15.—Gedstene.—HOUSES.—Twenty-four "A" houses at Harrow-road site, Warrington, for the R.D.C. S. F. Evershed, L.R.I.B.A., surveyor, 14, Bank Chambers, Oxford. Deposit £3 3s.

SEPTEMBER 15.—Hursley.—PAINTING.—External painting of 44 houses at Fryern Hill, Chandler's Ford, for the R.D.C. J. P. Game, surveyor.

SEPTEMBER 15.—London.—CONVENIENCE.—Certain works in connection with the erection of the new underground sanitary conveniences, and renewals of existing works, &c., at the Institution, Shepherdess-walk, City-road, N.1, for the Guardians of the Poor of Holborn Union. Clerk to the Guardians, Administrative Offices, 53, Clerkenwell-road, E.C.1. Deposit £1.

SEPTEMBER 15.—Wands worth.—HOUSES.—On South-west housing estate. (a) Group of 40 houses, (b) two flats. On Furzedown housing estate, (c) group of 43 houses, (d) group of 68 houses; (e) group of 58 houses, for the B.C. G. I. and H. B. Elkington, architects, 14, Oak House, 7, Laurence Pountney-hill, Cannon-st. E.C.4. Deposit £2 2s. each.

SEPTEMBER 15.—Wath-on-Deane.—ADDITIONS.—Additions to Wath-on-Deane Victoria Council School, for the West Riding E.C. Education Department, Ry Hall, Wakefield.

SEPTEMBER 16.—Hatch, near Basingstoke.—Erection of a pair of cottages for Roadmen, for the Southern C.C. Mr. A. L. Roberts, County Architect, The Guild, Winchester.

SEPTEMBER 16.—Mansfield.—SCHOOL.—For erection of a new Central School for 720 children, at Higham, Nottingham. Borough Engineer and Surveyor, Market-street, Mansfield. Deposit £2 2s.

SEPTEMBER 16.—Ormskirk.—HOUSES.—Forty houses on the Tank-lane site, for the U.D.C. W. Chadwick, Surveyor. Deposit £2 2s.

SEPTEMBER 16.—Sunderland.—HOUSES.—Erection of 78 four-roomed houses and 58 three-roomed houses at the Spark Farm estate, under the terms of the Housing (Financial Provisions) Act, 1924, for the County Borough. Borough Engineer's Office, Town Hall. Deposit £2 2s.

SEPTEMBER 18.—Southport.—BUILDINGS.—Block of new buildings and extensions to existing Art Gallery, at the corner of Eastbank-street and Sharrock-street, for the C.B. A. E. Jackson, Borough Engineer. Deposit £3 3s.

SEPTEMBER 18.—West Riding.—POLICE STATION.—Erection of new Police Station at Saddleworth (Upper-mill), near Oldham. Percy O. Platts, A.R.I.B.A., County Architect, County Hall, Wakefield.

SEPTEMBER 19.—Abergavenny.—ADDITIONS.—Carrying out proposed alterations and additions at King Henry VIII. Grammar School, for the Monmouthshire E.C. J. Bain, F.R.I.B.A., County-hall, Newport. Deposit £1 1s.

SEPTEMBER 19.—Bolton.—EXTENSIONS.—To Townleys Hospital, and improvements at the Fishpool Institution, Farnworth, near Bolton, for the B.G. J. Ward, architect, 24, Mawdsley-street. Deposit £3 3s.

SEPTEMBER 19.—Cranbrook.—RENOVATIONS, &c.—To the Isolation Hospital, including additional ward accommodation for twelve beds, administrative and nurses' quarters, central heating, drainage, &c., for the Cranbrook and Tenterden Joint Hospital Committee. Eric Clarke, Clerk to the Board. Deposit £2 2s.

SEPTEMBER 22.—Headington.—HOUSES.—Erection of 24 houses on the Barton-road, for the R.D.C. Mr. W. Page Webb, architect and surveyor, 23, High-street, New Headington, Oxford. Deposit £2 2s.

SEPTEMBER 22.—Mexborough.—HEATING.—Heating of the Technical Centre premises, for the West Riding E.C. Education Department, County Hall, Wakefield.

SEPTEMBER 23.—Wanstead.—SCHOOL.—For the erection of a secondary school, for the Essex County Council. The County Architect, Springfield Old Court, Chelmsford. Deposit £2 2s.

SEPTEMBER 28.—Durham.—ADDITIONS, &c.—To Haverton Hill Council school, for the Durham C.C. Mr. F. Willey, F.R.I.B.A., architect, 34, Old Elvet, Durham.

SEPTEMBER 28.—London, N.W.—Development of new housing estate at Hendon, for the L.C.C. Administrator of Housing Development Schemes, Old County Hall, Spring-gardens, S.W.1. Deposit £10.

NO DATE.—Alloa.—HOUSES.—120 houses, for the T.C. Jas. Cuthbert, Town Clerk.

NO DATE.—Borhill.—HOUSES.—Twenty-five blocks, comprising 104 houses at Union-street, for the D.C. of the Dunbartonshire C.C. J. Weekes, architect, 88, College-street, Dumbarton.

NO DATE.—Rowlands Gill.—BUILDINGS.—At Derwent Farmers' Auction Mart, Rowlands Gill. A. H. Borthwick, "Whitewell," Rowlands Gill.

MATERIALS. etc.

AUGUST 31.—Huyton-with-Roby.—KERBING.—Supply of 700 lineal yards of 12 in. by 6 in. concrete kerbing delivered to Huyton railway station. H. Finister, P.A.S.I., Surveyor, Public Offices, Huyton.

SEPTEMBER 1.—Portsmouth.—MATERIALS.—Ballast, sand grit, paints, varnishes and Portland cement, for the Corporation. Engineer.

SEPTEMBER 2.—Aldershot.—ROOFING SLATES.—Supplying to the B.C. of certain roofing slates for housing scheme No. 4. Mr. James Neave, Borough Surveyor, Municipal Buildings, Aldershot.

SEPTEMBER 4.—Merthyr Tydfil.—MATERIALS.—Cement, lime, slates, bricks, sewer pipes, limestone, and tarred macadam, paving stone, &c., for the C.B. Borough Engineer.

SEPTEMBER 5.—Sleaford.—GRANITE.—Granite, slag, and gravel for the R.D.C. Clerk.

SEPTEMBER 5.—York.—MATERIALS.—Stoneware pipe, stone flags, kerb and edging, building lime, and whinstone chippings for the T.C. F. W. Spurr, City Engineer.

SEPTEMBER 7.—Stoke-on-Trent.—MATERIALS.—Portland cement, blue paving bricks and common bricks, sanitary pipes and gullies, setts and kerbs, macadam, chippings and sand, cast iron work, and paints and oils, for the T.C. Town Clerk.

SEPTEMBER 10.—Darlington.—MATERIALS.—Sanitary pipes, &c., concrete kerb, flagging, &c., whinstone, slag, slag bricks, paving bricks, cement, lime, iron and steel ware, cast-iron pipes, for the C.B. Borough Surveyor and Water Works Engineer.

SEPTEMBER 11.—Durban.—MATERIALS.—Steel, cast-iron pipes and specials, and sluice and air valves, for the T.C. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

SEPTEMBER 15.—London.—FENCING.—Fencing materials for the Madras and Southern Mahratta Railway Co. Directors, 25, Buckingham Palace-road, S.W.1. Charge £1 1s.

SEPTEMBER 17.—South Africa.—FOOTBRIDGE.—Supply and delivery only of structural steel and woodwork for a footbridge at Nottingham-road, Natal Province, the approximate weight of the material being 37 tons. 35, Old Queen-street, S.W.1.

ENGINEERING. IRON AND STEEL.

AUGUST 31.—Bedwas.—BRIDGES.—(1) Reconstructing, rebuilding and repairing the abutments and centre pier of Pwll-y-Pant Bridge, Bedwas, and making the approach roads and platform thereto, for the U.D.C.; (2) supplying material for and erecting a steel bridge on prepared stonework, for the U.D.C. The Surveyor to U.D.C. Council Offices, Bedwas.

AUGUST 31.—Carlisle.—BRIDGE.—Reconstruction and improvement of St. Nicholas Bridge; the work comprises the reconstruction and widening of five bridge spans carrying the road over the railways, also the widening of the road, and includes the building of all

new retaining walls, abutments and buttresses, the complete formation of the new road surface, and raising of all approaches. Henry C. Marks, M.Inst.C.E., City Engineer and Surveyor, 18, Fisher-street, Carlisle. Deposit £2 2s.

AUGUST 31.—Southampton.—REPAIRS.—Widening of the following small bridges:—(1) Shawford canal bridge and culvert on the Shawford-Twyford main road, near Shawford station; (2) Holmsley county bridge, on the Southampton-Bournemouth-Exeter main road, near Holmsley Station (Southern Railway); (3) Somerford Bridge, at the junction of the Southampton-Bournemouth main road with the Lympington-Christchurch main road, about 1½ miles east of Christchurch; (4) Humphreys bridge, on the Lympington-Christchurch road main, about one half-mile east of Somerford Bridge; (5) Huckles Brook County Bridge on the Christchurch-Ringwood-Salisbury main road, about 2½ miles south of Fordingbridge, for the C.C. W. J. Taylor, County Surveyor, Winchester. Deposit £1 1s. each.

SEPTEMBER 7.—Essex.—RECONSTRUCTION.—Of Causeway bridge carrying the road from Aveley Village to Stonehouse-lane Corner over the River Mardyke, in the parishes of Aveley and West Thurrock, for the C.C. W. H. Morgan, Chartered Civil Engineer, County Surveyor, Old Court, Chelmsford.

SEPTEMBER 9.—Rotherham.—FILTERS, &c.—Labour and materials required in the construction of three percolating filters 54 ft. 6 in. diameter, precipitation tanks, Humus tanks, engine house and pump well, sludge drying beds, and alterations to existing works for the R.D.C. C. O. Rawstron, Engineer and Surveyor, Engineer's Office, Grove-road, Moorgate, Rotherham, August, 1925.

SEPTEMBER 9.—Rotherham.—FILTERS, &c.—Labour and materials required in the construction of two percolating filters 24 ft. diameter, tanks, sludge beds, store house, &c., for the R.D.C. C. O. Rawstron, Engineer and Surveyor, Engineer's Office, Grove-road, Moorgate, Rotherham. Deposit £1 1s.

SEPTEMBER 16.—Cornwall.—BRIDGE.—Construction of a large floating bridge propelled by steam for use on ferry service between Devon and Cornwall, for the C.C. W. L. Platts, Clerk of the County Council, County Hall, Truro. Deposit £2 2s.

SEPTEMBER 16.—London, W.C.—Supply and erection of a steel chimney at Somerset House, Strand, W.C. Contracts awarded to H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

SEPTEMBER 21.—Hong Kong.—HARBOUR CROSSING.—The Crown Agents for the Colonies, acting on behalf of the Government of Hong Kong, invite tenders from experienced and approved firms for the construction of two lines of steel pipe main across Hong Kong Harbour, between Kowloon and the city of Victoria, with all works in connection therewith. The Crown Agents for the Colonies, Z Department, 4, Millbank, Westminster, S.W.1. Deposit £5.

OCTOBER 1.—London.—STEELWORK.—Structural steelwork for wagon shop, Perambur, for the Madras and Southern Mahratta Railway Co. Directors, 25, Buckingham Palace-road, S.W.1. Charge £1 1s.

ROAD, SEWERAGE, AND WATER WORKS.

AUGUST 31.—Horsted Keynes.—ROAD.—Making of a road and footpaths at the Holy Well pumping station in Keyford-lane, for the Mid-Sussex Joint Water Board. H. S. Gudson, Clerk to the Mid-Sussex Joint Water Board, Bolto-road, Haywards Heath.

AUGUST 31.—Ilfracombe.—RESEALING.—Resurfacing of approximately 15,000 yds. super. of roads, in four sections. Council's Engineer and Surveyor, Town Hall.

AUGUST 31.—Ilfracombe.—ROADS.—Making of roads in connection with the Highfield Housing scheme, for the U.D.C. Council's Surveyor, Town Hall.

AUGUST 31.—Nuneaton.—STREET WORKS.—Completion of the street works comprised in the various roads on the Attleborough Housing Estate, for the Town Council. Borough Engineer and Surveyor, Municipal Offices, Nuneaton. Deposit £2 2s.

AUGUST 31.—Ossett.—FOOTPATHS.—Concreting the footpaths at the Northfield-road, Sowood-avenue, Wilson's-avenue, and Manor-road and Teal-street housing sites, and for providing and laying concrete edging, for the Corporation. Borough Surveyor, Town Hall, Ossett.

AUGUST 31.—Penarth.—KERBING.—Providing and laying artificial stone kerbing on the Cornerswell Farm, for the U.D.C. Edgar I. Evans, Surveyor.

AUGUST 31.—Rochester.—SEWERS.—Construction of stoneware pipe sewers and other relative works included in Contract No. 3. The works included in the contract comprise the laying of approximately 6,543 lineal yards 7 in. sewers, 2,059 lineal yards 9 in. sewers, 2,244 lineal yards 12 in. sewers, 356 lineal yards 15 in. sewers, and 92 lineal yards 18 in. sewers, and the necessary manholes and subsidiary works. William Law, A.M.I.C.E., City Surveyor and Engineer for the Sewerage scheme. Deposit £5 5s.

AUGUST 31.—Somerset.—RECONSTRUCTION.—Of the trunk Bristol-Exeter road, for the C.C. Edward Stead, County Surveyor, 49, High-street, Weston-super-Mare. Deposit £5.

SEPTEMBER 1.—Haverfordwest.—TRUNK ROAD.—The Main Roads and Bridges Committee of the Pembrokehire C.C. invite tenders for a diversion of the road at Nanteoys. Arthur H. Thomas, County Surveyor, Council Offices. Deposit £10.

SEPTEMBER 1.—Neath.—PRIVATE STREET WORKS.—Constructing storm water sewers, laying and jointing earthenware pipes, erection of manholes and gullies, fixing gully grating, paving, channelling, ballasting and metalling, &c., in connection with the reconstruction of Greenfield-terrace, Heathfield-avenue, Lock-street, New-street, and Oddfellow-street, for the R.D.C. D. M. Davies, surveyor, Council Offices, Neath. Deposit £2 2s.

SEPTEMBER 2.—Cardiff.—WIDENING.—Widening and improvement of Church-road and Penline-road corner, in the Parish of Whitchurch. W. Farrow, Park House, 20, Park-place, Cardiff.

SEPTEMBER 2.—East Grinstead.—RECONSTRUCTION.—Execution of street works under the Private Street Works Act, 1892, in each of the following roads, namely:—Crescent-road, Garland-road, Grosvenor-road, Park-road, and Stockwell-road, East Grinstead, for the U.D.C. H. Campbell Golding, Acting Surveyor, Engineer and Surveyor's Office, London-road. Deposit £2 2s.

SEPTEMBER 2.—Merton and Morden.—MAKING-UP.—Of (a) 107 yards approximately of Langley-road; (b) 230 yards approximately of Milner-road, Morden, for the U.D.C. G. Jerram, Surveyor. Deposit £2.

SEPTEMBER 2.—Whitchurch (GLAM.).—IMPROVEMENT.—Improving the Church and Penline roads corner at Whitchurch, for the Cardiff R.D.C. William Farrow, surveyor, 20, Park-place, Cardiff.

SEPTEMBER 2.—Wood Green.—IMPROVEMENTS.—Street improvements in Vallance and Talbot-roads, and passageway at rear of 171-189, High-road, for the U.D.C. Engineer and Surveyor. Deposit £1 1s.

SEPTEMBER 3.—Loughor.—IMPROVEMENTS.—At Pentwyn, Loughor, main road, for the Glamorgan C.C. T. Mansel Franken, Clerk of the County Council, Glamorgan County Hall, Cardiff.

SEPTEMBER 3.—Southend-on-Sea.—MAKING-UP.—Of the following roads: Quebec-avenue and Baltic-avenue, Section 1; Canvey-road, Section 2; Grange Park-drive, Harley-street, Holyrood-drive, and incidental works in connection thereto, for the Corporation. Robert H. Dyer, Borough Engineer and Surveyor.

SEPTEMBER 5.—Chester.—SEWERING.—Sewering forming, kerbing of the Selkirk-road, for the T.C. C. Greenwood, City Engineer and Surveyor. Deposit £1 1s.

SEPTEMBER 5.—Whitley and Monkseaton.—KERBING.—Kerb and foundations.—Brantwood-avenue, West Monkseaton estate, Paignton-avenue, West Farm estate, Crawford-place, West Farm Estate, for the U.D.C. A. J. Roussel, surveyor.

SEPTEMBER 5.—Wimbledon.—ROADS.—Street works in each of the following roads, namely, Worcester-road and Compton-road (Section III), Wimbledon, for the B.C. Borough Engineer and Surveyor, Town Hall, Wimbledon.

SEPTEMBER 7.—Bexhill.—MAKING-UP.—Of Colebrook-road, De La Warr-road (footpaths only), Lionel-road, Richmond-grove, for the T.C. G. Ball, surveyor. Deposit £1 1s.

SEPTEMBER 7.—Bury.—MAIN.—Laying of an 18 in. diameter water main and the construction of a manhole situate near Power Station, Chamber hall, for the C.B. J. Ainsworth Settle, Borough Engineer. Deposit 10s. 6d.

SEPTEMBER 7.—Wandsworth.—PAVING.—Of Aberfoyle-road, Abercain-road (part), Broadway-road, Carnforth-road, Donnybrook-road (part), Penistone-road, Leithcote-gardens, Walrod-street (part), and Ribblesdale-road (part), Streatham; Hillbrook-road and Ravenfield-road, Balham and Tooting; Longstaff-road (part), Mapleton-road and Granville-road (part), Southfield; and Burntwood-lane (part), Springfield, for the B.C. E. J. Elford, M.Inst.C.E., Borough Engineer, Town Hall. Deposit £1 1s.

SEPTEMBER 8.—Esher and the Dittons.—SEWER.—Laying about 430 yards run of stoneware pipe sewer in Stevens-lane, Claygate, together with manholes and other works, for the U.D.C. Surveyor.

SEPTEMBER 8.—Newton Abbot.—MAINS.—Laying 1,140 yards of 3 in. cast-iron water main from existing main at Kingskerswell to North Whilborough, for the R.D.C. Mr. Gray, 12, Summerland-street, Newton Abbot.

SEPTEMBER 9.—Rotherham.—MAKING-UP.—Labour and materials required in the making-up of a private street on the south-east side of Old Gate-lane, Dalton, including surface water drains, manholes, &c., for the R.D.C. Oxley & Coward, Clerks to the Council, Council Offices, Grove-road, Moorgate, Rotherham. Deposit £1 1s.

SEPTEMBER 12.—Otley.—SEWERS.—Constructing roads and laying sewers, drains and water mains on the extension of the Council's housing site at Carr Green, for the U.D.C. C. F. Hodgson, surveyor and engineer. Deposit £1 1s.

SEPTEMBER 14.—Kent.—ROAD.—Construction work in connection with the Orpington By-pass road with Spur, Kent, for the M.T. H. H. Piggott, Assistant Secretary, 17, Whitehall, S.W.1. Deposit £25.

SEPTEMBER 14.—Paddington.—PAVING.—With reinforced concrete, the carriageway, and, with artificial flags and gravel, the footways of Ashworth-road, between Lauderdale-road and a line drawn across Ashworth-road from the party fence of Nos. 7 and 9, Ashworth-road, to the north fence of the garage of No. 24, Ashworth-road, for the Paddington B.C. Borough Engineer's Office, Town Hall, Paddington, W.2. Deposit £1 1s.

SEPTEMBER 16.—Bournemouth.—MAKING-UP.—Of Browning-avenue, for the C.B. F. P. Dolamore, Borough Engineer. Deposit £1 1s.

SEPTEMBER 16.—Chichester.—RESERVOIR.—Construction of a ferro-concrete reservoir of 2,000,000 gallons capacity or thereabouts at the Chalk Pit-lane Plantation, Lavant, near Chichester, to be constructed upon the Hennebicke or other approved system of Ferro-concrete. City Engineer's Office, North-street. Deposit £2 2s.

SEPTEMBER 22.—Folkestone.—PIPES.—Concrete pipes and manholes (approximately 1,050 tons) for the High Level Intercepting Sewer, for the T.C. A. E. Nichols, Borough Engineer, 11, Church-street. Deposit £5 5s.

SEPTEMBER.—Epsom.—WIDENING.—Of Sutton-lane, Banstead, for the R.D.C. T. E. Ware, surveyor, Waterloo-road, Epsom.

Competitions.

(See Competition News, page 310.)

Auction Sales, Tenders, etc.

AUGUST 31.—London, E.—Varyard & Yates will sell, without reserve, at Lea Bridge-road, E. (close Lea Bridge and Clapton Stations), at Middlesex Wharf (foot of Lea Bridge), new timber of various kinds. Auctioneers, 365, Norwood-road, S.E.27.

AUGUST 31.—London, E.C.—Farebrother, Ellis & Co. will sell, by order of the liquidator, in voluntary liquidation, British Portland Cement Research Association, at the London Auction Mart, Queen Victoria-street, E.C., freehold property, Rosherville-court, Burch-road, Gravesend. Auctioneers, 29, Fleet-street, E.C., and 26, Dover-street, W.

***SEPTEMBER 3.—London, S.W.—Messrs. Chas. R. Davis & Co.** will sell, at Mr. G. H. Newton's yard and stores (entrance to Tooting Gardens, off Garrett-lane), the nearly new plant and materials of a builder and contractor. Auctioneers, 285, Borough High-street, S.E.1.

SEPTEMBER 8.—London, E.—Joseph Hibbard & Sons will sell, without reserve, by order of the Trustee, Mr. F. H. Agar, F.C.A., under a Deed of Assignment, re Yates & Co., upon the premises, No. 3, Rivington-street, Great Eastern-street, Shoreditch, dry stock of imported hardwoods. Auctioneers, 15, Newington Green, Islington, N.16.

***SEPTEMBER 8.—London, S.W.—Varyard & Yates** will sell, at 255, Clapham-road, S.W., timber, fittings and building materials, &c. Auctioneers, 365, Norwood-road, S.E.27.

***SEPTEMBER 8 AND 9.—Haldon House, near Exeter.**—Messrs. Fox & Sons will sell, in lots, the materials of the mansion, including all fixtures, fittings and fabric, also the private chapel on the estate. Auctioneers, 44-50, Old Christchurch-road, Bournemouth.

***SEPTEMBER 9.—London.—Messrs. Henry Butcher & Co.** will sell contractor's plant and machinery lying at Isle of Dogs Pumping Station, and St. James's Hospital, Wandsworth Common. Auctioneers as above.

SEPTEMBER 9 AND FOLLOWING DAYS.—North Devon.—J. T. Skelding & Co. will sell, re P. & W. Anderson, Ltd. (in liquidation), by order of the Receiver for the Debenture Holders, at The Dump, adjoining the North Devon Clay Co.'s sidings (by their kind permission), Peter's Marland, Dunsbear Station, North Devon, contractors' plant and machinery, tools, buildings, and effects used in the construction of the new line from Torrington to Halwill. Auctioneers, 48, Gresham-street, London, E.C.2.

SEPTEMBER 10.—Bucks.—Knight, Frank & Rutley (in conjunction with Hammett, Raferty & Co.), will sell, in the Mansion, Hedsor, Bourne End (unless previously sold privately), the remaining portions of the freehold residential building estate, Hedsor, including the Mansion. Auctioneers, Knight, Frank & Rutley, 20, Hanover-square, W.1; Hammett, Raferty & Co., 30, High-street, High Wycombe.

***SEPTEMBER 15 AND 16.—Frampton-on-Severn.**—Messrs. Jackson Stopps will sell, on the premises, the mansion, Pretherne Court, near Frampton-on-Severn, with about 14 acres of heavily timbered grounds; also building sites with views over the Severn. Auctioneers, 32, St. James's-street, S.W.1, Bridge-street, Northampton; Town Hall, Towcester.

Public Appointments.

AUGUST 31.—London, E.8.—VISITING TEACHER OF BUILDING CONSTRUCTION (Stages 1, 2 and 3).—On three evenings weekly (Mondays, Tuesdays, and Fridays), for the L.C.C. Education Officer (T.J.A.) The County Hall, Westminster Bridge, S.E.1. (Stamped addressed foolscap envelope necessary), for form.

AUGUST 31.—Newcastle-under-Lyme.—Architectural Assistant required in the Borough Engineer and Surveyor's Department. The Borough Engineer, Municipal Offices, Newcastle-under-Lyme, Staffs.

SEPTEMBER 3.—London, S.W.1.—EVENING CLASSES.—Lecturers required in various branches of the building trade for session 1925-26, commencing September 21, 1925, for the Technical Institute, Gladstone-road, Wimbledon, S.W.19. The Principal.

SEPTEMBER 5.—Portsmouth.—One permanent General Assistant, and one permanent Architectural Assistant in the Borough Engineer's Department. Borough Engineer, Town Hall, Portsmouth.

***SEPTEMBER 7.—East Riding of Yorkshire.**—Junior Assistant required in the County Architect's Department of the C.C. The County Architect, County Hall, Beverley.

***SEPTEMBER 14.—London, N.—Architectural Assistant** required by the Southgate U.D.C. Mr. A. E. Lauder, Clerk to the Council, Town Hall, Palmer's Green, N.13.

***SEPTEMBER 15.—London, S.E.—Sanitary Inspector** required by the Bermondsey B.C. Mr. Fredk. Ryall, Town Clerk, Town Hall, Spa-road, S.E.

SEPTEMBER 25.—Manchester.—Assistant Lecturer in Building Construction in the College of Technology The Registrar, College of Technology, Manchester.

SEPTEMBER 30.—Newcastle-upon-Tyne.—Clerk of Works required for the proposed secondary schools at Heaton. Director of Education, Education Offices, Northumberland-road, Newcastle-upon-Tyne.

***NO DATE.—Sudan.**—Two Foremen of Works are required for the Sudan Public Works Department. Advisory Engineer, Sudan Government, London Office, Wellington House, Buckingham Gate, S.W.1.

Rotherham Public Library.

The damage to the Rotherham Public Library, destroyed by fire recently, is estimated at between £25,000 and £30,000.

PROPOSED NEW BUILDINGS & OTHER WORKS.

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building operations taking the responsibility of commencing works before plans are finally approved by the local authorities, "proposed" works at the time publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ABINGDON.—Property is being acquired for police purposes by the Berkshire Standing Joint Committee. **ASHTON-UNDER-LYNE.**—Lancashire E.C. are seeking sanction to borrow £6,420 for the erection of a secondary school.

BARNSELY.—The E.C. has received the sanction of the M.H. to the borrowing of £34,860 for the erection of 82 further houses under the Ardley (Kendal No. 3) scheme. The Town Clerk reported that the sanction of the M.H. had been received for the erection of new entrance gates at Locke Park, amounting to £477.

BENFIELDSDALE.—The B.E. has approved plans for the Durham County E.C. for the erection of an elementary school.

BIRMINGHAM.—The E.C. has acquired a site on Staplehall Farm estate for the erection of an elementary school. A site at Fast Pits Farm estate has been obtained for the erection of an elementary school.

BISHOPSTOKE.—The Mount is to be converted into a sanatorium for 72 tuberculosis patients, for the Hampshire C.C.

BLACKPOOL.—The Corporation propose to apply to the M.H. for sanction to borrow £12,000 for the substitution of 150 houses to be erected by private builders.—Passed by the T.C.: 16 houses, George-street, for the Coleridge Estate Building Syndicate; 8 houses, Arlington-avenue and 10 houses in Jesmond-avenue for Smith & Gardner, builders; Council School, Claremont-road, for the E.C., Borough Engineer, Mr. F. Wood; church, Wolverton-avenue, for the Trustees of St. Stephen's Church, architects, Allen & Paley of Lancaster; Printing works, Central Drive, for the Blackpool Times, architect, W. Wade, St. Anne-on-Sea; bank and café, Red Bank-road, for William Deacons Bank Ltd., architects, Lumb & Walton Clifton-street, Blackpool; 20 houses, Dunmail-avenue for Atherton & Kerfoot, builders; 10 houses and garages, Bispham-road for J. England & Son, builders; houses, Rosebery-avenue, for Leach & Unsworth, builders.—Messrs. Walton & Edmondson, builders are developing land in St. Anne's-road, the architect for the scheme being Mr. F. H. Gorst, Birley-street.—Mr. David Wilson is proposing a new street in St. Anne's-street, being a continuation of Pederslar, the architect for the scheme being Mr. James Bur M.S.A., Birley-street.—The Borough Surveyor is submitted plans for proposed clock tower and tram shelter to be erected at the Gynn.

BLAYDON.—The U.D.C. is preparing plans and estimates for the erection of 100 houses by direct labour.

BOGNOR.—The surveyor submitted to the General Purposes and Property Committee a sketch plan of underground lavatories proposed to be constructed. Waterloo-square showing accommodation for 71 sexes, which he estimated would cost £4,250. The Committee recommended that, if the Council agreed to provide accommodation for men as well as women, the plan and estimate submitted be approved, but if it is the Council's intention to provide only ladies accommodation there fresh plans be prepared showing such proposals and that the cost thereof be limited to £2,000.

BRAMLEY.—Plans are being prepared by a local firm of architects for a proposed grand stand, dressing rooms, and pavilion at the Barley Mow Football Ground.

BURNLEY.—The Sites Sub-Committee of the Burnley E.C. has decided to reserve a portion of land at Locky Avenue for the purpose of erecting a new Central school. Extensions are to be carried out at the Todmorden Road Central School, at an estimated cost of £3,750.

CHADDERTON.—The D.C. propose to build 50 houses in North Chadderton, and 20 on Denton-lane.

CHESTER.—The Corporation have decided to erect 103 houses on the Heath-lane estate. The Corporation are granting a lease of land at Tozer Fields to the Crosville Motor Co., Ltd.

CHESTER-LE-STREET.—The architect, Mr. Graba has prepared plans for the Cottage Homes which the B.C. propose erecting at Lumley at an approximate cost of £1,220, and has been instructed to prepare designs for another similar institution in the Park district.

CLUTTON.—The M.H. has received sanction from M.H. to the erection of 103 houses on various sites.

COALVILLE.—A site on the Broom Leys building estate, Coalville, has been purchased by the Chamber of England Extension Board for the building of a church.

CROWTHORNE.—A site has been purchased by the Berkshire Standing Joint Committee for the erection of a police house, estimated to cost £925.

DERRY.—The Corporation passed plans for 13 houses at Hawthorne-terrace, for F. J. Simmons.

* See also our List of Contracts, Competitions, etc.

OT.—Berkshire E.C. has prepared plans for the
ment of the school.

IN.—The Ministry of Local Government and
Health are to hold an inquiry into the applica-
tion of the Commissioners for power to acquire
the erection of working-class lodging-houses
on a loan of £664,787 in relation thereto.—The
Commissioners are proposing to erect 1,000 houses
estimated to cost about £500,000.

PERMILINE.—The Dean of Guild Court has
Mrs. Carnegie, widow of the multi-millionaire,
to erect a building.

NGTON.—The Easington Coal Co., Ltd., is to
51 houses.

M.—The M.H. has sanctioned the erection of
Barnett Wood-lane, for the R.D.C.

NGTON.—The managers of the Church of Eng-
school propose to undertake alterations at the
school, and are being urged by the Berkshire
to formulate proposals for improving the Girls'
as well.

KEY HILL.—Berkshire E.C. has obtained sanction
of £2,636 for the erection of an elementary

BOROUGH.—Berkshire E.C. report that the
of the Farnborough School proposes to carry
out improvements.

LOW.—The City Engineer has now prepared
plans for a new and improved Kelvin Hall on
the site. Ground.—Messrs. Keppie & Henderson,
are to erect buildings between Gallogate and
-street, the cost being estimated at £80,000.—
re lease of St. John's Church, George-street, at
of £14,000, is recommended, with a view to the
being utilised in connection with any future exten-
sion of the Municipal Buildings.—An experimental
pavilion is to be erected at Glasgow Green at
of £300. A site in Stobcross-street is being
for the erection of a welfare centre for the
district.—The Housing Committee are to
54 houses at Langlands and 38 on the experi-
ment of the estate.

DEORD.—New shops and stores are to be built
George-street, for occupation by Messrs. Armour
Ltd., meat importers. Plans have been before
the Council, the architect being Mr. T. R.
ce, St. Mary's House, Quarry-street.

ROGATE.—The T.C. are considering two building
s. One for a new pavilion in the Valley Gardens.
The other scheme is the pulling down of the Royal
mans and converting the space into open gardens
of the Royal Hall grounds, in order to give a
of the garden from the Parliament-street end.
case it is proposed to build a dance and con-
ball, with cafes between the Royal Hall and
the Majestic Gardens.

UTING.—Berkshire E.C. have prepared plans for
vision of a manual instruction room at the

WELL.—Flintshire E.C. are to carry out
works at the Holywell Spring Gardens Elemen-
tary School at a cost of £830.

STREILD.—The Baths and Model Lodging-
Committee has approved the Queen-street
erection ground as the site for the proposed
works. The Borough Architect is to submit a
detailed plan of the proposed new building,
with an estimate of the cost thereof.

A venereal diseases centre is to be erected at
at a cost of about £6,000.—A further 300
to be subsidised.—The City Architect is to
plans for a lodge at the new Infectious Diseases
at an estimated cost of £2,875.—The Cor-
poration has obtained sanction to borrow £78,000 for
extension of pail into water-closets.—The B.E.
proposed a site in East Hill for the erection of
primary school for 1,000 pupils only.—Plans
for 18 houses, Southcoates-lane, for Mr. R.
26 houses, New-street, Charterlands-avenue,
for Mr. R. Barnett; 27 houses, Park-avenue, for
W. & J. H. Barnett; 12 houses, Southcoates-
for Mr. E. Greenides; 13 houses, Savery-
Messrs. Lawrence Bros.; 18 houses, North-
for Mr. W. O. Montgomery; 12 houses, Perth-
for Mr. A. Lison; 42 houses, Westcott-street,
Spruit; 13 houses, Brindley-street, for Mr.
Geller; 18 houses, Westbourne-avenue, for
Trigg.

Y.—The governors of the Kingston Grammar
School decided upon an extension scheme which
cost £14,000.

Y.—Berkshire E.C. are in communication
with the managers of the Lambourn Church of England
regarding the necessity for a scheme of
extension.

The City Engineer has been asked to pre-
pare plans for their laying out as house
plots, three in number. One estate, containing
acres, is between York-road and Osmond-
-street, which the Corporation have agreed to
subject to the sanction of the M.H., for
Messrs. William Airey & Son have sub-
mitted plans for the erection of 500 houses. Another
estate, Harehills-lane, adjoining the present estate
to form a very extensive colony.—The
portion of the Meanwood estate.—The
passed plans: 16 houses, Parkside View,
for E. Holmes; 20 houses, Upland-road,
for C. H. & F. Lax.

ROUGH.—Lancashire E.C. are purchasing
a site at a cost of £6,100 for purposes of a

OXWELL.—Berkshire E.C. are asking the
managers of the Little Coxwell Church of England
to provide additional accommodation and
sanctuary.

NO.—The U.D.C. has accepted tenders for
in Knowles-road, Mowbray-road, and on
Stu-d-road of 41 additional houses, at a total
cost of £11,000.

The surveyor to St. Thomas's Hospital
proposes a sub-way under Lambeth Palace-road
for the conveyance of patients from the hospital to the

new extension on the opposite side of the road.—Mil-
burn House, Knight's Hill is to be adapted for use as a
maternity home at an estimated cost of £6,100.—A
convenience is to be constructed by St. Luke's Church,
West Norwood.—The Borough Engineer is to prepare
plans for a convenience in the vicinity of the Crystal
Palace.—An electricity sub-station is to be erected
in Industry-terrace, Brixton.

LOUTP.—The R.D.C. has accepted the tender of
Messrs. Graham & Sons, of Huddersfield, as to three
bridges over the Louth Canal, and it was agreed that
the firm be asked to submit an amended tender as to
two other bridges.

MANCHESTER.—The Tramways Committee of the
Manchester Corporation approved an amended eleva-
tion prepared by the City Architect of the proposed
new car shed in Birchfield-road, and also plans pre-
pared by the City Architect showing proposed lay-out
of the new Parcels Depot at the Hyde-road Depot.

Plans were approved in connection with the proposed
alterations to be carried out at the Chorlton Central
School.—It was resolved that work should be proceeded
with in connection with the alterations and additions
at the Heald-place Council school.—The Housing
Committee reported that the following sites were con-
sidered suitable for the erection of licensed premises:
Wilbraham-road estate, Anson estate (land situate
at the junction of Birch Hall-lane and Brynton-road),
Clayton estate (land situate on either side of
Folkestone-road).—The Corporation have prepared a
comprehensive scheme for the erection of 2,000 houses.
Meanwhile the Corporation proposes to proceed with
a scheme for 610 houses at Moston, estimated to cost
£309,150.—The Ministry of Health are to hold an
inquiry regarding the scheme of sewage works exten-
sions at Davyhulme, to cost £465,000. Public con-
veniences are to be provided at West Point, Levens-
hulme, at a cost of £1,280.—The City Architect is to
prepare plans for the completion of the Levenshulme
baths scheme.—An elementary school for Roman
Catholic children is to be erected at St. Malachy, Colly-
hurst.—A school for mentally defective children is to
be erected on a site in Cheetham Hill.—Plans have now
been prepared for the new school at Victoria-avenue,
Blackley.—Alterations and additions are to be carried
out at St. Peter's school and Waterloo-road school
cookery and laundry centres.—The Corporation
Libraries Committee are urging for the erection of a
central library.

MERTHYR TYDFIL.—The Borough Architect has been
instructed to prepare draft schemes for submission to
the M.H. for dealing with unhealthy areas and erecting
90 houses at Dolwais to replace houses demolished, and
50 elsewhere.—The Borough Architect has now
prepared final plans for the workshops for the blind in
Swan-street, the estimated cost being £5,900.

MERTON.—Surrey E.C. propose to proceed with
the erection of an elementary school at West Merton.

MORECAMBE.—The Corporation have granted per-
mission to the Morecambe Bay Motor Boat Co., to
extend their west end landing stage.—The Borough
Engineer has been instructed to prepare plans for houses
on the South Grove estate.

NELSON.—Plans have been approved for alteratio
and additions to offices, Southfield-street, for the Valley
Room & Power Co.—Plans have been prepared by
Mr. Richard Jacques, architect, of Railway-street, for
the erection of a new church of St. Bede's in a
modern Gothic style estimated to cost £12,000.—H.M.
Office of Works propose to acquire land at the corner
of Bradley-road and Fleet-street for the erection of an
employment exchange.—A memorial is to be erected
at the park at an approximate cost of £350.

NEW BOTLEY.—Berkshire E.C. are considering the
provision of a new elementary school.

NEW SEAHAM.—Preliminary plans for a new ele-
mentary school are being prepared by the Durham
County E.C.

OXFORD.—Sanction is to be sought for a loan of
£8,300 for the provision of improved accommodation
for dental and other clinics and additional accommoda-
tion for the teaching of handicraft subjects. A hut is
to be built at Milham Ford school, at a cost of £1,000.
A new classroom is to be added to the South Oxford
school, at a cost of £810. Plans passed: Factory
extension, Cherwell-street, for Mr. N. E. E. Minty;
engine-house, Woodstock-road, for Osberton Radiator
Co., Ltd.

PAIGTON.—The Urban District Council are seeking
sanction for a loan of £71,000 for waterworks purposes.
The Parochial Church Council have a scheme for the
erection of a church in the St. Michael's area.

PANGBOURNE.—Berkshire E.C. has decided to pro-
vide a teachers' room at the elementary school.

PONTEFRAC.—The R.D.C. are seeking sanction to
borrow £18,350 for the acquisition of land and various
works required in the erection of 38 houses on the
Airedale No. 2 scheme.

PRESTON.—A new wing is to be added to the
"Chestnuts" Sanatorium, at Ribbleson, near Preston,
which will increase the accommodation from 17 to
30 beds.

QUEENSBURY.—The U.D.C. are to erect 12 more
houses.

RADLEY.—The managers of the Church of England
school have arranged a scheme of repairs and im-
provements.

READING.—A disused police station is to be adapted
as a coroner's court at a cost of £3,000.

REMSHAM.—Berkshire Standing Joint Committee
are acquiring a site for the erection of a police house.

SALFORD.—The Highway and Paving Committee are
to borrow £60,296, for the erection and completion
on the Littleton-road housing estate of 96 houses.
Plans passed by the U.D.C.: R. Haworth
& Co., Ltd., seven houses in Gladys-street, and nine
houses in Treble-street, Salford, Mr. H. V. Dyson,
architect, 48, Bridge-street, Manchester; J. E.
Humphreys & Co., Ltd., 32 semi-detached houses,
Welbeck-road, Ashbourne-grove, Tully-street, Bispham-
grove, and Norman-road, Broughton, Mr. A. V.
Roberts, architect, 113, Cheetham-street West.

SANDHURST.—Berkshire Standing Joint Committee
have purchased land in Florence-road for the erection
of police buildings.

SHEFFIELD.—The Tramways and Motors Committee
has decided to purchase a plot of land at Lodge Moor
for the purpose of building a tramway shelter.—
Approval by the Finance Committee has been given
to the expenditure of £157,475 for the Wybourn
housing scheme, for 340 houses.

STRATFORD-ON-AVON.—The bridge is to be widened
at a cost of £22,000.

TORQUAY.—Mrs. Rowcraft has given the Corporation
£100,000 to cover the cost of erecting the new Torbay
Hospital.—The Borough Engineer has been authorised
to prepare a scheme for blocks of houses for families
displaced by the Pimlico improvement scheme.—The
provision of a mortuary is under consideration.—
Another 200 housing subsidies are to be granted.—
Plans passed: Twenty-four houses, Daison estate, for
Messrs. Thos. Vanstone & Sons; 15 houses, Daison
estate, for Mr. William Rowe; 24 houses, Daison
estate, for Mr. John Lloyd; 104 houses at Barton, for
Messrs. Ball & Wilkinson, Ltd.

TYLDESLEY.—Lancashire E.C. are purchasing the
U.D.C. offices, at a cost of £1,100, for purposes of a
school clinic.

WALLINGFORD.—Berkshire E.C. has obtained sanc-
tion for a loan of £1,200 for the provision of an addi-
tional classroom at the Grammar School.

WALSALL.—The E.C. have decided to establish an
orthopaedic clinic at Bradford-street.

WANTAGE.—Berkshire E.C. are calling for improve-
ments at the Church of England Boys' School and the
Wesleyan School.

WEMBLEY.—A site for a new cinema to seat 2,000
has been purchased.

WESTCLIFF-ON-SEA.—A proposal is on foot for the
erection of a new pier on a site near Crowstone.

WEST CORNFORTH.—The Thrislington Colliery Wel-
fare Fund is to erect a new hall and institute. The
architects for the scheme are Messrs. Kellet & Clayton,
of Darlington and Bishop Auckland.

WEST DRAYTON.—It is proposed to build works on
a site at West Drayton for Lilomite Roads, Ltd., 10A,
New Bond-street, W.1. Plans have been prepared
by H. T. Wright, consulting engineer, 10A, New Bond-
street, W.1.

WETHERBY.—The West Riding C.C. have secured
an option of the purchase of a site at Linton, near
Wetherby, containing about 112 acres, for the erection
of a sanatorium for the treatment of tuberculosis.

WICKHAM.—The U.D.C. is making application to
the M.H. for permission to build 64 flats at Dunston.

The Council is erecting 70 houses on the Rectory site.

WINSERS.—Berkshire E.C. have arranged to pro-
vide a new Council school for Wimsersh by the purchase
and improvement of the buildings of the Church of
England school, Bear Wood.

WOOTTON.—Revised plan has been prepared by the
managers of the Wootton school for improvements.

WORCESTER.—An open-air school is to be built at
an estimated cost of £3,670.

WYCOMBE ABBEY.—A new school chapel is to be
erected at a cost of about £10,000.

FIRES.

ANDOVER.—Messrs. McDougall's, Ltd., flour factory
was burned to ruins by a disastrous fire.

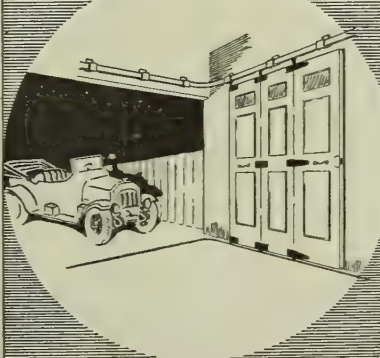
LEICESTER.—St. Philip's Church Schools were
destroyed by fire.

ROCHESTER.—The large premises of the Rochester
and Chatham District Laundry Co., in High-street,
Rochester, were completely destroyed by fire. The
damage is estimated at several thousand pounds.

THE "HENDERSON" SYSTEM

SLIDING DOOR GEAR

FOR FACTORIES, GARAGES, SCHOOLS, ETC.



"TANGENT JUNIOR" FOR LIGHT DOORS.
"TANGENT SENIOR" FOR HEAVY DOORS.

WRITE FOR BOUND CATALOGUE B.24 TO:-
P.C. HENDERSON, LIMITED.
BARKING, ESSEX. PHONE: EAST HAM 247.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.			
Per 1,000 Alongside, in River Thames up to London Bridge.			
Best Stocks	£ s. d.	4	3 6
Second Hard Stocks	£ s. d.	3	18 6
Per 1,000, Delivered at London Goods Stations.			
Flettons, at	£ s. d.	2	13 3
King's Cross	£ s. d.	2	15 3
Do, grooved for plaster	£ s. d.	2	15 3
Do, Bullnose	£ s. d.	3	8 3
Best Stourbridge Fire brick—	£ s. d.	8	11 0
2½ in.	£ s. d.	10	3 0
GLAZED BRICKS—			
Best White	£ s. d.	10	3 0
Ivory, and Salt Glazed	£ s. d.	27	10 0
Stretchers	£ s. d.	31	10 0
Headers	£ s. d.	32	10 0
Quoins, Bullnose and 4 in	£ s. d.	30	0 0
Flats	£ s. d.	28	10 0
Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.			

BREEZE CONCRETE SLABS.			
Delivered London			
2 in. per yd. super	£ s. d.	3 in. per yd. super	£ s. d.
2½ in.	£ s. d.	4 in.	£ s. d.
Thames Ballast	£ s. d.	6 per yd.	£ s. d.
Pit Sand	£ s. d.	13	9
Thames Sand	£ s. d.	14	6
Best Washed Sand	£ s. d.	14	6
2 in. Shingle for Ferro-Concrete	£ s. d.	12	9
1 in.	£ s. d.	14	0
2 in. Broken Brick	£ s. d.	11	6
Pan Breeze	£ s. d.	7	6
Per ton delivered in London area in full van loads.			
Best Portland Cement, British Standard Specification. Test £2 18 0 to £3 3 6			
51s. alongside at Vauxhall in 80-ton lots.			
Ferrocrete per ton extra on above	£ s. d.	0	10 0
Super Cement (Waterproof)	£ s. d.	4	8 0
Roman Cement	£ s. d.	8	15 0
Parian Cement	£ s. d.	5	15 0
Keene's Cement, White	£ s. d.	5	10 0
" Pink	£ s. d.	3	0 0
" White	£ s. d.	3	12 6
" Fine	£ s. d.	5	12 0
Sirapite Coarse	£ s. d.	3	9 0
Finish	£ s. d.	3	17 0
Grey Stone Lime	£ s. d.	2	11 9
Chalk Lime	£ s. d.	2	11 9
Best Ground Blue Lias Lime	£ s. d.	2	4 6
Hair	£ s. d.	17	0 0
Granite Chippings	£ s. d.	1	12 0
NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.			
Stourbridge Fireclay in sacks 35s. 0d. per ton at rly. dpt.			

STONE.			
BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube.			
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube.	£ s. d.	2	11 3
PORTLAND STONE—			
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., Westbourne Park, Paddington, G.W.R., per ft. cube.	£ s. d.	4	4
Do. do. delivered on road wagons at above stations, per ft. cube.	£ s. d.	4	5
White basebed, 3d. per ft. cube extra.			
NOTE.—1d. per ft. cube extra for every foot over 20 ft. average, and 1d. beyond 30 ft.			
HOPTON-WOOD STONE—			
Delivered at any Goods Station, London.			
Small random blocks, up to 10 ft. cube, P. ft. cb.	£ s. d.	7	0
Random blocks from 10 ft. and over	£ s. d.	17	0
Sawn two sides	£ s. d.	27	0
Sawn three or four sides	£ s. d.	32	0
YORK STONE, BLUE—Robin Hood Quality.			
Delivered at any Goods Station, London.			
6 in. sawn two sides landings to sizes (under 30 ft. super.)	£ s. d.	5	6
6 in. rubbed two sides, ditto	£ s. d.	6	0
3 in. sawn two sides slabs (random sizes)	£ s. d.	2	3 1
2 in. to 2½ in. sawn one side slabs (random sizes)	£ s. d.	1	6 1
1½ in. to 2 in. ditto, ditto	£ s. d.	1	4
HARD YORK—			
Delivered at any Goods Station, London.			
Scalloped random blocks to sizes (under 40 ft. super.)	£ s. d.	6	3
6 in. rubbed two sides ditto	£ s. d.	6	1 1
6 in. sawn two sides slabs (random sizes)	£ s. d.	2	10
3 in. ditto ditto	£ s. d.	2	1 1
2 in. self-faced random flags	£ s. d.	9	0

ARTIFICIAL STONE.			
Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.			
WOOD.			
GOOD BUILDING DEAL.			
Inches.	per stan.	Inches.	per stan.
4 x 11	£32 0	3 x 6	£23 0
4 x 9	28 0	3 x 11	28 0
4 x 8	26 0	2 x 11	28 0
4 x 7	25 0	3 x 9	25 0
4 x 6	24 0	2½ x 9	25 0
3 x 7	23 0	3 x 4½	23 0
2½ x 7	22 0	3 x 4	23 0
PLANED BOARDS.			
1 x 11	£32 0	1 x 9	30 0

PLAIN EDGE FLOORING.			
Inches.	per sq.	Inches.	per sq.
1½	21/-	1½	32/6
1	23/-	1½	37/6
1	25/-		
TONGUED AND GROOVED FLOORING.			
Inches.	per sq.	Inches.	per sq.
1	25/-	1½	16/6
1½	32/6	1½	20/-
1½	37/6	1½	25/-
BATTENS.			
Inches.	s. d.		
2½ x 2	2 6 per 100 ft.		
SAWN LATHS.			
Per bundle	1" AND UP THICK.		
Dry Austrian Wainscoat, per ft. cube	0 16 0 to 0 18 0		
Dry American and/or Japanese Figured Oak, ft. cube	0 15 0		
Dry American and/or Japanese Plain Oak, ft. cube	0 11 0 to 0 13 0		
Dry s. edged Honduras Mahogany, ft. cube	0 16 0 to 0 18 0		
Dry Log cut Honduras Mahogany, ft. cube	0 18 0 to 1 1 0		
Dry Cuba Mahogany, ft. cube	1 4 0 to 1 10 0		
Dry Teak, ft. cube	0 13 0 to 0 15 0		
Dry American Whitewood, ft. cube	0 11 0 to 0 14 0		
Best Scotch glue, per cwt.	4 10 0 to		
Liquid Glue, per cwt.	4 7 0 to 5 10 0		

SLATES.			
1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.			
24 by 12	£ s. d.	18 by 10	£ s. d.
22 by 12	37 12 6	18 by 9	21 2 6
22 by 11	34 0 0	16 by 10	18 12 6
20 by 12	31 5 0	16 by 8	17 12 6
20 by 11	29 15 0		
20 by 10	25 12 6		

TILES.			
Best machine-made tiles from Broseley or Staffordshire district			
Ditto hand-made ditto	£ s. d.	5	12 6
Ornamental ditto	£ s. d.	6	2 6
Hip and valley tiles (per dozen)	£ s. d.	0	9 6
Hand-made	£ s. d.	0	9 6
Machine-made	£ s. d.	0	9 0

METALS.			
JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—			
R.S. Joists, cut and fitted	£ s. d.	13	10 0
Plain Compound Girders	£ s. d.	15	10 0
Stanchions	£ s. d.	17	10 0
In Roof Work	£ s. d.	20	10 0

MILD STEEL ROUNDS.			
To London Station, per ton.			
Diameter.	£ s. d.	Diameter.	£ s. d.
1 in.	14 10 0	2 in. to 1 in.	12 10 0
1½ in.	13 0 0	1 in. to 2½ in.	12 0 0

WROUGHT-IRON TUBES AND FITTINGS—			
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)			
Tubes.	Fittings.	Flanges.	
Sizes 1½" to 6"	Under 1½" to 6"	Under 1½" to 6"	
Black Gas 55%	47½%	50%	57½%
Blue Water 50%	42½%	45%	52½%
Red Steam 45%	37½%	40%	47½%
Galv'd Gas 40%	37½%	40%	47½%
" Water 33½%	32½%	35%	42½%
" Steam 27½%	27½%	30%	37½%

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.			
Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/24	11/24	3/4d.
3½ in.	1/24	11/24	3/4d.
4 in.	1/24	11/24	3/4d.
4½ in.	1/24	11/24	3/4d.
5 in.	1/24	11/24	3/4d.
O.G. GUTTERS.			
3 in.	1/7	1/3	3/4d.
3½ in.	1/7	1/3	3/4d.
4 in.	1/7	1/3	3/4d.
4½ in.	1/10	1/6	4/4d.
5 in.	2/3	1/9	5/4d.

RAIN-WATER PIPES, &c.			
Bends, stock Branches, angles, stock angles.			
Per yd. in 6 ft. plain	Pipe.	Angles.	Stock angles.
2 in.	1/24	1/24	1/8
2½ in.	1/11	1/4	2/0
3 in.	2/4	1/8	2/6
3½ in.	2/10	2/4	2/10
4 in.	3/8	2/4	3/6
L.C.C. COATED SOIL PIPES—London Prices, ex Works.			
Bends, stock Branches, angles, stock angles.			
2 in. per yd. in 6 ft. plain	2 11	2 3	2 9
2½ in.	3	2 9	3 6
3 in.	4 1	2 9	4 0
3½ in.	4 5	3 5	4 8
4 in.	4 11	3 9	5 5

L.C.C. COATED DRAIN PIPES—London Prices, ex Works.			
Bends, stock Branches, angles, stock angles.			
3 in. per yd. in 6 ft. lengths	4 3	5 9	7 8
4 in.	6 3	6 11	9 6
5 in.	7 10	12 0	15 3
6 in.	9 6	15 0	20 9
Gasken for jointing, 88/6 per cwt.			
IRON—			
Common Bars	£ s. d.	13	10 0
Staffordshire Crown Bars—good merchant quality	£ s. d.	14	5 0

STAFFORDSHIRE "MARKED"			
Bars	£ s. d.	18	10 0
Mild Steel Bars	£ s. d.	11	0 0
Steel Bars, Ferro-Concrete quality, basis price	£ s. d.	11	0 0
Hoop iron, basis price	£ s. d.	16	0 0
Galvanised	£ s. d.	31	0 0
Soft Steel Sheets, Black—			
Ordinary sizes to 20 g.	£ s. d.	14	10 0
" " 24 g.	£ s. d.	15	10 0
" " 26 g.	£ s. d.	17	10 0
Sheets Flat Best Soft Steel, C.R. & C.A. quality	£ s. d.	19	10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	£ s. d.	21	10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g.	£ s. d.	21	10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	£ s. d.	23	10 0
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	£ s. d.	19	0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g.	£ s. d.	19	10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	£ s. d.	22	10 0
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	£ s. d.	22	10 0
Best Soft Steel Sheets, 22 g. and 24 g.	£ s. d.	24	10 0
Best Soft Steel Sheets, 26 g.	£ s. d.	26	0 0
Cut Nails, 3 in. to 6 in. (under 3 in. usual trade extras.)	£ s. d.	20	0 0
METAL WINDOWS.—Standard sizes, suitable for plate houses, including all fittings, painting, coats, and delivery to job, average price 1s. 4d. to 1s. 7d. per foot super.			

LEAD, &c.			
(Delivered in London.)			
LEAD—Sheet, English, 4 lb. and up	£ s. d.	49	
Pipe in coils	£ s. d.	51	
Soil Pipe	£ s. d.	53	
Compo pipe	£ s. d.	54	
NOTE.—Country delivery, 30s. per ton extra; 10s. 3 cwt., 8s. per cwt. extra, and over 3 cwt. and under 1 cwt., 1s. 6d. per cwt. extra. Cnt to sizes, 2s. cwt. at Mills. Do., ex country, carriage forward			
Do., ex country, carriage forward	£ s. d.	37	0 0

COPPER.			
Seamless Copper tubes (basis).			
Strong sheet	£ s. d.		
Thin	£ s. d.		
Copper nails	£ s. d.		
Copper wire	£ s. d.		

PLUMBERS' BRASS WORK.			
Delivered in London.			
NEW RIVER PATTERN SCREW DOWN BIB COCK			
1 in. 1 in. 1 in. 1 in. 2 in.	£ s. d.	29/-	45/-
2 in. 2 in. 2 in. 2 in. 3 in.	£ s. d.	153/-	246/-
NEW RIVER PATTERN SCREW DOWN STOP COCK			
1 in. 1 in. 1 in. 1 in. 2 in.	£ s. d.	41/6	62/-
2 in. 2 in. 2 in. 2 in. 3 in.	£ s. d.	92/-	174/-
NEW RIVER PATTERN SCREW DOWN MAIN FERN			
1 in. 1 in. 1 in. 1 in. 2 in.	£ s. d.	39/6	60/-
2 in. 2 in. 2 in. 2 in. 3 in.	£ s. d.	116/6	per do.
CAPS AND SCREWS.			
1½ in. 1½ in. 2 in. 3 in. 3½ in. 4 in.	£ s. d.	7/6	10/-
DOUBLE NUT BOILER SCREWS.			
1 in. 1 in. 1 in. 1 in. 1 in.	£ s. d.	7/6	11/-
BRASS SLEEVES.			
1½ in. 2 in. 3 in. 3½ in. 4 in.	£ s. d.	10/-	12/-
2 in. 2 in. 2 in. 2 in. 3 in.	£ s. d.	20/-	24/-
NEW RIVER PATTERN CROCODON BALL VALVE			
1 in. 1 in. 1 in. 1 in. 1 in.	£ s. d.	35/-	56/-
2 in. 2 in. 2 in. 2 in. 3 in.	£ s. d.	98/-	162/-
DRAWN LEAD P. & S. TRAPS WITH BRASS CL			
SEW.			

PRICES CURRENT OF MATERIALS (contd.)

GLASS.
ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

Per Ft.	Per Ft.
15 oz. fourths ... 3d.	32 oz. fourths ... 8d.
15 " thirds ... 4d.	32 " thirds ... 10d.
21 " fourths ... 4d.	Obscured Sheet, 15 oz. 4d.
21 " thirds ... 5d.	21 " 5d.
26 " fourths ... 5d.	Fluted 15oz. 6d., 21oz. 8d.
26 " thirds ... 7d.	En'lied 15oz. 5d., 21 oz 7d.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

Per Ft.	Per Ft.
1 Rolled plate ... 4d.	
1 Rough rolled ... 5d.	
1 Rough rolled ... 5d.	
1 Figured Rolled, Baltic, Oceanic, Arctic, Stip- polyta, and small and large Flemish white ... 6d.	
1 Ditto, tinted ... 6d.	
1 Rolled Sheet ... 6d.	
1 White Rolled Cathedral ... 6d.	
1 Tinted do. ... 7d.	

VARNISHES, &c.

Per Gallon.	£ s. d.
Oak Varnish ... Outside	0 14 0
Fine ditto ... ditto	0 18 0
Fine Copal ... ditto	0 18 0
Pale Copal ... ditto	1 0 0
Pale Copal Carriage ... ditto	1 4 0
Best Ditto ... ditto	1 12 0
Floor Varnish ... Inside	0 18 0
Fine Pale Paper ... ditto	0 18 0
Fine Copal Cabinet ... ditto	1 2 6
Fine Copal Flattling ... ditto	1 0 6
Hard Drying Oak ... ditto	0 13 0
Fine Hard Drying Oak ... ditto	0 19 0
Fine Copal Varnish ... ditto	1 0 0
Pale ditto ... ditto	1 2 0
Best ditto ... ditto	1 12 0
Best Japan Gold Size ... ditto	0 12 6
Best Black Japan ... ditto	0 10 6
Oak and Mahogany Stain (water) ... ditto	0 12 0
Brunswick Black ... ditto	0 7 6
Herlin Black ... ditto	0 14 6
Knocking (patent) ... ditto	1 5 0
French and Brush Polish ... ditto	0 17 0
Liquid Dryers in Terebine ... ditto	0 9 0
Quince Black Enamel ... ditto	0 7 0

NEW BUILDINGS IN SCOTLAND

Wishaw.—SCHOOL.—The Dean of Guild Court has passed plans for the erection of a new High School to accommodate between 600 and 700 pupils. The estimated cost of the new building is £47,000.

Dunoon.—TEMPLE.—Plans have been passed for the erection of a Masonic Temple to be erected in Argyle-street, for the Dunoon Argyll Lodge.

Torrey.—SCHOOL.—The Aberdeen T.C. has passed plans for the erection of an intermediate school, at an estimated cost of £25,000.

Paisley.—ADDITIONS.—The Dean of Guild Court has passed plans for the erection of important additions to William-street and Abercorn Public Schools, for the Renfrewshire E.C.

Glasgow.—HOUSES.—The following plans have been lodged with the Dean of Guild Court:—Sixty-four houses and four villas at Shawmoss-road and Hags-road, for J. Adam & Co.; offices and showrooms at corner of Waterloo-street and Mains-street, for Metropolitan Vickers Electrical Co., Ltd., per Jas. T. Thomson, architect, 4, Jane-street; 130 houses at King's Park, Mount Florida, for McTaggart & Mickel, Ltd., per plans by Jas. Taylor, 166, Buchanan-street; ballroom, tea room and picture house at Renfield-street and West Nile-street, for G. Green, Ltd., per plans by John Fairweather, 182, Trongate.

Edinburgh.—VARIOUS.—The Dean of Guild Court passed plans: Church at the corner of Albion-road and Albion-place, the church will accommodate about 750 people, and will cost 14,000; W. Thyne, box factory at Marionville-park.

Houses, Airdrie.

The Scottish Board of Health has given approval for the erection of 20 houses at the napelside Lands site, for the Town Council. Each house is estimated to cost £337 10s. 2d.

THE SCOTTISH BUILDER

PITLOCHRY'S STEEL HOUSE

A "demonstration" steel house of the Atholl type, erected by Perthshire Highland District Committee, has recently been opened by Capt. W. E. Elliot, M.P., Parliamentary Under-Secretary to the Scottish Board of Health. In the course of Capt. Elliot's remarks, he said that Clydesdale was famous for its shipbuilding, and he hoped it would become equally famous for its steel houses. In Pitlochry twelve brick houses had cost fully £1,000 each. They were, therefore, indebted to the engineering firms who were constructing other types of houses, and to authors of schemes, such as the Duke of Atholl. The Duke, in thanking Capt. Elliot, stated he had taken up the scheme with the view of relieving the housing problem and of assisting unemployment. At a special meeting of the Highland District Committee it was agreed to build another four double houses of the "Atholl" type.

Concrete Houses at Saughton.

It is stated that Mr. Thos. L. Rae, for twenty years water superintendent to Clydebank and District Water Trust, has intimated his resignation in order to join a new company which has been formed for the erection of concrete houses.

Higher Standard of Housing in Scotland.

Speaking at the annual meeting of the Glasgow Workmen's Dwellings Co., Ltd., Sir Daniel M. Stevenson said that in no case was a public authority building houses of one apartment. It was a good thing, he said, that the standard of housing had been raised, but it was a pity that the standard had been raised without the occupants of the houses paying, or being able to pay, an economic rental. The consequence was that the country was being launched on a system of house subsidy which looked like being continued for many years. The house

ought to pay its way unless it was to be taken for granted that housing should be a public question in the same way as education.

Garages and the Glasgow Corporation.

The Dean of Guild Court is considering the question of the erection of garages by tenants of the Corporation housing schemes, two residents in Mossbank having been cited to appear in connection with alleged contraventions of the regulations by the erection of structures for the accommodation of motor cars. The Corporation do not object to the erection of wooden structures measuring 8 ft. by 6 ft. by 6 ft. for the storing of garden implements, &c., but the building of garages was not contemplated when this permission was given.

Kelvin Hall, Glasgow.

The Glasgow Corporation has instructed the City Engineer to prepare a new lay-out plan showing accommodation to be provided in the new hall to be erected in place of the building which was destroyed by fire. The special committee formed agreed with the Engineer's proposal that any building erected should be similar to the architectural features of the Glasgow University, the Western Infirmary, and the Art Galleries, all of which are near the site.

Housing Progress in Scotland.

The following figures show the progress that has been made in State-aided housing schemes in Scotland to July 31, 1925:—

	Completed.	Under construction.
1919 Act	24,769 ..	727
Private subsidy schemes	2,324 ..	—
Slum Clearance Schemes	1,566 ..	2,669
1923 Act	3,468 ..	6,269
1924 Act (Local Authorities' schemes)	168 ..	1,936
	32,295	11,601

Of the total number of houses completed and under construction under the 1923 Act, 3,075 are by the local authorities and 6,662 by private enterprise.

BUILDING TRADE WAGES IN SCOTLAND.*

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters	Brick-Masons' layers' tercers Labourers.
Aberdeen	1/3	1/8½	1/3	1/3	1/3	1/3	1/7	1/0½
Aldrie	1/3	1/3	1/3	1/3	1/3	1/3	1/6½	1/3
Alexandria	1/3	1/3	1/3	1/3	1/3	1/3	1/2½ to 1/3½	1/2½ to 1/3½
Arbroath	1/7	1/7	1/7	1/7	1/7	1/7	1/5½	1/1½
Ayr	1/3	1/3	1/3	1/3	1/3	1/3	1/6½	1/3
Bathgate	1/3	1/3	1/3	1/3	1/3	1/3	1/6½	1/2 to 1/3
Blairstown	1/7	1/7	1/7	1/7	1/5	1/7	1/4	10d. to 1/1
Blairstown	1/3	1/3	1/3	1/3	1/3	1/3	1/8	1/3
Bo'ness	1/3	1/3	1/3	1/3	1/3	1/3	1/6½	1/3 to 1/3½
Coatbridge	1/3	1/3	1/3	1/3	1/3	1/3	1/8	1/3½
Dumbarton	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/8½	1/2
Dumfries	1/3	1/3	1/3	1/3	1/3	1/3	1/8	1/3
Dunfermline	1/3	1/3	1/3	1/3	1/3	1/3	1/8	1/3½
Edinburgh	1/3	1/3	1/3	1/3	1/3	1/3	1/8	1/3½
Falkirk	1/7½	1/7½	1/7	1/3	1/7	1/7	1/6½	1/2½
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Glasgow	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Greenock	1/3	1/3	1/3	1/3	1/3	1/3	1/8	1/3½
Hamilton	1/3	1/3	1/3	1/3	1/3	1/3	1/8	1/3½
Hawick	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/3½
Helensburgh	1/3	1/3	1/3	1/3	1/3	1/3	1/7	1/3½
Inverness	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/1 to 1/1½
Kilmarnock	1/3	1/3	1/3	1/3	1/3	1/3	1/8	1/3½
Kirkcaldy	1/3	1/3	1/3	1/3	1/3	1/3	1/8	1/3½
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/1 to 1/1½
Lanark	1/3	1/3	1/3	1/3	1/3	1/3	1/8	1/3½
Leith	1/3	1/3	1/3	1/3	1/3	1/3	1/8	1/3½
Motherwell	1/3	1/3	1/3	1/3	1/3	1/3	1/8	1/3½
Perth	1/3	1/3	1/3	1/3	1/3	1/3	1/8	1/3½
Strirling	1/3	1/3	1/3	1/3	1/3	1/3	1/8	1/3½
Strling (Eastern District)	1/3-1/1	1/3-1/1	1/3	1/3	1/7	1/3	1/3½	1/3½
Wishaw	1/3	1/3	1/3	1/3	1/3	1/3	1/7	1/3½

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 33.

CURRENT PRICES FOR BUILDING WORK IN LONDON

EXCAVATOR.

Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	s. d.
		11 0
Add if in clay	" "	1 0
Add for every additional depth of 6 ft.	" "	0 6
Planking and strutting to trenches	per foot super	0 5
Do. to sides of excavation, including shoring	" "	1 0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	32 0
Add if in underpinning in short lengths	" "	7 0
Add if in floors 6 in. thick	" "	3 3
Add if in beams	" "	3 9
Add if aggregate 1: 2: 4	" "	10 0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2 6

BRICKLAYER.

Reduced brickwork in lime mortar and Fletton bricks	per rod	£ s. d.
		30 0 0
Add if in stocks	" "	7 10 0
Add if in Staffordshire blues	" "	22 0 0
Add if in Portland cement and sand	" "	1 10 0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0 0 1½
--	---------------	--------

POINTING.

Neat flat struck or weathered joint	" "	0 0 3
-------------------------------------	-----	-------

ARCHES.

Extra only to the price of ordinary brickwork:—		
Fair external in half brick rings	" "	0 0 10
Axed in stocks	" "	0 1 9
Rubbed and gauged jointed in putty camber or segmental	" "	0 6 0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0 1 0
Setting ordinary register grates and stoves	each	1 0 0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	" "	4 15 0

ASPHALTER.

Half-inch horizontal damp course	per yard sup.	4 3
Three-quarter-inch vertical damp course	" "	8 6
¾ inch on flats in two thicknesses	" "	6 3
Angle fillet	per foot run	0 3
Skirting and fillet 6 in. high	" "	1 2

MASON.

York stone templates fixed	per foot cube	13 0
York stone sills fixed	" "	22 0
Bath stone and all labour fixed	" "	10 6
Portland stone fixed	" "	20 0

SLATER.

Welsh 16 in. x 8 in. 3 in. lap, including nails	per square	72 9
Do. 20 in. x 10 in. Do. Do.	" "	80 9
Do. 24 in. x 12 in. Do. Do.	" "	90 0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5 0
Do. joists	" "	5 6
Do. roofs, floors and partitions	" "	6 0
Do. trusses	" "	8 6

Deal rough close boarding	per sq.	35/6
Flat centering for concrete floor, including struts or hangers	" "	72/-

Do. to beams	per ft. sup.	1 0
Centres for arches	" "	1 6
Gutter boards and bearers	" "	1 0

FLOORING.

Deal-edges shot	per sq.	44/6
Do. tongued and grooved	" "	49/-
Do. matchings	" "	51/-
Moulded skirting, including backings and grounds	per ft. sup.	1/6

SASHES AND FRAMES.

One-and-a-half moulded sashes or casements	per foot super	1 10
Two Do. Do. Do.	" "	2 1
Add for fitting and fixing	" "	0 3

Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	3 9
--	-----	-----

DOORS.

Two-panel square framed	per ft. sup.	2/1
Four-panel Do.	" "	2/5
Two-panel moulded both sides	" "	2/8
Four-panel Do. Do.	" "	2/11

CARPENTER AND JOINER—continued.

Deal wrot moulded and rebated	per foot cube	14 0
Plain deal jamb linings framed	per ft. sup.	1/7
Deal shelves and bearers	" "	1/4
Add if cross tongued	" "	2d.

STAIRCASES.

Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/	2/2	2/8	—

Housings for steps and risers	each	0 11
Deal balusters, 1 in. x 1½ in.	per ft. run.	0 9
Mahogany handrail: average 3 in. x 3 in.	" "	6 0
Add if ramped	" "	11 10
Add if wreathed	" "	23 9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/3
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

Rolled steel joists	per cwt.	16 3
Plain compound girders	" "	19 0
Do. stanchions	" "	21 9
In roof work	" "	27 6

RAIN-WATER GOODS.

Half-round plain rebated joints	ft. run	3'	4'	5'	6'
Ogee Do. Do.	" "	1/6	1/9	2/-	2/8
Rain-water pipes with ears	" "	1/9	2/-	2/6	3/3
Extra for shoes and bends	each	1/9	2/7		
Do. stopped ends	" "	4/4	5/11		
Do. nozzles for inlets	" "	1/11	2/4½	3/7	4/-
	" "	2/2	2/7	3/10	4/3

PLUMBER.

Milled lead and laying in flashings and gutters	per cwt.	65 0
Do. Do. in flats	" "	64 0
Extra labour and solder in coated cesspools	each	6 9
Weld joint	per ft. run.	0 6
Soldered seam	" "	1 6
Copper nailing	" "	0 6

Drawn lead waste per ft. run	1/2	3/4	1/2	1½	2"	4"
Do. service	1/8	2/2	2/7	3/10	4/0	
Do. soil						6/9
Bends in lead pipe	each				3/3	8/2
Soldered stop ends	" "	1/2	1/8	2/1	2/10	3/6
Red lead joints	" "	11d.	1/-	1/3	1/11	2/4
Wiped soldered joints	" "	2/10	3/6	4/-	4/11	6/6
Lead traps and cleaning screws	" "				14/7	19/6
Bib cocks and joints	" "	6/4	9/7	15/4	41/-	
Stop cocks and joints	" "	15/4	17/2	25/8	61/-	

PLASTERER.

Render, float and set in lime and hair	per yard sup.	2 4
Do. Do. Sirapite	" "	2 7
Do. Do. Keen's	" "	3 7
Add sawn lathing	" "	1 7
Add metal lathing	" "	2 6
Portland cement screed	" "	2 2
Do. plain face	" "	3 3
Mouldings in plaster	per l girth	0 1½
One-and-a-half granolithic pavings	per yard sup.	5 9

GLAZIER.

21 oz. sheet plain	per foot sup.	0 8½
26 oz. Do.	" "	1 0
Obscured sheet	" "	1 1
½ in. rolled plate	" "	0 9
½ in. rough rolled or cast plate	" "	0 10½
½ in. wired cast plate	" "	1 4

PAINTER.

Preparing and distemporing, 2 coats	per yard sup.	0 9
Knotting and priming	" "	0 7
Plain painting 1 coat	" "	0 9
Do. 2 coats	" "	1 2
Do. 3 coats	" "	1 9
Do. 4 coats	" "	2 4
Graining	" "	2 3
Varnishing twice	" "	1 9
Sizing	" "	0 3
Flattening	" "	0 7
Enamel	" "	1 1
Wax polishing	per foot sup.	0 6
French polishing	" "	1 2
Preparing for and hanging paper	per piece 2/- to 4/-	

These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright. Prices include both materials and labour.

TENDERS

communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

Denotes accepted. † Denotes provisionally accepted. Denotes recommended for acceptance. Denotes accepted subject to modification.

ASHFORD.—New offices, showrooms and garage, Messrs. Stanhays, Ltd. Mr. Edwin A. Jackson, I.B.A., chartered architect, Ashford. Quantities by the architect :—
Davis & Leaney, Goudhurst, Kent .. £12,362
G. E. Everitt & Sons, Ltd., Croydon .. 10,863
D. Godden & Son, Ashford .. 10,789
R. Webster, Folkestone .. 10,670
C. Jenner & Son, Folkestone .. 10,594
S. H. Howland, Ashford .. 10,530
W. Shipham, Ashford .. 10,347
G. Browning, Canterbury .. 10,250
J. B. Sharman, Ltd., Ramsgate .. 10,088

MINSTER.—Alterations to the new Council Chambers, for the U.D.C. :—
Messrs. Clarke.

ARNLEY.—Reinforced concrete work at pumping station, for the T.C. :—

Hodkin & Jones, Ltd. £560

ARNLEY.—Entrance gates at Locke Park, for the T.C. :—

Bayliss, Jones & Bayliss, Ltd. £145

BERKSHIRE.—Bye-pass roads, for the C.C. :—
Clark & Partners, Ltd., London—
Sunning bye-pass .. £19,563 2 5
Twyford bye-pass .. 59,793 14 4

BRADFORD.—Reconstruction of premises at corner of Meesgate and Hustlergate, for the London and Yorkshire Insurance Co. :—
T. Obank & Sons, Ltd., Thackley.

BURTON-ON-TRENT.—Erection of sub-stations at Hincote and Overseal, for the B.C. :—
Hincote—
G. Hodges & Son .. £1,170

BRISTOL.—
R. Kershaw & Son .. 488

BURTON.—Eight houses at Paulton, for the C.C. :—

C. G. Tovey, Midsomer Norton .. £3,227

BURTON.—Twelve houses, for the R.D.C. :—
Turner & Co., Bristol .. £6,752

BURTON.—Ten houses at Farrington Gurney, for the R.D.C. :—

C. G. Tovey, Midsomer Norton .. £3,913

CHICHESTER.—Installation of electric light at Girls' School (and gymnasium), for the E.C. :—

Baker & Sons .. £319 0 0

H. S. Tett & Co., Ltd. 259 18 6

H. Saunders, Ltd. 255 16 0

H. Hayward & Son .. 237 0 0

F. Dunkley .. 235 0 0

J. Cannon & Co. 223 0 0

A. Pinto .. 223 0 0

CHICHESTER.—Repairs and redecorations at Girls' School, for the E.C. :—

W. Jenkins & King .. £162 10 0

H. W. Moody .. 160 0 0

H. Wales .. 159 17 6

Baker & Sons .. 149 19 6

W. Jones & Son .. 146 0 0

H. Welby .. 137 19 0

H. Jones & Son .. 137 0 0

H. Ross & Co. 124 0 0

CHICHESTER.—Fifty-four houses in various blocks, for C. Mr. John Bennett, City Architect :—

W. P. Jones & Sons, Pinhoe, near Exeter £3,205 13

CHICHESTER.—
Bond, Exeter .. 4,189 4

CHICHESTER.—
Exeter Federation of Master Builders .. 2,219 5

CHICHESTER.—
houses—do. 4,446 0

CHICHESTER.—
houses—do. 2,219 0

CHICHESTER.—
houses—do. 3,322 10

CHICHESTER.—
houses—do. 3,322 10

CHICHESTER.—
houses—do. 3,358 10

CHICHESTER.—
houses—do. 3,346 10

CHICHESTER.—The concrete work for the formation of pits and padding pools in Kelvingrove Park, at Park, Richmond Park, and Elder Park, T.C. :—
W. Paterson .. £1,784 9 1

CHICHESTER.—Laying of a water main from road to Guildown :—
H. & Co. £431 14 1

CHICHESTER.—
Streeter & Co., Ltd. 409 12 10

CHICHESTER.—Provision of a storm sewer at road, for the T.C. :—
H. H. Harris Bros. £3,358 8 0

CHICHESTER.—
Trison (Roads), Ltd. 3,329 14 6

CHICHESTER.—
eter & Co. 3,298 8 7

CHICHESTER.—
Douglas .. 3,265 0 1

HULL.—Construction of street works and sewers on the West Hull housing site, for the Corporation :—
*R. & H. Fisher, Hull .. £5,827 4 4

KINGSBRIDGE.—Erection of 18 cottages at Rack Park, for the U.D.C. :—
J. H. Dyer, Kingsbridge .. £9,348

LEEDS.—Warehouse extensions at Messrs. Holt & Co.'s, in Park Cross-street. Messrs. Chorley & Gribbon, architects, Park-place :—
*Armitage & Hodgson.

LIMERICK.—Concreting second section of streets in Limerick, for the Repairing Committee of the Corporation :—
†P. Dillon .. £30,107

LONDON.—Tenders accepted for July by H.M.O.W. :—

Building Works: Battersea Telephone Exchange—Plasterer: J. & P. Wright, London, S.E. Belfast, New Parliament Buildings—Masonry: J. & W. Stewart, Belfast. Bermondsey Employment Exchange—Erection: A. Roberts & Co., Ltd., London, W. Patent stone: Malcolm Macleod & Co., Ltd., London, E.C. Steelwork: The Somerville Barnard Construction Co., Ltd., London, S.E. Birmingham P.O. Stores Factory—Concrete water tank, &c.: W. B. & F. T. Archer, Birmingham. Bolton Employment Exchange—Painter: John Lea & Son, Wigan. Bridge of Don—Erection of Coastguard cottages: R. Pert & Son, Montrose. Cley-next-the-Sea—Erection of Coastguard cottages, &c.: R. Claxton, Wells. Colwyn Bay P.O., &c.—Painter: Hyett Bros., Gloucester. Edinburgh, Courts of Law—Alterations, &c.: G. & R. Cousin, Edinburgh. Findon—Erection of Coastguard cottages, &c.: B. Thomson & Sons, Stonehaven. Hoylake P.O.—Painter: Hyett Bros., Gloucester. Leeds, Ministry of Pensions Hospital—Painter: Dearden Bros., Leeds. Plumber: H. Braithwaite & Co., Ltd., Leeds. Slater: Watson & Worsnop, Leeds. London Wall Telephone Exchange—Steelwork: Archibald D. Dawney & Sons, Ltd., London, S.W. Macleodfield—Erection of a new P.O., &c.: Cooper Bros., Macleodfield. Asphalter: Thomas Faldo & Co., Ltd., Manchester. Painter: Barker Bros., Macleodfield. Plasterer: C. Hoyland, Manchester. Plumber: F. Mottershead, Macleodfield. Steelwork: Edward Wood & Co., Ltd., Manchester. Mount Pleasant Letter Office—Road paving: The Neuchatel Asphalte Co., Ltd., London, S.W. Openshaw Employment Exchange—Asbestos tiling: Weston & Co., (Manchester), Ltd., Manchester. Excavator, &c.: T. Campion & Son, Manchester. Painter: Charles Bell (Manchester), Ltd., Manchester. Plumber, &c.: S. Oakley & Sons, Manchester. Ramp-ton State Institution—Road construction: Bernard Purney, Ltd., Gainsborough. Royal Mint—Re-forming road, &c.: A. Roberts & Co., Ltd., London, W. Granolithic Paving and Plastering: Young Bros., London, S.W. St. Agnes—Erection of Coastguard cottages, &c.: A. J. Treneer & Sons, St. Mary's. Shoreditch Housing Scheme—Tar paving: Josiah Smart & Son, London, W.C. Stalybridge P.O.—Decorator: H. Rigby & Sons, Dukinfield. Wakefield P.O., &c.: —Painter and glazier: Chas. Turner & Sons, Wakefield. Plumber: Samuel Atkinson, Ltd., Wakefield. Wellington (Salop) P.O., &c.—Asphalter: Val de Travers Paving Co., Ltd., London, E.C. Plumber and Painter: G. H. York & Co., Wellington. Steelwork: Jesse Tildesley, Ltd., Darlaston. Yealm—Erection of Coastguard cottages, &c.: H. J. & A. Wright, Ltd., Great Missenden.

LONDON.—Tenders accepted for July by H.M. War Office :—

Building Works and Services: Blackdown (Reconstruction and New Work): Ashford Builders Co., Ltd., London, W.C. Southsea Castle (repairs to piling on foreshore): F. Bevis, Ltd., Portsmouth. Canterbury (single storey barrack block): G. Browning, Canterbury. Londonderry (erection of married officers' quarters): R. Colhoun, Londonderry. Lower Chatham Barracks (alterations to roofs of soldiers' quarters): Geo. Gates & Sons, Rochester, Kent. Beverley (construction of Miniature range): Jaram & Son, Scarborough. Feltham (erection of two W.O.'s quarters): R. Mansell, Croydon. York Cavalry Barracks (repair to mangers): J. W. Maw & Sons, Ltd., York. Blenheim Barracks, Aldershot (detached W.O.'s quarters): C. Morgan & Son, Ash Vale, Surrey. Ashton-under-Lyne (gymnasium extension): J. R. Idyard & Sons, Ltd., Ashton-under-Lyne. Beachley Camp (erection of married officers', W.O.'s and married soldiers' quarters): J. Stephens, Cardiff. Catterick Camp (reconditioning of roads): Tarslag (1923), Ltd. Stockton-on-Tees. Colchester (repair of roads): J. Tovell, Ltd., Colchester. Topsham Barracks, Exeter (erection of married soldiers' quarters): Woodman & Son, Exeter. Redford Barracks, Edinburgh (erection of married officers' quarters): W. & E. R. Watson, Ltd., Edinburgh.

LONDON.—Building works at Sir Walter St. John's School, Battersea, for the Governors. Mr. Heron Ryan Tenison, F.R.I.B.A., architect :—
George Parker & Sons .. £12,132

Holliday & Greenwood .. 11,706

H. S. Lee, Ltd. 11,598

William Akers & Co. 11,447

George Heath .. 11,312

A. & F. J. Leather & Co. 11,299

H. H. Hollingsworth & Co. 11,282

William Hammond .. 11,255

Hudson Bros. 11,088

W. C. Barton & Co. 10,990

Albert Monk .. 10,930

F. Troy & Co. 10,923

Patman & Fotheringham .. 10,861

Loye & Co. 10,853

Alan V. Goad .. 10,852

*John Willmot & Sons .. 10,542

Subject to the approval of the B.E. and the L.C.C.

OLD WARDEN, BEDFORDSHIRE.—Repairs to the Parish Church roof, for the Vicar and Churchwardens. Messrs. Cockrill & Sellek, architects, Bedford :—
H. Pond, Stevenage .. £230 0

H. Lynn, St. Neots .. 212 10

G. H. Napp, Shefford .. 190 16

Fennemore & Son, Sandy .. 160 10

C. A. White, Bedford .. 157 9

J. S. Ludford, Shefford .. 155 10

H. S. Sharp, Sandy .. 148 0

†Fennemore & Son, Potton .. 142 10

PONTEFRAC.—Thirty-eight non-parlour type houses on the Airedale No. 2 housing scheme, for the R.D.C. :—
*F. Tree, Ferrybridge .. £15,618

PONTEFRAC.—Works in connection with the construction of roads, house drainage, footpaths and fencing for 38 non-parlour type houses at Airedale No. 2 housing scheme, for the R.D.C. :—
*Barber & Heseltine, Pontefract £2,013 2 8

READING.—For (a) 83 parlour and (b) 67 non-parlour type houses on the Oxford-road site, for the T.C. :—
*(a) W. Creed & Co., Maidenhead £39,972

*(b) Bonding Block Constructional Co., Ltd., London .. 29,441

RICHMOND (YORKS).—Restoration of the Market Hall roof, for the T.C. :—
*J. E. Nelson & Son .. £365 9

ST. HELENS.—Bridge over the canal at Blackbrook, for the C.B. Mr. A. W. Bradley, Borough Engineer :—
†Walter Jowett, Prescott.

SHEFFIELD.—Conversion of Brightside Library for open access, for T.C. :—
†Ash, Son & Biggin, Ltd. £1,135 11

SHEFFIELD.—Adaptation of huts, &c., at Carfield School, for the E.C. :—
*Wellerman Bros., Ltd. £1,334 5

SOUTH SHIELDS.—Three houses, Sunderland-road, for the T.C. :—
†Co-operative Wholesale Society £1,620

STANLEY.—Twenty "B 3" type houses at South Stanley, for the U.D.C. :—
*G. E. Ridley, Stanley £449 7 6 each

STRETFORD.—Widening Trafford Park-road, for the U.D.C. :—
*Bethell & Sons .. £2,434 12 6

SWANSEA.—Cleaning and painting cranes, bridges, buildings, &c., at Swansea Docks, for the G.W.R. :—
*Hanney & Co., Cardiff.

THIRSK.—Alterations to 14 houses, for the R.D.C. :—
*R. Stephenson, Thirsk .. £294

TWYFORD.—Construction of two road bridges, for the Berkshire C.C. :—
†Somerville & Co., Ltd., London £6,754 6 4

WALLASEY.—Thirty-two houses on the Belvidere-road site, for the C.B. :—
*A. H. Chelmick, Wallasey .. £19,520

WALTHAMSTOW.—Shelter for Open-Air Class, Forest-road Girls' School, for the E.C. Mr. H. Prosser, Architect to the E.C. :—
J. Upton .. £262 9

J. Penrose .. 198 0

Marrable Bros. 187 10

Douglass Halse & Co. 184 0

S. Shaw .. 180 0

S. Blow, Ltd. 165 0

J. Sands .. 154 0

*J. E. Ree .. 136 0

All of London.

WALTHAMSTOW.—Sundry interior improvements in forming teachers' room and removal of gallery, Gamuel-road schools, for the E.C. Mr. H. Prosser, Architect to the E.C. :—
J. Upton .. £132 0

Douglass Halse & Co. 126 0

J. Sands .. 117 0

*S. Blow, Ltd. 112 10

All of London.

WALTHAMSTOW.—Exterior painting Gamuel-road schools, for the E.C. Mr. H. Prosser, Architect to the E.C. :—
J. Sands .. £320 0 0

H. C. Earl .. 283 13 6

Lucas Bros. 277 10 0

F. E. McBride .. 269 7 0

Douglass Halse & Co. 241 0 0

*S. Blow, Ltd. 218 10 0

E. Maffia & Sons .. 172 10 0

All of London.

WALTHAMSTOW.—Canteen for Physically Defective Centre, Joseph Barrett schools, for the E.C. Mr. H. Prosser, Architect to the E.C. :—
S. Shaw .. £353 0

Douglass Halse & Co. 325 0

Marrable Bros. 323 15

S. Blow, Ltd. 295 0

J. Sands .. 260 0

*J. E. Ree .. 195 0

All of London.



WALTHAMSTOW.—New range of w.c.'s and fre-roofing playsheds, Forest-road schools, for the E.C. Mr. H. Prosser, Architect to the E.C. :—

J. Upton.....	£285	0	0
J. Sands.....	254	0	0
Douglass Halse & Co.....	253	0	0
F. E. McBride.....	249	10	0
J. Penrose.....	237	1	8
S. Blow, Ltd.....	229	5	0
*Byfield & Co.....	145	0	0

All of London.

WALTHAMSTOW.—Painting, distempering, &c., the interior of the Forest-road schools, for the E.C. Mr. H. Prosser, Architect to the E.C. :—

J. Upton.....	£940	0	0
Douglass Halse & Co.....	780	10	0
J. Penrose.....	780	7	6
S. Blow, Ltd.....	744	5	0
Lucas Bros.....	649	0	0
E. Maffia & Sons.....	640	10	0
F. E. McBride.....	619	7	0
*J. Sands.....	526	0	0
H. C. Earl.....	520	10	6

All of London.

WALTHAMSTOW.—Cleansing and lime-whiting to out-buildings, &c., of schools, for the E.C. :—

*Murray, Walthamstow £190 5

WALTHAMSTOW.—Plastering to interior walls and renovation work, Marsh-street Boys' School, for the E.C. Mr. H. Prosser, Architect to the E.C. :—

Byfield & Co.....	£795	0
Douglass Halse & Co.....	660	0
S. Blow, Ltd.....	638	10
*J. Sands.....	619	10

All of London.

WEALDSTONE.—124 parlour type houses on the Weald Village estate, for the U.D.C. :—

†H. Brown, Harrow.....	£71,400
Alternative.....	59,446

WEST WALTON.—School and teacher's house, for the Norfolk E.C. Mr. C. W. Bullen, Building Inspector, Shirehall, Norwich. Quantities by Building Inspector :—

*Eldon J. Smith, Bunwell £7,400

WICKLOW.—Repairs to foreshore works and concrete groyne, for the U.D.C. :—

Lee Bros., Arklow £1,223

WORSBOROUGH.—Forty houses, for the U.D.C. :—

*Rawson Porter..... £17,380

YORK.—Reflooring the Mansion House State Room, for the C.C. :—

*F. Shepherd & Son, Ltd..... £249

Builders' Estates.

Mr. Richard Fenwick, of 9, Plough and Harrow-road, Edgbaston, Birmingham, builder and contractor, has left £31,776.

Mr. Paul Hodgkinson, of Haslington, near Crewe, builder, left estate of the value of £10,682.

Salonica First International Fair.

Opportunities for widening their business activities are offered to British manufacturers by this Fair, which is to be held from October 18 to 31. Specially arranged and constructed pavilions and stands covering an area of 40,000 square metres are available in the heart of the newly-reconstructed city. The purpose of the Fair is :—(1) To afford an opportunity to the Greek merchants to come into closer business relations with their suppliers in the country and abroad; (2) to enable local and Near East merchants to get a wider knowledge of the vast field of production in the countries from which they import their requirements; (3) to concentrate in the Greek pavilion all national industries in order to make them known to a larger field and to create for them new openings; (4) to draw special attention to the section on Agri-

J. J. ETRIDGE, J^r. Ltd
SLATING AND TILING
SLATE MERCHANTS
CONTRACTORS.

Inspections and Reports made on
OLD OR FAULTY ROOFS
in any part of the country.

Telephone: Bishopsgate 1944/5, or write,

Bethnal Green Slate Works,

BETHNAL GREEN, LONDON, E.

culture—"Constructions, Buildings and Dring"—which most concerns the new Gr Territories, particularly Macedonia. Particu and application forms can be obtained from offices of the Fair, 11, Papakvriazi-str Salonica, or from any Greek Consulate in G Britain.

FLOORINGS

HIGH-CLASS

of every description in

WOOD BLOCKS. PARQUET
SEASONED T. & G. WAINSCOT OA
TEAK AND MAPLE.

FACTORY AND ROADWAY PAVIN

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASAN

WANDSWORTH, S.W.18.

(Phones: Putney 1700 & 24

FITZPATRICK & SON

Masons and Paviers,

455, OLD FORD ROAD, BOW, E.

Phone: EAST 4808.

Granite Setts and Kerb (redressed and second hand), York Paving Spur Stones, Granite Chippings, and Granolithic and Sett Paving.

School & Hospital Stove

MAKERS OF

WRIGHT'S IMPROVED and also SHORLAND PATENT
WARM AIR VENTILATING PATTERNS.

GEO. WRIGHT (LONDON)
LIMITED

19, Newman St., Oxford St., London, W.1
Burton Weir Works, Rotherham.

OGILVIE & CO.,

Telephone OLISCOB
Many years' connec
with the late Firm
W. H. LASCHLES &
of Bunhill Row.

Wildmay Works, Wildmay Avenue, Islington

EXPERTS IN HIGH-CLASS JOINERY

ALTERATIONS AND DECORATIONS.

Telegrams: "Frolic, Liverpool." Phone 228 B4

E. B. BURGESS & CO.

6, CASTLE ST., LIVERPOOL

WOOD BLOCK FLOORING

AND PARQUETRY.

Wheatly & Co.,

SPRINGFIELD TILERIES, NEWCASTLE, STAFFS.

'Phone: Newcastle, Staffs, 101.
'Grams: "Wheatly, Trent Vale."

Estd. Over 50 Years.
Brand: TRITON.

SPECIALITIES.

Rustic, Sand Faced and Hand Pressed Tiles in Blue, Blue Brindled, Red, Light Brindled and Dark Brindled Colours. Extensive stocks held of many varieties of Flooring Quarries, Ridge Tiles, Garden Edging Tiles, Air Bricks, Blue Bricks, Copings, etc., etc.

Price List and Catalogue, or Illustrated Brochure of Roofing Tiles free on demand.

N.B.—ALL our products are Hand-made by the Plastic Process.

HOWELL J. WILLIAMS
Builders Ltd.

High-Class Building

and

Joinery Work

11/17, BERMONDSEY STREET,

Telephone. LONDON BRIDGE, S.E.1
HOP 202

Builders of very many well-known Banks, Office and Business premises. Our works especially convenient for City Building and fittings.

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

OL. CXXIX.—No. 4,309

SEPTEMBER 4, 1926

ART EXPORTS

THE recent sale by Earl Spencer of Titian's "Venus and Adonis" to Mr. Joseph Widener created a certain amount of excitement both in art and commercial circles. There was the usual outcry in the press about the folly of allowing masterpieces to leave this country, and it was distinctly amusing to watch the conflict between art and wealth. It was computed that last year and 1923, Americans spent over £4,000,000 in Europe on objects of art of various kinds: how much has been spent in Great Britain, we do not know.

Students of history and political economy have been interested for some time in the Westward movement of art treasures. As a movement it is significant, or rather was, until certain countries began to impose export restrictions in the form of duties. It means that art treasures gravitate naturally to the countries which are wealthy and prosperous. It may, of course, mean much more than this: it may indicate a love of art, and that these established masterpieces may form a basis for the development of æsthetic taste in the United States. In matters of taste we will not attempt to define which is cause or effect, but we can safely say that a fine sense of taste has been combined with business acumen. We all have exclusive tastes, where we have the means to satisfy them. A picture may be worth £200,000 or it may be worth next to nothing, and everyone at some time or other has dabbled with the speculation of whether he would take the £200,000 or keep his picture.

The simple truth is that certain pictures have a distinct commercial value, which no one believes has any relation to their æsthetic value, and we part with them not because we do not appreciate them, but because we are too poor to keep them. Our nation we managed to acquire in the days of our prosperity a good proportion of the world's art treasures which came to us from the West, and if we cannot retain them all, it is because we are poorer or because other nations are wealthier. It may be urged that a country is really wealthy that is rich in art, but modern civilisation has given this philosophy a new meaning. Wealth, as a means of acquiring objects of art, takes the place of conquest by arms.

We are not in sympathy with those who have no scruples in holding the nation to ransom by forcing it to collect its art treasures by selling off its funds to retain the custody of its art treasures. We do not value the sacrifice in the cause of art, and, in fact, we doubt whether art has anything to do with it. The real strength of the healthy State does not lie in its hoard of antiques, but in the interest it displays in developing and encouraging contemporary art of every kind. We do not wish to claim for our æsthetic taste by trading in posthumous masterpieces: we prove it if we spend a little of our fabulous profits on sales in taking an active interest in the art of our day. One tenth of the money spent in prolonging our ownership of a single picture (and it is only a temporary ownership after all) would do more good to the cause of art, by saving things, than the loss of many masterpieces. If we took the practical point of view there would be no shortage of masterpieces, and public taste would have a significance we could understand. Meantime the dead stifles the

From the strictly economic point of view a nation is neither richer nor poorer by inflating the prices of its art treasures and keeping them in the country. All that happens is that the public is a little poorer, and a few individuals are richer; plus and minus cancel out, and we have kept the transaction within the family circle. The cause of Art has nothing to gain from this domestic arrangement of buying and selling: on the contrary, it suffers considerably if we neglect the art which is living by concentrating on that of the past. It is all to the good that America should spend some of her surplus wealth in purchasing objects of art in this country, and as a nation we cannot afford to neglect any opportunity of interrupting the steady flow of gold to America. We bought war material from America and contracted a large debt; we are paying back in works of art. On reflection there is something which is not altogether mercenary about the arrangement if we choose to look at it from the unselfish and larger point of view.

We have distinct regrets about losing the guardianship of our national masterpieces, but we do not agree with those who fear that the time is coming when we shall have none for ourselves left in the country. We have entirely misjudged human nature if there ever happens to be a depleted market for the art lover or the speculator. Every generation will find something that it will count as priceless, and if there is a shortage it will not be because the nation has lost its taste in art, but because the collectors have lost their skill. We do not regret the Westward movement of our art collections; we think it is more wholesome that we should have more works of art than that we should hoard our antiques. It is indeed an open question whether posterity has more need to be afraid of an ample supply of antiques than a shortage.

Meantime it is distressing to think that Bramall Hall (a fine old example of half-timbered-work) has appeared valueless as a work of art because it could not be shipped in a crate to America. This thought compels us to harbour no illusions about the humbug which arises when æsthetic taste reveals itself in commercial art values. It is, then, that we like to pretend that our taste is real because it is sentimental. We have heard it said that the repair of St. Paul's Cathedral has cost the nation as much as the purchase of an old masterpiece in paint. This is true, and the analogy will serve our purpose, though it is not our intention to contrast architecture with painting. We cannot help seeing St. Paul's; we can see it every day and enjoy the sight for nothing, and we are not in the habit of attaching values to that which we get for nothing. It is therefore to the credit of our nation that it realised the value of St. Paul's even if it were valueless in the jargon of commercial art.

The moral is that our trafficking in pictures is not the serious matter we pretend, and we need not be afraid of being labelled as Philistines. When we pay an enormous sum for a picture we are fairly certain that we have a valuable article which we can sell again; when we restore and preserve a beautiful building we cease to measure æsthetic values in terms of what is technically known as a "business proposition." St. Paul's Cathedral will remain as a tribute to a nation which knew the difference between æsthetic and commercial values, yet did not falter.

NOTES.

Legal Assistance for Architects. A LICENTIATE MEMBER of the R.I.B.A. writes to us as follows:—"Now that the R.I.B.A. and Society of Architects are amalgamated, perhaps some kind reader will inform me as to whether the R.I.B.A. undertake to safeguard the interests of their members who may be so unfortunate as to be engaged with local government authorities and large commercial firms, on lines similar to the Legal and Medical professions (the oldest 'trade unionists' in existence); if not, I would ask: What is supposed to be the benefit a member derives from merely paying his subscription year after year?" We are not surprised our correspondent should have asked this question, though we think he is singularly unfortunate if he has not discovered the benefits to be derived from membership of the R.I.B.A., even though there is not at present machinery for safeguarding the interests of members "on lines similar to the Legal and Medical professions." As a matter of fact, the question has been before the Institute for some time, and before the war proposals for the formation of a Defence Union were actually, we believe, approved by the Council. Since then the Council have, we understand, empowered the Practice Standing Committee to prepare a scheme for the assistance of members who need legal assistance, and such a scheme will, no doubt, be submitted and dealt with in the near future. Even as it is, the Institute has taken up cases on behalf of members where any question of principle has been involved, and would, we should think, do so again.

German Competition in Housing. THE news that a German firm is able to secure a contract for the erection of 230 houses in Dublin at a figure £4,000 lower than the lowest Irish tender, will come as a surprise to those interested in housing costs, especially as it is reported that the houses are to be built of concrete blocks "made in Germany." We have become accustomed to foreign competition in materials, but not in actual construction. The news is the more extraordinary when we remember that the chief claim of the concrete house to cheapness is that the walling, or walling units, can be made by unskilled labour from local materials. We have no further information so far than is contained in the daily press, and we are inclined to doubt whether this gives an accurate impression of the facts. Messrs. Kossel, the firm in question, have for some years made a speciality of building concrete houses, and among other places they have been responsible for a number on Mr. Kepler's big Amsterdam scheme. But their system makes no use of pre-cast concrete units. It is a monolithic system, in which a slag and clinker concrete is poured between a highly-efficient wooden shuttering. We do not, of course, know whether the firm is proposing to use a different system for these Dublin houses, but we think it is highly probable that all that will be "ready made in Germany" is the shuttering. Certainly it would be remarkable if lower wages, together with the difference in the rate of exchange, made it possible to deliver German concrete blocks in Ireland cheaper than the home-made article, for as the cost of transporting them from the docks to the site would not be less than the cost of bringing sand and gravel from the pit, the saving in cost could only be effected

by the difference in unskilled labour Germany and Dublin.

The Housing Subsidy. MR. JAMES P. ORR, Director of Housing to London County Council, writes to the *Times* of Wednesday reference to the housing subsidy incidentally gives figures to show how difficult it is to escape from overcrowding in tenemented houses in London. The course of a survey of 153 homes in a group of typical tenemented houses in London 20 families were last year found to be in need of early relief from really serious overcrowding, and it has taken 12 months of continuous effort to find the first of 20 new homes needed. "A modern five-roomed flat," he says, "rented at £10 per week, has at last been secured for a family of six, who have for the last years been trying to escape from overcrowding, rooms, rented at 8s. 9d. For these rooms the landlord now gets 27s., instead of 8s. 9d.: one is let furnished at £10, the other unfurnished at 12s. The family has been secured as an extra room for a family of ten, who have for eight years lived in two dark basement rooms in the same house. The two families thus relieved could afford high rents, and in each case there were several workers, and the family earnings came to a total of £10 per week; but few of the remaining 18 families can afford more than £5 per week rent."

A Suggestion. HE says that it is the duty of the large young firms who needs relief, and suggests the payment of rents on a sliding scale according to income for houses of accommodation, and says, "there is no reason why it should not necessarily be then any greater loss



Birkenhead War Memorial.

PROFESSOR LIONEL B. BUDDEN, M.A., A.R.I.B.A., Architect. MR. G. H. TYSON SMITH, Sculptor. (See p.352.)



Birkenhead War Memorial: Detail of End Elevation.

PROFESSOR LIONEL B. BUDDEN, M.A., A.R.I.B.A., Architect.

MR. G. H. TYSON SMITH, Sculptor.

sidy scheme than there is now, if houses are let in pairs, one at somewhat more, the other at as much less than average rent. The L.C.C.'s estimates of 24-5 show that on the average the purse pays 18s. towards the economic rent (31s. per week) of each of the Addison houses erected by the up to last April." It has already suggested in our columns that system by which relief should be to tenants who cannot afford to pay economic rent for the houses they would be better than the present, and we can understand Mr. Orr he says, "Why should every tenant the same subsidy without reference at he can afford? Why should we flag the subsidy by talking as 13s. were the full rent? Why the 31s. rent and the 18s. rebate? ure to suggest that in each locality nts for houses should be classified lieved in order of the urgency of need of relief; that in each case ate should be limited to the m necessary to secure that relief."

Rot
ber.
y, and it is well that the best

THE question of dry rot in timber is of great importance to the architectural profession and the building

methods of identifying and dealing with it should be known. Mr. Alan E. Munby, in referring in *The Times* to the help given him by the Natural History Museum in identifying fungi in building timber, says the subject embraces a cause of immense annual loss to the country and upon which much remains to be learnt. "The ravages of dry rot," he says, "which often involve the partial demolition and reconstruction of buildings, are so common and widespread that it seems extraordinary that more research upon the diseases included in this term are not in progress. Besides the Natural History Museum, the Imperial College and (quite lately) the Department of Industrial Research deal with this subject, but only in a very limited manner, and not on a scale at all commensurate with the importance of the problem. . . . The Royal Institute of Architects has been pressing the need for research on dry rot from time to time for some years, and the British Science Guild has recently had the subject before it for discussion as one of national importance." As the subject is receiving attention, we may refer to the article by Professor Groom, published in *The Builder* for May 30, 1913, and subsequent issues, and the letters in our Inquiry Column this week.

The National Joint Council for the Building Industry. A BALLOT on a new national wages agreement for the building industry has just been completed by the unions affiliated to the National Federation of Building Trades Operatives, with the exception of the bricklayers' and plasterers' organisations, which recently seceded. This agreement will bring to an end the present Wages and Conditions Council and its constitution and will establish a National Joint Council for the building industry. Wages will be reviewed annually in January of each year and adjustments will be made on the average cost of living figure over a yearly period. The present wage rates will be based on a cost of living figure of 78 per cent. above the 1914 level, and with every rise or fall of $6\frac{1}{2}$ points there is to be an increase or reduction of a halfpenny an hour. The result of the ballot will not be announced until the emergency committee of the Federation meets late this week to consider the returns, but we understand that the agreement has been ratified by the unions. The agreement affects very little the agreement between the Employers' and Operatives' Federations, but the substitution of the name of National Joint Council for the old title is to be commended.



One of a Pair of Bedroom Windows in Stained Glass, Braintree.

By MR. LEONARD WALKER, R.I.

GENERAL NEWS

Bonar Law Memorial.

The 12 ft. Scottish cairn erected in memory of Mr. Bonar Law at Rexton, New Brunswick, where the late British Premier was born, will be unveiled on September 17.

New Church at Rothsay.

A church to seat 800 has been opened at Rothsay. It is in the Norman style, and was designed by Mr. R. Fairlie, A.R.S.A., of Edinburgh.

Architect's Estate.

Mr. Vincent Craig, F.R.I.B.A., J.P., of High Close, Wokingham, Berks, formerly president of the Belfast Art Society, who died on July 1 last, left property of the gross value of £110,603 7s. 1d.

Wooden Houses for Hendon.

The London County Council are contemplating building some 2,000 wooden houses at Hendon as a result of Mr. G. Topham Forrest's visit to America, where he was very favourably impressed with the possibilities of adopting timber-framed houses in this country.

Pickering Castle.

At a recent meeting of the Pickering Urban District Council it was agreed that, subject to certain terms, the Office of Works should take over from September, 1926, the ruins of Pickering Castle and its grounds under the scheme for the Preservation of National Monuments.

R.I.B.A. Scholarships.

The Board of Architectural Studies of Cambridge University have awarded the R.I.B.A. (Anderson and Webb) Scholarships as follows: First year student, £35, to R. F. Henniker, Trinity Hall; second year student, £35, to C. D. G. Nicholson, Jesus College.

Armagh Housing Scheme.

The Armagh Rural Council recently had under consideration 53 representations for labourers' cottages, the first of a batch of 300, under the Labourers' Acts. The scheme is estimated to cost between £80,000 and £100,000.

Archæological Find at Sandwell Gate.

There has been removed to the Hartlepool Museum an interesting archæological find recently discovered near Sandwell Gate, Town Wall. It is the servery hatch to the Refectory or dining-hall of the Saxon monastery which at one time existed there, and had been built into the wall of a subsequent structure, now being demolished.

Road Improvements.

£6,500,000 has been allocated from the Road Fund, administered by the Minister of Transport, for the improvement and modernising of several trunk roads throughout the country. About 40 county councils are concerned in the programme, and the parts of the great highways that are to undergo improvement reach a total length of 500 miles.

Liverpool Rehousing Scheme.

Plans have been prepared in Liverpool for a large rehousing scheme, which will involve the rebuilding of a residential belt affecting a population of at least 50,000. The Housing Committee propose to erect at the Dingle—the south end of the city—a ten-story block of tenements for the first lot of residents to be removed, and a similar block of tenements for the north end is contemplated.

Ashted Forest Excavations.

A Roman site covering at least several acres has been found in Ashted Forest, and the foundations have already been unearthed of what are believed to be the indoor bathing quarters—centrally heated from a charcoal furnace—of a large villa, including a hypocaust 20 ft. 7 in. by 10 ft., and, what is rare in Roman buildings in this country, a circular chamber 17 ft. in diameter.

Salonica International Fair.

We are informed that owing to the very short time the prospective participants would have for the preparation and dispatch of their exhibits to Salonica to be in time for the opening of the Fair, the organisers have found it necessary to postpone the opening to a later date—probably the spring of 1926, but the date has not yet been fixed.

Beet Factory for Felstead.

The Anglo-Scottish Beet Sugar Corporation, Ltd., have now definitely decided to proceed with the erection of a beet factory at Felstead, at a cost of £250,000.

Reconstruction of Dublin Customs House.

The work of rebuilding the old Dublin Custom House, which was destroyed during the trouble of 1921, is proceeding rapidly, about 180 men being employed.

WAR MEMORIALS.

Scotland's War Memorial.

Considerable progress has been made with the reconstruction of the old barrack building on Edinburgh Castle rock into a Gallery of Honour, which is to form, with a shrine on the north side, the Scottish National War Memorial. Mr. P. Jackson has completed the sculpture of the great arch, nearly 30 ft. high, that leads from the gallery into the shrine; the latter has been carried up to the level of the springing of the stone vault. At each end of the Gallery of Honour there is to be a window, the one to the Navy and the other to the Air Force, and these are almost complete. The bays for the memorials to the twelve historic Scottish regiments and other units are taking shape, and the doorway forming the lower story of the porch—which will be the central feature of the exterior looking south into Crown-square—is completed. The work is under the supervision of the architect, Sir Robert Lorimer, A.R.A., and the Duke of Atholl's committee.

St. Quentin Memorial.

Marshal Foch recently unveiled at Mont St. Quentin, in the Somme, a monument erected to the memory of Australian soldiers who fell at the Battle of St. Quentin.

Longford War Memorial.

General Sir William Hickie recently unveiled Longford County War Memorial, at Longford; it is in the form of a Celtic Cross, and stands in the Market-square.

Pallerton War Memorial.

A war memorial, consisting of a granite obelisk, was unveiled at Pallerton recently.

Actors' War Memorial.

A war memorial to the actors who lost their lives in the war was recently unveiled at Stratford-on-Avon. It was designed by Sir George Frampton, R.A., and is in the form of a marble panel.

Owlerton War Memorial.

The foundation stone of Owlerton war memorial will be laid on September 19. The memorial takes the form of a large hall capable of seating 500 people, and will cost £5,000.

COMPETITION NEWS

Model Dwellings Competition, Russia.

THE Russian Government has issued particulars of a competition to be held for the purpose of providing model dwellings for working-class homes in Russia. The particulars issued are of considerable interest although it is very unlikely that they will have any response from British architects.

The document is headed "First Contest of Projects for Model Workers' Homes announced by the Moscow Soviet of Workers, Peasants and Red Army Deputies." Discussing the gravity of the problem and the necessity for cheap-

ing the costs by rational methods of construction, cheaper materials and efficient plans, the document goes on to say that they are "interested in methods and proposals which, however brilliant in themselves, cannot be easily and profitably carried out just now for the purpose of erecting workers' homes in the and Province of Moscow." Attention is mainly called to new building materials, competitors should feel quite free to suggest revolutionary and daring ideas, free from tradition and prejudice. Pure reasoning, building mechanics and pure physics—these the only laws obligatory to the architect in selection of materials and constructive method... the plan must be co-ordinate with the requirements and living habits of our workers. It should prompt our workers to quit unhealthy habits inculcated by living in uncomfortable dwellings, should not prompt the workers to excessive luxury and increase household expenditure. The project must suit the proletarian test from the æsthetic standpoint.

The types of houses proposed are:—

1. The two-story house containing on floor 4 to 8 dwellings.

2. The house of the ordinary block type no less than 3 dwellings each located on floors.

3. The three- or four-storied fire-proof house with central heating with not less than three entrances to the dwellings from the landing each floor.

There are three types of dwellings:—

1. Bedroom, living-room, kitchen, &c., a total floor space of 450 square feet.

2. Two bedrooms, living-room kitchen, with a total floor space of 540 square feet.

3. The same accommodation with 630 sq. feet.

Each type is to have a bathroom, but alternative plans may be submitted without. The ratio of dwellings per house is two to 50 per cent.; three rooms 30 per cent. than three rooms 20 per cent.

Minute particulars are given as to the requirements of construction and sanitation and the various drawings to be sent in. In the case of special constructions, quantities and costs have to be provided. Five prizes are offered each type of house, the total of the first prize being £650. The judges present a formidable list of names and represent all sorts of interests, Soviet, the Planning Commission, the Trade Unions, Building Workers' Unions, the Municipal Engineers, the Architects, the Engineers, the Department of Health, the Technical Commission of Moscow Workers and the State Building Office.

Competitions Open.

	Particulars published in "The Builder."	See in
Drammen Bridge (Drammen-selven). Premiums: 10,000 Norwegian crms., 8,000, 6,000. Apply Gov. Eng., Drammen.	May 29 ..	0
Newcastle Fire and Police Station. Premiums: £500, £300, £100. Mr. P. S. Worthington, F.R.I.B.A., Assessor.	June 12 ..	0
Town Hall, Pretoria. Open to architects residing in South Africa or Registered under Architects' Act, of 1909, Transvaal. Assessor to be appointed by R.I.B.A. Premiums: £250, £150, £100.	— ..	N
Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply parties., 35, Old Queen-street, S.W.1	April 24 ..	D
New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool.	Aug 7 ..	3
Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London	Aug. 14 ..	M
*Enlargement of Carnegie Hall, Dingwall	— ..	
*Flee wood Hospi al	— ..	

* Competitions when "warned" or vetoed R.I.B.A. are Starred.



Birkenhead War Memorial.

PROFESSOR LIONEL B. BUDDEN, M.A., A.R.I.B.A., Architect. MR. G. H. TYSON SMITH, Sculptor. (See p. 352.)

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

London.

SIR,—The present is an age when nearly everyone is ready to discuss the spoliation of the Metropolis. There is scarcely a newspaper that does not give some space to the subject, either in the form of an attack against a quarter scheduled for improvement, or an article lauding the merits of some new building projected for the benefit of commerce. As an Englishman and a lover of London, I claim to set forth some of the ideas which occurred to me during a recent perambulation in town.

There is a point that has puzzled the chartered architects of Great Britain as well as those who form the audience and suffer in silence; it is whether it is preferable to have the amenities of London preserved, or to continue to allow haphazard changes. This, to my mind, is the political aspect of this very serious question. During the past fifty years I have watched London changing from its old urbanity to an overgrown collection of districts which stretch into the home counties. It is still a series of villages grouped about London and Westminster, it still retains its mediæval tortuosity, but in spite of legislation it is inchoate and unintelligible. Having got rid of my preface, I will proceed to enlarge on the theme. London defies analysis; it is impossible to say what should be done or on whom to place the responsibility for the preservation of seamliness and order. For any one man, or for that matter any public body, to assume the gesture of Canute would be idle and pernicious. But, notwithstanding these objections, we should take instant measures to discover the remedy for the evils which are overwhelming the entity of the Metropolis.

Every one is familiar with the problem of housing as it affects Londoners; there are some who profess to be proud of their city and its vast size; to such the difficulties connected with transport seem trivial, they prefer to see the near countryside choked with villas and bungalows, to a remodelling of districts and parishes within the true London area.

When the London Society prepared the new map of London with suggestions for preserving open spaces whereby the future growth of residential districts could be regulated, few realised the inner movement which had been in progress for many years. Soon after this map was published statistics were prepared attempting to record the various trades and activities; doubtless these have been carefully pigeon-holed.

It happens that London develops internally as well as outwardly without the aid of statistics. The centre of business has changed; no longer does it imply the City and the vicinity of the Bank. It now covers an area from Whitechapel Church to Hyde Park Corner, and extends from the north bank of the Thames to Euston-road. In this inner movement the streets of Clerkenwell, the squares of Bloomsbury, and the whole of the district west of Tottenham Court-road can be included. Therefore, it is feasible that by the end of the present century this section of London will be practically non-residential.

For many years past schemes have been projected for the reclamation of South London, particularly those districts which form the hinterland along the south bank of the river, but such is the natural inclination of Londoners for the higher ground that few have the heart to further the idea of a newer London across the water.

There remains the question of remodelling such fourth-rate districts as Highbury, Canonbury, Holloway, Camden Town, Kilburn and parts of North Kensington. Scarcely a century since these places were rural in every sense of the term. They have since passed through the drab period of Victorian respectability, and have descended to the neglected state. Much could be done to bring about an alleviation of the shortage of houses in these districts by

building blocks of flats in place of the huge Victorian residences which are mainly let into tenements. There are bad patches in the midst of these inner suburbs of North London, but they are as heaven when compared with the drabness that oppresses the Londoner from Westminster Bridge to Catford in the one direction, and to Clapham Common in the other on the south side of the river.

The new arterial roads, such as the one from Chiswick to Staines, on the west, the north circular road, now being constructed, the new road to Southend, the new Watling-street in Kent, and the new by-pass road from Wood Green to Cheshunt, are well-considered improvements. They have, however, the fault of collecting fast traffic and of choking the comparatively narrow roads upon which they debouch. Until such roads are continued well into the centre of London, the present traffic difficulty will continue. Even those who have no inclination to ask for such logical improvements as the above suffer for their apathy. It is a mistaken policy—this passive acceptance of inconvenience. It is all very well to say, as many do, "that a hundred years since, the country was within walking distance; in Victorian times it was within an omnibus ride, and now it is an easy journey by tube"—or to state that inner London is just as accessible to the suburban dweller of to-day as it was to those who, a century since, came in by the short stage from Stamford Hill, Greenwich, or Turnham Green. It is not, to my mind, the comfort of the individual that has to be considered, but the comfort of the myriads who are employed in town during the day. Hence the argument in favour of flats being erected within the five-mile radius. During only last week, I could not help being struck by the position of the great markets. Here is a subject that might well engage the immediate attention of the authorities. The decentralisation of Leadenhall Market, Smithfield Market, and Covent Garden would do much to relieve the traffic problem. There is room for a dozen such markets, one of each kind, in the residential parts of London, and it is somewhat anomalous to retain such centres of congestion so far from the people they are intended to serve. In the case of Billingsgate, owing to its riverside position, it should be retained, but riverside markets of lesser size might well be established on either side of the river as far as Richmond.

It is well known that chaos begets chaos. The very ungainliness of London has a fascination for the unthinking; no longer can its deformities be held up to admiration, neither is it flattering to refer to the Metropolis as the modern Babylon. The interest of London is in its old buildings, in the spacious squares and vast parks, the majestic sweep of the river and the lordly grandeur of its fashionable centres. But the vaster London that has grown without and around, the interminable labyrinth of drab streets, shabby and decaying, the pathetic rows of struggling shops, the sordid glitter that accompanies industry, is a lasting reproach and a menace to society at large. I feel, Sir, that you will pardon my somewhat lengthy letter. As one who lives in the provinces, I am privileged to know London perhaps as well as any person who lives in town. My visits are not infrequent; to me, she has an interest that calls for the truest sympathy. I am appalled at the changes. What are Londoners about, to sanction office buildings in Euston-square? How can they tolerate the desecration of Mornington-crescent? Has London grown so large that her rulers have become blinded to her pressing needs? Her streets are well paved, none will question the lighting, the drainage, or the building regulations, but her good looks are waning, she is becoming untidy and sluttish, and such indications are depressing to those who know her best.

EDWARD MASSINGHAM WARBOYS.

Manchester Art Gallery Lighting.

SIR,—I have been reading the article in the *Builder* on the lighting of the proposed Manchester Art Galleries. Galleries are provided to enable the general public in their thousands

to see pictures, not to meet the views of armchair philosophers. I have been in the Manchester Art Gallery hundreds of times, spent hours there, half-days, and have found the light perfect from every point of view. I have never noticed a single visitor in any way affected by any deficiency of lighting.

The writer of the article complains of width of the galleries having been limited to 30 ft.; it would be a gross waste of public money to make them an inch wider. If the system of top-lighting of the present Manchester Galleries were repeated in the proposed galleries the Manchester public would obtain everything they desire. By all means let the writer of the article continue his theoretical studies of lighting of picture galleries, but it would be absurd to spend public funds to give effect to them, whilst we have a system which has stood the test of time and gives the general public who pay for them, everything they want.

If a few artists and theorists want a special type of lighting they must provide their own galleries; they have no claim on public funds. The general public are satisfied with the system of the existing art gallery; I have never heard of a complaint.

Manchester.

T. SINGO.

SIR,—Whilst most of Mr. Seager's criticisms in your columns is beyond controversy, the conditions of the competition is of doubtful value. Glazed and unglazed pictures can be placed respectively on opposite walls; ceiling spring blinds can be installed. The balance in favour of narrow galleries—first of running cost, public convenience, and general wall space—is enormous.

Museums partly side, partly top-lit, seem both minimum first and running costs for efficient lighting, if a little thought be given to the design and arrangement of the exhibits.

Manchester.

A. HENTHORN STOR.

Proposed New Shirehouse Extension, Norwich.

SIR,—Having visited the exhibition of designs submitted in competition for the new Shirehouse, I was very surprised to discover that the winning design has no resemblance in any way to existing building. It will be remembered that there was a condition which stipulated "The design need not follow the old in style detail, but if departed from an effort should be made to avoid too great a contrast between old and new."

The winning design shows the greatest contrast I have ever seen, and as an outside observer I do not think that justice will have been done to other competitors who have based their whole design on the existing building if winning design be accepted.

I trust that the responsible parties will understand the general feeling in the matter, and an explanation seems to be necessary.

E. Yrks.

A. F. SOSITT.



A Stained-Glass Panel from a Door in St. John's Wood.

By MR. LEONARD WALKER, R.I.

SOME PERSONAL VIEWS ON STAINED GLASS

By LEONARD WALKER, R.I.

ARTISTS work, in a sense, in different worlds. I can imagine that the sculptor's landscape is crowded with shining marble quarries under southern skies. For all I know, the leather-worker must be always chasing after cows for a view to their conversion into the binding of a sumptuous volume. Perhaps the wood-carver sees forests, various trees of prodigious things—and so on.

The architect's world is very complex; all his dreams are chivied about with demands of clients, building regulations, utility—Beauty most screened by a hundred and one petty annoyances.

I'm in a world of fragments of bottles and shattering bits of slabs of glass, and strips of lead.

In surveying the various materials we work with, they all have special and individual requirements; some display their inherent qualities, others are more legitimately veiled by form and colour and representations of form. The painter of the easel-picture unblushingly may conceal his canvas; the black-and-white man does not hesitate to hide his white paper with black ink or wash. Again, the book binder controlled somewhat by the contents of the book he is binding—the maker of a fountain pen so much so, except in so far as the inside of the good receptacle for the water-pipes.

The percentage of importance of the factors which make up our work varies considerably. Things can be expected and allowed on a basis which a sculptor would scorn. A piece of plaster does not ask for so much decoration as the same shape in another material: a piece of marquetry is decorative in itself.

With the exception of architecture, which divides us all, we may divide the materials of our crafts roughly into three groups in relation to light. The majority are opaque and reflect only; we have a little group semi-opaque, like jewellery and mosaic; and finally we have translucent material glass, transmitting light.

Now, it will be admitted that this material of glass, with its varied thicknesses, at times veiled by colour, which transmits light, is something to be admired in itself. Its jewel-like qualities can more adequately suggest the brightness of nature than any other—white instead of the limited white pigment. Our work can be displayed by it to its fullest; in speaking of colour and its effect on us, one almost treads on holy ground. It holds hold of us in an uncanny way; we come into its embraces, and it moves us as when we are stirred by the musicians' mystic art.

The first windows were translucent coloured glass, stuck together, I believe, with some kind of cement. Then came progress with its advantages and disadvantages—the manufacture of glass with greater transparency, more fluency; the discovery that a glass-pan could be painted on the glass and protected by firing, and the joy of reproducing the play of nature by its means on the glass.

In the designing and shaping of our pieces of work for a fixed aperture, we come to the question of what manner, theme, representation, is legitimately harnessed to enhance, and to mask, the precious qualities of the material. We can apprehend a piece of work, and all the factors which make it up—material, and shade, form, everything in a moment. I suggest that in creation it is in the balance of all which must be watched carefully. If one of the scales is too heavily weighted in one direction, there is

beauty. So we descend to paintings on glass, a mere misuse of material.

Now, paper and canvas can be more heavily and beautifully weighted with representative matter, because the material on which or with which you work, has no great beauty in itself. It is only by the most intimate knowledge of the character and language of your material that you can gauge how far exactly it is inviting, or how it would repel elaboration and representation if it could speak.

We have heard all this before—but just a minute. Heard? Yes, but have the precious and unique gifts of the gods to coloured glass been guarded and preserved? Not always faithfully, I fear. With a nice smooth, slippery, polished surface, the designer and executant being separated, it was easy for the fascination of the application of a brush to grow to such an extent that interest was sidetracked to other things, to pictures on glass, which other materials and crafts could more legitimately display.

Glass has taught me that its chief function is to embellish the translucent parts of the walls of a building, whether in cathedral or in cottage. Now, what should be the appearance of themes, whether represented by figures, pattern, &c., when conditioned by this material of glass?

Take a tree, and see it in an early morning mist, when its form is veiled; see it at noon when its myriad of forms are definitely expressed; or, again, by twilight or moonlight, when perhaps only its silhouette is visible; or see it with a strong light behind it; the sun's strong rays of dazzling light obscure the form, revealing a thousand interstices of jewel-like brilliance of different degrees of strength. What has happened to the tree? It has ceased to be of great interest to the botanist, the archaeologist, the arborist, the historian; it is just a vehicle to call up other things to our minds. It seems to say, "Don't look at me, look at the light coming through me."

Again, take a white female figure, in a garden. Under how many varied conditions could she be seen? Just take two—possibly outlined definitely against a black shadow, or possibly broken into innumerable fragments as she passes a bush of red roses. In the latter instance the figure is subordinated to a medley, if you will, of shining patches of white and green and red; in other words, the light reflected from her frock, from the leaves and from the roses, is dominating our vision. The tree in the former and the figure in the latter instance have sacrificed themselves for what I think a sufficient end.

Though different kinds of views of nature may be accepted and translated by the painter or worker in other crafts with considerable freedom and choice, the genuine glassworker loyally accepts the restricted view which the demands of the material impose. Of course, a figure or landscape, painter can take a subject and put it on glass and hoodwink a few more millions, but the result is not real glasswork. We shall all recall some pictures on glass which have little more relation to the material than the chalk efforts of the pavement artist have to the stone.

Now, as our work is created to be seen, what of the beholders? The human being does not always want to hold out his brain as you might your hat to be a receptacle for a number of historical facts, glorious truths expressed with the most perfect diction; he may know them or can do without them. He or she may just want an accompaniment to his or her vocation, whatever it may be, something, perhaps, which when looked at chases away a cloud. Coloured glass can do this. It has surprised me how just a rhythmic arrangement of harmonious colour patches suitable as pendants or worked in with simple glazing, has given pleasure in houses where one anticipated more meticulous requirements.

Curiously and happily enough, the demands of the material coincide with factors which are likely to give the owner perpetual pleasure. Glass seems to demand for its fullest display a certain element of mystery and suggestion, rather than a drummed-in series of tabulated facts. This latter, if unduly exhibited, not only kills the fullest expression of the glass, but will eventually kill the client, or whoever is perpetually brought in contact with the work. Play, however excellently, the same Chopin waltz or prelude every day to a man at breakfast, see what he would do; but let a musician just happily extemporise, leaving play for the listener's imagination, and the result is different.

I am not trying to preach a gospel that any mass of bits of glass thrown together in chaotic confusion can produce anything but confusion. All I ask for this material, for the reasons I have mentioned, is more freedom in the manner of representation than you would permit—and quite rightly—in other crafts.

With regard to architectural setting the proper use of glass prevents any over-emphasis of the third dimension. On the other hand, one must avoid the flat, pass-everything-under-a steam-roller policy, but try to secure depth boiled down—something of low relief. Perspective sobered by good design can join in the fun.

Just a few thoughts that guide me. I take simple words, not the confusing ones of the pigment maker. Just blue, red and yellow, orange, green, purple and grey—the primaries—co-existing in equal quantities, in faint and delicate form; white, and in darker form, grey and black. Lead lines are dark grey. Certain colours seem to harmonise easily, others want more management. It's like a hostess, a little tired of asking the usual folk who get on well together, to her table, so invites the Puritan, the Bolshevik, the boxer and the poet; her powers then are really tested.

I look on crude colour as selfish colour, i.e., never speaking except to ventilate in monotonous voice its particular colour.

With the cartoons in a way done, but left for modification at the dictates of the material, the prologue is over, and you enter the stage when, with joyous fascination, you select the exact colour and character of glasses required, to produce, maybe, in places a series of tints expressing the subtlest of changes of one colour to another.

THE RATING AND VALUATION BILL

REPORTS are rather scanty as to the proceedings of the Standing Committee in reference to the Rating and Valuation Bill, but it appears that when the sitting was resumed a Government concession was made as regards the deductions allowed by clause 21 and the Second Schedule of the Bill from the gross value of certain properties in order to ascertain the net annual value.

In the Schedule the first category of hereditaments is "Houses and buildings without land other than gardens where the gross value does not exceed £40," and the amount of the deduction is 25 per cent. in respect of these hereditaments. The Minister of Health proposed a concession in connection with these small properties by splitting the £40 limit into two categories; on properties where the gross value did not exceed £20 he proposed an allowance of one-third, and where the gross value was between £20 and £40 an allowance of £7, or the 25 per cent. named in the Schedule, whichever amount should be the greater. This proposal, after discussion, was adopted.

The Bill is hardly likely to pass into law this year, for the Autumn Session will probably be too short for a measure of this kind to be considered, but as it has suffered so much change in its passage through Committee and the report of the proceedings has been both slight and interrupted, we propose, when the Bill is printed as amended in Committee, surveying it as a whole.

THE BRITISH ASSOCIATION

The British Association, at their recent meeting at Southampton, discussed a number of subjects of direct or indirect architectural and building interest, among these being the possibility of producing a new smokeless fuel from peat, the progress of the art of map-making, the desirability of encouraging the use of Empire-grown timber, and new methods of electro-plating. The substance of these papers is given hereunder.

Commercial Value of Peat.

The commercial feasibility of starting what would be, in effect, a new industry of first-class importance in this country, by a greatly increased use of peat fuel, was the main contention of a paper on "Recent Progress in the Peat Problem," by DR. R. MOLLWO PERKIN in the Chemistry Section. After reminding his audience that the quantity of peat in the United Kingdom and Ireland amounted to over 8,000,000 acres of an average depth of 12 ft. to 14 ft., he discussed previous schemes, both British and Continental, for the large-scale utilisation of this fuel, and attributed their more or less general failure in most cases to the difficulties of removing the water contained in the peat and the want of practical methods for doing this. He said that having for seventeen years studied the various peat propositions and watched the failures, and having worked on his own lines, he had found that by macerating the peat under suitable conditions, extruding as much water as possible; then passing it into an autoclave and heating under regulated pressure, which caused a certain rise in temperature; then suddenly discharging by means of a sluice valve and afterwards filtering or pressing off the necessary amount of water; and then passing the peat directly into the press, briquettes containing only 18 to 20 per cent. of water could be produced.

The speed of this particular plant would be such that the peat from the time it left the bog would be briquetted within eight hours, and these briquettes were immediately ready for transport, and, being very hard, would not break up or disintegrate.

From peat we obtained cheap briquettes which were smokeless and a very valuable charcoal for metallurgical purposes and as a decolorising agent; and in the producing of this charcoal a high yield of oils could be used for motor purposes, lighting purposes, and as fuel oils, thus assisting the Empire to produce the oil which it would otherwise, as at present, have to import from abroad. There were millions of tons of peat to be worked, and on the average they were very low in ash and very low in sulphur and phosphor. The specific gravity of well-briquetted peat was about that of coal; consequently there would be no higher freightage. It would be less.

As it was now possible to produce peat commercially at a price much lower than that of coal, it would be a great pity to allow other nations to be the first to work it on a proper scale. The British peat was, as shown by a number of analyses made by him, superior in all respects to European and other peats, and now was the time to produce a new home industry.

Neglected Art of Map-making.

MR. A. R. HINKS, secretary of the Royal Geographical Society, president of the Section of Geography, devoted his address from the chair to map-making. He began by saying that the science of his subject had made a notable advance, but the art had suffered a lamentable decline since the heroic days of Saxton and Hondius and Norden, of Mercator and Blaeu. As he was speaking in Southampton, he desired to pay a special tribute to the name of Alexander Ross Clarke, whose genius had adorned the city.

The progress of invention had placed new and beautiful methods in the hands of sur-

vveyors. There seemed unhappily to be something in self-government that was antipathetic to map-making. Our Crown Colonies were getting pretty well provided with maps, thanks in great measure to the work of the Colonial Survey Committee which had been so active in the early part of the century, and which, it was to be hoped, had not been a casualty in the war. But our self-governing Dominions had not much to boast of. As a bad example he might mention that when the Union of South Africa wished to make a small relief map to be shown at Wembley last year, they had sent round to the Geographical Society for material and had found to their horror that Natal had never been mapped. He believed that there was still not a single topographical sheet to be bought of Australia. Canada, however, had now a first-rate geodetic survey and the beginning of a good topographical map.

Although he hoped to see an effort to carry out stereographical surveying on geographical scales, he was doubtful if the photographs should be taken, at least in the first instance, from the air, as seemed to be contemplated by the advanced school and taken for granted by the newspapers. Air photography had made a brilliant success in the war, when the cost was not too rigidly scrutinised. It had done its best work in France, but required a pretty close plane table survey of well-marked points to give it a rigid skeleton. In the East it had also done well, but perhaps on the ground that any sort of patchwork mosaic was a great deal better than nothing at all.

After discussing other technical details of cartography, Mr. Hinks turned to the art. Colour, he said had been used in engraved maps from the very first, and in his opinion the most agreeably coloured atlas ever published was the Rome edition of Ptolemy of 1486. But that was hand-coloured. In the years that followed the colour became more elaborate, but had been largely in the ornament, and the essential outline of the map was in black from the single engraved plate. In modern colour lithography outlines of different classes were distinguished; blue for rivers, brown for contours, red for roads, and so forth. The resulting improvement was conspicuous in the representation of relief. Layer colouring was a method in which the British had always excelled. The supreme example of layer-colouring was the colour scale attached to the report of the Paris Conference of the 1/1,000,000 map in 1913, a scale which we might be proud to believe had been printed in England, he thought at the War Office. On

the other hand, modern methods had lost the richness of tone in the black outlines printed from the old engraved plate, and it was to be hoped that by some invention this perfection might be restored to the modern colour maps.

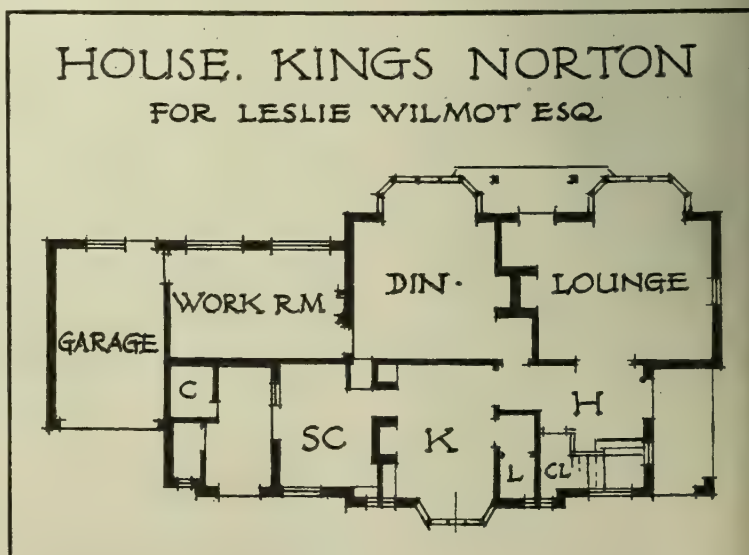
Another defect that had to be remedied was the writing of the names on the maps. The present method of type-writing was ugly, inefficient, and the invention of a machine for writing names on maps was urgently required. A great deal of change would have to be made before we could reach the beauty of the old maps. But that result was not to be reached by deliberately mediæval or archaic methods.

Plea for Empire-grown Timber.

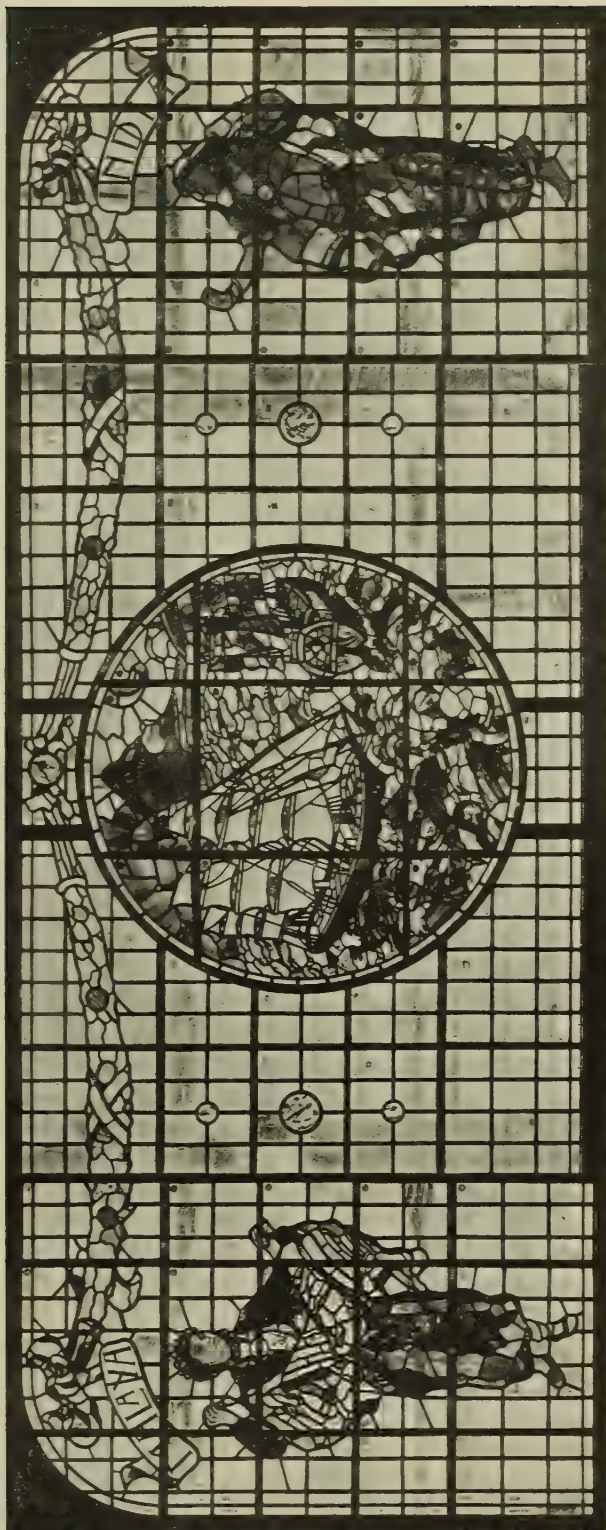
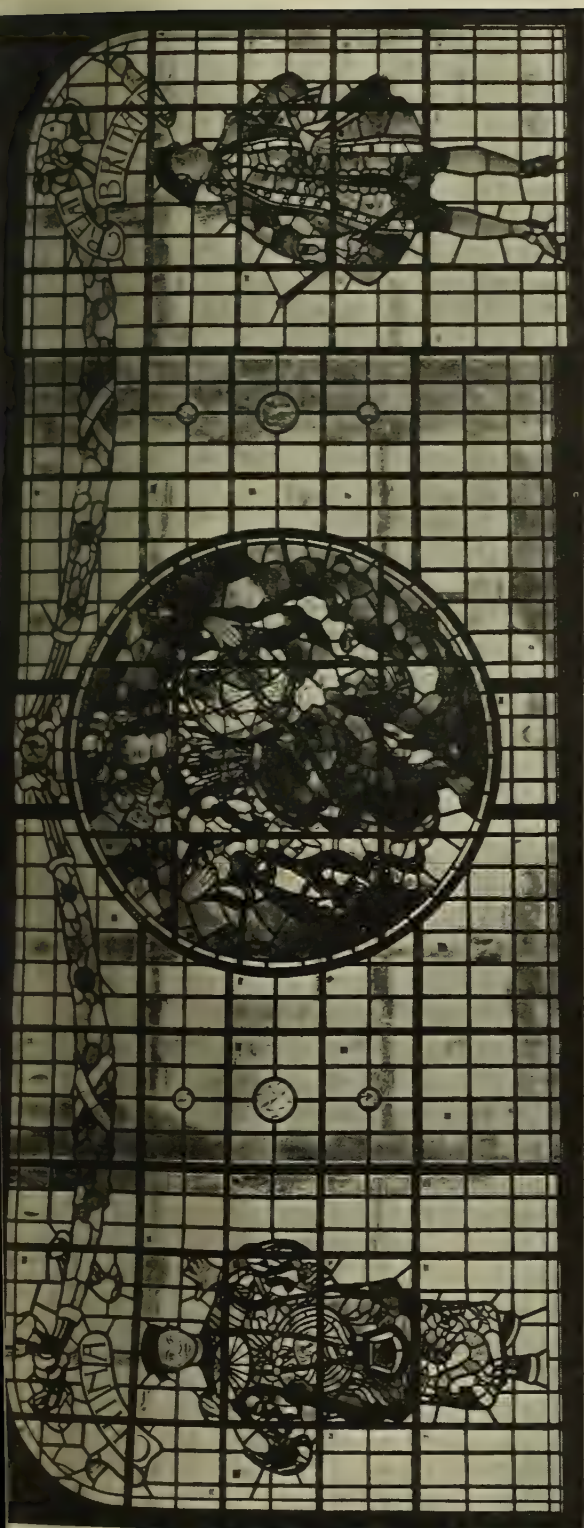
The present and future supplies of timber formed the subject of a paper read in the Botany Section (Forestry Sub-section) by MR. ALEXANDER HOWARD, who said that unless some method of replanting was adopted the world in the not distant future would be faced with a serious deficiency of timber. Vast stretches of pine and larch forests had been razed to the bare ground in England. Where little ash there was was eagerly sought after for aeroplane and motor-car work. Oak was disappearing. In no part of the world was a substantial effort being made to restore supplies. More should be done to encourage the use of Empire-grown timber. Railway companies who before the war used hard woods, which could be obtained within the Empire, now imported German, Russian, or Polish oak. American mahogany or black walnut. Recently one railway had issued a demand for American walnut "sawn by American women in America." Home producers were hit by railway rates, for it cost as much to bring timber to London from a spot 80 miles away as it did to bring it from America.

Electro-plating.

In the Chemistry Section, MR. E. A. OLSBY of Manchester, read a paper on the resistance to corrosion of electro-deposited chromium. He described tests made under both laboratory and service conditions. He said chromium plating was found to be specially suitable in cases where an article was required to be bright without cleaning. It developed a high polish and in that condition resisted corrosion even better than in the unpolished state. But a single layer did not form an efficient protection for an easily corrovable material such as steel, and the most satisfactory plating for all-round purposes was chromium plated with nickel as an underlying metal. Chromium plating would prove of great use for domestic purposes, especially under present-day conditions, when the servant problem required cleaning should be cut down to its minimum.



MR. J. A. SWAN, F.R.I.B.A., Architect. (See p. 352.)



Two of a Series of Ten Stained Glass Windows for the Hong Kong and Shanghai Bank, Singapore (Size 17 ft. 6 in. by 7 ft.).

By Mr. LEONARD WALKER, R.I.

LEADING CONTENTS. PAGE

ART EXPORTS	343
NOTES	344
GENERAL NEWS	346
COMPETITION NEWS	346
CORRESPONDENCE	348
SOME PERSONAL VIEWS ON STAINED GLASS ..	349
THE BRITISH ASSOCIATION	350
PHILIP WEBB AND HIS WORK.—IX	360
BOOK REVIEW	362
ARCHITECTS' AND BUILDERS' INQUIRY	
BUREAU	363
THE BUILDING TRADE	364
BIRMINGHAM BUILDING EXHIBITION	365
CLAIM FOR HARDWARE	366
NEW BUILDINGS IN LONDON	367
CAPITALISM	368
NEW COMPANIES	369
CONTRACTS, COMPETITIONS, &C.	370
A NEW METHOD OF CONCRETE CONSTRUCTION	
FOR HOUSES	377

ILLUSTRATIONS

New Premises for the Midland Bank, Ltd., Pall Mall.

These new premises are being built on the site of the old Guards' Club, and the existing branch of the Bank. The front and back are carried out in Portland stone with a Mansard roof of green slates. The sub-basement, basement, and ground floor are being occupied by the Bank.

The banking hall, which is 21 ft. high, will be lit with a large ornamental ceiling light in the centre of the building, and finished with a walnut dado and plaster panelling above. The whole of the fittings will be carried out in walnut in keeping with the usual practice of the Bank. Waiting and interview rooms will be provided on the ground floor, and a notable feature will be the provision of special rooms, close to the strong rooms, where customers may inspect their valuables and securities.

The third, fourth and fifth floors are being finished as two flats, one overlooking St. James' Park, and the other Pall Mall. These flats are being carried out in keeping with the rest of the work. The third floor will contain the hall and reception rooms, which will all be panelled. The fourth floor will contain bedrooms, and the fifth floor, which will comprise kitchens and servants' quarters, will be fitted with the latest modern appliances. Two electric passenger lifts will serve the offices and flats.

The general contractors are Messrs. Hall, Biddall & Co., Ltd., and the following are some of the principal sub-contractors:—Stonework, Messrs. F. J. Barnes, Ltd.; carving, Mr. Alfred Buxton; concrete reinforcement, Messrs. British Reinforced Concrete Engineering Co., Ltd.; lifts, Messrs. The Express Lift Co.; heating, Messrs. Rosser & Russell and Messrs. Henry White & Co.; hot water supply, Messrs. Burn Bros.; electric light, Messrs. Bell Bros.; decorative plaster, Messrs. G. & A. Brown; ornamental ceiling light, Messrs. The British Challenge Glazing Co., Ltd. The architects are Messrs. Whinney, Son & Austen Hall, F.F.R.I.B.A.

The SS. "Otranto."

Two water colour drawings recently on view at the Royal Academy Exhibition afforded some evidence of the luxury of the public rooms to the new 20,000 tons Orient liner ss. *Otranto*. Delicacy and refinement, without the loss of the broad architectural line, are indicated in both the drawings of the first-class dining saloon and smoking room. The former, of which we give an illustration, is a spacious and well-lighted saloon, its soft varying tones of grey giving prominence to the character and treatment of the Classic architecture.

The well of the saloon is a feature of much interest; square fluted columns, broken to the wall pilasters to give scale and relief, are carried up beyond the low portion level to the ceiling line of the deck above, and have carved capitals crowned with a low relief frieze, and finished with a carved cornice. Ranged between the columns, and separating the well from the surrounding

gallery, are panels of silhouetted figures in the form of bronze grilles portraying stories based on Greek mythology.

The entire floor is covered with "Rubroleum." The design is on broad lines and executed in three colours, the general scheme being to give the full benefit of length and breadth as well as harmony to this saloon. The dining saloon and the remainder of the first-class public rooms and the special cabins are being carried out in accordance with the designs and under the direction of Mr. A. N. Prentice, F.R.I.B.A.

The general contractors are Messrs. H. H. Martyn & Co., Ltd., of Cheltenham. Messrs. A. B. Burton, of Thames Ditton, are responsible for the casting of the figured bronze grilles, from the special models prepared by Mr. Richard Garbe, the sculptor. The electric fittings are being executed by Messrs. Harcourts, Ltd., from designs prepared by Mr. Walter Gilbert. The "Rubroleum" floor is being supplied and laid by Messrs. Korkid & Rubroleum Tile Co.

Brancepeth Miners' Welfare Building.

Occupying a site of two acres, this building consists of three blocks, the central one comprising billiard room, gymnasium, reading room, library, games room, meeting rooms, &c., with a single-story caretaker's house on one side and a group of slipper and spray baths on the other. The eastern block comprises an assembly hall, &c., with a total accommodation on main floor and balcony of 600. The west end block provides a large plunge bath in a suitable building, and advantage is taken of the fall in the ground from north to south to provide for the sloping floor of the main hall and the necessary fall to the bath. The total estimated cost of the buildings and the lay-out of the grounds is £18,000. The architects, who were awarded first place in a limited competition for the work, are Messrs. Hays & Gray, A.A.R.I.B.A., of Wingate, Co. Durham, and North Shields.

Some Recent Domestic Work.

Two recent houses by Messrs. Baillie Scott & Beresford are illustrated this week. The house at Crockham Hill has walling of 2 in. brickwork, and the roof is of sand-faced tiles. The half-timber work is in English oak. The contractors are Messrs. G. E. Wallis & Sons, of Maidstone, Kent.

In the case of the house at the University Botanical Gardens, Cambridge, the manner of the early nineteenth century has been adopted because it seemed most appropriate in the Botanical Gardens, where the house is placed as the terminal feature in one of the main vistas. The walls are whitewashed brickwork and the roof of slate. The contractors were Messrs. Arthur Negus & Sons, Cambridge. Casements by Messrs. George Wragge, Manchester.

House at King's Norton, near Birmingham.

This house, shown by a drawing that was on view in this year's Royal Academy, has been built for Mr. Leslie Wilmot, from the designs of Mr. J. A. Swan, F.R.I.B.A. It is placed on a hilly site, overlooking the golf links, and is planned to suit the requirements of the client. A feature has been made of the staircase hall, which goes through two floors. The accommodation on the first floor includes three bedrooms and a maids' room. The mantelpieces and fittings were designed by the architect. The materials used are: Kenilworth bricks (2½ in. broken-colour, wire-cut, with wide joints), the tiles being Rosemary, sand-faced. The contract price, including the garage, was £1,340. The work has been carried out by Mr. W. Jackson, of Langley Green. The sub-contractors were as follows:—Sanitary fittings and grates and Eagle combination range, Messrs. Parker, Winder & Achurch, Birmingham; locks and door furniture, Messrs. Walker & Worsey, Birmingham; mantelpieces, Mr. G. Furness, Birmingham; casements and leaded lights, Messrs. W. & J. H. Oldaker, Smethwick; electric light, Mr. W. H. York, Birmingham; paint, Messrs. Mander Bros., Wolverhampton.

Birkenhead War Memorial.

This memorial has been erected in Hamilton-square on a site directly facing the Town Hall,

from the designs of Professor Lionel B. Budden, M.A., A.R.I.B.A. It consists of a simple rectangular cenotaph, flanked by flagstaffs 45 ft. high, and set upon a paved plateau. The main body of the central monument 25 ft. high, is built of Portland stone, and on its longer sides, above a strongly moulded base, are panels of green Westmorland stone bearing the names of 1,293 Birkenhead men who died in the war. On each of the two narrower sides is a female mourning figure carved in relief of green Westmorland stone, enclosed within an architectural frame. Mr. G. H. Tyson Smith was responsible for the sculpture of the figures, panels, for the carving and lettering on the cenotaph, and for the modelling of the flagstaff bases. The building contract was carried out by Mr. Joseph Davies, of Birkenhead, Messrs. H. A. Clegg & Sons, of Chester, being sub-contractors for the masonry, and the Liverpool Artificial Stone Co., Ltd., for the steps and plateau. The flagstaffs were supplied and fixed by Messrs. A. Rutherford & Co., Ltd.

Deaf and Dumb Institution, Spring Bank, Hull.

The commission for this building—which is now in course of erection—was won by Messrs. F. J. Horth & H. Andrew, A.A.R.I.B.A., in a limited competition. The accommodation provided includes a meeting room to seat 30 persons, lecture hall on the amphitheatre principle seating 120, billiard and reading and board rooms, and missioner's residence. Messrs. Lawrence's sand-faced multi-coloured bricks and tiles are being used for the facing and roofing, Bewerley stone dressings being introduced for the windows. Steel casements and leaded lights are being fixed, the joinery throughout being in Austrian oak and paving in Terrazzo and Biancola. The contractors, Messrs. Vince Knowles & Sons, Ltd., who are also responsible for the brickwork and joinery, have carried out many important jobs in Hull during the past 40 years. The masonry is being executed by Messrs. Quibell & Son, Ltd.; the tiling by Messrs. Dawber, Townsley & Co., Ltd.; plumbing by Mr. C. F. Procter, and the painting by Mr. A. Christopher. The steelwork is being supplied and erected by Messrs. King & Co., Ltd., and Messrs. Samuel Butler, Ltd., Stanningley. Messrs. Rosser & Russell, Ltd., Leeds, have been entrusted with the heating and ventilation. Messrs. Morris & Co., Ltd., Warrington, are to supply the steel casements and leaded lights, and the mosaic marble and Terrazzo will be by Messrs. The Art Pavement and Decorations, Ltd., London.

Extension of the Shirehouse, Norwich.

We published last week the winning design in this competition, by Mr. A. Dunbar Smith, F.R.I.B.A. In this issue we illustrate the selected design, by Mr. Herbert Langford, F.R.I.B.A., and Mr. F. Richardson, A.R.I.B.A. associated architects. In their report to promoters the architects state that it is proposed to construct the building of brickwork and stone dressings, as used in the elevations of adjoining Shirehouse. The internal walls will be of brickwork, floors of reinforced concrete hollow block construction, roofs slated to harmonise with the adjoining buildings, partially constructed of concrete flats and natural rock asphalt finish.

"Doone House," Winchmore Hill.

This house has been erected from the designs of Mr. T. Elson Hardy, Lic.R.I.B.A. The house is multi-coloured, hand-made, sand-faced and roofing and hanging tiles are also hand-made and sand-faced.

The work was carried out by Mr. J. Weston, M.I.Struct.E., with the following sub-contractors: tiling, Messrs. John Williams; sanitary fittings, Messrs. Mellowes & Co.; leaded lights, Messrs. Walter Gibbs & Sons; and Messrs. William Morris & Co. (Westminster) Ltd.; joinery, Messrs. Duncan Tucker & Co., Ltd.; bricks, Messrs. W. T. Lamb & Sons, Leeds Fireclay Co., Ltd.

The Higher Market, Exeter.

A typical example of Classic Revival architecture, measured and drawn by Mr. Cecil W. V.



Birkenhead War Memorial.

PROFESSOR LIONEL B. BUDDEN, M.A., A.R.I.B.A., Architect.—MR. G.-H. TYSON-SMITH, Sculptor.





House at Crockham Hill.



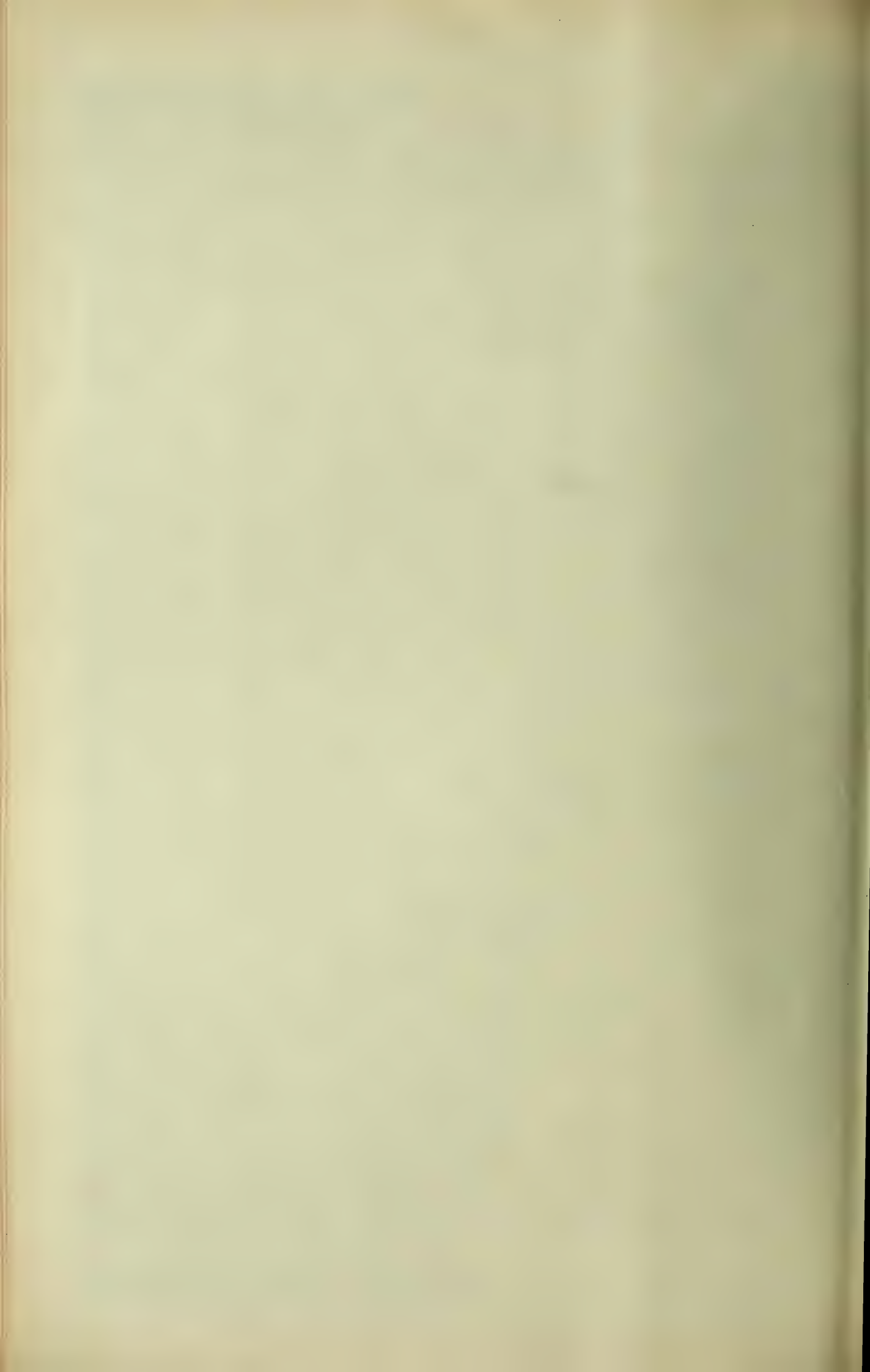


BRANCEPETH WELFARE SCHEME

HAYS AND GRAY ARCHTDS. LTD. LONDON

MESSES. HAYS & GRAY, A.A.R.I.B.A., ARCHITECTS.

R.A. EXHIBITION.



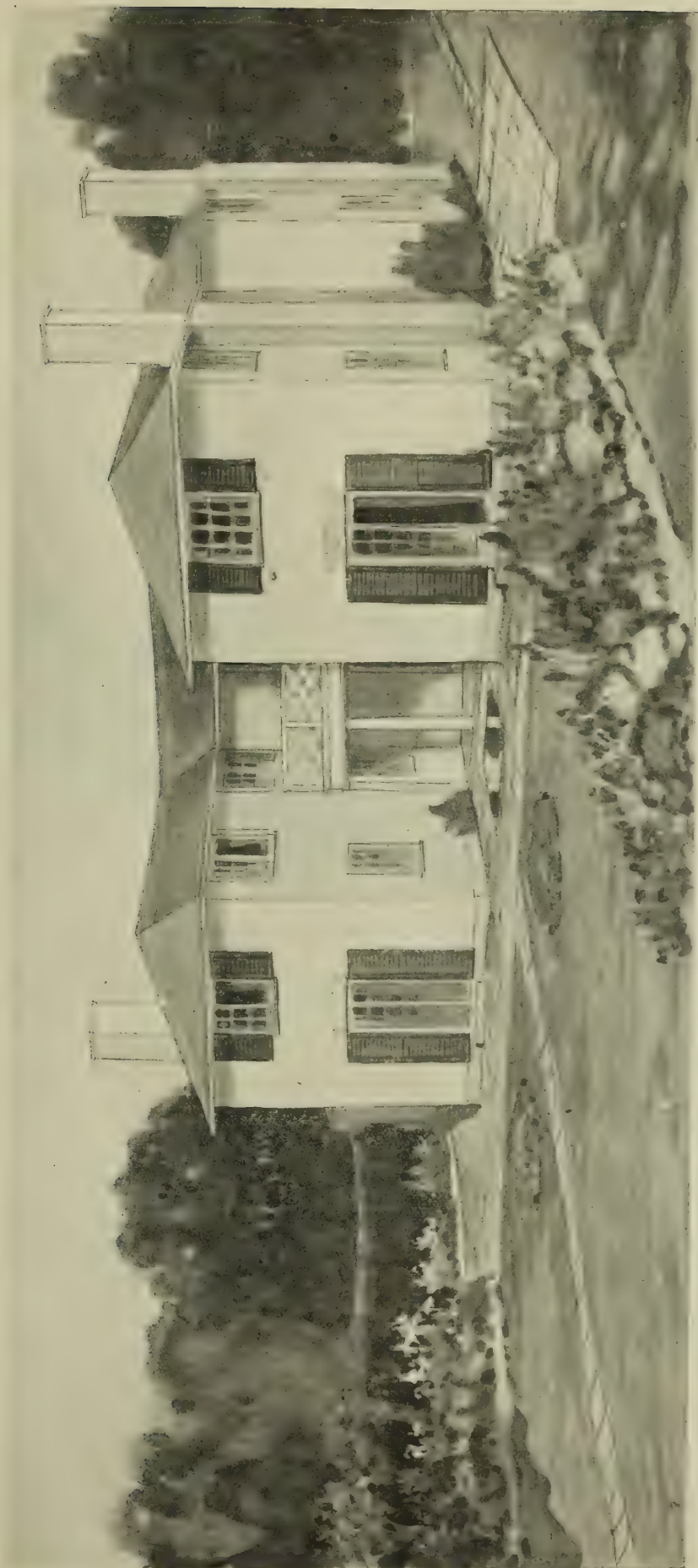


MIDLAND BANK LIMITED
NEW PREMISES 69 & 70 PALL MALL



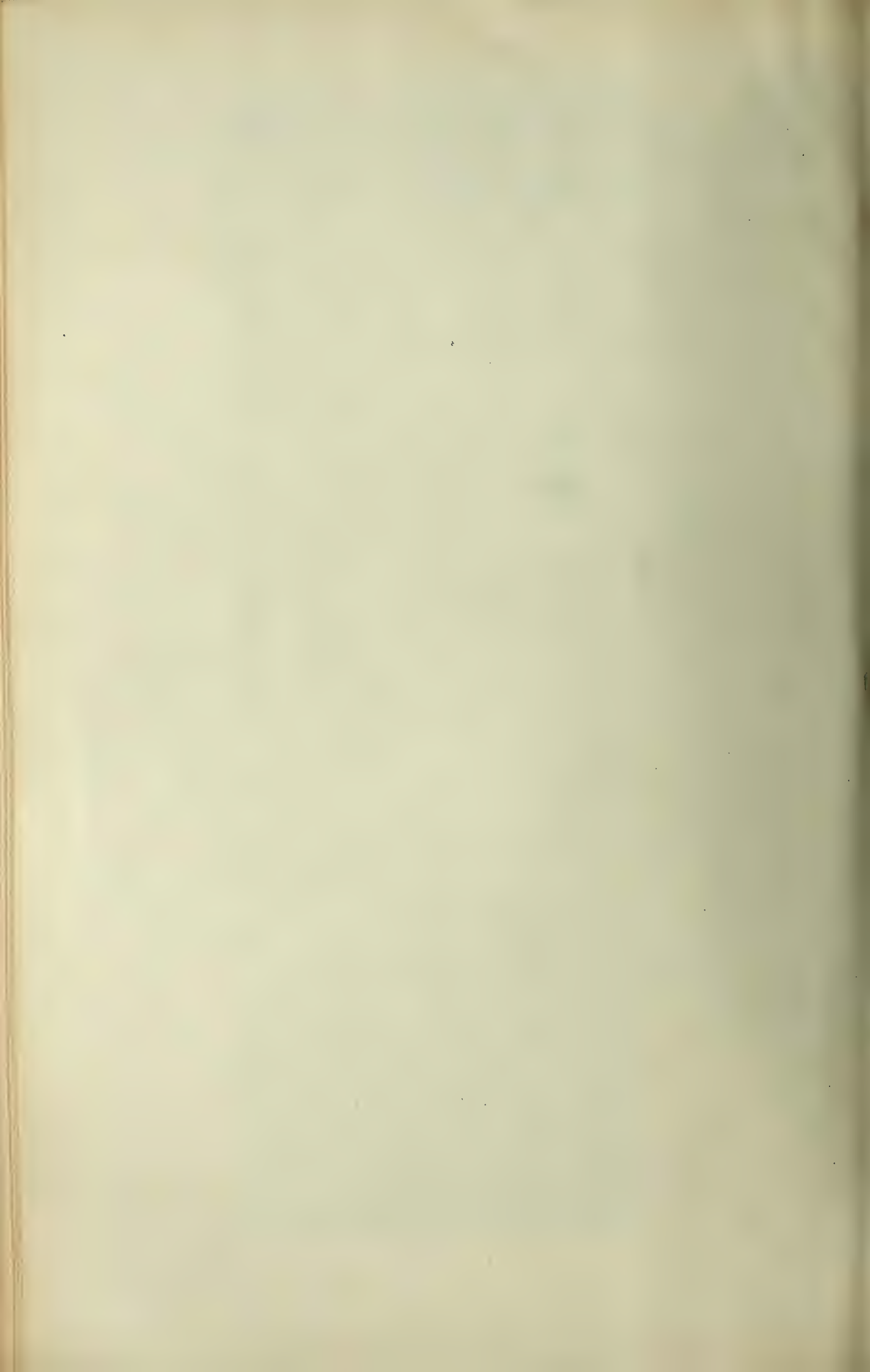


MESSES. WHINNEY, SON & AUSTEN HALL, FF.R.I.B.A., ARCHITECTS.



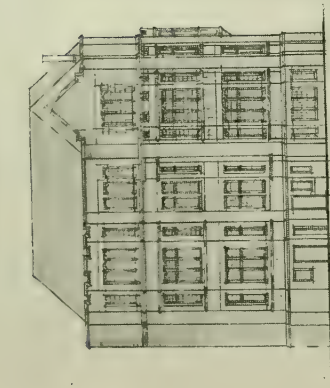
Proposed House for Curator, University of Cambridge Botanic Gardens.

MESSRS. BAILLIE SCOTT AND BERESFORD, Architects.

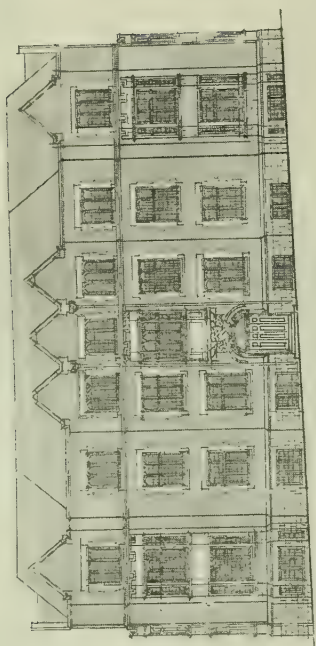




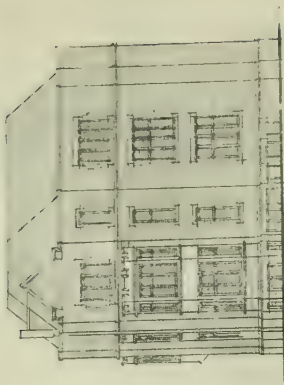
THE DEAF AND DUMB
INSTITUTE
SPRING BANK HULL
F.J.HORTH : A.R.I.B.A. ARCHT-
H.ANDREW : A.R.I.B.A. TECTS :



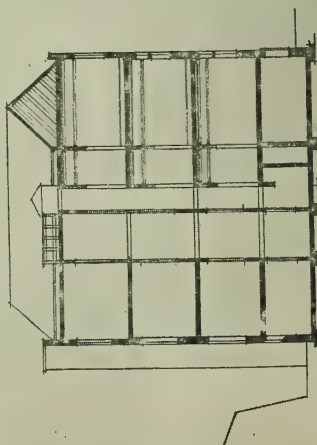
ELEVATION TO SHIREHOUSE



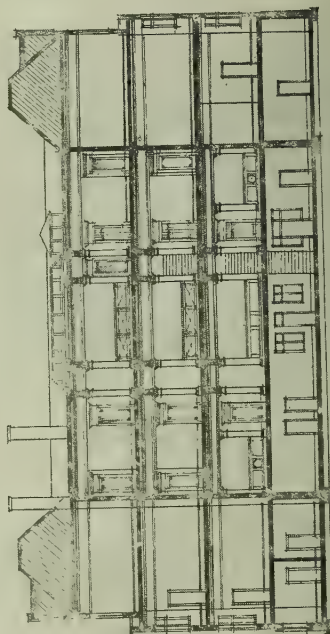
ELEVATION TO CASTLE MEADOW ROAD



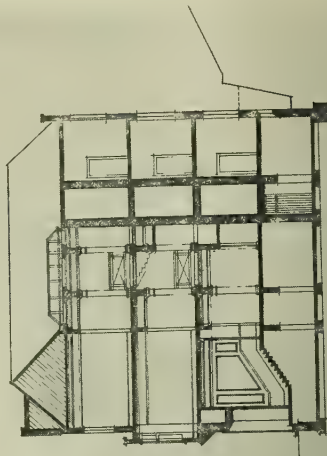
ELEVATION TO POLICE STATION



SECTION B-B



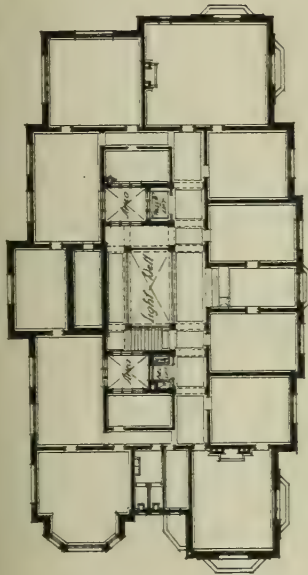
SECTION A-A



SECTION C-C

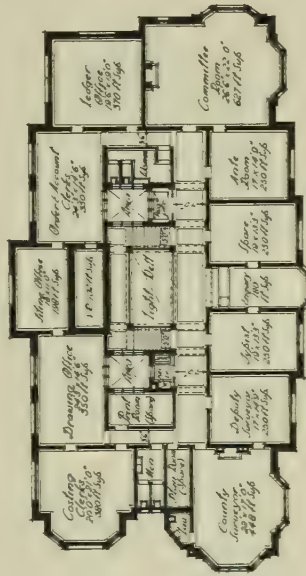
9'0" 12'0" 12'0" 12'0"

SCALE OF FEET
0 10 20 30 40 50 60 70 80 90 100



SECOND FLOOR PLAN

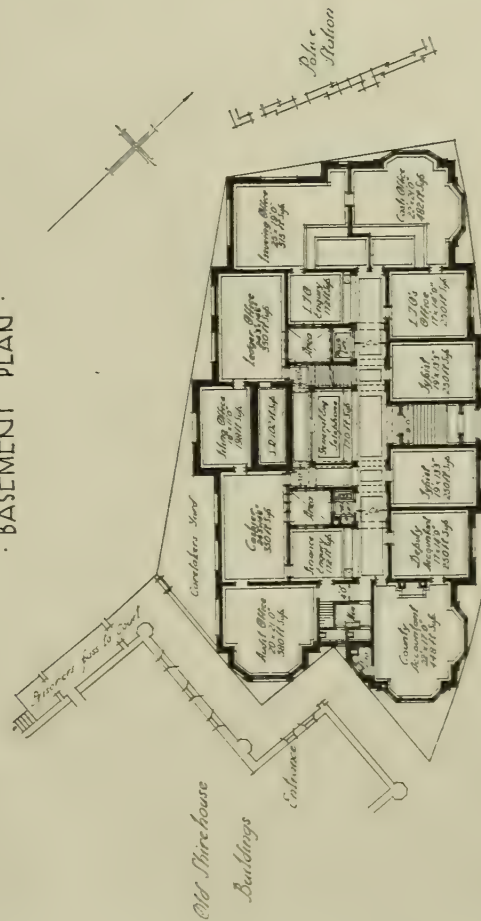
NETT AREA OF OFFICE	FLOOR SPACE	Sq. Ft.
County Accountant		2500
General Enquiry		170
Local Enquiry		1669
Total Ground floor		4339
County Surveyor		4175
2nd floor		4388
TOTAL FLOOR SPACE		12902



FIRST FLOOR PLAN



BASEMENT PLAN

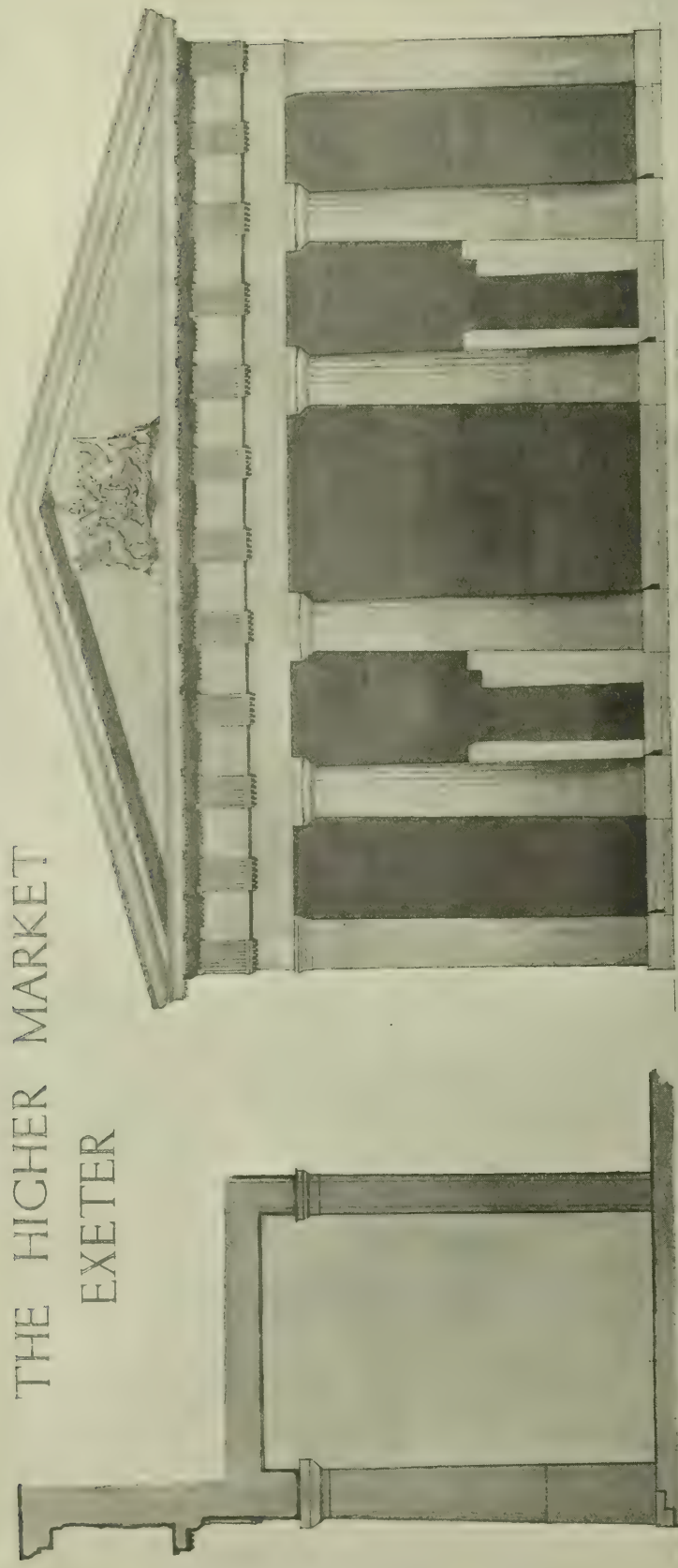


GROUND FLOOR PLAN
& SITE PLAN

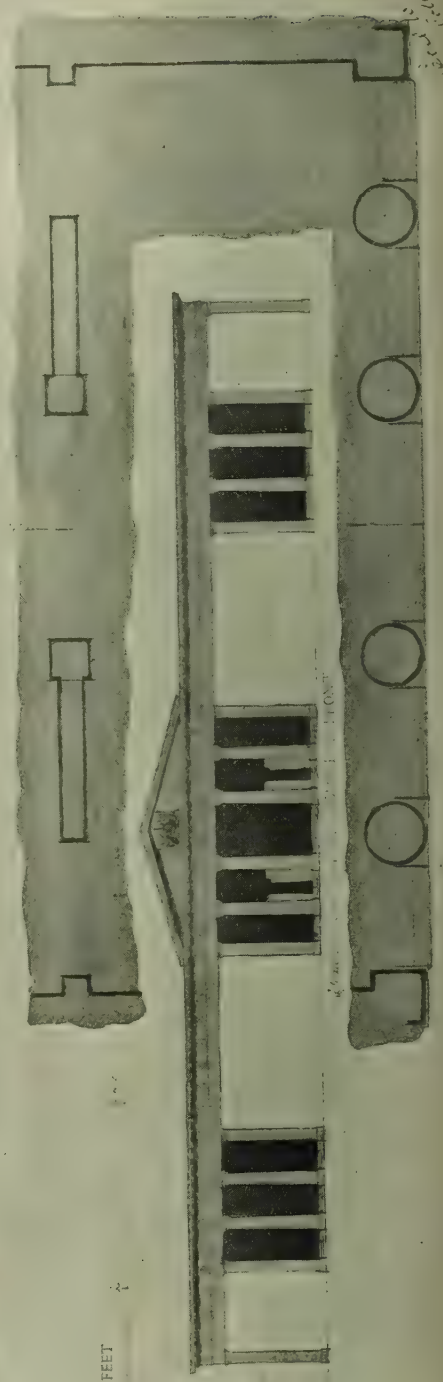
SCALE OF FEET

The Shirehouse Extension Competition, Norwich: Plans of Second Premiated Design.
MR. HERBERT LANGMAN, F.R.I.B.A., and MR. F. RICHARDSON, A.R.I.B.A., Associated Architects.

THE HICHER MARKET
EXETER

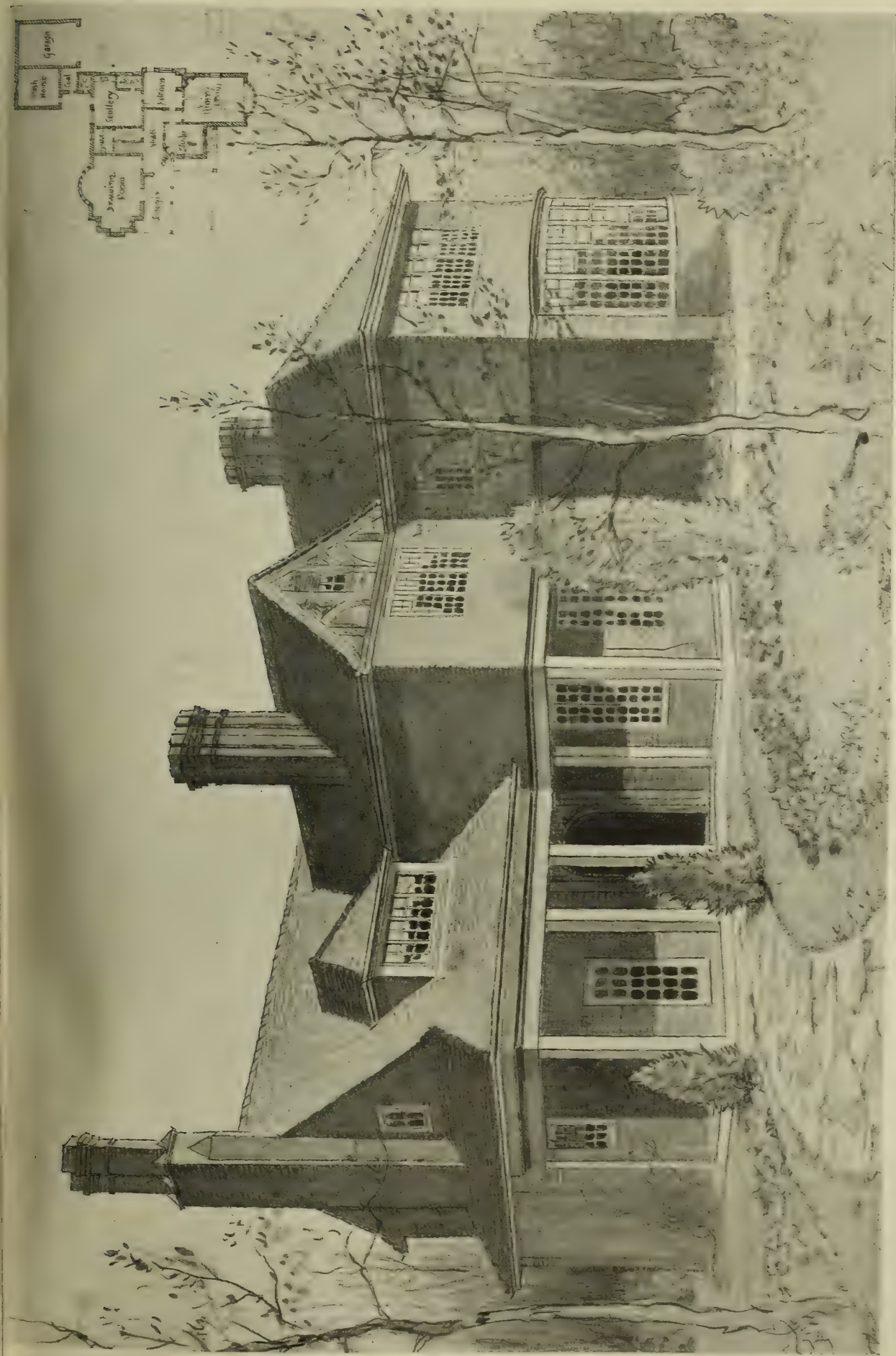


SECTION AA



SCALE OF FEET

Handwritten notes in Persian script, likely a library or archival stamp.



"Doone House," Broad Walk, Winchmore Hill. Mr. T. ELSON HARDY, Licentiate R.I.B.A., Architect.

PHILIP WEBB AND HIS WORK—IX

By W. R. LETHABY.

A WINTER IN ITALY, 1884-5.

In 1880 reports reached England of a large "restoration" scheme in progress at St. Mark's, Venice, the glorious building which Morris called "a work of art, a monument of history, and a piece of nature." The recently formed Society for the Protection of Ancient Buildings organised meetings of protest, and the newspapers gave the question a publicity which they would hardly have accorded to similar doings at home. I still have some memory of the anxiety and excitement, especially the controversy about levelling the mosaic pavement which "undulated like the sea." Our sometimes clumsily expressed, interfering interest was at first resented in Italy, and English residents in the country reported the irritation felt there. Among Webb's papers I find a copy of a letter dated May 12, 1882, addressed to Signorina Bella Duffy, Florence, which explains that: "The S.P.A.B. is only concerned with the welfare of the infinitely valuable ancient monuments, and is absolutely free from any mercenary bias. I am in hope that this spirit will in time be appreciated by the Italians and other nations, and that all suspicion of motives will die out as the increase of communion between nations does away with the fear which is bred of ignorance. I should be glad if, in your intercourse with cultivated Italians, you could impress upon them that we in England would be sincerely glad if they would familiarise themselves with our monuments and help us with forcible expression from their side when the intelligent English are hard pressed while striving to save what remains unfalsified in their own land."

When recovering from a severe illness in 1884, Webb was ordered to have rest and a change. He decided to spend the winter in Italy, where Fairfax Murray and Middleton arranged to meet him.

He wrote from Florence to Mr. Jack: "I got away really on Sunday, the 9th [November, 1884], and have come through Dover, Ostend, Bruges, Ghent, Brussels, Basle, Lugano, Como and Milan to this place. . . . I have seen many fine things, mostly in a state of decay, but many of them quite beautiful and exciting—perhaps too much so for me, for I feel rather like a fish out of water, wanting the support of my daily work which has become so much of a habit to me that I do not feel at home without the stay of it. This feeling may perhaps go off, and I may get more elastic in mind and less strained in it."

The following notes are taken from his sketch-books:—

"November 10. *Bruges*. The Virgin of Van Eyck: the best work possible. The carillon of the belfry, three Mozarts and a Gounod; the hour-tune of a Mozart's Sonata. Memling triptych at the Cathedral—in best condition and altogether to be remembered.

"November 13. *Ghent*. Van Eyck's Adoration of the Lamb—unmentionable! St. Michael's Church still whitewashed. The Cathedral they have begun to play the devil with. . . . Heard good music and double diligent vespers: extra singers on screen: organ good tone." Here he drew the old dragon vane on the belfry, noted the noble oak roof of the Butchers' Market and the curved plan and whitened walls of St. Nicholas Church and visited the Beguinage.

"*Brussels Picture Gallery*—St. Sebastian by Stuerbout, remarkable anywhere, so wonderfully good that it looks like a greatest master. Who was Stuerbout? Portrait of Charles the Bold by R. Vander Weyden. Lord! what wonderful flesh. Portrait 6 x 9 inches called school of Dürer—might be an Erasmus by Holbein and is certainly by a first-rate painter. Two first-rate little tall

portraits of Philippe le Beau and Joanna of Castile: good condition, perfect pictures; foregrounds of admirable natural flowers; wings of Van Eyck, Adoration, low in tone, very perfect work; beautiful altogether, and seemingly quite untouched. Royal Library. Extra-

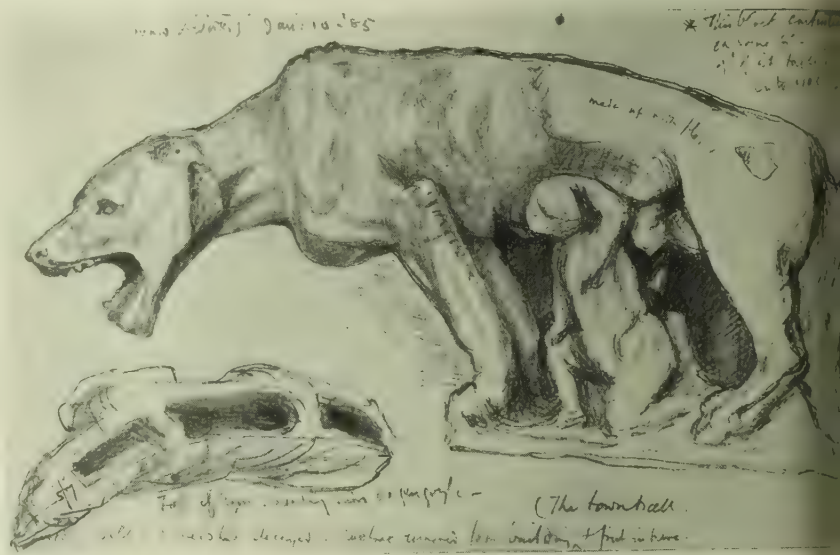


FIG. 1.—SCULPTURE, SIENA, DRAWN BY PHILIP WEBB.

ordinary vellum view of Seville, George Hoffnagel 1573, minute excellence astonishing.*

"Night of 17-18, *via* Strasbourg to Basle. Saw many of the old Swiss houses, very sober, useful, dignified and even beautiful. Got to *Lugano* late in the afternoon, four inches of snow on Swiss side of tunnel, but out on Italian side splendid bright sunshine without snow. Here first sight of Italian campanile. Hotel *Lugano*, [Fairfax] Murray at night. November 19. Saw the Church of Sta. Maria and Luini's great picture about 30 ft. x 40 ft. Must be nearly perfect in all ways—touched me more than I thought any picture would.

"*Como*, Duomo interesting but not to compare with the Broletto, good sound thirteenth-century brick and stonework. Towers of walls fine, five- or six-angled up-standing things of great size.

"20th to *Milan*. Duomo much as I expected, not over interesting: piers of nave fine in a way. Sculpture always good; some of glass pleasant. San Maurizio very good. Brera, with loads of noble pictures; most to me were the Luini's and the Gentile Bellini's. But I was even less touched than I expected. Sant Ambrogio is still the wonderful old church, but has been barbarously used of late years. Surely an Atrium is of all things the right entrance for a Church in a City.

"November 24. *Florence*. Saw San Miniato to-day: all wonderful in spite of some (much) damnable mutilation and smartening."

* Some drawings of Spanish cities by Hoffnagel (?) at the Victoria and Albert Museum are not so well known as they should be; some others are at Hampton Court.

Visits to Pisa, Pistoja, Siena, Orvieto followed, and Rome was reached on January 1, 1885. Here Webb settled down for a month making drawings to keep the home working with Mr. George Jack's help; and exploring the city and neighbourhood. Excursions into the Campagna with Middleton have been especially delightful, for he often talked of them in later years. February he was in Assisi; Perugia, Arezzo, Florence, Bologna, Ravenna followed; then Venice, Padua, Verona, Brescia and Milan. Figs.

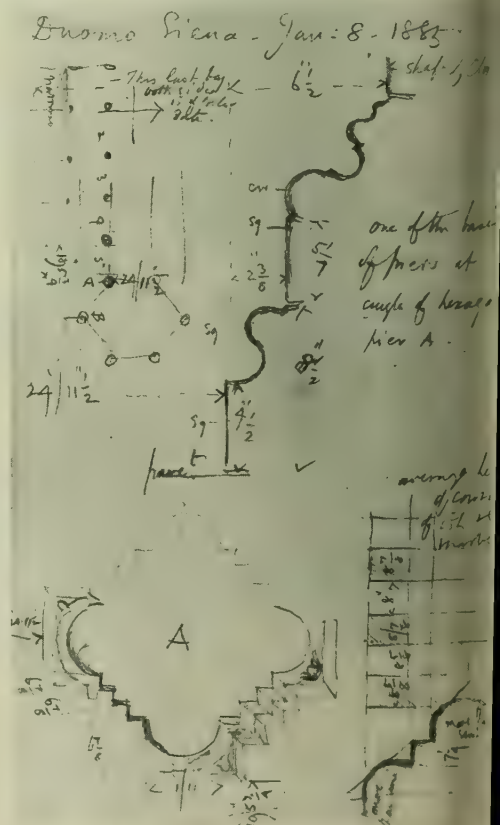


FIG. 2.—NOTES AT SIENA.

somewhere between 7 and 10 o'clock on evening. P.W."

Webb's impressions of Italy are recorded in his letters to George Boyce, the architect, and to the Faulkners, which are to fill a separate chapter. Here I will give some account of his meeting and close friendship with Signor Boni, then an architect and later a distinguished scholar and protector of the monuments of his land.

When Ruskin was in Venice in 1876 he made friends with Giacomo Boni, and according to the *Life*: "His (Boni's) letters to me show how much the young architect valued the books, sympathy, and help of the English writer. He entered new life, he says, in first reading the books; his principles of architecture were to be founded on Ruskin's teaching. The enthusiasm of this architect interpreted 'restoration' as destruction, very pleasing to Ruskin."* Boni was, of course, well known to Fairfax Murray, who was working for Ruskin in Venice, and it was probably he who gave Webb an introduction to Boni, who was employed at this time on the works at the Doge's Palace. In Webb's sketch-book—following a note, "Venice, March 16 [1885], School of S. Rocco: Perhaps one of the most splendidly dismal buildings in Europe"—is written: "Signor Boni, of Works at the Ducal Palace." Webb has shown the Palace, St. Mark's, and other things by Boni, and a friendship was established between them which lasted until Webb's death. Nearly twenty years later Webb recorded in a letter: "That was good luck, the olding at Wells. Something like mine at the Ducal Palace."

While I was writing this, it was announced in the *Times* of July 8 that Commendatore Boni was hopelessly ill from an attack of cancer, and this was followed in a few days by notice of his death. Born in the Cadore district, St. Mark's day, April 25, 1859, he became draughtsman in the office of the director of restoration of the Ducal Palace. "He taught himself Greek, Latin and English, the order that he might read Ruskin, for whom he always had the greatest admiration." He wrote some articles criticising the methods of restoration, and was dismissed but taken back. Further articles in the *Bullettino di Roma* attracted the attention of the Emperor, who gave him employment in reporting on the monuments of Apulia. In 1898 he was put in charge of the exploration of the ruins. "The skill which he showed in discovering earlier remains without damaging

later buildings was most remarkable. It was his ambition to make both the Forum and the Palatine places of beauty as well as of archaeological interest, and it was his particular pleasure to heal the scars of excavation by the help of Nature. Boni was a great archaeologist, of almost uncanny powers, a real genius who by character and industry possessed himself of profound erudition—a poet and a philosopher. . . . He gave himself no peace if the beauty of mountain, lake, or river was ever threatened."

Without making extravagant claims, it may be said that there was much of Ruskin and something of Webb in all this; and as Boni's letters will show, the ideas of Ruskin and the Anti-Scrapers were after all caught up and then admirably applied in Italy.†

After Webb had left Venice, Boni wrote:—

"Duc. Pal., May 6, 1885. I got your letter, a very fond one, quite like you. . . . I recollect me of the few hours I spent with you. An unconscious sadness which I felt when you went away softens down into a fond recollection of all you said, your voice, your look, &c., coupled with an intense desire of seeing you again very soon. . . . The purpose of my journey to Rome was that of preparing the ground for our new law of protection of those monuments which, being the property of private people or separate communities, have been under no control whatever until now. The good mason whose new house we saw together asked me whether any detail of the drain pipes which you mentioned to him may be found. . . . Repeating again and again my thanks for your kindness to me. . . . Ever gratefully yours, Giacomo Boni."

In this same year Boni sent Webb a piece about the size of a brick, of one of the oak piles from the foundation of the Campanile, as hard and heavy as a fossil, and on December 15, 1885, he wrote a letter beginning "Dear Amico for I am you with a warmer love than I can express." In another letter he speaks of "Professor Middleton, the dear and learned man." Webb had another illness in the autumn of 1887, and on hearing of it Boni wrote: ". . . You will recover soon and take a long rest here as you deserve after a laborious life, and we will build a little Sandolo with a pointed sail of a dark yellow colour and its upper part darker, like the wings of a

*Through Boyce's friendship with a French painter living at Vézelay the S.P.A.B. principles were explained in France, and Herr Muthesius transmitted them to Germany. The Society has not been without honour save in its own country.

swallow, and we will go to Torcello and touch with our fingers the basketwork of the eleventh-century capitals and see how the crystals of the Greek marble glitter. . . . In the *Riforma*, our leading Roman paper, I fought hard for the law to protect ancient monuments which has been voted by our Parliament just now." To this letter Webb replied:—

To Signor G. Boni. December 21, 1887. By the hand[writing] of my friend and colleague [Mr. George Jack] I send you a few words in answer to your delightful letter of December 14. It was my greatest surprise during the time of my sickness, as I had almost forgotten everything else than a bed and a sick fool in it. I am better now, and able to think of your rhapsodic idea of the lagoons and Torcello. It was good of you to chime in with my present sentiment, which is almost childish. Your notes on what you and others have done towards saving for a more reasonable generation some small fragments of beautiful things done by a less foolish generation demands my respect. Go on as long as there is breath in your body. After I left Venice with Sig. Murray I stayed a day and half in Vicenza, and after having been made melancholy by the skilful but dismal skill of the great Palladio I turned to the beautiful bits of mediæval work. Your photograph of the Casa Nigafatta interests me greatly, though, of course, the renaissance had already begun to tell disastrously on the imaginative work of the Middle Ages. If you can get your 20 plates together of these remains I and my friends shall be glad of copies at 20 f. each. You may put down the following as subscribers for which you will hold me responsible [16 copies]. The pamphlet on 'Ca' d' Oro' interests me exceedingly. I hope shortly to become a human being again and able to do something for myself once more.

Boni to Webb, May 19, 1888. "Ten years ago I wrote a passionate paper which no Venetian journal cared to publish. Some parts I published in 1882, being my first utterance on the subject of monuments. Your letter set me to think. . . ."

June 8, 1888. "The papers sent to me by the S.P.A.B. are very interesting. While reading, I worked out what seemed to me general principles, of which I am in search in order to prepare a law for the preservation of monuments in Italy. . . . I feel what I owe to the help and encouragement of those

Ruskin as quoted in the *Life* spoke of him as 'our Boni.'



FIG. 3.—BYZANTINE CAPITAL, DRAWN BY G. BONI.



FIG. 4.—BYZANTINE CAPITAL, DRAWN BY G. BONI.



friends who contributed to develop my views on the subject of monuments. If I could tell you what has been done for the good cause your benevolent eyes would express satisfaction for having not been mistaken when you chose me for your friend."

May 9, 1888. "I have been called to Rome as architect of the General Direction of Monuments—the most noble of occupations to look after beautiful noble old buildings. . . . I should feel grateful for the statutes of the Soc.P.A.B. I want your wise word and suggestions. You will know that among those who would be disposed to agree upon and follow them none is more affectionate to you than, yours ever, Giacomo."

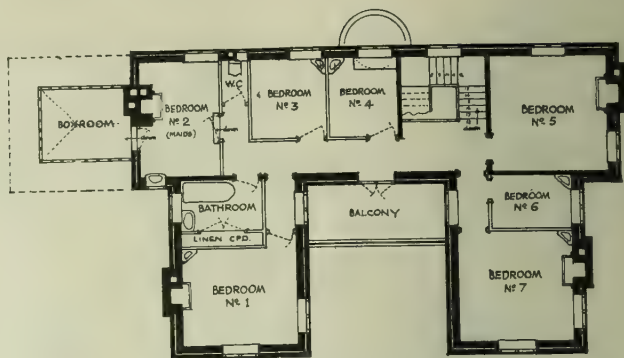
June 1, 1890. " . . . I am knee-deep in a grammar of Roman construction, workmanship, materials, mortars. I am surveying the ruins of villas in the Campagna, where I find types of extraordinary beauty. . . ."

In another letter he refers again to "the beauty and importance of the types of Roman masonries which I have the good luck to discover." In 1893 (March 29) he speaks of "the information which I had collected about the works of the Roman marmorarii at Westminster." In another letter he says: "I am reading with interest an account of the Rolls Chapel [a royal building c. 1250 successfully destroyed in London] which Hebb sent to me."

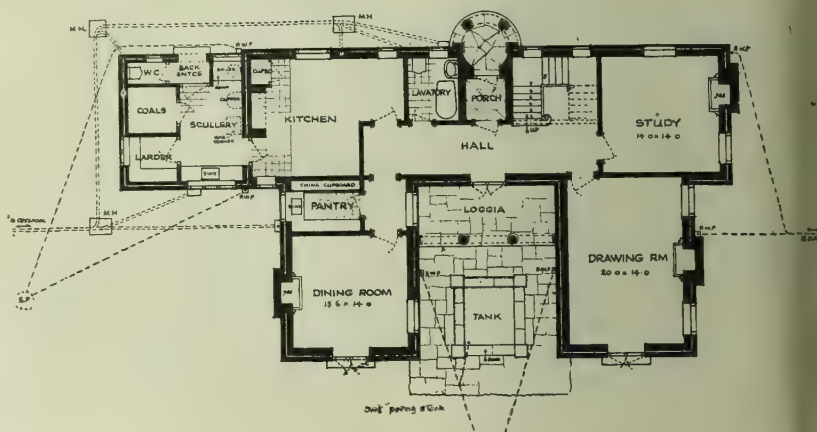
In answer to a question about Byzantine capitals in Rome signed with monograms, Boni wrote as follows, illustrating the letter with two exquisite sketches (Figs. 3 and 4).

"Ministero dell' Istruzione, Rome, March 19, '94. My dear Webb, monograms abound at Parenzo and Ravenna; some are also to be found at St. Giuste di Trieste. I did not succeed as yet in my researches at the Mattei Palace because the present landlord, an American, does not allow anybody to cross the threshold—but I found a capital of the sixth century and of the same type at S. Clement, together with another one resembling that of Parenzo, and bearing the inscription MERCVRIVS PB. (Mercurius a prior of S. Clement, was elected pope under the name of Giovanni II in the year 532.) Before the end of March I will start for the terra d'Otranto, and thence (from Brindisi) to Constantinople, stopping a few days in Athens. I hope to be back towards the end of April, a little less ignorant perhaps, or a little more presumptuous, according to Minerva's or Sophia's influence. You will be, I hope, by that time in as good health and as brisk as possible, jumping from one branch to another of Gray's Inn trees, twittering or chirping like the feathered inhabitants of my hermitage, to the great bewilderment of your fellow citizens. George Wardle has not written to me from Posilippo. Sartorio sent me on your letter to read. William Lethaby will be so patient as to wait till I have a free entrance for the Mattei Palace! Hearty thanks to Micklethwaite for the interest he takes in the study of the types of ancient masonries. Ever yours aff. [?] Mousiobigio."

May 16, 1894. " . . . The arches resting on the columns of the *Statio Annonæ* (now S.M. in Cosmedin, or Bocca della Verità) are decorated with modelled stuccoes which, from the analogies they present with those of S. Sebastian (fourth century) seem also to be of the age of Constantine. . . . The cornices and arches borne by small columns of stucco which decorated the apsis of S. Ambrogio, Milan, have been demolished thirty years ago supposing they were barocchi. They contained 85 per cent. of chalk (gesso or sulphate of lime), a little lime and brick powder. The bold stuccoes of S. Maria Cividale (eighth to tenth century) show that the tradition was not lost. The Austrian archaeologists seem to be unable to understand that the stuccoes of Parenzo are pure sixth-century work and not seventeenth. I should like to know whence is derived the word *stucco*—from the Arab?



The FIRST FLOOR Plan



The GROUND FLOOR Plan

Plans of Proposed House for Curator, University Botanic Gardens, Cambridge
MESSRS. BAILLIE SCOTT AND BERESFORD, Architects.

Later he wrote from Athens.

"Dear Philip, I examined nearly 300 fractures of the marble blocks forming the cellas of the Parthenon, &c., and found them to be produced only by the rusting of iron cramps. . . ."

In 1897 he tells that "the circular Roman tombs were usually crowned with battlements. I found traces of these over the cornice of Cecilia Metella. . . ." Again he writes of the mosaics of the Baptistery of Naples (early sixth century): "Stags drinking, each from a separate river, and sheep eating the flowering grass illuminated with gold: palm trees with pecking birds on them, the blue background of unsurpassable colour. . . . A band decorated with peacocks and fruits on a gold ground."

December 31, 1897. He describes his planting-out work in the Forum. "Over 2,000 rose trees with acanthus, oleanders, junipers, ericas, &c." Other letters speak of "my nightingales," which he really seems to have known personally, and his own garden and roses. Again, he describes the Lion of St. Mark.

January 12, 1898. " . . . Wardle came. Norton is much pleased to know you met his father [Prof. C. Norton]. . . . Monreale was something archangelic. I had a long conversation with one of the archangels in mosaic of the apse who has a lovely late Greek face, like Mrs. Stilman's, and was sorry to have to come down the scaffolding. . . ."

The latter goes on to speak of the Classic Arab flora. "The superiority of the Arabo-Byzantine flora derives from the nobility of its aspect and from the oldness of its genealogies and the myths which they originated. . . . In the Arabic mosaics we notice the palms, citrons, pomegranates and aloes."

At Agrigentum he observed "traces of

original plaster, thin as a sheet of paper, to be found in many of the flutings of columns and of the foldings of the drapery of fragments of the sculptures—still amazingly smooth."

"As to the Aurelian walls of Rome ought to make it understood that some of them only belong to the period. There are remains of the time of Tiberius with filling masonry, and Aurelian built with great care using any material that might be got by tearing down old buildings. . . . and the ruins of the Goths and of early Byzantine type." A few years later Commendatore visited England and saw Webb once more.

BOOK REVIEW

Small Country Houses of To-day. Vol. I.
By R. RANDAL PHILLIPS, Hon. A.R.
(Country Life.) Price 25s.

This volume maintains the high standard of the preceding volumes. The houses illustrated are of a larger type than those in the previous issues, and the styles are varied. The object of the book, the editor remarks, is to draw the attention of the public to the study of modern work; an admirable object, some of the old houses to which additions have been made possess a charm which only brings about. That these modern examples improve when the materials have weathered and the gardens matured there is no doubt that those who build to-day have a structure which many of the old ones cannot possess, and so necessitate continual patching. It is difficult to select any particular house for special mention, as all the examples are so well proportioned, and built of materials suitable to the sites on which they are placed.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

glad to give questions and answers, but cannot
responsibility for contributed replies, especially on
letters.

appeal to our correspondents to submit their
on paper of a size easily filed, and written as
is possible, or, better still, in typewriting?—ED.

Horse-power Required for a Pump.

[REPLY TO AQUA, AUGUST 14.]

Let W be the weight of water required
ft per second, in pounds weight; H the
to be lifted, and E the efficiency of the
as a percentage, then the H.P. required is
to $W \times H \times 100$. H is in feet.

550 × E. STATO.

File and Go of Stairs.

[REPLY TO PITCH, AUGUST 14.]

The rule used by your correspondent is
upon the rough assumption that the energy
led in lifting the weight of the body
is twice that used in propelling the body
d, so that twice the rise added to the go
ents the same energy as a step forward
same total amount. Therefore, to make
mbing of the stair easy, this should be equal
average normal step forwards, viz., 23 in.
ERGO.

Mahogany.

[REPLY TO COLLECTOR, AUGUST 14.]

It is quite possible that the wood that
ling your correspondent is African walnut,
has a very similar grain to mahogany.
gure produces dark lines upon the surface
board. As a matter of fact, the wood is
rarely met with.

MERCHANT.

Sand-Lime Bricks.

[REPLY TO MR. RICHARD ANDERTON,
AUGUST 14.]

If Mr. Anderton will write to me I will
in all information on the above subject.

THOMAS DAWBER,
The British Brick Co., Ltd.,
Philpstoun, West Lothian.

Cleaning Porcelain Enamel Bath.

[REPLY TO "R.P.B.," AUGUST 14.]

One tablespoonful of liquid ammonia
e gallon of water forms a suitable cleansing
ion for this and other purposes. Apply
a broad brush, rub, rinse and leather off.

JOHN M. FIFE.

Well under House.

[REPLY TO "WATER."]

Your correspondent might satisfy him-
by consulting the authorities at the
gical Museum, who, being informed as to
osition on the map and the depth of the
would be able to assure him of the likeli-
of the well tapping a good water-bearing
. As a matter of fact a good, deep well
not fail except after an unusual period of
ht, and the failure often occurs some
after the drought has been broken and
the new rains have percolated through
deep strata.

ve several times called on, or corresponded
the Curator of the Geological Museum in
n-street, W., and have never failed to
e the most valuable and courteous advice,
have no doubt your correspondent would
ally well received.

"AQUA."

Shuttering.

[REPLY TO "R. M. P."]

For boxes for pre-cast concrete work
found that a coating of soft soap has
ery successful in coming away clean
e concrete when set. For the larger
such as for a concrete floor cast *in situ*,
nothing so good as a good thick coat of
te.

"PRACTICE."

A Girder Question.

[REPLY TO "F. G. J."]

SIR,—I have never tried the following method,
but have had it recommended by a firm of
structural engineers, and have made a mental
note of it for use on the first possible occasion:—

Calculate the safe load to be carried, and
select two girders, each of half the required
total strength. Chase the flanges back and
front into the wall so that the girders can be
erected and placed with their webs tight on to
the wall faces; the piers at either end must
be thickened out wide enough to form a bearing
for the girders, which are now in their per-
manent positions. Over the girders cut out
for and insert short lengths of light R.S.J.
crossing the girders at about 18 in. to 24 in.
centres, and well pin in with slates in cement.
When the work has thoroughly set, open up
the work under as required, and the whole job
will have been done without any temporary
dead shoring or needling.

"INTERESTED."

Hard Tennis Court.

[REPLY TO F. P. MERRIT.]

SIR,—One of the most important parts of a
hard court is the foundation, which should con-
sist of a good bed of clinkers, boiler ashes or
broken slag laid to a thickness of at least 6 in.
and well rammed and rolled to a level surface.
The turf and vegetable soil should, of course,
have been first removed and the ground under
well rolled. The surface can then be finished
with asphaltic limestone laid on in successively
thinner and finer coats to the number of three.
Each layer should be independently rolled and
consolidated. Another surfacing material con-
sists of porous clay burnt in kilns to an even
hardness; and again, crushed brick, grouted in
cement, has been used with success. As far as
I am aware the permanent green finish is a trade
secret, and in any case I should recommend your
correspondent to consult a specialist firm to carry
out the entire job.

DEUCE.

Insect Nuisance.

[REPLY TO "ANXIOUS."]

SIR,—Since the inquiry published under the
above head in your issue of July 24, I have met
with the problem of cleansing a particularly
verminous house and have found quite satis-
factory results by the use of formalin and
permanganate of potash for fumigating pur-
poses, reinforced with constant sprayings of
strong formalin. The local Medical Officer of
Health claimed that this treatment would
destroy eggs as well as live stock, but we found
definitely that was not the case, and a series of
four fumigations at seven-day intervals had to
be carried out before all sign of life had been
destroyed. The treatment needs patience and
perseverance to bring success, and the failure of
the first fumigations should not give cause for
doubting the treatment. In the case I am
quoting we went to the length of removing all
skirtings and picture rails and window boards,
and the plugholes were found to be the favourite
nesting places. We also drilled all the plaster
ceilings to allow the floor spaces to be thoroughly
fumigated. All this means expense, but it is
quite impossible to grapple with this nuisance
by any half-measures.

X.

Dry Rot.

[REPLY TO "ANXIOUS," AUGUST 28.]

SIR,—The virulence of the dry rot fungus is
often underrated. Although germinating in
and feeding upon wood, it can penetrate into
brickwork and pass through joints or up the
walls of a building between plaster and brick-
work, obtaining nutriment from the joists, &c.,
or other timber it finds in its path. Your
correspondent will find it useless to renew

infected wood without treating the walls to
kill the fungi. The best means of doing this is
to remove all woodwork (*i.e.*, skirtings, &c.),
and all plaster for a distance of at least 12 in.
from the new timber, and burn the exposed
wall surface with a blow lamp. The walls
should be replastered with Portland, Keens', or
other hard cement or plaster, and all new wood-
work built in should be generously treated with
creosote or other wood preservative. This will
prevent any fungi returning and attacking the
new wood. Of course, all new work must be
well ventilated, or the trouble will start again
in the timber.

JOHN C. F. JAMES.

SIR,—The most important point is to take
away every possible vestige of dry rot and
destroy same. The fungus left in the joints of
brickwork should be burnt out with a very
powerful blow-lamp or, better still, an oxy-
hydrogen burning plant. The joists and the
underside of the flooring should be treated with
at least two coats of one or other of the many
wood preservatives advertised. See that the new
wood contains no sap of any sort. Look
also to ventilation.

G. W. HARRIS.

Roofing Felt.

SIR,—Can you tell me whether the bituminous
roofing felts are superior to the hair felts for an
under lining to a slate or tile roof?

CLIMATE.

Cold Water Supply.

SIR,—I am running a lead cold water service
in a trench by the side of some heating pipes.
The trench will be permanently sealed. Do you
consider it safe to leave the pipe unwrapped as
it runs by the side of a heating-pipe? The job
is a school.

QUERY.

Wind-Driven Plant.

[REPLY TO P. E. STEPHENS, AUGUST 14.]

SIR,—I have a "Ventimore" installed which
has given great satisfaction in regard to efficiency
in low winds. It is particularly good in winds
estimated at from 7 to 10 miles.

WILL E. MORUNT.

Tiles Splashed with Cement.

SIR,—We have had several inquiries recently
from customers who have had machine-made
tiles on sills, &c., splashed with cement and
mortar stains. These discolorations, having
been allowed to dry and remain some months,
are difficult to remove. Could any of your
readers suggest some preparation that would
be effective in restoring the normal appearance
of the tiles?

"CEMENT."

Provincial Architect's Practices.

SIR,—I recently came upon a practice in a
certain office which appears to be most irregular.
The case in point is this:—

A bill of quantities is prepared by an architect
who acts as his own quantity surveyor. In
the "Painters Bill" a provisional sum of £200
is provided. The architect received a fee of
2½ per cent. on this amount. When the build-
ing was half-completed a bill of quantities of
"painting work" for the same building was
prepared and put out for tenders. At the end of
the bill the contractor was required to provide
the sum of 2½ per cent. for quantity surveyor's
fees.

Now, the architect acting as his own quantity
surveyor receives 2½ per cent. twice over
for the same work. I should like to know if this
is the general practice of architects in any
district.

ALBERT C. FREEMAN.

THE BUILDING TRADE.

SETTING OUT A STAIRCASE

On Paper.—To the beginner in design the setting out of a staircase will present one of the main difficulties of his design and, as the experienced designer will know, it is a matter to which very careful consideration must be given at an early stage in the operations as so many other matters depend thereon.

Having decided upon the relation of the stairs to the rooms, into which the matter of aspect and lighting will enter, the main requisites will be directness and a saving of passage space. So far as aspect is concerned in a domestic building, where it is naturally desired that as many as possible of the living rooms should face the sun, it will be obvious that the staircase will be relegated to another side of the building;

quotient being the number of risers; e.g., if the height from floor to ceiling is 8 ft. and the thickness of plaster ceiling, floor joists and floor boards, 9 in., together these equal 105 in. so that $\frac{105}{7} = 15$ risers.

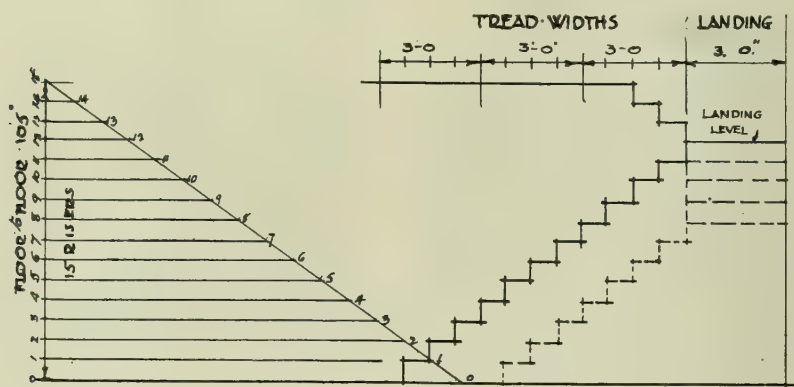
The next step is to mark off on a vertical line extending from floor to floor corresponding to the story-rod 15 divisions, for which the following is a rule of thumb method quickly executed. Lay the scale at an angle so that the figure 0 on the scale coincides with the lower floor line and the figure 15 with the upper floor line, and tick off on to this diagonal line the numbers 1 to 14, when lines drawn parallel to the bottom floor line from 1 to 14 will give, where they cut the vertical line, the risers in

alternately by the use of the T-square for treads and T-square and set-square for risers, until the flight from lower floor to landing is completed. The upper flight may then be finished in the same manner working upwards from the landing, the outer edges of the landing continued upwards for a height of 7 in. being the first riser from the landing or the 15th in the stairs.

From this skeleton section so formed, the plan may be completed and its relation to the floor space, doors, &c., on both floors studied. Where another staircase is desired above the section, it should be worked out in the same manner, in order that the necessary headroom may be obtained and its effect upon the plan discovered before the other details of the plan are filled in. In upper flights where they come under the roof it is always advisable to design the stairs so that the topmost flight follows the rake of the roof, but where headroom is not possible dormer windows cut in the roof will supply this.

Where winders occur (though showing in their actual position in plan) on the skeleton section they will appear merely as vertical spaces left vacant, the first rectangular tread starting from above the line of the outer edge of the landing at the height of the mark, indicating the top winder.

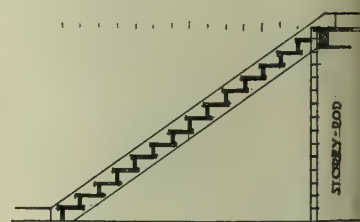
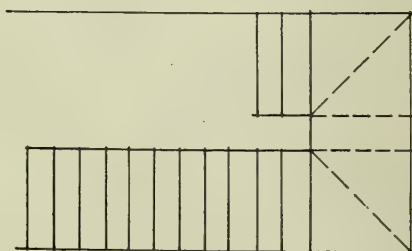
Setting out a Stair in the Shop.—In the actual construction of the stairs in the shop a story-rod is used which corresponds to the vertical line on which the heights of the risers were marked off on the drawing. In the same way the heights of the risers are set out on the



LAYING OUT A STAIR

ON PAPER

DOTTED LINES SHOW ALTERNATIVE STAIR WITH WINDERS.



SHOWING USE OF STORY-ROD

and whilst a view is desirable at all times, it will not be of such importance from the stairs as from a living-room or bedroom. But lighting, on the other hand, is a matter of the very first importance, though one so often overlooked. Wherever possible a staircase should have at least one outside wall on all landings and galleries, and the largest windows possible in the space should be provided; also portions of sash windows should be hung to open to provide ventilation of a space that will otherwise very soon become stuffy, especially in houses. Top-lights in the form of skylights are better than no light, but are best avoided wherever possible, and are only of use over staircases where there is an appreciable well between the flights.

While a staircase should have at least one outside wall, to be most effective it should be so planned that it lands at a point as near as possible to the doors of the principal rooms on that floor, thereby saving space in passages.

Method.—The position of the staircase having been decided upon, it remains to plot it upon the plan, and the method employed involves the simultaneous consideration of the plan and section. If, for example, a stair having a tread of 9 in. and a riser of 7 in. be taken, the number of risers is found by dividing the height of the rooms plus the thickness of the floor by 7, the

equal heights, 0 being the lower floor and 15 the upper. In actual draughtsmanship it will save time if the vertical line chosen be the outer wall of the stairs, and if it is an open newel stair with a landing, at least 3 ft. from this wall to its outer edge should be provided at a height giving suitable head-room. A distance of 3 ft. may then be marked off from the outer wall at the height chosen, and from that point distances of 9 in. which for expedition in drawing it will be found convenient to set off in distances of 3 ft. subdividing into four subsequently. It should be borne in mind that the top step of each flight being the surface of the floor or landing, consequently the number of treads will always be one less than the number of risers, so that if the landing is at the height of 12 risers, 11 treads will require to be marked off from the outer edge of the landing. This will give the flight from the landing to the lower floor. As a time-saving method the depth of landing and 11 treads of 9 in. may be ticked off from the scale laid along the line of the upper floor, in which position they will not be hidden from view by the T-square in completing the flights, but the risers may be drawn down from them by the use of the set-square. Starting, then, with the outer edge of the landing as the 12th riser, the remaining treads and risers may be drawn

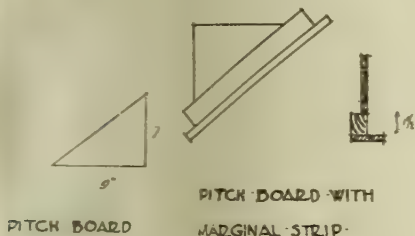
story-rods by means of compasses, the proportion of tread to riser having been determined by any of the methods already described. The story-rod is first marked on the works with the distance from floor to floor by being dropped vertically down the face of the trimmer to the floor below to a point directly under it, obtain by means of a plumb-line and bob. The point which the floor boards on the upper floor cut the story-rod is then marked on the story-rod which is now divided equally by means of dividers into as many divisions as there are risers shown on the drawings. The top one is then marked "Up," and the side of the rod which these divisions figure is marked "Rise." The rod is next laid against the plaster of the end wall, if the wall is rendered, or 1 in. allowed if it is not, and the distance from the end wall to the trimmer position is marked on the other edge of the rod. The position of the first riser is also marked on the rod, and should be lettered "Start." The position of any openings for doors or windows should also be marked.

From the story-rod, the heights of the risers are marked on the inner faces of the strings on a line drawn $1\frac{1}{2}$ in. from the bottom edge of the strings and parallel to it.

The next process is to get out a template known as a "pitch-board," for laying out the form of the steps on the strings. This template is shown above in the form of a right-angled triangle, having a base the width of the tread and a height the same as that of the riser. The pitch-board is then laid on the string with its longest side along the line, marked 12

up from the bottom edge and with the side of the same length as the tread, touching the point marked from the stair-rod, the third side giving the face of the riser.

An alternative form of pitch-board is that shown in section below. On the bottom edge of this is fixed a strip of the same width as the margin, and another strip is tacked on at right angles to act as a gauge for the pitch-board, to enable the correct angle of the lower edges of the rise and tread mortices to be marked on the string. It might be thought that the simplest method would be to mark out the tread and riser at right angles; but, as the mortice has to be of wedge shape to take the wedging at the back of the treads and risers, the angle

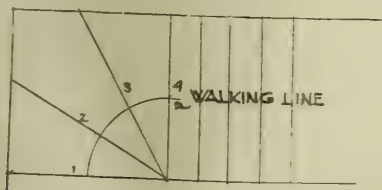


between the two mortices makes 98 degs. instead of 90 degs. For use in conjunction with these, two other templates are required, the one—the riser template—being the length of the riser, and its width plus the space required by the wedge; the other, the tread template, having similar dimensions. These are then laid on the single lines marked on the inner faces of the strings from the pitch-board, and a line drawn round them gives the actual dimensions of the chase mortices into which the treads and risers are to be housed and wedged.

The length of the string may be estimated by multiplying the longest edge of the pitch board by the number of steps, adding the distances necessary to meet the skirtings or return strings, though it is advisable to leave an additional length for cutting and fitting on the works. The illustration shows the method of cutting the string to fit the floor and skirting.

A more rough-and-ready method of laying out the steps on a string is by the use of the steel square on which the inch marks corresponding to the depth of tread and riser are placed against the line parallel to the bottom of the string.

Laying Out Winders.—When winders occur at the bottom of a flight they are laid out in the following manner. One leg of a compass is placed at the outside end of the last rectangular riser and the other leg opened out to 14 in. and a curve described between the point where it



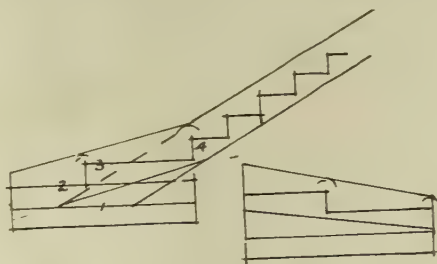
LAYING-OUT WINDERS-1

puts the last rectangular riser and the bottom riser at right angles thereto. This curve is then divided into three equal divisions, and through these points lines are drawn from the centre of the curve to the wall string. These lines give the risers of the winders.

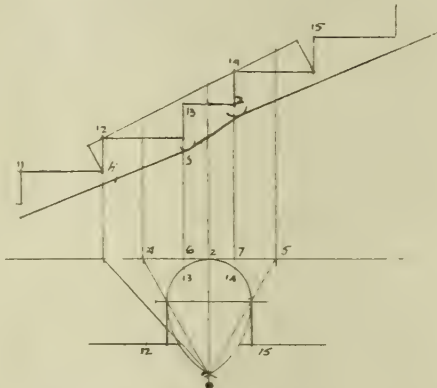
To lay-out the wall strings to take the winders they are measured from the fourth riser to the third, the distance between the points where the fourth and third risers cut the wall string on plan. One leg of a compass is placed on the angle of the fourth tread and riser, and the other leg to the top edge of the straight string. An arc of the same radius is then described from the point of intersection of the tread and riser No. 3 with the string. A tangent to the two arcs gives the top edge of the string, and a line parallel to

this and at a distance sufficient to take the second tread gives the underside of the string.

To obtain the short string on the wall at right-angles to the main flight to take the first riser and part of the second, draw riser 1 at a point where it cuts the string and do the same

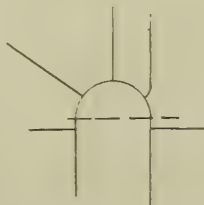


with riser 2, making the distance between them equal to the width of the first winder and the distance from the top of riser 2 to the string equal to that portion of the second tread which is carried by this string. The height from this intersection of the second tread with the string to the top of the string should be made equal to the height of the point of intersection of the wall string described in the last paragraph to take winder No. 3.



Risers around Cylindrical Openings.—The ends of well-holes between flights are often terminated in a cylindrical curve around which the winders are formed. By this means the narrow ends of the winders are prevented from coming to an actual point, as when grouped round a central newel. Considerable work will be saved by their correct arrangement in the construction of the strings and rails.

Where there are several risers around the cylinder the chord of the last rectangular riser should be so placed as to come 2 in. below this chord, as shown. Where a cylinder is placed either at the top or bottom of a staircase, and contains several winders, the one next the landing should be placed at least 2 in. within the cylinder, when the remaining winders should have their risers radiating at equal distances apart from the centre of the cylinder.



WINDERS ABOUT A CYLINDER

Where the cylinder comes at the intersection of two flights leading from a half-space or level landing, the diameter of the cylinder should equal the width of the treads, and the risers should be in the springing.

(To be continued.)

THE BIRMINGHAM BUILDING EXHIBITION

THE Birmingham and Midland Building and Allied Trades Exhibition (including Public Works and Road Making Section) is to be held at Bingley Hall, Birmingham, from September 7 to 19. The Exhibition is one of the most important of the year to be held in the Midlands, and it presents an excellent opportunity for the display of building trade products to architects, builders, and others interested in the subject throughout the huge area which comprises the Midland Counties. We shall publish a comprehensive survey of the Exhibition in our next issue, but in the meantime it will be of interest to give some general idea of the wide range of its appeal. The Exhibition has for its President the Right Hon. the Lord Mayor of Birmingham (Alderman P. Bower, M.B.E., J.P.), and there are twenty-three vice-presidents, all gentlemen who are intimately and prominently associated with the industry in the district, in official, professional, or business capacities. It is organised by the Birmingham Chamber of Commerce (Incorporated), 95, New street, Birmingham, under the patronage and with the support of the Birmingham Architectural Association, the Midland Federation of Building Trades Employers, Birmingham Association of Building Trades Employers, Birmingham and District Master House Builders' Association, Birmingham and District Master House Painters' Association, Birmingham and District Builders' Merchants' Association, Birmingham Association of Master Plumbers, Birmingham and District Master Gas Fitters' Association, the Electrical Contractors' Association, Birmingham Civic Society, the Clerks of Works and Building Foremen's Association, Birmingham Tame and Rea District Drainage Board, the Institution of Civil Engineers, the Midland Counties Builders' Merchants' Association.

The exhibits will comprise building materials, builders' ironmongery and hardware, architectural and ornamental work, constructional steel work, ferro-concrete, sanitary apparatus, appliances and fittings, contractors' plant, shop, bar and restaurant fittings, municipal engineering and equipment, paints, varnishes, colours, enamels, stains, polishes, lacquers, metal powders, wood preservatives, glues and adhesives, mechanical and hand painting and spraying apparatus, decorating materials, wallpapers and coverings, electrical, gas, oil, and other illuminating and heating plant and fittings, road-making plant and materials.

The efficient organisation of the Exhibition is assured. The members of the committees are all prominent in trade and business circles, and it need only be recalled that the staff who are responsible for the success of the British Industries Fair, Birmingham, are entrusted with carrying through the arrangements of the Exhibition, with Mr. G. Henry Wright as Secretary, and Mr. Charles Stanley as General Manager. The venue chosen is well known. Bingley Hall is situated within a few minutes' walk of the Town Hall, Post Office, railway and tram termini, and is very spacious and well-lighted, with ample accommodation for visitors.

A series of conferences is being arranged, at which addresses on technical subjects of interest to the industry will be given by well-known people. In this connection it is proposed to erect a special Conference Pavilion in the Minor Hall, which will provide for the comfort and convenience of visitors.

Messrs. Herbert Nicholls, Ltd.

We are informed that Mr. Guy Herbert Nicholls, the managing director's eldest son, has been elected a director of Messrs. Herbert Nicholls, Ltd., public works contractors, in place of Mr. D. B. Tanner, who has resigned in his favour.

CLAIM FOR HARD CORE

Building Trade Custom Set Up as to Payment.

In the Mayor's and City of London Court, before Deputy Judge Frank Hinde, a claim was recently made by the P. & S. Road Materials Transport, Ltd., hard core merchants, 26, Shaftesbury-avenue, Piccadilly-circus, against the Suburban Developments (London), Ltd., Finsbury Pavement, E.C., for £52 15s. 4d., for hard core supplied. Mr. Basil Tod-Jones was counsel for the plaintiffs, and Mr. G. Granville Sharp represented the defendants. Mr. Jones said the Court would be troubled with one point in the case which had been commenced by a specially endorsed writ in the High Court on February 16 last, by which date all the orders had been given, the goods supplied and the prices accepted. In the affidavit, in answer to Order XIV proceedings, sworn by Mr. Green, secretary of the defendant company, he said that at the date of the issue of the writ the time for payment of the plaintiffs' account had not arrived. The affidavit went on to state: "The defendant company are builders, and by custom of the trade, payment for goods was made on the 20th of the month following delivery. Of the amount claimed by the plaintiffs, £30 9s. 1d. was not due for payment until February 20, and the balance would not become due until March 4, when they were ready and willing to pay the account." The defendants, counsel said, had persistently refused to make any offer, or to pay the costs on the ground that the plaintiffs had issued the writ prematurely. The plaintiffs' answer to the custom of the trade was, in the first place, that so far as they knew no such custom existed. In the second place, if it did exist it did not bind the plaintiffs because they were not builders. And even supposing it did exist, and was binding upon the plaintiffs, there was a special agreement made with the defendants as to the time for payment of the account. He (counsel) proposed to prove the special agreement, and leave his learned friend to prove his custom of the trade. Mr. C. T. Payne, called for the plaintiffs, said he was the founder and managing director of the plaintiff company. About the middle of January a telephone conversation took place between him and Mr. Batchelor, of the defendant company, with regard to payment of the account and the terms arranged were for payment of cash against invoice. Deliveries of material commenced about January 20, and he made many attempts to get into telephonic communication with the defendants with regard to payment of their account. He was not successful until the month of February, just previous to the last delivery, when Mr. Batchelor, who came to the phone, said he would please himself about payment. Upon that, instructions were given to their solicitor to issue a writ. Later, during the correspondence, defendants stated that they would pay the account by the end of the month, which was afterwards altered to the 20th of the month. Witness said that business consisted mainly of the supply of hard core for road-making purposes, and they could not in any sense be called builders, or builders' merchants. There was a separate trade called the hard core trade, and there was no custom, in the absence of special agreement, to pay accounts on the 20th of the month following delivery. Cross-examined, witness admitted answering an advertisement on September 29 for the supply of hard core, and quoting 5s. 3d. per cubic yard, which was accepted by the defendants, who required delivery to start about October 12, of approximately 16 to 20 yards per day. In dealing with the defendants plaintiffs thought they were public works contractors. Plaintiffs dealt with builders as roadmakers, but not as builders. There was delay in getting cash against delivery because it was not known the exact amount of material on the lorry. Mr. Percy Triplett, manager to the defendants,

said on September 30 he gave orders to the plaintiffs for the supply of 200 yards of hard core at 5s. 3d. per yard. There was no question of terms of payment discussed at any time with him. He had been in the building trade 20 years, and he was familiar with the custom as to payment of accounts which was to pay at the end of the month following delivery of the goods, unless there was a special arrangement. Evidence in support of the defendant's contention as to the custom of the trade was given by a number of witnesses.

The Deputy Judge, after hearing the evidence, said it was perfectly obvious that judgment must be entered for the plaintiffs. There was only one defence and that was that there was a custom which provided that payment of accounts like the present need not be made until the 20th of the month following delivery, or as was now stated, at the end of the month. The question before him was, was there such a custom between people occupying the relationship of the plaintiffs and defendants in that case that accounts should not be paid until the end of the month? He was of opinion that the evidence did not establish such a custom at all. He did not think it would be sufficient to establish a custom in the building trade. The witnesses were by no means unanimous. The majority, however, were agreed that between builders' merchants and builders there was such a custom. The plaintiffs had abundantly made out their case. He thought in a matter of that sort the writ should not have been issued in the High Court, but in the County Court. There would therefore be judgment for the plaintiffs with such costs as were provided by the County Court scale.

COMMERCIAL CREDIT RISKS

EXPORT CREDITS AND CREDIT INSURANCE.*

This little volume deals with a subject which from the Introduction appears to have been suggested by Mr. Samuel the Parliamentary Secretary to the Department of Overseas Trade, in a speech delivered last January before the Leeds Chamber of Commerce. Mr. Samuel appears to have said that whether the facilities for export credits now in existence would be continued remained to be seen, but to have invited the Chambers of Commerce to express an opinion whether a system of overseas credit insurance against default by the buyer should the buyer be unable to meet the bill when due, for reasons that he had lost his money because of bad trade, or because the exchange had given way, or a revolt had taken place, or war had broken out between nations, would be a practical idea, in which case he would approach the Chancellor of the Exchequer with a view to seeing whether the Department of Overseas Trade, for a premium, could take the war risk off the shoulders of the insurance companies.

The Department since this speech was delivered has issued a questionnaire to the Chambers of Commerce, banks, and other trade associations, which will be found in this volume, and the author, who has had many years' experience of this very complex subject, has presented his views in this volume trusting that it may assist those concerned in evolving a scheme. Seeing the highly technical subject dealt with in these pages we can do little more than inform our readers where full information on the subject can be found. The author deals with the various stages through which the subject has developed and refers to the experience in the United States, and comes to the conclusion that the existing schemes of insurance here have been, and are,

* By A. H. SWAIN, Fellow of the Corporation of Insurance Brokers, Chairman, City of Leicester Electricity Commission; Member of the East Midlands Electricity Advisory Board. (London: Sir Isaac Pitman & Sons.) 1925. 5s. net.

so limited in their scope that little can be expected from them so far as overseas trade is concerned, but in his last chapter he formulates what he terms the "outlines of a scheme designed to meet the manifest needs of the commercial community." To do more than present such a scheme in outline he says would be an absolute impossibility.

We must refer our readers to this chapter for full information, but we may reveal the fact that the author considers that mutual insurance affords the only possible basis for a scheme to insure against the risks in question. The work is written in an attractive style and deserves the attention of all who are interested in this question.

"SUNDEALA" WALLBOARD

Messrs. G. D. Peters & Co., Ltd., of Caxton House, Westminster, are exhibiting a variety of their specialties at Wembley, including a number which have a particular interest for architects and builders. Chief among these is the "Sundeala" wallboard, a synthetic colloidal material which has many uses in connection with building, though it is especially suitable as panelling for walls and ceilings. It is homogeneous and, as we have been able to test for ourselves, possesses great rigidity and strength as well as marked fire-resisting qualities. It can be bent to a radius in manufacture, and is thus especially suitable for internal or external angles or for providing coves to ceilings and such-like purposes. It requires few battens in erection, and its use thus ensures a reduction of labour and material costs. The makers claim for the material that it will not warp, blister, or split under changing temperatures, and that it is unaffected by heat, damp or cold. The process of manufacture gives the finished product the ability to reject moisture instead of absorbing it, therefore it retains paints of all kinds, distemper, varnish, etc., and maintains a perfect finish, however treated. One side is flat and smooth, providing an excellent surface where delicate or polished effects are desired; the other side is canvas-finished, and is suitable for the panelling of dining-rooms, studies, offices, halls, etc. The material is easily cut and is supplied bent to shape, if required. It is made in sheets of two sizes: 11 ft. by 4 ft. 6 in. and 8 ft. by 4 ft. It can also be supplied in sheets 11 ft. by 2 ft. 3 in. and 8 ft. by 2 ft. embossed and decorated in the following designs:—Tile for bathroom, kitchens, corridors, etc.; oak grain, seal, crocodile, baby crocodile, and antique leather grains for panelling dining and billiard rooms, halls, lounges, cafés, etc. Messrs. G. D. Peters & Co. are also manufacturers of equipment for railway carriages, motor cars, omnibuses and tramcars, and mobile electric welders, and specimens of these products are all on view at Wembley.

Kelvin Hall, Glasgow.

The Glasgow Corporation Special Committee has decided to recommend the acceptance of an offer by Sir William Arrol & Co. to erect a new Kelvin Hall. The estimated cost of the building which will have a glazed roof of three spars girders, is £162,115. The front elevation is to be of stone, others of stone facings with rough cast back, and floors of concrete, making practically a fireproof structure.

Houses in Renfrewshire.

Plans passed by the Upper District of the Renfrew C.C.: 46 houses, Commercial-road Barrhead, Paisley; Messrs. Lennox & McMath 103, Bath-street, Glasgow, are the architects three dormitories, one isolation pavilion, an maids' home at Mearns Sanatorium, Mearnskirrk for the Glasgow Corporation.

Glasgow Mains.

The Electricity Department of the Corporation are to carry out expansions of mains, at a estimated cost of £90,140, for winter relief work.

NEW BUILDINGS IN LONDON.

Ashted Park.—Improvements and extensions costing £8,000 are being made to the house and stable block at Ashted Park for the City of London Orphan School Committee. The builders are Messrs. Cropley Bros., Ltd., Church-road, Epsom.

Becontree.—A site on the London County Council's Housing Estate at Becontree has been purchased by the Co-operative Wholesale Society, Ltd., 99, Leman-street, E.1, for new buildings, which will be designed by the Society's architect, Mr. L. G. Elkins, F.R.I.B.A.

Bermondsey.—A new Employment Exchange is to be erected in Bermondsey, under the supervision of H.M. Office of Works, Storey's Gate, S.W.1. The contractors are Messrs. A. Roberts & Co., Ltd., 74, Earl's Court-road, W. The steelwork will be supplied by Messrs. Somerville-Barnard Construction Co., Ltd., Archangel Works, S.E.

Brook-street.—Two West-End residences are to be erected in Brook-street, W.1, by Messrs. E. D. Winn & Co., Ltd., 32, Lowndes-street, S.W.1.

Chelsea.—Messrs. Rice & Son, 15, Stockwell-road, S.W.9, are erecting a new wing of three floors at the St. Mark's College, King's-road, Chelsea, S.W.3, costing about £40,000. Messrs. Beazley & Burrows, architects, 17, Victoria-street, S.W.1.

Denmark-street.—A new building, consisting of offices, etc., is being erected in Denmark-street, W.1, under the supervision of Mr. Walter J. Fryer, Walmer House, Regent-street, W.1.

Deptford.—New shop premises are being put up for Messrs. Mitchell & Son at 20, High-street, S.E. The builder is Mr. W. Figg, George-row, S.E.6. The architects are Messrs. Purvis & Purvis, 417, New Cross-road, S.E.14.

East Ham.—East Ham Hospital Committee hope to collect the necessary funds this year to enable a start to be made on the building of their new hospital of 66 beds. Messrs. Mennie & Smith, A.R.I.B.A., architects, 11, Newcourt, Lincoln's Inn, W.C. Mr. Joseph Rookwood, F.S.I., quantity surveyor, 25, Bedford-row, W.C.

Eltham.—Plans by Mr. J. A. Emes, 21, Surrey-street, Strand, W.C.2, for shops and showrooms on a site at the corner of High-street and Grove-yard, Eltham, for Messrs. Furlongs, Ltd., have been approved.

Enfield.—Alterations and improvements, including a new hot-water heating apparatus, are to be carried out at the Infirmary at Chase Farm Schools, Enfield. Mr. J. C. S. Mummery, A.R.I.B.A., architect, 34, Bloomsbury-square, W.C.1.

Fenchurch-street.—Messrs. F. Keen & Son, 469, Old Kent-road, S.E., are pulling down old premises on a site in Fenchurch-street, E.C., prior to the building of a six-story office and shop block. Messrs. Richardson & Gill, architects, 41, Russell-square, W.C.1.

Gray's Inn-road.—It is proposed to expend £50,000 upon extensions at the Royal Free Hospital in Gray's Inn-road, W.C. Messrs. H. V. Ashley & Winton Newman, architects, 14, Gray's Inn-square, W.C.1.

Grosvenor-gardens.—A new branch of Messrs. Lloyds Bank, Ltd., is to be established in Grosvenor-gardens, S.W.1. The alterations are to be carried out by Messrs. Trollope & Colls, Ltd., 5, Coleman-street, E.C.2.

High Holborn.—The British Bureau, of 19, Abingdon-street, S.W.1, has acquired the large block of buildings at Nos. 95-99, High Holborn, W.C., and 14-17, Eagle-street,

where it is proposed to erect a new building called "Monomark House."

King's Cross.—The London and North-Eastern Railway Company are to convert a large granary at King's Cross, N.W.1, into a goods warehouse. Plans by the company's engineers.

Lambeth.—A new building, to cost about £58,000, is being erected at St. Thomas's Hospital, on the Albert Embankment, S.E.1, to provide accommodation for students and staff. Mr. H. W. Currey, F.S.I., architect, 37, Norfolk-street, Strand, W.C. Messrs. Sabey & Son, contractors, 100, Great Russell-street, W.C.1.

Leighton-road.—A scheme has been submitted to the authorities for the rebuilding of the "Gloucester Arms" public-house at 61, Leighton-road, N.W., at a cost of £8,000. Plans by Mr. Malcolm T. Saunders, architect to the owners, Messrs. Watney, Combe, Reid & Co., Ltd., Stag Brewery, Westminster.

Lombard-street.—Old buildings are being pulled down in Lombard-street, E.C.3, by Mr. Nelson Wise, contractor, Henshall-street, N.1, preparatory to the erection of a large office block. Messrs. J. Campbell Jones, Son & Smithers, architects, 9, Dowgate-hill, Cannon-street, E.C.4.

Maidstone-street.—Mr. Samuel A. S. Yeo, A.R.I.B.A., Bank-chambers, St. John's-street, E.C.1, has prepared plans for the rebuilding of the public-house, "Britannia," in Maidstone-street, E., for Messrs. West's Brewery Co., Ltd., Hackney-road, E.2.

Oxford-street.—The premises at No. 100, Oxford-street, W.1, owned by Messrs. F. & C. Osler, Ltd., electric light fittings manufacturers, are to be rebuilt, to plans prepared by Messrs. Constantine & Vernon, 82, Mortimer-street, W.1. The contractors are Messrs. Bovis, Ltd., 43, Upper Berkeley-street, W.1, and demolition is being carried out by Messrs. J. Ashton & Sons, Stoke Newington-road, N.16.

Piccadilly.—A large block of shops, showrooms and offices is to be built on the site at the corner of Piccadilly, opposite the Ritz Hotel, W.1. Messrs. Treherne & Norman, architects, Windsor House, Kingsway, W.C. Messrs. Griggs & Son, builders, 100, Victoria-street, S.W.1.

Plaistow.—The King Edward's Hospital Fund for London have considered a scheme for the extension of St. Mary's Hospital for Women and Children at Plaistow. Messrs. A. Saxon, Snell & Phillips, architects, 9, Bentinck-street, Manchester-square, W.

Putney.—The Putney General Hospital at Lower Common, S.W.15, are raising funds for the building of a new wing, at a cost of about £10,000. Messrs. Young & Hall, 17, Southampton-street, W.C., have prepared the plans.

Queen Victoria-street.—Alterations are to be made at the General Post Office buildings in Queen Victoria-street, E.C.4, to plans prepared by H.M. Office of Works, Storey's Gate, S.W.1.

Regent-street.—A commencement has been made on operations in connection with the rebuilding of Les Gobelins Restaurant in Heddon-street, Regent-street, W.1. The contractors are Messrs. James Smith & Sons, Ltd., South Norwood, S.E.25. Messrs. Nicholas & Dixon-Spain, F.F.R.I.B.A., architects, 19, Hanover-square, W.1.

Regent-street.—A start has been made upon the rebuilding of the premises in Regent-street, W.1, of the International Fur Company. The builders are Messrs. Hall, Beddall & Co., Ltd., Waterloo-road, S.E.1. Steelwork by Messrs. H. Young & Co., Ltd., Nine Elms Ironworks, S.E. Messrs. Henry Tanner, architects, 3, Hanover-square, W.1.

Regent-street.—Good progress is being made in the rebuilding of premises in Regent-street

and Vigo-street, W.1, for Messrs. Austin Reed, Ltd., outfitters. The contractors are Messrs. W. F. Blay, Ltd., of Dartford, Kent, and Dowgate Hill, Cannon-street, E.C.4. Steelwork by Messrs. Moreland Hayne & Co., Ltd., 80, Goswell-road, E.C.1. Messrs. P. J. Westwood & Emberton, architects, 7, Adam-street, Strand, W.C.

Richmond.—Alterations and additions are to be carried out to the shop premises of Messrs. Charity Bros. in the Quadrant. Mr. E. J. Partridge, F.R.I.B.A., architect. Messrs. Soole & Son, contractors, Dunstable Works, Richmond.

Rotherhithe.—A new office building is to be erected for Messrs. H. J. Enthoven & Son, Ltd., at Rotherhithe-street, S.E.6, to the designs of Messrs. J. Moir, Kennard & Sons, 13, Railway Approach, London Bridge, S.E. The contract is being carried out by Messrs. Galbraith Bros., Ltd., 63, Waterloo-street, S.E.5.

St. John's Wood-road.—A public garage, with a number of lock-ups, is to be built on a site in St. John's Wood-road, N.W. The contractors are Messrs. P. W. Kirkman, 134, Green-street, Forest Gate. Steelwork by Messrs. Girder Frameworks, Ltd., 31, St. Paul's-churchyard, E.C.4. Mr. J. S. Stewart, architect, St. Paul's-churchyard, E.C.4.

Shoreditch.—Various conversion works are to be executed at the St. Leonard's Hospital in Hoxton-street, N.1, for the Guardians of the Parish of St. Leonard. Mr. F. Danby-Smith, F.R.I.B.A., architect, Parliament-mansions, Victoria-street, S.W.1.

Southwark.—Southwark Borough Council have approved plans, submitted by Mr. A. Sykes, architect, 19, Fitzroy-square, W.1, for the erection of a large warehouse at the corner of Upper Ground and Bennett-street, Stamford-street, S.E.1, for Messrs. J. Sainsbury, Ltd., provision merchants.

Tooting.—Messrs. Edward Mortimer (London), Ltd., clothiers, etc., 9, New Bridge-street, E.C.4, have put in hand work upon the building of new branch premises at Upper Tooting-road, S.W. Messrs. Birdwood & Mitchell, architects, 80, George-street, Portman-square, W.1.

Tottenham.—The foundation-stone of the new hall for St. Hilda's Church at Tottenham, N., has been laid. Messrs. H. Knight & Son, builders, 16, Bruce Grove, N.17. Professor Reilly, F.R.I.B.A., architect.

Walham Green.—Messrs. Prestige & Co., Ltd., Cambridge Wharf, Grosvenor-road, S.W.1, are to build new branch premises in the Broadway, Walham Green, for the Westminster Bank, Ltd. Mr. E. Guy Dawber, F.R.I.B.A., architect, 18, Maddox-street, W.1.

Walthamstow.—A new secondary school is to be erected at Walthamstow for about 410 pupils. Mr. Jno. Stuart, F.R.I.B.A., architect, Springfield Old Court, Chelmsford.

Walthamstow.—Alterations and renovations are to be carried out at the Granville-road Schools, Joseph Barnet Schools, Forest-road and Mark-street Schools, for the Education Committee, whose architect is Mr. H. Prosser.

Warwick-street.—Foundations are being constructed for a building of shops and offices at Nos. 23 and 24, Warwick-street, Regent-street, W.1. Messrs. George Porter & Sons, Ltd., contractors, 124, Summer-road, S.E.15. Mr. F. Cubitt Nichols, F.R.I.B.A., architect, 37, Norfolk-street, Strand, W.C.

A Correction.

In our issue for August 21, under "New Buildings in London," it was stated that plans for "Marcol House" (289-293, Regent-street, W.) had been prepared by Mr. Walter J. Fryer. This was an inadvertent mis-statement. Mr. C. T. Armstrong, A.R.I.B.A., is the architect, Mr. Fryer being the client.

CAPITALISM

WE do not know whether the recent speech of Mr. A. A. Purcell, delivered when presiding at the fifth session of the British Commonwealth Labour Conference, is correctly reported, but if that is the case his industrial views appear to have somewhat altered since he wrote the Foreword to the "Waste of Capitalism," a work we reviewed in our issue of October 31 last. In his recent speech he is reported as saying that the reasons for our low exports were to be found in the stupendous industrial development in India, China, South Africa, and the subject and Colonial countries generally, and in the extension and intensification of industrial capitalism in Middle Europe, Germany, Austria, Hungary, and in America. . . . "We must now realise that the economy of the world was so highly developed, so technically efficient, and so extensive that infinitely more could be produced than could be consumed under capitalism. Every extension of capitalist industrialism—and capitalist industrialism was extending at a very rapid rate both within and without the Empire—added to the capacity for increasing the overflow of output while at the same time not increasing the powers of consumption to anything like the same degree. "The time has come," Mr. Purcell is reported as saying, "when we have got frankly to admit the failure of capitalism and to take steps to break the capitalist system and reconstruct world economy on an entirely new basis; to do that it is necessary to develop a power capable of smashing capitalism and reconstructing society."

The doctrine contained in these last words is nothing new; it savours of what has been known as Illuminism for more than a century and a half, but the failure of capitalism Mr. Purcell now speaks of is an entirely different thing from what he wrote about in September, 1924, in the above Foreword to the "Waste of Capitalism."

There we read: "There is abundant evidence in this volume to prove that responsibility for the failure to reach maximum output rests upon the employers. . . . The result of this inquiry is to throw the onus on the other side," meaning the employers. "It is shown in the plainest and most convincing manner possible that the normal operation of the capitalist system maintains production at the level at which the highest profits are obtainable by the employers, and that this maximum of production is not the highest maximum which would be normal in a system organised for production and not for profit. . . ." And again: "This report is in effect an indictment of the capitalist system. Limitation of output to maintain profits, price fixing, the exercise of monopolistic control carried to such a point that by agreement firms are paid not to produce. . . . Not only these positive checks upon output, but the failure to introduce well-tested improvements in methods, technical organisation and scientific design in workshop layouts, the continuance of unhealthy working conditions, the maintenance of long hours of work without proper provision for rest intervals, must be laid at the door of the employers. The loss of output due to causes for which the workers can in part at least be held responsible is much less than is commonly supposed. . . ." Never surely has a writer written words which have had such a surprising effect in less than a year. The obstacles to output appear to have been removed throughout the whole world, output has outstripped consumption and capitalism, "so highly developed, so technically efficient," is capable of producing far more than can be consumed under a capitalist system, and Mr. Purcell is aghast at the effect of his words. A new system, he finds, must be suggested, not increase of output but increase of consumption; but this he sees cannot be attained without the drastic remedy of smashing the whole system and re-

constructing society. Will these words have the same influence as his former words of wisdom appear to have had upon the whole world? Mr. Purcell has laid a heavier burden upon himself this time. He shows capitalism is steadily extending in every country; he shows every country is alive to the necessity of increasing output, but before he will convince the world that the right remedy for all evils is to smash everything and begin again, he will have to show what lies behind this process, and what kind of place the world he proposes, after destruction, to reconstruct will be.

A PROSECUTION UNDER THE RENT ACTS

In the *Times*, August 25, a prosecution under section 10 of the Rent Act, 1920, was reported.

That section deals with the letting of a house or any part thereof at a rent which includes payment in respect of the use of furniture, where the rent charged yields to the lessor a profit which, having regard to all the circumstances of the case, and in particular to the margin allowed under section 9, which deals with the civil remedy, is extortionate, and the maximum penalty is £100. This penalty can be inflicted "without prejudice to any other remedy under this Act," but the Court may, in addition to the penalty, order that the rent, so far as it exceeds the amount permitted by section 9, shall be irrecoverable, and that the amount of any such excess shall be repaid to the lessee, but if this course is adopted, such order shall be in lieu of any

other method of recovery prescribed by the Act. Section 9, subsection (2), defines "normal profit" as "a profit which might reasonably have been expected from a similar letting in the year ending August 3, 1914, while subsection (1) provides that it must be proved that the rent charged is yielding or will yield to the lessor a profit more than 25 per cent. in excess of the "normal profit."

In the case, as reported, the defendant was the owner of two houses in which there were nineteen furnished rooms let at various rents. In 1914 the net annual profit on the tenancies of the two houses was stated to be £142, whereas the net annual profit to the defendant, who had been the landlord since 1921, was stated to be £452 19s. 5d. Evidence appears to have been given that the rent for one poorly furnished room let to a married man and his wife and four children was 14s. a week.

There seems to have been no defence put forward, as an offer was made to refund the excess charges for the past six months. The Bench inflicted a penalty of £50 and ordered the defendant to pay £25 costs, and in addition ordered that the rent paid during the last six months in excess of the rent agreed as a fair rent, 10s., between the defendant's legal representative and the prosecuting solicitor, should be repaid.

It was stated by the defendant's legal representative that this was only the second prosecution brought under the Rent Acts (we have only recorded one previously, see *The Builder*, September 7, 1923), and he pleaded this showed public ignorance of the Act.

The Bench, in inflicting the above penalty, intimated that the system of charging exorbitant rents must be put down, but time was granted to the defendant in which to consider the question of an appeal.

COMPARISON OF PRICES OF BUILDING MATERIALS IN AUGUST, 1925, WITH CURRENT PRICES.

Material.	Aug. 1925.			Sept. 1			Rise.	Fall.
	£	s.	d.	£	s.	d.	%	%
Bricks—								
Best Stocks	4	3	6	4	3	6	—	—
Flettons	2	13	3	2	13	3	—	—
Glazed	21	10	0	21	10	0	—	—
Thames Ballast	0	10	6	0	10	6	—	—
Thames Sand	0	14	6	0	14	6	—	—
Shingle (¾ in.)	0	12	9	0	12	9	—	—
Portland Cement	2	18	0	2	18	0	—	—
Ground Blue Lias Lime	2	4	6	2	4	6	—	—
Grey Stone Lime	2	11	9	2	11	9	—	—
Bath Stone	0	2	9½	0	2	9½	—	—
Portland Stone	0	4	4	0	4	4	—	—
Good Sound Building Timber—								
4 in. × 11 in.	32	0	0	32	0	0	—	—
3 in. × 11 in.	28	0	0	28	0	0	—	—
2 in. × 11 in.	28	0	0	28	0	0	—	—
3 in. × 9 in.	25	0	0	25	0	0	—	—
3 in. × 7 in.	23	0	0	23	0	0	—	—
3 in. × 4 in.	23	0	0	23	0	0	—	—
Slates—								
24 in. × 12 in.	37	12	6	37	12	6	—	—
22 in. × 12 in.	34	0	0	34	0	0	—	—
20 in. × 10 in.	25	12	6	25	12	6	—	—
18 in. × 10 in.	17	12	6	17	12	6	—	—
16 in. × 8 in.	13	15	0	13	15	0	—	—
R.S. Joists	13	10	0	13	10	0	—	—
Iron—								
Common Bars	13	10	0	13	10	0	—	—
Mild Steel Bars	11	0	0	11	0	0	—	—
Steel Bars	11	0	0	11	0	0	—	—
Cut Nails	20	0	0	20	0	0	—	—
Sheet Lead	47	10	0	51	10	0	8.42	—
Glass—								
15 oz. Sheet	0	0	3½	0	0	3½	—	—
21 oz. Sheet	0	0	4½	0	0	4½	—	—
26 oz. Sheet	0	0	5½	0	0	5½	—	—
Raw Linseed Oil	0	3	10	0	3	10	—	—
Turpentine	0	5	9	0	6	0	4.35	—
Ground English White Lead	56	15	0	60	5	0	6.17	—
White Lead Paint	77	15	0	81	5	0	4.50	—
Red Lead	53	0	0	55	0	0	3.77	—

NEW COMPANIES

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

The particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116, & 119, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

HALWILL Co., LTD. (206,703). Registered June 18. Clayworkers and brickmakers. Nominal capital, £6,000.

B. WHITEHOUSE & SONS, LTD. (206,771). Registered June 20. Park House Works, Monument-road, Birmingham. Builders. Nominal capital, £30,000.

ELIANE, LTD. (206,723). Registered June 19. 23, Portugal-street, W.C.2. Builders or restorers and decorators of buildings, &c. Nominal capital, £5,000.

E. J. MEARS, LTD. (206,726). Registered June 19. 11, Great Turnstile, High Holborn, W.C. Builders, contractors, estate agents, &c. Nominal capital, £500.

BELGRAVIA ELECTRICAL Co., LTD. (206,694). Registered June 18. Adams House, 23, Old Queen-street, Westminster, S.W.1. Engineering contractors, general engineers, &c. Nominal capital, £2,000.

AMPHORA ART POTTERY AND TILE, Co., LTD. (206,691). Registered June 18. 2, Fox-court, Gray's Inn-road, E.C. Slaters, tilers, builders, &c. Nominal capital, £500.

LAYTON HALL (BLACKPOOL), LTD. (206,735). Registered June 19. Builders and contractors, &c. Nominal capital, £3,000.

GEORGE OUGH, LTD. (206,786). Registered June 22. Pucketon Quarries, Liskeard, Cornwall. Stone, rock, slate and other quarry proprietors, &c. Nominal capital, £1,000.

LONDON AND SOUTH COAST BRICK Co., LTD. (206,757). Registered June 20. Manufacturers of and dealers in bricks, &c.

ROMILEY PARK ESTATES, LTD. (207,384). Registered July 20. Builders, decorators, sanitary, electrical and general engineers, &c. Nominal capital, £1,000.

NEWCASTLE CONSTRUCTION Co., LTD. (207,380). Registered July 20. 33, Sandhill, Newcastle-on-Tyne. Builders and contractors, decorators, &c. Nominal capital, £1,000.

DORMAN LONG HOUSING Co., LTD. (207,365). Registered July 18. Zetland-road, Middlesbrough. Build houses under their steel frame systems of construction. Nominal capital, £25,000.

HEARN, ROGERS & HARTLEY, LTD. (207,331). Registered July 17. 37, St. Barnabas-street, Pimlico, S.W. Decorative and architectural plasterers, &c. Nominal capital, £2,000.

FRED. WHITAKER & Co. LTD. (207,329). Registered July 17. 20, Otley Old-road, Leeds. Builders and contractors, &c. Nominal capital, £5,000.

BUILDERS' SUPPLY Co. (CAMP HILL), LTD. (207,286). Registered July 15. Trinity Wharf, Sandy-lane, Camp Hill, Birmingham. Builders' merchants, &c. Nominal capital, £4,000.

ROWLANDS & RHODES, LTD. (207,130). Registered July 7. 8, Royston-road, Cudworth, Yorks. Builders and contractors. Nominal capital, £1,000.

W. WAGER & SON, LTD. (207,259). Registered July 14. Builders, &c. Nominal capital, £2,000.

W. H. COLT, LTD. (207,246). Registered July 13. Bush House, Aldwych, W.C.2. Builders, &c. Nominal capital, £2,500.

ARTHUR LAKE, LTD. (207,234). Registered July 13. Capel House, 54, New Broad-street, E.C.2. Roofing contractors, &c. Nominal capital, £100.

V. C. FITZPATRICK & Co., LTD. (207,205). Registered July 11. Manufacturers of and dealers in building materials, &c. Nominal capital, £1,000.

GEOFFREY MARTIN & TAYLOR, LTD. (207,223). Registered July 13. 8-9, Old Broad-street-venue, E.C.2. Manufacturers of, agents for, and dealers in cement, lime, bricks, &c. Nominal capital, £100.

	Masons.	Brick-layers.	C/p'ers. Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Aldersham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Bedford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Birkenhead	1/9	1/9	1/8	1/9	1/9	1/9	1/8	1/8
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bournemouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Brighton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Cambridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Crewe	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
E. Glam. (Mon. Val.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Eastbourne	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Grays	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Hallifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hartlepool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Ipswich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Lancaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Liverpool	1/9	1/9	1/8	1/9	1/9	1/9	1/8	1/8
Llanelli	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
London (12 m. radius)	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/8
London (12-15 m. radius)	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/8
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Maldstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Newport Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Nottingham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Oakham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Oldham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Oxford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Rochester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Southend-on-Sea	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Strood	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Taunton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

SEPTEMBER 7.—**Athlone**.—PAINTING.—Painting works, and works incidental, at Custume Barracks, Athlone. Felix Cronin, Major-General, Quarter-master-General. Deposit £1 ls.

SEPTEMBER 7.—**Croydon**.—FOUNDATIONS.—Formation of new basement floor, new engine room floor, reinforced concrete raft, and foundations for turbo-alternator No. 5, at the Electricity Works, Factory-lane, for the C.B. Borough Electrical Engineer.

SEPTEMBER 7.—**Croydon**.—HOUSES.—Erection of two houses on the sites known as 81 and 82, Welford-road, for the C.B. Borough Engineer, Town Hall, Croydon. Deposit £2 2s.

SEPTEMBER 7.—**Dublin**.—EXTENSION.—Of Parochial Schools, Pearce-street, Dublin, for the Very Reverend McNevin, P.P. J. J. Robinson, F.R.I.A.I., architect, 8, Merrion-square. Deposit £2 2s.

SEPTEMBER 7.—**Edinburgh**.—ELECTRIC LIGHTING.—Electric lighting installations in 288 dwelling houses under the Gorgie Housing Scheme, Contract No. 10, for the T.C. A. Grierson, Town Clerk. Deposit £1 ls.

SEPTEMBER 7.—**Hitchin**.—PUBLIC CONVENIENCE.—Building a public convenience near Bancroft, for the U.D.C. Surveyor's Department, Old Town Hall, Hitchin.

SEPTEMBER 7.—**Kingsbridge**.—HOUSES.—Eighteen houses at Rack Park, and laying of a 6 in. sewer and the extension of water main, for the U.D.C. J. Hole, Architect to the Council.

SEPTEMBER 7.—**London**.—KEEPER'S LODGE.—Materials required in the erection of a wharfekeeper's lodge, Chancellor-road, W.6, for the Hammersmith Borough Council. R. Hampton Clucas, Borough Engineer and Surveyor, Town Hall, Hammersmith, W.6. Deposit £1 ls.

SEPTEMBER 7.—**Newcastle-upon-Tyne**.—SECONDARY SCHOOLS.—Erection of secondary schools to provide for 1,000 pupils, subject to the sanction of the loan by the Ministry of Health, for the Education Committee. Director of Education, Education Office, Northumberland-road, Newcastle-upon-Tyne. Deposit £5.

SEPTEMBER 7.—**Pencelwdd**.—BUILDING.—Police station, for the Glamorganshire C.C. T. Mansel Franken, Clerk of the C.C., Glamorgan County Hall, Cardiff.

SEPTEMBER 7.—**Sevenoaks**.—COTTAGES.—Tenders for the erection of 10 pairs of cottages at Seal-road, for the U.D.C. Geo. T. Bradbury, Clerk of the Council, Council Offices, Argyle-road. Deposit £1 ls.

SEPTEMBER 7.—**Surbiton**.—HOUSES.—Erection of 50 houses at Tolworth, forming an extension to the housing scheme, for the U.D.C. C. Edgar Shelly, Clerk to the Council, Council Offices, Ewell-road, Surbiton. Deposit £1 ls.

SEPTEMBER 7.—**Wexford**.—HOUSES.—Twelve dwellings for the T.C. Town Surveyor.

SEPTEMBER 8.—**Coalville**.—HOUSES.—Seventy-six houses of the non-parlour type on the Coalville housing site, between Belvoir-road and Forest-road, for the U.D.C. McCarthy, Collings & Co., Central Chambers, Coalville, and Goddard & Wain, architects, Station Chambers. Deposit £2 2s.

SEPTEMBER 8.—**Elland**.—HOUSES.—Two blocks of non-parlour type houses, for the U.D.C. T. Exley Fisher, L.R.I.B.A., Housing Architect. Deposit £1 ls.

SEPTEMBER 8.—**Listowel**.—RESTORATION.—Of Listowel ex-R.I.C. Barracks, Co. Kerry, for the Commissioners of Public Works, J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

SEPTEMBER 8.—**London**.—PAINTING.—For internal painting, &c., at the Patent Office, Chancery-lane, W.C. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners).

SEPTEMBER 8.—**London**.—REDECORATION.—For the redecoration of Mount Pleasant Letters and Parcel Office, E.C. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners).

SEPTEMBER 8.—**Mountain Ash District**.—HOUSES.—Erecting for the Mountain Ash U.D.C. houses, as follows:—Contract F: Forty-eight houses (40 non-parlour and eight parlour types) at Pontcynon site. Contract G: Forty non-parlour houses at Penrhwiwceib site. Tender to be on fixed basis for materials and is adjustable to wage alterations. W. H. Williams, architect, Council Offices, Mountain Ash. Deposit £1.

SEPTEMBER 8.—**Newbury**.—HOUSES.—Erection of 32 non-parlour dwelling-houses in St. George's and St. Nicholas-roads, Newbury (contractors can tender for the whole or any part of the proposed scheme), for the Borough Council, Borough Surveyor, Municipal Buildings, Newbury.

*SEPTEMBER 8.—**Northleach**.—GRAMMAR SCHOOL.—Erection of a new Grammar School at Northleach, for the Gloucestershire C.C. Mr. R. S. Phillips, F.R.I.B.A., County Education Architect, Shire Hall, Gloucester. Deposit £5 5s.

SEPTEMBER 8.—**Shrewsbury**.—ADDITIONS, &c.—(1) Alterations and additions to Coton Hill House; (2) taking down and rebuilding No. 12, Wyle Cop, for the B.C. A. W. Ward, A.M.Inst.C.E., Borough Surveyor, The Guildhall, Shrewsbury.

SEPTEMBER 8.—**Walton-on-Thames**.—BUILDING.—For the extension of Walton-on-Thames P.O. Contracts branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners).

SEPTEMBER 9.—**Beeston**.—HOUSES.—Twenty-three houses in Clifford-avenue, Hetley-road, and Central-avenue, for the U.D.C. E. A. Bush, Surveyor, Public Offices, Beeston, Nottingham. Deposit £2 2s.

SEPTEMBER 9.—**Bingham**.—PAINTING.—At the Children's Cottage Home, for the B.G. C. E. Law, Poor Law Institution.

SEPTEMBER 9.—**Bolton**.—RESIDENCE.—For the Medical Superintendent of the Townleys Hospital, at the junction of Wash-lane with the road leading to the entrance gates of the Fishpool Institution in Farnworth for the B.G. J. Ward, architect, 24, Mawdsley-street. Deposit £1 ls.

SEPTEMBER 9.—**Bristol**.—BUILDING.—Completion of Bryant's Hill, St. George. W. H. Watkins, F.R.I.B.A., architect, 15, Clare-street. Deposit £1 ls.

SEPTEMBER 9.—**Essex**.—SECONDARY SCHOOL.—Erection of a secondary school at Walthamstow for 410 pupils, for the Essex C.C. County Architect, Springfield Old Court, Chelmsford. Deposit £2 2s.

SEPTEMBER 9.—**Halesowen**.—HOUSES.—Twenty parlour type and 37 non-parlour type houses, the laying of sewers and surface water drains, and the making of roads on and in connection with the housing site at Hawne-lane, for the U.D.C. T. S. Beach, architect, Great Cornbow.

SEPTEMBER 9.—**Littlehampton**.—PAINTING.—Painting the exterior iron work and woodwork at the public library, for the U.D.C. A. Shelley, Clerk to the Council.

SEPTEMBER 9.—**Llandaff**.—ADDITIONS.—Alterations and additions at Llandaff Police station, for the Cardiff T.C. T. Pearson Frank, architect, City Hall, Cardiff.

SEPTEMBER 9.—**London**.—ALTERATIONS.—For the execution of alterations at the Queen Victoria-street Block of the G.P.O. South E.C. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners).

SEPTEMBER 9.—**Newcastle-upon-Tyne**.—EXTENSION.—Extension of the laundry at the Cottage Homes, Ponteland, for the B.G. E. Ditchin, architect, 46, Granger-street West, Newcastle. Deposit £2 2s.

SEPTEMBER 10.—**Carrigaholt**.—STATION.—For the Garda Siochana at Carrigaholt, Co. Clare, for the Commissioners of Public Works. J. J. Healey, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

SEPTEMBER 10.—**Fulbourn**.—HOUSE.—New wards, assistant medical officers' house, and additions to existing Mental Hospital, for the Committee of Visitors. A. Paul MacAlister, F.R.I.B.A., architect, 20, St. Andrew's-street, Cambridge.

SEPTEMBER 10.—**Llantrisant** and **Llantwit Fardre**.—HOUSES.—56 houses at Tonteg, road and sewer work in connection with the layout of the site. 42 houses at Pengyawl, Llantrisant, road and sewer work in connection with the site, for the R.D.C. Thomas & Morgan and Partners, architects and engineers, 23, Gellwastad-road, Pontypridd. Deposit £5.

SEPTEMBER 10.—**London**.—PAINTING.—For internal painting at the British Museum, and external painting of No. 39, Russell-square, W.C. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners).

*SEPTEMBER 10.—**London, E.**—PUBLIC CONVENIENCE.—Erection of public convenience at Wanstead Flats, Manor Park, E.12, for the East Ham Council, Borough Engineer, Town Hall, East Ham, E.6. Deposit £2.

SEPTEMBER 10.—**Nottingham**.—CONVENIENCE, &c.—Proposed urinal and soap baths at Victoria Baths, Sneinton, for the T.C. T. Wallis Gordon, City Engineer. Deposit £2.

SEPTEMBER 10.—**Poulton-le-Fylde**.—HOUSES.—Four houses, in pairs, on the Big Field housing site, Lower Green, for the U.D.C. Ernest Prescott, Surveyor to the Council, Council Offices, Poulton-le-Fylde, Blackpool. Deposit £1 ls.

SEPTEMBER 10.—**Rowley Regis**.—HOUSES.—(a) Erecting 30 parlour type houses (four blocks of four each and seven blocks each semi-detached), sewerage, roadways, &c. (b) Erecting 22 non-parlour type houses (11 blocks each semi-detached), road, footpath, &c. The Clerk, Council House, Old Hill, Rowley Regis.

SEPTEMBER 10.—**Various Districts**.—REPAIRS.—Execution of ordinary works, and repairs to buildings in the charge of the Commissioners, H.M.O.W. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit 10s. 6d. in respect of each district (Cheques payable to the Commissioners).

SEPTEMBER 11.—**Ballinrobe**.—RESTORATION.—Of a portion of the old military barracks at Ballinrobe, Co. Mayo, for the Commissioner of Public Works. J. J. Healey, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

BUILDING TRADE WAGES IN SCOTLAND.

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters. Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Brick-Masons' layers' Labourers.
Aberdeen	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/0 1/2
Airdrie	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/2 to 1/3
Arbroath	1/7	1/7	1/7	1/7 1/2	1/7	1/7	1/5 1/2	1/1
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bathgate	1/8	1/8	1/8	1/8 1/2	1/8	1/8	1/8	1/2 to 1/3
Blairgowrie	1/7	1/7	1/7	1/7 1/2	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Coatbridge	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8 to 1/3
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Dumfries	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Falkirk	1/7 1/2	1/7 1/2	1/7	1/8	1/7	1/7	1/8	1/2 1/2
For William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Glasgows	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/3
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Greenock	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hamilton	1/7	1/7	1/7	1/7 1/2	1/7	1/7	1/7	1/2 1/2
Hawick	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Helensburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Inverness	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/- to 1/2
Kilmarnock	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/5	1/4	1/-
Leannan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/- to 1/3
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Motherwell	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Perth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stirling	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/3
Stirlingshire (Eastern District)	1/3-1/10	1/3-1/10	1/3	1/3	1/3	1/3	1/3	1/3 1/2
Thurso	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3

The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 369.

SEPTEMBER 11.—**Leeds.**—REPAIRS.—At Rothwell High Institution, inside painting, Institution; inside and outside painting, Children's Homes; pointing brickwork, Institution; bricklayers' and joiners' work, Children's Homes, for the B.G. James H. Ford, Clerk to the Guardians, Poor Law Offices, South Parade.

SEPTEMBER 11.—**Thornbury.**—HOUSES.—Eight houses at Redwick, near Bristol, for the R.D.C. F. W. Davies, surveyor, High-street.

SEPTEMBER 12.—**Ashwellthorpe.**—COTTAGE.—Police cottage for the Norfolk C.C. A. F. Scott & Sons, architects, 24, Castle Meadow, Norwich.

SEPTEMBER 12.—**Berwick-upon-Tweed.**—School.—Secondary school for girls to accommodate 150 scholars, for the Northumberland, E.C. C. Williams, Director of Education, the Moothall, Newcastle-upon-Tyne. Deposit £2 2s.

SEPTEMBER 12.—**Halifax.**—BUILDING.—Sale Ring at the new auction mart, Victoria Cattle Market, for the C.B. Borough Engineer. Deposit £1 1s.

SEPTEMBER 12.—**Newcastle-upon-Tyne.**—ELECTRIC LIGHTING.—300 houses on the High Heaton estate, for the T.C. Housing Architect, 18, Cloth Market.

SEPTEMBER 12.—**Tunbridge Wells.**—For the enlargement of the County School for Girls, for the Kent E.C. Mr. W. H. Robinson, Architect, Room 69, Sessions House, Maidstone. Deposit £2 2s.

SEPTEMBER 12.—**Wokingham.**—HOUSES.—Fourteen pairs of semi-detached non-parlour houses on sites in the following parishes, viz.: Hurst, Shinfield, Sonning, Twyford, Wargrave, and Wokingham-Without, for the R.D.C. C. Aldridge, surveyor, Loddon Bridge Lodge, Earley, near Reading.

SEPTEMBER 14.—**Adwick-le-Street.**—ELECTRIC LIGHTING.—Internal wiring for electric lighting of Council houses, for the U.D.C. W. M. Selvey, consulting engineer, Independent Buildings, Sheffield.

SEPTEMBER 14.—**Bedwas and Machen.**—HOUSES.—Forty semi-detached parlour type houses and the completion of roads and sewers on a site near the Schools at Maesycwmmer, for the U.D.C. Housing Architect, Council Offices, Bedwas. Deposit £3 3s.

SEPTEMBER 14.—**Belfast.**—WIRING.—Plumbing, electric wiring, &c., of medical superintendent's residence at Purdyburn, for the C.B. Tulloch & Fitzsimons, architects, 21, Castle-place. Deposit £2 2s.

SEPTEMBER 14.—**Bury.**—Twenty houses in Woodley street, Market-street, and Morley-street, for the C.B. J. Ainsworth Settle, the Borough Engineer. Deposit £2.

SEPTEMBER 14.—**Carlisle.**—PAINTING.—External painting of 74 houses at Garden City, Stanwix; 32 houses at Boustead's Grassing; 24 houses at Denton-street, Carlisle, for the T.C. Henry C. Marks, City Engineer and Surveyor.

SEPTEMBER 14.—**Dublin.**—HOUSES.—Fifty-nine houses, L.G.D. type, at Fairbrothers' Fields, for the C.B. John J. Murphy, Town Clerk. Deposit £2 2s.

SEPTEMBER 14.—**Dublin.**—RESTORATION.—Of the central portion of the east front of the Custom House, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath. Deposit £5.

SEPTEMBER 14.—**Dublin.**—PAINTING.—Certain painting works, and works incidental thereto, at Eastern Command Hospital, Portobello Barracks, Dublin. Felix Cronin, Major-General, Quartermaster-General. Deposit £1 1s.

SEPTEMBER 14.—**Dunmow.**—HOUSES.—Pair of houses at Barnston and one pair of houses at Bishop's Green, Great Dunmow, for the R.D.C. J. Plumbley, Sanitary Surveyor, New-street.

SEPTEMBER 14.—**London.**—BUILDING.—For the erection of two blocks of dwellings: (a) on the Wapping estate, (b) on the Holland estate, Spitalfields, for the L.C.C. The Architect of the Council, the County Hall, (Room No. 3), Westminster Bridge, S.E.1. Deposit £2 in respect of each block.

SEPTEMBER 14.—**London, N.W.**—The following works for the Hendon U.D.C.:—(1) Public convenience (adjoining "The Castle" P.H.), Hermitage-lane, Child's Hill, N.W.2; (2) alterations to miniature rifle range and new convenience, Child's Hill, Recreation Ground, N.W.2. Mr. A. O. Knight, A.M.I.C.E., Engineer to the Council, Town Hall, Hendon, N.W.4.

SEPTEMBER 14.—**Manchester.**—BUILDING WORK.—Building work, including all trades, in the superstructure of the Company's new offices, situate on the west side of King-street, Manchester. F. A. Eyre, Secretary, Manchester Ship Canal Co., 41, Spring Gardens, Manchester.

SEPTEMBER 14.—**Marsh.**—BUNGALOW.—At Le-Marchant-avenue, Marsh. J. Ainley, architect and surveyor, 55, New-street, Huddersfield.

SEPTEMBER 14.—**Merthyr Tydfil.**—HEATING.—Heating installation in connection with the extensions to the female wards of the Poor Law Institution Infirmary, for the B.G. Herbert Brown, consulting engineer, 2, Park-grove, Cardiff.

SEPTEMBER 14.—**Risca.**—HOUSES.—Fifty-six parlour type houses on the Meadows site, for the U.D.C. A. J. Dardis, Surveyor and Engineer. Deposit £2 2s.

SEPTEMBER 14.—**Rotherham.**—HOUSES.—Thirty-four houses on the East Dene estate, for the C.B. Chas. A. Broadhead, architect, Devonshire House, Moorgate. Deposit £2 2s.

SEPTEMBER 14.—**Wolviston.**—REPAIRS.—Alterations and repairs to Sundial House Farm, for the Durham C.C. Wm. Carter, A.R.I.B.A., architect, Shire Hall, Durham.

SEPTEMBER 15.—**Borris.**—RESTORATION.—Of Borris ex-R.I.C. Barracks, Co. Carlow, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

SEPTEMBER 15.—**Godstone.**—HOUSES.—Twenty-four Class "A" houses at Harrow-road site, Warringham, for the R.D.C. S. F. Evershed, L.R.I.B.A., surveyor, Lloyds Bank Chambers, Oxted. Deposit £3 3s.

SEPTEMBER 15.—**Hursley.**—PAINTING.—External painting of 44 houses at Fryern Hill, Chandler's Ford, for the R.D.C. J. P. Game, surveyor.

SEPTEMBER 15.—**Huthwaite.**—HOUSES.—Eight non-parlour type houses, and 10 parlour type houses, for the U.D.C. G. Bostock, Surveyor. Deposit £1.

SEPTEMBER 15.—**London.**—CONVENIENCE.—Certain work in connection with the erection of the new underground sanitary conveniences, and renewals of existing sanitary work, &c., at the Institution, Shepherdess-walk, City-road, N. 1, for the Guardians of the Poor of the Holborn Union. Clerk to the Guardians, Administrative Offices, 53, Clerkenwell-road, E.C. 1. Deposit £1 1s.

SEPTEMBER 15.—**Wandswoth.**—HOUSES.—On Southfields housing estate: (a) Group of 40 houses, (b) two small flats, On Furzedown housing estate, (c) group of 43 houses; (d) group of 68 houses; (e) group of 58 houses, for the B.C. G. I. and H. B. Elkington, architects, Norfolk House, 7, Laurence Pountney-hill, Cannon-street, E.C.4. Deposit £2 2s. each.

SEPTEMBER 15.—**Warrington.**—COTTAGES.—Twelve cottages for the Visiting Committee of the Croydon Mental Hospital; erection of two pairs of parlour cottages in Harrow-road, Warrington; also two pairs of non-parlour and one block of four non-parlour cottages in Green-lane, Warrington. The Borough Engineer, Town Hall, Croydon. Deposit £2 2s.

SEPTEMBER 15.—**Wath-on-Dearne.**—ADDITIONS.—Additions to Wath-on-Dearne Victoria Council School, for the West Riding E.C. Education Department, County Hall, Wakefield.

SEPTEMBER 15.—**Worship.**—HOUSES.—Twelve type "A" and 12 type "B" houses, together with the street works, sewers and surface water drains in connection therewith, at Langold, in the parish of Hodsock; also six type "A" houses and 14 type "B" houses, together with the street works, sewers and surface water drains in connection therewith, in the parish of Harworth, for the R.D.C. A. Edwin Hewitt, surveyor, 66, Bridge-street. Deposit £2 2s.

SEPTEMBER 16.—**Bournemouth.**—WALL.—Stone faced concrete retaining wall to the Bath-road frontage of St. Peter's Vicarage, for the C.B. F. P. Dolamore, Borough Engineer. Deposit £1 1s.

SEPTEMBER 16.—**Chorley.**—SCHOOL.—On the site of Duke-street Council school, for the T.C. Biram & Fletcher, L. & F.R.I.B.A., architects, 17, George-street, St. Helens.

SEPTEMBER 16.—**Hatch, near Basingstoke.**—Erection of a pair of cottages for roadmen, for the Southampton C.C. Mr. A. L. Roberts, County Architect, The Castle, Winchester.

SEPTEMBER 16.—**Mansfield.**—SCHOOL.—For erection of a new Central School for 720 children, at High Oakham, Nottingham. Borough Engineer and Surveyor, Market-street, Mansfield. Deposit £2 2s.

SEPTEMBER 16.—**Newmill.**—HOUSES.—Twenty-five houses in Kirkrods-lane, for the U.D.C. J. Berry & Sons, architects, 3, Market-place, Huddersfield.

SEPTEMBER 16.—**Ormskirk.**—HOUSES.—Forty houses on the Tank-lane site, for the U.D.C. W. Chadwick, surveyor. Deposit £2 2s.

SEPTEMBER 16.—**Sunderland.**—HOUSES.—Erection of 78 four-roomed houses and 58 three-roomed houses at the Spark Farm estate, under the terms of the Housing (Financial Provisions) Act, 1924, for the County Borough. Borough Engineer's Office, Town Hall. Deposit £2 2s.

SEPTEMBER 17.—**Aberaman.**—PAINTING.—Painting the iron-work of the whole of the outside of the Aberaman public hall and institute, library and grand theatre, for the Committee. H. Vause, General Manager.

SEPTEMBER 17.—**Liverpool.**—PAINTING.—Interior painting and general repairs at Mill-lane Hospital, Old Swan, for the T.C. Land Steward and Surveyor.

SEPTEMBER 17.—**Salford.**—EXTENSIONS.—Structural extensions at the Broughton High School for Girls, for the E.C. Secretary, for Education, Education Offices.

SEPTEMBER 18.—**Burton-on-Trent.**—SCHOOL.—Girls' school at the Woodlands, Winsill, for the Governors of the Endowed Schools. R. S. Litherland, L.R.I.B.A., Quantity Surveyor, 10, High-street. Deposit £2 2s.

SEPTEMBER 18.—**Orpington.**—For the execution of ordinary works and repairs to buildings in the Orpington District. The Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit 10s. 6d.

SEPTEMBER 18.—**Southport.**—BUILDINGS.—Block of new buildings and extensions to existing Art Gallery, at the corner of Eastbank-street and Sharrock-street, for the C.B. A. E. Jackson, Borough Engineer. Deposit £3 3s.

SEPTEMBER 18.—**West Riding.**—POLICE STATION.—Erection of new Police Station at Saddleworth (Upper-mill), near Oldham. Percy O. Platts, A.R.I.B.A., County Architect, County Hall, Wakefield.

SEPTEMBER 19.—**Abergavenny.**—ADDITIONS.—Carrying out proposed alterations and additions at King Henry VIII. Grammar School, for the Monmouthshire E.C. J. Bain, F.R.I.B.A., County-hall, Newport. Deposit £1 1s.

SEPTEMBER 19.—**Bolton.**—EXTENSIONS.—To Townsleys Hospital, and improvements at the Fishpool Institution, Farnworth, near Bolton, for the B.G. J. Ward, architect, 24, Mawdsley-street. Deposit £3 3s.

SEPTEMBER 19.—**Cranbrook.**—RENOVATIONS, &c.—To the Isolation Hospital, including additional ward accommodation for twelve beds, administrative and nurses' quarters, central heating, drainage, &c., for the Cranbrook and Tenterden Joint Hospital Committee. Eric Clarke, Clerk to the Board. Deposit £2 2s.

SEPTEMBER 19.—**London, N.**—SCHOOL.—Erection of a school for 910 children in Rokesby-avenue, for the Hornsey E.C. Mr. H. Carter Pegg, F.R.I.B.A., architect, 35, Parliament-street, S.W.1. Deposit £1.

SEPTEMBER 19.—**Northwold.**—COTTAGE.—Police cottage, for the Norfolk C.C. J. L. Carnell, F.R.I.B.A. and W. Dymoke White, L.R.I.B.A., architects, Paradise Chambers, King's Lynn. Deposit £1 1s.

SEPTEMBER 21.—**Bethnal Green.**—TENEMENTS.—Erection of 32 tenements at Parminster-street, Bethnal Green, for the Bethnal Green Borough Council. Mr. E. C. P. Monson, Architect, Finsbury-pavement House, 120, Moorgate, E.C.2. Deposit £2.

SEPTEMBER 21.—**Shipley.**—CONVENIENCES.—Public conveniences at Stead-street, for the U.D.C. Surveyor and Architect.

SEPTEMBER 22.—**Blackpool.**—For adaption work at the old Post Office building, Corporation-street, Blackpool, for the Commissioners H.M. Works. The Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

SEPTEMBER 22.—**Headington.**—HOUSES.—Erection of 24 houses on the Barton-road, for the R.D.C. Mr. W. Page Webb, architect and surveyor, 23, High-street, New Headington, Oxford. Deposit £2 2s.

SEPTEMBER 22.—**Mexborough.**—HEATING.—Heating of the Technical Centre premises, for the West Riding E.C. Education Department, County Hall, Wakefield.

SEPTEMBER 23.—**Hammersmith.**—Erection of an underground water-tight ferro-concrete pump chamber and an overhead brick pump house, for the Metropolitan Borough of Hammersmith. F. Hill, Borough Electrical Engineer, Electricity Works, 85, Fulham Palace-road, W.6.

SEPTEMBER 23.—**London, W.C.**—Erection of the "Strand" Telephone Exchange. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

SEPTEMBER 23.—**Wanstead.**—SCHOOL.—For the erection of a secondary school, for the Essex County Council. The County Architect, Springfield Old Court, Chelmsford. Deposit £2 2s.

SEPTEMBER 24.—**London, S.E.**—ADDITIONS.—Adoption of, and construction of additions to Millburn House, Knight's Hill, West Norwood, S.E., for the purposes of a Maternity Home, for the Lambeth B.C. Mr. Osmond Catlin, Borough Engineer, Lambeth Town Hall, Brixton Hill, S.W.2. Deposit £2 2s.

SEPTEMBER 25.—**Bridgewater.**—HOUSES.—Thirty-one parlour houses in blocks of two, four and six, for the T.C. Samson & Colthurst, architects, 51, High-street. Deposit £2 2s.

SEPTEMBER 25.—**London.**—For the erection of a telephone exchange at Seven Kings, London, for H.M. Office of Works. The Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

SEPTEMBER 26.—**Bournemouth.**—BUILDINGS.—Extensive school buildings adjoining the present Stourfield school, for the C.B. F. P. Dolamore, Borough Engineer. Deposit £1 1s.

SEPTEMBER 28.—**Carlisle.**—BUILDING.—Screening and pumping chambers at the new electricity power station, Willow Holme, for the T.C. Henry C. Marks, City Engineer and Surveyor. Deposit 10s.

SEPTEMBER 28.—**Durham.**—ADDITIONS, &c.—To Haverton Hill Council school, for the Durham C.C. Mr. F. Willey, F.R.I.B.A., architect, 34, Old Elvet, Durham.

SEPTEMBER 28.—**London, N.W.**—Development of new housing estate at Hendon, for the L.C.C. Administrator of Housing Development Schemes, Old County Hall, Spring-gardens, S.W.1. Deposit £10.

SEPTEMBER 30.—**Nantwich.**—HOUSES.—Forty-six houses on the Wallfields housing site, for the U.D.C. F. H. Paton, surveyor. Deposit £2 2s.

SEPTEMBER.—**Malling.**—CONVERSION.—Of the house known as "Elverdale," the Freehold, East Peckham, into two cottages, for the R.D.C. C. Souter, Sanitary Surveyor, West Malling.

OCTOBER 1.—**Litherland.**—HOUSES.—Erection of 50 houses on the housing site belonging to the U.D.C. of Litherland between Sefton-road and Moss-lane. Mr. G. Ponsford, Engineer and Surveyor, Council Offices, Litherland.

OCTOBER 1.—**London, S.W.**—DEMOLITION.—Taking down and clearing away temporary iron buildings complete with fittings, &c., at Tooting Home, Church-lane, Tooting, S.W., for the Guardians of the Wandsworth Union. Mr. F. J. Curtis, clerk, Union Offices, St. John's Hill, S.W.18.

OCTOBER 2.—**Didcot.**—ADDITIONS AND ALTERATIONS.—Erection of six new classrooms, new offices, drainage, and other works at Didcot Council School, for the Berkshire E.C. Mr. W. C. F. Anderson, Education Secretary, Shire Hall, Reading. Deposit £2 2s.

OCTOBER 5.—**Hindley.**—SCHOOL.—School off Leigh-road, Hindley Green, to accommodate 450 scholars, for the U.D.C. H. Wade, 2, Birley-street, Blackpool. Deposit £5 5s.

★ **OCTOBER 5.—Newmarket.**—**HOUSES.**—Erection of 12 brick and slated parlour houses, in six pairs, at Laureate Paddocks site, for the Newmarket U.D.C. Mr. W. H. Eley, Surveyor, Godolphin House, Newmarket.

No DATE.—**Butterley.**—**HOUSING.**—Housing scheme at Butterley. Naylor, Sale & Moore, architects, Market-place, Derby.

No DATE.—**Coxhoe.**—**PAINTING.**—The Co-operative Society's premises and manager's house at central premises Coxhoe, and Trimdon Grange branches. Secretary.

★ No DATE.—**Crowborough Camp.**—For the removal and purchase of hutting, machinery and other materials at Crowborough Camp, including the reinstatement of the site. Director of Army Contracts (D.C. Sales), Caxton House West, Tothill-street, Westminster, S.W.

No DATE.—**Sheffield.**—**BUILDING.**—Three-story wing, stone, &c., also alterations to existing building, the Bennett College, Melbourne-avenue, for the Bennett College, Ltd. J. H. Bennett, The Bennett College, Ltd., Regent-street. Deposit £1 ls.

No DATE.—**Tiverton.**—**ALTERATIONS.**—Certain alterations and additions at the Cafe, 9, Gold-street, for A. E. Clapp, J. Archibald Lucas, F.R.I.B.A., Chartered Architect and Surveyor, Guildhall Chambers, High-street, Exeter.

MATERIALS. etc.

SEPTEMBER 7.—**Manchester.**—**PAVING.**—Draining paving (rock asphalt), flagging (artificial flags), &c., Roydale-street, Newton Heath, for the T.C. P. M. Heath, Town Clerk. Deposit £1 ls.

SEPTEMBER 7.—**Stoke-on-Trent.**—**MATERIALS.**—Portland cement, blue paving bricks and common bricks, sanitary pipes and gullies, setts and kerbs, macadam, chippings and sand, cast iron work, and paints and oils, for the T.C. Town Clerk.

SEPTEMBER 9.—**Rochdale.**—**GRANITE.**—1,200 tons of granite setts, for the C.B. S. H. Morgan, Borough Surveyor.

SEPTEMBER 10.—**Darlington.**—**MATERIALS.**—Sanitary pipes, &c., concrete kerb, flagging, &c., whinstone, slag, slag bricks, paving bricks, cement, lime, iron and steel ware, cast-iron pipes, for the C.B. Borough Surveyor and Water Works Engineer.

SEPTEMBER 11.—**Durban.**—**MATERIALS.**—Steel, cast-iron pipes and specials, and sluice and air valves, for the T.C. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

SEPTEMBER 14.—**Dublin.**—**PIPES.**—300 tons (English) of cast-iron pipes (2 in. to 33 in.) and for valves and hydrants of special heavy pattern, for the C.B. John J. Murphy, Town Clerk.

SEPTEMBER 14.—**Edmonton.**—**MATERIALS.**—Broken granite and Portland cement, for the U.D.C. Engineer.

SEPTEMBER 15.—**Dublin.**—**PIPING.**—Lead piping, &c., for the C.B. J. J. Murphy, Town Clerk.

SEPTEMBER 15.—**London.**—**FENCING.**—Fencing materials for the Madras and Southern Mahratta Railway Co. Directors, 25, Buckingham Palace-road, S.W.1. Charge £1 ls.

SEPTEMBER 16.—**Poole.**—**GRANITE.**—Broken granite, coarse and fine tarmacadam, for the T.C. Samuel J. Newman, F.R.I.B.A., Borough Surveyor.

SEPTEMBER 17.—**Birkenhead.**—**MATERIALS.**—Asbestos, cement, bricks, &c.; lead sheet, piping, &c.; metals; paints, varnish, &c.; wooden shafts, &c.; wrought iron piping and fittings for gas, steam, &c., for the Mersey Railway Co. J. Shaw, General Manager and Secretary, Central Station.

SEPTEMBER 17.—**South Africa.**—**FOOTBRIDGE.**—Supply and delivery only of structural steel and wood-work for a footbridge at Nottingham-road, Natal Province, the approximate weight of the material being 37 tons. 35, Old Queen-street, S.W.1.

SEPTEMBER 19.—**Bucklow.**—**MATERIALS.**—Granite setts, broken granite, tared macadam, chippings, slag, for the R.D.C. R. C. Cordon, Engineer and Surveyor, 25, Station-buildings, Altrincham.

SEPTEMBER 23.—**Norton.**—**STONE.**—Stone, for the R.D.C. L. Richmond, Clerk to the Council, Union Offices, Westbar, Sheffield.

ENGINEERING. IRON AND STEEL.

SEPTEMBER 7.—**Essex.**—**RECONSTRUCTION.**—Of Causeway bridge carrying the road from Aveley Village to Stonehouse-lane. Corner over the River Mardyke, in the parishes of Aveley and West Thurrock, for the C.C. W. H. Morgan, Chartered Civil Engineer, County Surveyor, Old Court, Chelmsford.

SEPTEMBER 9.—**Rotherham.**—**FILTERS.**—&c.—Labour and materials required in the construction of three percolating filters 54 ft. 6 in. diameter, precipitation tanks, humus tanks, engine house and pump well, sludge drying beds, and alterations to existing works for the R.D.C. C. O. Rawstorn, Engineer and Surveyor, Engineer's Office, Grove-road, Moorgate, Rotherham, August, 1925.

SEPTEMBER 9.—**Rotherham.**—**FILTERS.**—&c.—Labour and materials required in the construction of two percolating filters 24 ft. diameter, tanks, sludge beds, store house, &c., for the R.D.C. C. O. Rawstorn, Engineer and Surveyor, Engineer's Office, Grove-road, Moorgate, Rotherham. Deposit £1 ls.

SEPTEMBER 10.—**Cheltenham.**—**FILTERS.**—Percolating filters, together with the necessary supply pipes, gauging chambers, distributors and other works, for the T.C. J. S. Pickering, Borough Engineer. Deposit £3 3s.

SEPTEMBER 16.—**Cornwall.**—**BRIDGE.**—Construction of a large floating bridge propelled by steam for use on ferry service between Devon and Cornwall, for the C.C. W. L. Platts, Clerk of the County Council, County Hall, Truro. Deposit £2 2s.

SEPTEMBER 16.—**London.**—**W.C.**—Supply and erection of a steel chimney at Somerset House, Strand, W.C. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 ls.

SEPTEMBER 21.—**Hong Kong.**—**HARBOUR CROSSING.**—The Crown Agents for the Colonies, acting on behalf of the Government of Hong Kong, invite tenders from experienced and approved firms for the construction of two lines of steel pipe main across Hong Kong Harbour, between Kowloon and the city of Victoria, with all works in connection therewith. The Crown Agents for the Colonies, Z Department, 4, Millbank, Westminster, S.W.1. Deposit £5.

OCTOBER 1.—**London.**—**STEELWORK.**—Structural steelwork for wagon shop, Perambur, for the Madras and Southern Mahratta Railway Co. Directors, 25, Buckingham Palace-road, S.W.1. Charge £1 ls.

ROAD, SEWERAGE, AND WATER WORKS.

SEPTEMBER 7.—**Bexhill.**—**MAKING-UP.**—Of 'Cole' brooke-road, De La Warr-road (footpaths only), Lionel-road, Richmond-grove, for the T.C. G. Ball, surveyor. Deposit £1 ls.

SEPTEMBER 7.—**Bury.**—**MAIN.**—Laying of an 18 in. diameter water main and the construction of a manhole situate near Power Station, Chamber hall, for the C.B. J. Ainsworth Settle, Borough Engineer. Deposit 10s. 6d.

SEPTEMBER 7.—**Wands worth.**—**PAVING.**—Of Aberfoyle-road, Abercain-road (part), Broadway-road, Carnforth-road, Donnybrook-road (part), Penistone-road, Leithcote-gardens, Walrond-street (part), and Ribblesdale-road (part), Streatham; Hilbrook-road and Ravenfield-road, Balham and Footing; Longstaff-road (part), Mapleton-road and Granville-road (part), Southfield; and Burntwood-lane (part), Springfield, for the B.C. E. J. Elford, M.Inst.C.E., Borough Engineer, Town Hall. Deposit £1 ls.

SEPTEMBER 8.—**Esher** and **the Dittons.**—**SEWER.**—Laying about 430 yards run of stoneware pipe sewer in Stevens-lane, Claygate, together with manholes and other works, for the U.D.C. Surveyor.

SEPTEMBER 8.—**Welwyn.**—**RECONSTRUCTION.**—Of Bridge-road East, including footpath and surface water sewer, for the R.D.C. F. Oakes, Clerk to the Council. Deposit £2 2s.

SEPTEMBER 9.—**Exeter.**—**SURFACING.**—Excavating existing roadways, laying 6 in. bituminous asphalt about 2,000 super. yds. in Alphington-road, and 120 super yds. in New Bridge-street, for the T.C. T. Moulding, City Engineer and Surveyor.

SEPTEMBER 8.—**Newton Abbot.**—**MAINS.**—Laying 1,140 yards of 3 in. cast-iron water main from existing main at Kingskerswell to North Whillborough, for the R.D.C. Mr. Gray, 12, Summerland-street, Newton Abbot.

SEPTEMBER 9.—**Macclesfield.**—**ROAD.**—Concrete road, for the T.C. Borough Surveyor.

SEPTEMBER 9.—**Rotherham.**—**MAKING-UP.**—Labour and materials required in the making-up of a private street on the south-east side of Old Gate-lane, Dalton, including surface water drains, manholes, &c., for the R.D.C. Oxley & Coward, Clerks to the Council, Council Offices, Grove-road, Moorgate, Rotherham. Deposit £1 ls.

SEPTEMBER 10.—**Llantrisant and Llantwit Fardre.**—**ASPHALT.**—Asphalt macadam paving, for resurfacing on prepared foundations approximately 12,000 sq. yds. of the Llantrisant-Tonyrefail-road, for the R.D.C. T. Saunders, Surveyor, Council Offices, Pontyclun, Glam.

SEPTEMBER 11.—**Stone.**—**MAKING-UP.**—Of Airdale-road, for the U.D.C. A. Brewer, Surveyor.

SEPTEMBER 11.—**Windermere.**—**PIPING.**—Provision, laying and jointing of cast-iron pipes, the construction of two 70 ft. diameter bacteria beds, siphon chambers, humus tanks, together with other incidental works, for the U.D.C. Willcox & Raikes, engineers, Birmingham. Deposit £5 5s.

SEPTEMBER 12.—**Bilston.**—**ROADS.**—Construction of two small roads and sewers on the Stow Heath-lane housing site, about 1,400 square yards of road making and 130 lin. yards of 6 in. pipe sewer, for the U.D.C. W. G. Lofthouse, A.R.I.B.A., Architect. Deposit £2 2s.

SEPTEMBER 12.—**Oswestry.**—**MAINS.**—Laying and jointing about 1,390 lin. yds. of 9 in. diameter, and 8 in. diameter iron water main, together with the construction of valve and meter chambers, &c., for the T.C. G. W. Lacey, Borough and Water Engineer. Deposit £1 ls.

SEPTEMBER 12.—**Otley.**—**SEWERS.**—Constructing roads and laying sewers, drains and water mains on the extension of the Council's housing site at Carr Green, for the U.D.C. C. F. Hodgson, surveyor and engineer. Deposit £1 ls.

SEPTEMBER 14.—**Bellingham.**—**SEWER.**—Provision and laying of about 150 lin. yds. of 6 in. sewer, with manholes, &c., complete; also the provision and laying of 150 lin. yds. of 2 in. cast-iron water main, for the R.D.C. H. Moody, surveyor.

SEPTEMBER 14.—**Birmingham.**—**RECONSTRUCTION.**—Of Soho-road, Handsworth (between Grove-lane and Oaklands-road), comprising new reinforced concrete foundation, new granite kerbing, and concrete slab paving and relaying existing kerbing, brick paving, &c., for the T.C. H. H. Humphries, City Engineer and Surveyor. Deposit £2.

SEPTEMBER 14.—**Birmingham.**—**ROAD.**—Construction of a new 80 ft. road, a new 50 ft. road, and the widening of parts of Deakin's, Holder, and Hob Moor-roads, Yardley, for the T.C. H. H. Humphries, City Engineer and Surveyor. Deposit £2.

SEPTEMBER 14.—**Dunfermline.**—**MAINS.**—Providing, laying, and jointing one and a-half miles of 12 in. diameter cast-iron water main, for the D.C. H. F. Hodge, District Engineer, County Buildings, Dunfermline. Deposit £2 2s.

SEPTEMBER 14.—**Dunmow.**—**SEWER.**—Supply and laying of about 780 yards of 6 in. salt-glazed ware pipe sewer, and the laying of about 960 yards of 3 in. cast iron water main, for the B.D.C. J. Plumbley, Sanitary Surveyor, New-street. Deposit £1 ls.

SEPTEMBER 14.—**Edmonton.**—**MAKING-UP.**—Eldedene-road, for the U.D.C. C. Brown, Engineer and Surveyor. Deposit £2 2s.

SEPTEMBER 14.—**Hendon.**—**MAKING-UP.**—Lyndale, Lyndale-avenue, Ranulf-road, Hampstead Way, Derisingham-road, and Somerton-road, for the U.D.C. A. O. Knight, Engineer and Surveyor. Deposit £5.

SEPTEMBER 14.—**Kent.**—**ROAD.**—Construction work in connection with the Orpington By-pass road with Spur, Kent, for the M.T. H. H. Pigott, Assistant Secretary, 17, Whitehall, S.W.1. Deposit £25.

SEPTEMBER 14.—**Okehampton.**—**PIPES.**—Supply, laying and jointing of about 1,340 yards of 6 in. and 290 yards of 4 in. cast-iron socket pipes, with their appendages, including all necessary sluice valves, hydrants and other works, for the improvement of the water supply, for the R.D.C. Nichols & Unwin, engineers, 13, Victoria-street, Westminster, S.W.1. Deposit £2.

SEPTEMBER 14.—**Paddington.**—**PAVING.**—With reinforced concrete, the carriageway, and, with artificial flags and gravel, the footways of Ashworth-road, between Lauderdale-road and a line drawn across Ashworth-road from the party fence of Nos. 7 and 9, Ashworth-road, to the north fence of the garage of No. 24, Ashworth-road, for the Paddington B.C. Borough Engineer's Office, Town Hall, Paddington, W.2. Deposit £1, 1s.

SEPTEMBER 14.—**Reigate.**—**WIDENING.**—Of the western end of Wonham-lane, near Wonham Mill, for the T.C. F. T. Clayton, Borough Engineer and Surveyor. Deposit £2 2s.

SEPTEMBER 14.—**Reigate.**—**WIDENING.**—Widening and improvement of Blackborough-road, together with the construction of a length of new road, for the T.C. F. T. Clayton, Borough Engineer and Surveyor. Deposit £3 3s.

SEPTEMBER 14.—**Uxbridge.**—**FENCING.**—1,000 yards of straight and curved vertical iron fencing along gates to be fixed round Recreation Ground for the U.D.C. W. L. Eves, F.R.I.B.A., surveyor, 54, High-street.

SEPTEMBER 15.—**Maldon.**—**PIPES.**—Provision and laying of 1,810 lin. yards of 2 in. cast-iron water main, for the R.D.C. Wm. Almond, Engineer.

SEPTEMBER 15.—**Sedgefield.**—**MAKING-UP.**—Of front Lawson-street, at Trimdon Colliery, Trimdon, for the R.D.C. J. Stones, Surveyor, Union Offices.

SEPTEMBER 16.—**Bournemouth.**—**MAKING-UP.**—Of Browning-avenue, for the C.B. F. P. Dolamore, Borough Engineer. Deposit £1 ls.

SEPTEMBER 16.—**Chichester.**—**RESERVOIR.**—Construction of a ferro-concrete reservoir of 2,000,000 gallon capacity or thereabouts at the Chalk Pit-lane Plantation, Lavant, near Chichester, to be constructed upon the Hennebique or other approved system of Ferro-concrete City Engineer's Office, North-street. Deposit £2 2s.

SEPTEMBER 16.—**Halesowen.**—**PAVING.**—Laying c about 4,600 super. yards of Leicestershire granite set paving, together with a similar area of reinforced concrete foundation for same, for the Worcestershire C.C. C. F. Gettings, County Surveyor, 30, Foregate-street Worcester. Deposit £1.

SEPTEMBER 18.—**Plymouth.**—**SEWERS.**—Constructing of about 370 yards of 12 in. stoneware pipe sewer together with manholes and other incidental works, at Mutley-Plain-lane and Moor View-terrace, for the C.I. I. Wiberley, Borough Engineer and Surveyor.

SEPTEMBER 21.—**Manchester.**—**SEWER.**—Intercepting sewer from Barlow Moor-road, Didsbury, to Patine-road, Withington, for the T.C. City Engineer. Deposit £5 5s.

SEPTEMBER 22.—**Folkestone.**—**PIPES.**—Concrete pipe and manholes (approximately 1,050 tons) for a High Level Intercepting Sewer, for the T.C. A. Nichols, Borough Engineer, 11, Church-street. Deposit £5 5s.

★ **SEPTEMBER 23.**—**Hemsworth.**—**SEWERS.**—LAYING 2,800 yards of 12 in., and 425 yards of 9 in. pipe sewer, manholes, &c., and construction of new sewage disposal works in the parishes of Upton a North Elmhall, for the Hemsworth R.D.C. Mr. W. Lynnen, Engineer to the Council, Market-street, Cr Hill, Hemsworth. Deposit £2 2s.

★ **SEPTEMBER 25.**—**Hackbridge.**—**ROAD WORKS.**—For certain road works in Park-road, Hackbridge, the Beddington and Wallington U.D.C. Mr. S. E. Carter, Engineer and Surveyor, Council Offices, Wallington. Deposit £1 ls.

SEPTEMBER 25.—**Wath-upon-Dearne.**—**ALTERATIONS.**—Construction of (1) detritus tanks at the sewers, (2) an ejector chamber in Station-road, (3) ab 600 yds. of 9 in. sewers, and (4) about 400 yds 18 in. sewers, together with manholes, &c., for U.D.C. H. Cranage, Surveyor. Deposit £2.

SEPTEMBER 26.—**Lylington.**—**REPAIRS.**—Sewer water drains, kerbing, paving, &c., to certain roads, for the T.C. H. E. Tizard, Town Clerk. Deposit £2.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

Competitions.

(See Competition News, page 346)

Auction Sales, Tenders, etc.

SEPTEMBER 8.—**London, E.**—Joseph Hibbard & Sons will sell, without reserve, by order of the Trustee, Mr. F. H. Agar, F.C.A., under a Deed of Assignment, re Yates & Co., upon the premises, No. 3, Rivington-street, Great Eastern-street, Shoreditch, dry stock of imported hardwoods. Auctioneers, 15, Newington Green, Islington, N.16.

SEPTEMBER 8.—**London, S.W.**—Veryard & Yates will sell, at 255, Clapham-road, S.W., timber, fittings and building materials, &c. Auctioneers, 365, Norwood-road, S.E.27.

SEPTEMBER 8 AND 9.—**Haldon House, near Exeter.**—Fox & Sons will sell, in lots, the materials of the mansion, including all fixtures, fittings and fabric, also the private chapel on the estate. Auctioneers, 44-50, Old Christchurch-road, Bournemouth.

SEPTEMBER 9.—**Beddington.**—C. E. Clark will sell at Beddington House, Beddington, near Croydon, fire salvage timbers, sashes, doors, battens, corrugated iron, &c. The Auctioneer, Beddington House, near Croydon.

SEPTEMBER 9.—**Hull.**—W. H. Pickard will sell at the City Hotel, Lowgate, Hull, about 800 standards of various timbers. Timber Auctioneer, Hull.

SEPTEMBER 9.—**London.**—Henry Butcher & Co. will sell contractor's plant and machinery lying at Isle of Dogs Pumping Station, and St. James's Hospital, Wandsworth Common. Auctioneers as above.

SEPTEMBER 9 AND FOLLOWING DAYS.—**North Devon.**—J. T. Skelding & Co. will sell, re P. & W. Anderson, Ltd. (in liquidation), by order of the Receiver for the Debenture Holders, at The Dump, adjoining the North Devon Clay Co.'s sidings (by their kind permission), Peter's Marland, Dunsbear Station, North Devon, contractors' plant and machinery, tools, buildings, and effects used in the construction of the new line from Torrington to Halwill. Auctioneers, 48, Gresham-street, London, E.C.2.

SEPTEMBER 10.—**Bucks.**—Knight, Frank & Rutley (in conjunction with Hammett, Raffety & Co.), will sell, in the Mansion, Hedsor, Bourne End (unless previously sold privately), the remaining portions of the freehold residential building estate, Hedsor, including the Mansion. Auctioneers, Knight, Frank & Rutley, 20, Hanover-square, W.1; Hammett, Raffety & Co., 30, High-street, High Wycombe.

SEPTEMBER 15.—**Merton, S.W.**—Veryard & Yates will sell at Merton (opposite "Six Bells" Hotel) various timbers and building material. Auctioneers, 365, Norwood-road, S.E.27.

SEPTEMBER 15 AND 16.—**Frampton-on-Severn.**—Jackson Stoppes will sell, on the premises, the mansion, Strehme Court, near Frampton-on-Severn, with about 14 acres of heavily timbered grounds; also building sites with views over the Severn. Auctioneers, 32, St. James's-street, S.W.1, Bridge-street Northampton; Town Hall, Towcester.

SEPTEMBER 29.—**London, N.W.**—Ernest Owens, Ltd., will sell: (a) Edgware, a building estate; (b) Child's Hill, Hampstead, two freehold sites; (c) Church End, Finchley main road, freehold site. Auctioneers, Estate Offices, Golders Green, N.W.

Public Appointments.

SEPTEMBER 7.—**East Riding of Yorkshire.**—Junior Assistant required in the County Architect's Department of the C.C. The County Architect, County Hall, Beverley.

SEPTEMBER 9.—**Middleton.**—Engineering Assistant required in the Borough Engineer's Department of the T.C. Mr. J. P. Walmsley, Town Clerk, Town Hall, Middleton.

SEPTEMBER 10.—**London, E.C.**—Two Architectural Draughtsmen required in the Engineer's Department of the Metropolitan Asylums Board. Mr. G. A. Powell, Clerk to the Board, Office of the Board, Victoria Embankment, E.C.4.

SEPTEMBER 12.—**Bucks.**—Clerk of Works required by Bucks C.C. in connection with the erection of a small country police station. Mr. C. H. Riley, County Architect, Aylesbury.

SEPTEMBER 14.—**London, N.**—Architectural Assistant required by the Southgate U.D.C. Mr. A. E. J. W. Clerk to the Council, Town Hall, Palmer's Green, N.13.

SEPTEMBER 15.—**London, S.E.**—Sanitary Inspector required by the Bermondsey B.C. Mr. Fredk. Ryall, Town Clerk, Town Hall, Spa-road, S.E.

SEPTEMBER 16.—**Essex.**—Town Planning Assistant required by Orsett R.D.C. for the preparation of a town Planning scheme for the whole area in conjunction with the South-East Essex Regional scheme. Mr. J. Wright, Clerk to the Council, 2, Orsett-road, Grays, Essex.

SEPTEMBER 25.—**Manchester.**—Assistant Lecturer Building Construction in the College of Technology the Registrar, College of Technology, Manchester.

SEPTEMBER 30.—**Newcastle-upon-Tyne.**—Clerk of Works required for the proposed secondary schools at eastern Director of Education, Education Offices, orthumberland-road, Newcastle-upon-Tyne.

NO DATE.—**Hayes.**—Clerk of Works required by W. (London) Garden Village Society, Ltd., for supervision 60 concrete houses at Hayes, Middlesex. Mr. T. Iwyn Lloyd, F.R.I.B.A., architect, 6, Cathedral-road, Cardiff.

ABINGDON.—Berkshire E.C. has acquired premises in Conduit-road for purposes of a school clinic and physical exercises.

ADWICK-LE-STREET.—The U.D.C. has accepted a tender of £22,897 for the erection of 46 houses at Woodlands.

ASHFORD (KENT).—The General Committee of the Hospital have decided to build a new hospital on a site which has been purchased between Western-avenue and Chart-road, at an estimated cost of £20,000.

AYLESBURY.—The cattle market is to be extended at a cost of nearly £10,000.

BALLYBOGHILL.—The Dublin C.C. are to rebuild the bridge in reinforced concrete.

BIRMINGHAM.—Funds are being raised for the proposed new church at Kingsfield, in St. Dunstan's Mission, King's Heath, Birmingham.

BLEACH GREEN.—Plans are shortly to be prepared by the Durham County Education Committee for an elementary school.

BLOFIELD.—The B.G. are to carry out certain improvements at the house, which includes the erection of a water tower with new engines, to connect up with existing pumps, at a cost of about £300.

BLYTH.—An inquiry has been held by the M.H. into the proposed new town planning scheme by the T.C.

BOLTON.—The Rev. J. Burke, is submitting to the Corporation plans for a secondary school at Thornleigh, Shapples Park. The M.H. have sanctioned the scheme for the extensions at the Hacken sewage works, at a cost of £132,000.

BOOSBECK (CLEVELAND).—The Cleveland Miners' Association are to erect 10 cottages.

BOOTLE.—The E.C. recommended to the T.C. that a Central School for Boys and Girls should be established. The Clerk read a letter at the Council meeting to the Rev. Dr. O'Brien, of St. James, Bootle, intimating that the Board are prepared to consider the provision of a new public elementary school for about 300 children at the Stanley Hall, Stanley-street, Bootle, and requesting that plans be submitted to them for their consideration. Plans are being prepared.

BOSTON SPA, YORKS.—Many improvements will be made in the near future to the new holiday and convalescent home attached to St. Mary's Orphanage at Boston Spa.

BOURNEMOUTH.—The Corporation have decided to erect two cottages, gates and fences at the hospital, at a cost of £2,000. A scheme is under consideration for developing Strouden Farm, which was acquired some years ago, for housing and playing fields. It is proposed to obtain a site in Charminster-road for the erection of an elementary school.

BRIDLINGTON.—The T.C. has passed two schemes for sea front improvements—a £50,000 scheme for the

* See also our List of Contracts, Competitions, etc.

extension and development of the Prince's Parade on the north side, and a £50,000 scheme for development at the Spa on the south side. Application is to be made to the M.H. for sanction.

BURNFIELD.—A site is being secured by the Durham County E.C. for the erection of an elementary school.

CARMARTHENSHIRE.—The County E.C. have accepted various tenders for the painting of 34 schools. Mr. W. Vincent Morgan is the architect.

CATERHAM.—A new cinema is to be built from plans by G. A. Fortesque.

CHORLEY.—The Corporation are negotiating for the purchase of 6½ acres at Eaves-lane as a housing site. Mr. Percy Howard, architect, has now revised the plans for the proposed public baths, the cost being estimated at £19,000. Plans are to be prepared for a pavilion in Astley Park. A site in Queen's-road has been secured for the erection of an open-air school. The M.H. has sanctioned a loan of £2,875 for the erection of a special subjects centre at Duke-street.

CLITHEROE.—The members of the Clitheroe Congregational Church propose the erection of a memorial hall, to include a primary department for the Sunday School and a social institute for the young men.

COLCHESTER.—The Joint Committee of the C.C. of Cambridgeshire, Essex, East Suffolk and West Suffolk have agreed to recommend the purchase of the Royal Eastern Counties Institution at Colchester, and to carry out a scheme of extensions, the architect to be the Essex County Architect.

COLNE.—The M.H. has issued formal sanction to the borrowing by the T.C. of the undermentioned amounts in connection with the Haverholt housing scheme:—Erection of houses, £25,800; street works, £3,183; sewer works, £491.

COUNDON.—DURHAM E.C. are to acquire a site for the erection of an elementary school.

DEWSBURY.—The Corporation is, subject to the approval of the M.H., to proceed with the erection of 179 houses on the Raven's Lodge estate. The total cost is estimated at £85,651.

DUBLIN.—The C.B. are proposing to expend £152,000 on three important schemes of drainage. They include the linking up of Chapelizod with the city main drainage system.

DUNDALK.—A project has been launched for the erection of a temperance hall, at a cost of £15,000.

DUNDEE.—The Scottish Board of Health have approved the scheme of the Corporation for the erection of 216 houses on the Alpin-road estate. Tenders are shortly to be invited for the construction of 200 concrete houses on the Lawton site. The Housing Committee are considering the acquisition of land at Blackcroft for a housing scheme. The Cleansing Committee are purchasing land at Farfield-road for the erection of new stables. A site in North Ellen-street has been acquired for the erection of a public convenience. The directors of the Sidlaw Sanatorium are preparing a scheme for providing accommodation for double the number of children now accommodated. Twenty acres at Mid-Craigie are being purchased for the extension of the Eastern Necropolis. The City Engineer has prepared a scheme for the extension of the offices at Miln-street depot, at a cost of £450. The Markets Committee are considering the erection of new slaughterhouses on modern lines. The City Engineer is to prepare a scheme for repairs at the Meadows washhouses. Messrs. J. & E. Shepherd, on behalf of the Northern Housing Association, Ltd., has submitted a proposal for the erection of 152 houses at Thornbank and Ellengowan, the cost being estimated at from £440 to £460 each.

EAST FINCHLEY.—At an estimated cost of £6,500, the Congregational Church is to be extended.

EAST SUFFOLK.—Plans have been prepared by the East Suffolk C.C. for a nurses' home at St. Audry's Hospital.

EDMONTON.—The U.D.C. has received sanction from M.H. to the borrowing of £18,230 and £470, in respect to the new recreation ground and lay-out at Galliard-road.

FAIRSWORTH.—The U.D.C. are proposing to erect 404 houses in the next two years.

FELSTED.—A sugar beet factory is to be built at an estimated cost of about £250,000.

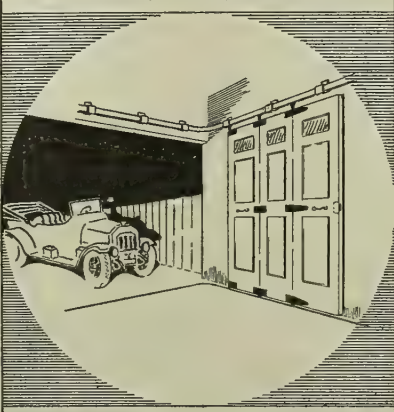
FESTINIOL.—Plans have been prepared by the Merioneth C.C. for a new bridge.

GLASGOW.—The Corporation have asked the City Engineer to prepare plans for a branch library on a site in Oxford-lane. The Water Committee are being asked to consider the erection of houses for men permanently employed by the water department. The Library Committee are considering the provision of a library for the Pollokshaws district. Schemes for repairs at Blackfriars and St. Andrew's parish churches are under consideration. A scheme has been prepared for the extension of the Glasgow and West of Scotland Commercial College. The pavilion at the Dalmarock Power Station recreation ground is to be enlarged at a cost of £598. The Housing Committee recommend granting the subsidy in respect of 160 terrace houses to be built by Messrs. Mactaggart & Mickel, Ltd., at King's Park.

(Continued on page 375.)

THE "HENDERSON" SYSTEM SLIDING DOOR GEAR

FOR FACTORIES, GARAGES, SCHOOLS, ETC.



"TANGENT JUNIOR" FOR LIGHT DOORS.
"TANGENT SENIOR" FOR HEAVY DOORS.

WRITE FOR BOUND CATALOGUE B.24 TO—

P.C. HENDERSON, LIMITED,

BARKING, ESSEX. PHONE. EAST HAM 257.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.	£ s. d.
Best Stocks	4 3 6
Second Hand Stocks	3 13 6
Per 1,000, Delivered at London Goods Stations.	£ s. d.
Flettons, at	£ s. d.
King's Cross	2 13 3
Do, grooved for plaster	2 15 3
Do, Bullnose	3 8 3
Best Stourbridge Fire brick—	
2½ in.	8 11 0
3 in.	10 3 0
GLAZED BRICKS—	
Best White	D'ble Strutch's 30 0 0
Ivory, and	D'ble Headers 27 0 0
Salt Glazed	One Side and
Stretchers	two Ends 31 0 0
Headers	Two Sides and
Quoins, Bull-	one End 32 0 0
nose and 4 in.	Splay's and
Plats	Squints 29 10 0
Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.	

BREEZE CONCRETE SLABS.

Delivered London	£ s. d.
2 in. per yd. super	1 11 2
2½ in. "	2 4 4
3 in. per yd. super	2 9 2
4 in. "	3 6 3
Thames Ballast	10 6 per yd.
Pit Sand	13 9 "
Thames Sand	14 6 "
Best Washed Sand	14 6 "
1 in. Shingle for Ferro-	12 9 "
Concrete	12 9 "
1 in. Broken Brick	11 6 "
Pan Breeze	7 6 "
Per ton delivered in London area in full van loads.	
Best Portland Cement. British Standard Specification. Test £2 18 0 to £3 6 51s. alongside at Vauxhall in 80-ton lots.	0 10 0
Ferrocrete per ton extra on above.	4 8 0
Super Cement (Waterproof).	8 15 0
Roman Cement	5 15 0
Parian Cement	5 15 0
Keene's Cement, White.	5 10 0
Plaster, Coarse, Pink	3 0 0
" Fine	3 12 6
Sirapite, Coarse	3 9 0
" Finish	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	82 0 0
Granite Chippings	1 12 0
NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.	
Stourbridge Fireclay in sacks 35s. 0d. per ton at rly. dpt.	

STONE.

BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube.	2 9½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube.	2 11½
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube.	4 4
Do. do. delivered on road wagons at above stations, per ft. cube.	4 5
White basebed, 3d. per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every foot over 20 ft. average, and ½d. beyond 30 ft.	
HOTTON-WOOD STONE—	
Delivered at any Goods Station, London.	7 0
Small random blocks, up to 10 ft. cube, P. ft. cb.	17 0
Random blocks from 10 ft. and over	27 0
Sawn two sides	32 0
Sawn three or four sides	32 0
YORK STONE, Blue—Robin Hood Quality.	
Delivered at any Goods Station, London.	£ s. d.
6 in. sawn two sides landings to sizes (under 30 ft. super.)	5 6
6 in. rubbed two sides, ditto.	6 0
3 in. sawn two sides slabs (random sizes)	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes)	1 6½
1½ in. to 2 in. ditto, ditto.	1 4
HARD YORK—	
Delivered at any Goods Station, London.	£ s. d.
Scalloped random blocks	6 3
6 in. sawn two sides landings to sizes (under 40 ft. super.)	5 1½
6 in. rubbed two sides ditto	6 1½
4 in. sawn two sides slabs (random sizes)	2 10
3 in. ditto	2 1½
2 in. self-faced random flags	9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube.—Plain, 6s. 6d.; Moulded, 7s. 9d.; Chills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£32 0	3 × 6	£23 0
4 × 8	28 0	3 × 11	28 0
4 × 9	26 0	2 × 11	28 0
4 × 7	25 0	3 × 9	25 0
3 × 8	24 0	2½ × 9	25 0
3 × 7	23 0	3 × 4	23 0
2½ × 7	22 0	3 × 4	23 0
1 × 11	£32 0	1 × 9	£30 0

PLANED BOARDS.

1 × 11	£32 0	1 × 9	£30 0
--------	-------	-------	-------

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
1½	21/-	1½	32/6
1½	23/-	1½	37/6
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.	Inches.	per sq.
1	25/-	1	16/6
1½	32/6	1	20/-
1½	37/6	1	25/-

BATTENS.

Inches.	per 100 ft.
½ × 2	2 6

SAWN LATHS.

Per bundle	1" AND UP THICK.
	0 16 0 to 0 18 0

Dry Austrian Wainscoat, per ft. cube

Dry American and/or Japanese Figured Oak, ft. cube

Dry American and/or Japanese Plain Oak, ft. cube

Dry sq. edged Honduras Mahogany, ft. cube

Dry Log cut Honduras Mahogany, ft. cube

Dry Cuba Mahogany, ft. cube

Dry Teak, ft. cube

Dry American Whitewood, ft. cube

Best Scotch glue, per cwt.

Liquid Glue, per cwt.

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

24 by 12	£ s. d.	18 by 10	£ s. d.
22 by 12	37 12 6	18 by 9	21 2 6
22 by 11	34 0 0	16 by 10	18 12 6
20 by 12	31 5 0	16 by 9	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

		1,01. London.
		£ s. d.
Best machine-made tiles from Broseley or		5 12
Staffordshire district		5 17
Ditto hand-made ditto		6 2
Ornamental ditto		0 9
Hip and valley tiles	{ Hand-made	0 9
(per dozen)	{ Machine-made	0 9

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—

R.S. Joists, cut and fitted	£ s. d.
Plain Compound Girders	13 10 0
Stanchions	15 10 0
In Roof Work	17 10 0
	20 10 0

MILD STEEL ROUNDS.

To London Station, per ton.	£ s. d.
Diameter.	£ s. d.
½ in.	14 10 0
1 in.	13 0 0
1½ in.	12 10 0
2 in.	12 0 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

Tubes.	Fittings.	Flanges.
Sizes	1" to 6"	1" to 6"
Black Gas	55% .47% .50% .57% .60%	
Blue Water	50% .42% .45% .52% .55%	
Red Steam	45% .37% .40% .47% .50%	
Galv'd Gas	40% .37% .40% .47% .50%	
Water	33% .32% .35% .42% .45%	
" Steam	27% .27% .30% .37% .40%	

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Nozzles.	Ends.
3 in.	1/2½	11½d.	3½d.
3½ in.	1/4	1/10½	3½d.
4 in.	1/5	1/12½	3½d.
4½ in.	1/6½	1/4	4½d.
5 in.	1/9½	1/5½	5½d.

O.G. GUTTERS

3 in.	1/7	1/3½	3½d.
3½ in.	1/7½	1/4	3½d.
4 in.	1/8½	1/6½	4½d.
4½ in.	1/10½	1/9½	5½d.

RAIN-WATER PIPES, &c.

Per yd. in 6 ft. lengths.	Pipe.	Bends, stock.	Branches, angles, stock angles.
2 in. plain	1/9½	1/2½	1/8½
2½ in.	1/11½	1/4	2/0½
3 in.	2/4½	1/8	2/6
3½ in.	2/10	2/2	2/10½
4 in.	3/3	2/4½	3/6

L.C.C. COATED SOIL PIPES—London Prices, ex Works.

		8. d.	8. d.	8. d.
2 in. per yd. in 6fts. plain	2 11	..	2 3	..
2½ in. "	.. 3 5	..	2 6	.. 3 8
3 in. "	.. 4 1	..	2 9	.. 4 0
3½ in. "	.. 4 5½	..	3 5	.. 4 8½
4 in. "	.. 4 11½	..	3 9½	.. 5 5½

1 C.C. COATED DRAIN PIPES—London Prices ex Works

L.C.C. COATED DRAIN PIPES—London Prices, ex Works.

	Pipe, angles.		stock angles.	
	s. d.	s. d.	s. d.	s. d.
3 in. per yd. in 9 ft. lengths	4 3	5 9	7 8	9 6
4 in. " "	6 3	6 11	9 6	12 0
5 in. " "	7 10	12 0	16 3	20 9
6 in. " "	9 6	15 0	20 9	
Gaaken for jointing, 38/6	per cwt.			

Gasken for jointing, 38/6 per cwt.

IRON—

Common Bars

Staffordshire Crown Bars—

good merchant quality

Staffordshire "Marked

Mild Steel Bars

Steel Bars, Ferro-Concrete

quality, basis price

Hoop iron, basis price

Galvanised

Soft Steel Sheets, Black—

Ordinary sizes, 20 g.

Ordinary sizes, 6 ft. by

2 ft. to 3 ft. to 20 g.

Ordinary sizes, 6 ft. by

2 ft. to 3 ft. to 22 g.

and 24 g.

Ordinary sizes, 6 ft. by

2 ft. to 3 ft. to 26 g.

Flat and Galvanised Corrugated Sheets—

Ordinary sizes, 6 ft. to

9 ft. to 22 g. and 24 g.

Ordinary sizes, 6 ft. to

9 ft. to 22 g. and 24 g.

Ordinary sizes, 6 ft. to

9 ft. to 26 g.

Sheets Galvanised Flat, Best quality—

Best Soft Steel Sheets,

6 ft. by 2 ft. to 3 ft. to

20 g. and thicker

Best Soft Steel Sheets,

22 g. and 24 g.

Best Soft Steel Sheets,

26 g.

Cut Nails, 3 in. to 6 in.

(under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for com-

plete houses, including all fittings, painting two

coats, and delivery to job, average price about

1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London)

LEAD—Sheet, English, 4 lb. and up

Pipe in coils

Soil Pipe

Compo pipe

NOTE.—Country delivery, 30s. per ton extra; lots under 5

cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.

Old lead, ex London area, at Mills

Do., ex country, carriage forward

COPPER.

Seamless Copper tubes (basis)

Strong sheet

Thin

Copper nails

Copper wire

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COOKS FOR

IRON.

1 in. 1½ in. 1 in. 1½ in. 1 in. 1½ in.

29/- 45/- 76/- 133/- 246/- 510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COOKS AND

UNIONS.

1 in. 1½ in. 1 in. 1½ in. 1 in. 1½ in.

41/6 62/- 92/- 174/- 300/- 538/- per doz.

NEW RIVER PATTERN SCREW DOWN MAIN FERRULES.

1 in. 1 in.

39/6 60/- 116/6 per doz.

CAPS AND SCREWS.

1½ in. 1½ in. 2 in. 3 in. 3½ in. 4 in.

7/6 10/- 14/- 23/- 30/- 42/- per doz.

DOUBLE NUT BOILER SCREWS.

1 in. 1 in. 1½ in. 1½ in. 2 in.

7/6 11/- 17/- 29/- 36/- 63/- per doz.

BRASS SLEEVES.

1½ in. 2 in. 3 in. 3½ in. 4 in.

10/- 12/- 20/- 24/- 31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F.

1 in. 1½ in. 1 in. 1½ in. 1 in.

35/- 56/- 98/- 162/- 228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING

SCREW.

1½ in. 1½ in. 2 in. 3 in.

8 lbs. P. traps .. 33/- 41/- 56/- 101/- per doz.

8 lbs. S traps .. 35/- 45/- 66/- 126/-

TIN—English Ingots, 2/6 per lb. SOLDER—Plumbers'

1/2, Timmen's 1/4, Blowpipe 1/5 per lb.

PAINTS, &c.

Raw Linseed Oil, in pipes

" " in barrels

" " in drums

Boiled " in barrels

PRICES CURRENT OF MATERIALS (contd.)

GLASS.
ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
15 oz. fourths	3½d.	32 oz. fourths	8½d.
15 " thirds	4½d.	32 " thirds	10½d.
21 " fourths	4½d.	Obscured Sheet, 15 oz.	4½d.
21 " thirds	5½d.	21 " 5½d.	5½d.
26 " fourths	5½d.	Fluted 15oz. 6½d., 21oz.	9½d.
26 " thirds	7½d.	En'lied 15oz. 5½d., 21 oz	7½d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
Rolled plate	4½d.
Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arctic, Slip-polyte, and small and large Flemish white.	6½d.
Do, tinted	6d.
Rolled Sheet	6½d.
White Rolled Cathedral	5½d.
Tinted do.	7½d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

	Per Gallon.
Oak Varnish	Outside 0 14 0
Fine ditto	ditto 0 18 0
Fine Copal	ditto 1 0 0
Pale Copal	ditto 1 4 0
Pale Copal Carriage	ditto 1 12 0
Best ditto	Inside 0 18 0
Floor Varnish	ditto 1 2 6
Fine Pale Paper	ditto 1 0 6
Fine Copal Cabinet	ditto 0 18 0
Fine Copal Flattening	ditto 0 19 0
Hard Drying Oak	ditto 1 0 0
Fine Copal Varnish	ditto 1 2 0
Pale ditto	ditto 1 12 0
Best ditto	0 12 6
Best Japan Gold Size	0 10 0
Best Black Japan	0 12 0
Oak and Mahogany Stain (water)	0 7 6
Brunswick Black	1 5 0
Berlin Black	0 17 0
Knottling (patent)	0 9 0
French and Brush Polish	0 9 0
Liquid Dryers in Aerebine	0 7 0
Cuirass Black Emulsi.	

TRADE NEWS

S. W. Francis & Co., Ltd., the Rolling Shutter makers, of 64-70, Gray's Inn-road, W.C., inform us that their workmen who went on strike some weeks ago for an advance in wages, have now been reinstated at the old rates.

We have received a copy of the latest booklet dealing with the sanitary section of Messrs. O'Brien, Thomas & Co.'s goods, a pocket edition of which has just been published under the title of "Sanitary Appliances." We would draw our readers' attention to the usefulness of this convenient size, and to the quality and reasonable prices of the goods illustrated. Those interested should apply to the show-rooms at 18, Upper Thames-street, E.C., for No. 48, Sanitary Section.

We have received a brochure from Messrs. Marshall, Sons & Co., Ltd., engineers, of Gainsborough, dealing with their Type "S" oil engines and their application. These machines are high-grade self-contained power generators, conceived on practical lines, and scientifically constructed for the economical utilisation of crude, refined, and residual oils. There is a stationary type to be used for belt driving machinery in factories, sawmills, brickyards, and other places where space and economy are considerations; the ground space occupied is small compared with that of a steam plant of corresponding power, and the foundations necessary are small and inexpensive. The portable series is suitable for contractors for driving mortar mills, crushers, mixers, pile drivers, saw benches, and other contractors' work requiring motive power. The driving principles of both types are similar, both being of the horizontal enclosed type, worked on the well-known two-stroke cycle, which is here fully explained. The combustion is so complete that no deposits are formed and the cylinder, therefore, needs very little cleaning. Another advantage is that no air or exhaust valves are required, and the trouble experienced with these is therefore eliminated. There is a specification given, together with a list of standard dimensions for both types. Those interested should apply to the London offices, at 3, London Wall Buildings, E.C.2, for particulars and price lists.

PROPOSED NEW BUILDINGS

(Continued from page 373).

GLOSSOP.—The Corporation have instructed the Borough Surveyor to prepare a design for a brick or stone building for purposes of an isolation hospital, to accommodate 24 patients and staff, for erection in sections.

GLOUCESTER.—The R.D.C. are proposing to build 50 non-parlour type houses. Application is to be made to the M.H.

GUISELEY.—The M.H. has approved of the tenders for 18 houses at Guiseley.

HALLAM.—The Conservatives in the Hallam Division of Sheffield are making progress towards the establishment of a new club for the district, and funds are being raised for this object.

HEADINGTON.—The R.D.C. are to apply to the M.H. for permission to build 24 houses on the Barton-road Headington site.

HERDEN BRIDGE.—The M.H. has given the U.D.C. sanction to borrow £2,800 to purchase the Garden-square estate, the land being required for extensions to the District Council offices, street improvements, and as a site for public baths.

HENLEY.—The D.C. has decided to erect 12 cottages on the Britwell-road site.

HONITON.—The M.H. has sanctioned the scheme by the R.D.C. for the erection of 68 houses, as follows:—Awliscombe (Wynnton), 8; Broadhembury (Cramier and Colliton), 4; Combe Raleigh, 4; Coteleigh, 4; Dunkeswell Abbey, 4; Farway, 2; Luppitt (Week), 2; Monkton, 4; Northleigh, 4; Offwell, 4; Payhembury, 2; Plymtree, 10; Salcombe Regis (village), 2; Widworthy, 2; Southleigh, 4; Broadhembury (village), 4; Awliscombe, 4.

HORSFORTH.—The U.D.C. has instructed the Surveyor to prepare a preliminary scheme for the extension of the sewage works.

HORSHAM.—The U.D.C. are to make application to the M.H. for sanction to borrow £690 for the purchase of land in Crawley-road to provide a site for a second Crawley-road housing scheme.

HULL.—The Corporation recommended the acceptance of a tender at £5,675 for the erection of a clinic for the treatment of venereal disease.

KILKENNY.—The Corporation has decided to build twenty new artisans' dwellings.

LANGWITH JUNCTION.—A start has been made with the new secondary school at Langwith Junction, which is under the Derbyshire E.C.

LONDON (BRONDESBURY).—Middlesex E.C. have acquired land from the Ecclesiastical Commissioners for erection of a secondary school.

LONDON (ST. MARLEBORNE).—The Grammar School is to be rebuilt at a cost of £44,000.

LONDON (STEPNEY).—The B.C. are applying to the L.C.C. and a loan of £5,000 to build baths on a Mile End-road, E. site.

LONDON (WALTHAMSTOW).—Ferry-lane is to be widened at a cost of £28,280.

LONDON (WANSWORTH).—The equipment of the new Technical Institute will cost the L.C.C. £15,000.

LONDON (WANSTEAD).—The Essex E.C. are inviting tenders for the erection of a new secondary school.

MIDDLETON.—On the new housing estate at Middleton a new church is to be erected by the Leeds Church Extension Society.

MORECAMBE.—The Surveyor to the Corporation has been instructed to prepare plans, details and specification for the erection of a large number of houses.

NEWMARKET.—The R.D.C. are to build 200 houses in the next three years.

NEWYDD.—Merioneth C.C. has decided to widen the bridge at Pont Newydd and the road approach on the Trafford side.

NORTH DUBLIN.—The R.D.C. are considering a scheme submitted by Mr. Sean O'Cull, on behalf of the Nua-Ghaedhtacht Committee for the building of about 100 houses.

ONWYDD.—The M.T. has approved plans prepared by the Merioneth C.C. for the reconstruction of Onwydd bridge.

OWLERTON.—Funds are being raised by the parish-ioners of Owlerton Church for the erection of a block of buildings in Forbes-road. The estimated cost of the hall is £5,000.

PANDYRODYN.—Merioneth C.C. are negotiating for land required for the improvement of the bridge.

PENISTONE.—The L.N.E.R. (Southern Section) are inviting tenders shortly for the construction of a steel bridge over Green-road widening in connection with the Penistone to Barnsley Loop Line construction. Plans, details and specification have been prepared by the Company's Engineers at King's Cross.

PINNER.—The Hendon R.D.C. passed plans: 26 houses, Parkfield-avenue, Pinner, for Neithcott & Pepper; pavilion, Headstone-lane, Pinner, for Bedford College for Women; eight houses, Manor-way, Pinner, for Headstone Manor Estates Co.; 12 houses, Priory-way, Pinner, for Headstone Manor Estate Co.

PONTEFRAC.—The R.D.C. has decided to erect an additional 38 non-parlour type houses on the Airedale housing estate, near Glasshouse.

PORTMADOC.—Portmadoc War Memorial Hospital subscribers have resolved to take steps to erect a new hospital towards which £5,000 is already available.

PORTSTEWART.—The Golf Club Committee is to erect two new club houses at a cost of £3,500.

REIGATE.—The R.D.C. has resolved to make an application to the M.H. for sanction to borrow a sum of £13,118 for 12 working-class houses at Betchworth, 6 at Kingswood, and 6 at Horley, to be erected by the Council, the amount to cover the cost of sites and buildings.

RETFORD.—The T.C. propose to carry out a scheme for the erection of 24 non-parlour type houses.

RICHMOND (YORKS).—Tenders have been accepted by the Corporation for the restoration of the Market Hall.

RISELEY.—Berkshire E.C. are in communication with the managers of the Swallowfield School regarding the improvement of the school buildings.

SCARBOROUGH.—The T.C. are considering a proposal to continue the promenade south of the bathing pool in front of the Holbeck Gardens at a cost of £8,745.

SALFORD.—The Corporation are purchasing property in Chapel-street for conversion into a showroom for the electricity department.

SCUNTHORPE.—The Scunthorpe and Frodingham U.D.C. have approved the Gas Manager's amended general lay-out of the suggested offices and stores at the new gasworks in Dawes-lane, to cost approximately £2,500, and the manager has been instructed to prepare details and obtain tenders for carrying out the work.

SEAHAM HARBOUR.—The U.D.C. has decided to have plans prepared for the erection of new lavatories near Seaham Harbour Station.—Durham County E.C. are preparing plans for an elementary school.—The U.D.C. have asked the Clerk to interview the trustees of the old Infirmary regarding the sale of the premises as Council offices.

SELBY.—The U.D.C. has decided to carry out an improvement scheme on the Flaxley-road building estate, at an estimated cost of £1,175.

SHREWSBURY.—A scheme has been enunciated by the Salop C.C. for the establishment of a hospital for twelve advanced cases of tuberculosis in conjunction with the Shrewsbury and Aitcham Joint Hospital Board's Isolation Hospital at Monkmoor, Shrewsbury, the tuberculosis shelter to be built on land adjoining the Isolation Hospital.

SKEGNESS.—The U.D.C. has decided to invite tenders for the construction of an orchestral piazza on the Grand Parade, with an up-to-date bathing pool on the sea-ward side. The estimated cost of the scheme is about £30,000.

SOUTHALL.—The Council has accepted a £13,284 tender for 28 houses.

STANLEY (YORKS).—A scheme is being launched for the construction of a bridge over the River Aire at Bottomboat.

STOWMARKET.—East Suffolk E.C. propose to enlarge the senior school to accommodate 80 more scholars, at a cost of £1,500.

SUNDERLAND.—Sunderland is to have a new deep-water quay with the necessary warehousing and railway facilities, and a special committee has been appointed to confer with the River Wear Commissioners with a view to the joint action of these bodies being taken in the matter.

SWALWELL.—A site is being selected for the erection of an elementary school for the Durham County E.C.

SWORLS.—The Balrothery R.D.C. has in contemplation a waterworks and sewerage scheme, estimated to cost £20,000.

TADCASTER.—Plans passed by R.D.C.: Twenty houses at Borrowby-lane, for J. R. Siberry; and new mission hall at Bowers-raw, Allerton Bywater, for the Trustees (architects, Garside & Pennington, Pontefract). The R.D.C. are making applications to the M.H. for sanction to borrow £48,500 for erection of 120 houses at Allerton Bywater; £29,100 for 60 houses at Micklefield; £20,370 for 42 houses at Kippax; £23,280 for 48 houses at Swillington; £5,820 for 12 houses at Church Fenton, and £11,640 for erection of 34 houses at Sherburn.

TAURLES.—North Tipperary C.C. decided to borrow the money required to provide and equip a technical school.

TOWYN.—Merioneth C.E.C. are to raise a loan of £4,500 for the purpose of providing additional accommodation at the county school.

TWICKENHAM.—The M.H. has given sanction to the D.C. raising a loan of £33,000 for alterations to York House and grounds for the use of the Council and the public.

WAKEFIELD.—The West Riding E.C. are preparing plans for the proposed public elementary school on the Portobello estate, Barnsley-road.—Plans have been prepared by W. H. H. Marten, architect, Leeds, for the erection of a new church, for the Rev. J. Ratcliffe, upon a site at the corner of Portobello-road and Barnsley-road.

WARGRAVE.—As a memorial to the men of the parish of Wargrave who fell in the war the church propose to erect a new chancel. The extension to the church is estimated to cost £7,000.

WARRINGTON.—Plans have been prepared by Messrs. W. & Segar Owen, and tenders have been accepted for the erection of a Reredos at St. Luke's Church as a memorial to Miss Ann Greenwell. The B.E. have decided to proceed with the provision of an intermediate school, rooms for practical instruction in the elementary schools, and to make application for sanction for the raising of a loan for the replacement of school property and various repairs required at the Sacred Heart School and St. Albans School. The new school is to be erected at the east end of the parish of St. Mary's.

WASHINGTON.—The U.D.C. has received sanction from the M.H. to erect an additional 62 houses on the Spout-lane site. The Council has approved plans submitted by Mr. Marks, architect, of Sunderland, for the erection, by private enterprise, of 133 houses on the estate between New Washington and Usworth Village.

WEALDSTONE.—The U.D.C. passed plans: Twenty-six houses in Whitefriars-avenue, for Mr. A. Thornborough.

WEST RIDING.—The Highways Committee of the West Riding C.C. have submitted to the M.H. a forecast of expenditure upon maintenance and improvement works for the year 1925-26, amounting to £1,178,285.—The County Council have prepared plans for widening the Cow Beck bridge at the Leeds city boundary in Abbey-road.

FIRES.

LONDON (BATTERSEA).—Considerable damage was done by fire to the premises of Messrs. Walter Carson & Sons, paint manufacturers, Lombard-road, Battersea.

OBAN.—Estimated at between £10,000 and £12,000 damage was caused by fire at the Neptune Mills.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.		
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11 0
Add if in clay	"	1 0
Add for every additional depth of 6 ft.	"	0 6
Planking and strutting to trenches	per foot super	0 5
Do to sides of excavation, including shoring	"	1 0
CONCRETOR.		
Portland cement concrete in foundation 1 to 6	per yard cube	32 0
Add if in underpinning in short lengths	"	7 0
Add if in floors 6 in. thick	"	3 3
Add if in beams	"	3 9
Add if aggregate 1, 2, 4	"	10 0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	"	2 6
BRICKLAYER.		
Reduced brickwork in lime mortar and Fletton bricks	per rod	30 0 0
Add if in stocks	"	7 10 0
Add if in Staffordshire blues	"	22 0 0
Add if in Portland cement and sand	"	1 10 0
FACINGS.		
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0 0 1½
POINTING.		
Neat flat struck or weathered joint	"	0 0 3
ARCHES.		
Extra only to the price of ordinary brickwork:—		
Fair external in half brick rings	"	0 0 10
Axed in stocks	"	0 1 9
Rubbed and gauged jointed in putty camber or segmental	"	0 6 0
SUNDRIES.		
Damp course in double course of slates breaking joint and bedded in Portland cement	"	0 1 0
Setting ordinary register grates and stoves	each	1 0 0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4 15 0
ASPHALTER.		
Half-inch horizontal damp course	per yard sup.	4 3
Three-quarter-inch vertical damp course	"	8 6
¾ inch on flats in two thicknesses	"	6 3
Angle fillet	per foot run	0 3
Skirting and fillet 6 in. high	"	1 2
MASON.		
York stone templates fixed	per foot cube	13 0
York stone sills fixed	"	22 0
Bath stone and all labour fixed	"	10 6
Portland stone fixed	"	20 0
SLATER.		
Welsh 16 in. x 8 in. 3 in. lap, including nails	per square	72 9
Do. 20 in. x 10 in. Do. Do.	"	80 9
Do. 24 in. x 12 in. Do. Do.	"	90 0
CARPENTER AND JOINER.		
Fir framed in plates	per foot cube	5 0
Do. joists	"	5 6
Do. roofs, floors and partitions	"	6 0
Do. trusses	"	8 6
Deal rough close boarding	per sq. ½" 35/6 1" 40/- 1½" 45/-	72/-
Flat centering for concrete floor, including struts or hangers	"	50 0
Do. to beams	per ft. sup.	1 0
Centres for arches	"	1 6
Gutter boards and bearers	"	1 0
FLOORING.		
Deal-edges shot	per sq. ½" 44/6 1" 53/- 1½" 60/6	
Do. tongued and grooved	" 49/- 57/6 65/-	
Do. matchings	" 45/- 51/-	
Moulded skirting, including backings and grounds	per ft. sup. 1/6 1/9 2/0 2/6	
SASHES AND FRAMES.		
One-and-a-half moulded sashes or casements	per foot super	1 10
Two Do. Do. Do.	"	2 4
Add for fitting and fixing	"	0 3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights average size	"	2 9
DOORS.		
Two-panel square framed	per ft. sup. 1½" 2/1 1½" 2/4 2" 2/6	
Four-panel Do. Do.	" 2/5 2/8 2/11	
Two-panel moulded both sides	" 2/8 2/11 3/2	
Four-panel Do. Do.	" 2/11 3/2 5/5	

CARPENTER AND JOINER—continued.		
FRAMES.		
Deal wrot moulded and rebated	per foot cube	14 0
Plain deal jamb linings framed	per ft. sup. 1" 1/7 1½" 1/8 2" 1/9	
Deal shelves and bearers	" 1/4 1/6 2d 2d	
Add if cross tongued	"	
STAIRCASES.		
Deal treads and risers in an 1 including rough brackets	2/1 1½" 2/4 1½" 2/9 2" — 2½" —	
Deal strings wrot on both sides and framed	1/8 2/ 2/2 2/8	
Housings for steps and risers	each	0 11
Deal balusters, 1 in. x 1½ in.	per ft. run.	0 9
Mahogany handrail; average 3 in. x 3 in.	"	6 0
Add if ramped	"	11 10
Add if wreathed	"	23 3
FIXING ONLY IRONMONGERY (INCLUDING SCREWS).		
6 in. barrel bolts	8½d. Rim locks	2/-
Sash fasteners	11½d. Mortice locks	4/6
Casement fasteners	1/5 Patent spring hinges and letting in to floor and	
Casement stays	1/2 making good	19/-
Cupboard locks	1/5	
FOUNDER AND SMITH.		
Rolled steel joists	per cwt.	16 3
Plain compound girders	"	19 0
Do. stanchions	"	21 9
In roof work	"	27 6
RAIN-WATER GOODS.		
Half-round plain rebated joints	ft. run 3" 1/6 4" 1/9 5" 2/- 6" 2/8	
Ogee Do. Do.	" 1/9 2/- 2/6 3/3	
Rain-water pipes with ears	" 1/9 2/7	
Extra for shoes and bends	each 4/4 5/11	
Do. stopped ends	" 1/11 2/4½ 3/7 4/-	
Do. nozzles for inlets	" 2/2 2/7 3/11 4/3	
PLUMBER.		
Milled lead and laying in flashings and gutters	per cwt.	67 0
Do. Do. in flats	"	66 0
Extra labour and solder in coated cesspools	each	6 9
Weld joint	per ft. run.	0 6
Soldered seam	"	1 6
Copper nailing	"	0 6
Drawn lead waste per ft. run	1/2 1/9 2/0 3/4 4/0	
Do. service	1/8 2/2 2/7 3/10	
Do. soil	"	6/9
Bends in lead pipe	each 1/2 1/8 2/1 2/10 3/3 8/2	
Soldered stop ends	" 11d. 1/- 1/3 1/11 2/4 4/10	
Red lead joints	" 2/10 3/6 4/- 4/11 6/6 9/9	
Wiped soldered joints	"	
Lead traps and cleaning screws	" 14/7 19/6	
Bib cocks and joints	6/4 9/7 15/4 41/-	
Stop cocks and joints	15/4 17/2 25/8 64/-	
PLASTERER.		
Render, float and set in lime and hair	per yard sup.	2 4
Do. Do. Sirapite	"	2 7
Do. Do. Keen's	"	3 7
Add sawn lathing	"	1 7
Add metal lathing	"	2 6
Portland cement screed	"	2 2
Do. plain face	"	3 3
Mouldings in plaster	per 1 girth	0 1½
One-and-a-half granolithic pavings	per yard sup.	6 9
GLAZIER.		
21 oz. sheet plain	per foot sup.	0 8
26 oz. Do.	"	1 0
Obscured sheet	"	1 1
½ in. rolled plate	"	0 9
½ in. rough rolled or cast plate	"	0 10
½ in. wired cast plate	"	1 4
PAINTER.		
Preparing and distempering, 2 coats	per yard sup.	0 9
Knotting and priming	"	0 7
Plain painting 1 coat	"	0 9
Do. 2 coats	"	1 2
Do. 3 coats	"	1 9
Do. 4 coats	"	2 4
Graining	"	2 3
Varnishing twice	"	1 1
Sizing	"	0 1
Flatting	"	0 1
Enamel	"	1 0
Wax polishing	per foot sup.	0 1
French polishing	"	1 1
Preparing for and hanging paper	per piece 2/- to 4/-	

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for employers' liability and National Health and Unemployment Act and from 1s. 6d. per £100 for Fire Insurance. The value of the information given on this page is copyright. Prices include both materials and labour.

NEW METHOD OF CON- CRETE CONSTRUCTION FOR HOUSES

A NEW system of concrete construction lately patented consists of casting concrete into its sired form and position, but instead of temporary supports a permanent mould is used which in itself forms an integral part of the finished structure. The mould consists of asbestos-cement sides 2 ft. 6 in. by 10 in. by 32 in. flanged throughout their length at the top and bottom, the ends of the sheets, or sides, being wiped to a radius so that similar character is preserved. The flanges provide a seating for successive courses and enable the sides to be added one to the other with metal connecting links, of which there are six—three at top and bottom. Those at the top are so shaped that they project above the top flange and provide a support for the succeeding course by allowing the bottom flanges of such course to be in contact with the projecting links. The sides and links are securely fastened together by inserting eyelets into corresponding holes and locking them.

For the purpose of constructing walls of different thickness links of different lengths are used. Where it is desired to construct cavity walls the method adopted is to replace the flat links at the bottom with twisted ones having notches sawn in them to receive legs of 24s. W.G. sheet metal arch piece, then to assemble before and insert the arch piece. All architectural and structural features are preserved by the adoption of standardised pieces.

The component members of the mould and special pieces are light and easily handled, are delivered to the site of building operations ready for assembling, and can be assembled by unskilled labour where and as required. The moulds are placed in their allotted positions on previously prepared foundations—butt ended, the special pieces being set to openings and corners, &c. The appearance of the whole then resembles a skeleton wall or continuous channel, into which is poured freshly mixed concrete. Succeeding courses are treated in a similar manner. In circumstances where cutting of material is essential, it is claimed that the use of an ordinary saw will quickly reduce any member to its desired form.

Asbestos-cement material has been used because it is impervious to climatic conditions and uninfluenced by contact with gas, &c., and is imperishable under usual conditions and in normal service required of building materials. The material in its natural colour is of pleasing appearance, and artistic effect can be obtained by the use of permanently self-toned material—such as terra-cotta red, russet-brown, &c. An important feature is that there are no joints or vulnerable points which can be attacked by the weather and so cause deterioration. We are informed that under stringent tests perfect adhesion between the concrete and the inside

of the moulds is found to be secured with no indication of air holes or other defects.

In cubic capacity one mould is equal to twenty bricks, but the assembled mould is equivalent in weight to just over one brick, from which it will be observed that ease and speed are dominant factors. Where extensive operations warrant the use of a mechanical mixer and distributor these factors assume greater importance. The economy in labour and time, it is claimed, is in direct proportion to the magnitude of building operations, and by comparison with brickwork—remembering that one mould displaces twenty bricks—the ratio appears to be as twenty is to one. Only one skilled artisan is said to be required to set out and supervise operations. He is followed by semi-skilled and unskilled labour in placing moulds and in mixing and casting concrete. Thus the number of skilled artisans can be distributed over a larger area or liberated for other operations, also a greater amount of semi-skilled and unskilled labour is absorbed. We understand that this method compares favourably with most methods and is about 22 per cent. cheaper than brickwork. For treatment of internal walls it is desirable first to apply a lining of Hessian cloth, after which papering or distempering can be immediately proceeded with. The patentee of the system is Mr. Maddock, of Elton, near Peterborough.

PATENTS.

APPLICATIONS PUBLISHED.*

- 236,325.—H. Tomlins: Building-blocks and walls.
- 236,327.—E. C. A. Bliault.—Strut or prop.
- 236,328.—C. de Zuttere: Processes of impregnating wood.
- 236,348.—E. W. Roberts: Portable impact tool.
- 236,361.—J. F. Downing: Grating and covers for gullies and manholes and the like purposes.
- 236,367.—J. A. Main: Means for securing roofing to purlins.
- 236,383.—C. F. Jenkin: Apparatus for measuring small relative displacements, applicable to the determination of strains in frameworks under load.
- 236,450.—Novocrete, Ltd., G. O. Cage and J. R. Garrow: Manufacture of blocks, slabs, panels, and other bodies from cement and mineralised fibrous material.
- 236,454.—A. Andre: Manufacture of sheets of cement and asbestos.
- 236,458.—G. Nicholl: Covering for roofs.
- 236,481.—C. Martin, and R. W. Snowden: Concrete and the like block-moulding machines.
- 231,141.—P. J. F. Kestner: Refractory cement.
- 236,976.—H. C. Ritchie: Reinforced-concrete structures.
- 236,989.—F. W. Roberts: Hinges for case-ment windows and fanlights.
- 237,010.—Prodor, Soc. Anon., and Dr. M. Levy: Manufacture of concrete.
- 237,020.—D. C. Davies, and A. H. Thomas: Concrete slab buildings.
- 215,357.—L. E. W. Pioda: Manufacture of Portland cement.
- 237,047.—M. Ommundsen: Window fasteners.
- 237,056.—T. Hulse: Knobs for doors, windows and drawers.
- 237,101.—S. W. Green: Woodworking machines.
- 228,909.—F. Peeters: Metal casks, and barrels.
- 237,182.—J. J. Hendrick, and Etablissements Poliet & Chausson: Process for the manufacture of artificial Portland cement which rapidly hardens and has very high resistances.
- 237,187.—G. Jaeger: Concrete-mixing machines.

* All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes accepted. † Denotes provisionally accepted.
‡ Denotes recommended for acceptance.
§ Denotes accepted subject to modification.

BALTINGLASS.—Rebuilding of the Courthouse, for the Wicklow C.C.:—

*E. Hetherington, Baltinglass..... £2,695

BOLTON.—Offices at the depot, Astley Bridge, for T.C.:—

*W. H. Orrell.

BURNLEY.—Schools in Lionel-street, at a cost of £32,000, for the Council. Plans prepared by Mr. A. Race, Borough Engineer and Surveyor:—

*Joiners' work—Clegg Bros.
*Plumbers' work—H. Nutter.
*Slaters' work—Barnes & Oates.
*Painters' work—Corporation Painting Department
*Plasterers' work—Rd. Guest.
*Masons' work—Mullen & Durkin.
(All of Burnley.)

CARNARVONSHIRE.—Reconstruction of Croesor Bridge, for C.C.:—

*E. G. Horton & Co., Ltd..... £2,909 1 6

CASTLEFORD.—Nine houses in Smawthorne-lane, and Lisheen-avenue:—

*L. J. Gallagher.

CHESTERFIELD.—Fire Station for the Corporation:—

*Thornhill Bros., Lincoln..... £21,000

DEBENHAM.—Culvert, for East Suffolk C.C.:—

*A. J. Gibbons, Crowfield £345 1 4

DEWSBURY.—115 Houses on the Ravens Lodge estate, for the C.B.:—

Mason—
*J. Donovan £24,794 12 6‡

Plumbers—
*F. Newsome, Ltd. 8,131 7 0

Joiners—
*Fothergill & Schofield (20 "B" type houses)..... 2,540 0 0

*Saml. Armitage & Sons, Ltd. (22 "B" type houses) .. 2,794 0 0

*T. Broadhead (8 "D" type houses) 916 0 0

*Wortley & Boothroyd (10 "E" type parlour houses) 1,516 0 0

*I. Bailey & Sons (24 "F" type parlour houses) 3,660 0 0

*Do. (20 "G" type parlour houses) 2,980 0 0

*Walter West (8 "G" type and three single houses) 1,657 0 0

Plasterer—
*J. Greenwood 4,114 17 0

Slater—
*J. Kellett 4,273 13 0

Painters—
*Pickles, Ayland & Co., Ltd. .. 1,047 0 2

DEWSBURY.—Sixty-four scullery-type houses on the Ravens Lodge estate, for the C.B.:—

Mason—
*A. C. Smith £11,789 18 1

Joiners—
*Dewsbury Pioneers' Industrial Society, Ltd..... 7,383 12 0

Plumbers—
*W. Scott & Sons 3,840 0 0

Plasterer—
*F. Boothroyd 1,700 16 0

Slater—
*J. Kellett 2,047 0 0

Painters—
*Pickles, Ayland & Co., Ltd. .. 466 19 10

DEWSBURY.—Construction of percolating filters, humus tanks, pumping stations, recorder houses, at the Mitchell Laithes Sewage Works, for the T.C. Messrs. J. H. Diggle & Sons, engineers, Manchester:—

*S. Johnson & Co. (Mirfield), Ltd., Mirfield £47,527 6

(Subject to the M.H. approval).

DUNDEE.—Joiner work at Markets, for T.C.:—

*Sievwright..... £419

GALASHIELS.—Twenty additional houses in Glendinning-terrace, for the T.C. Messrs. J. & J. Hall architects:—

*Mason work—R. Hall & Co.

*Joiner work—James A. Grant.

*Plumber work—J. Tweedie & Son.

*Slater work—L. McLaren & Son.

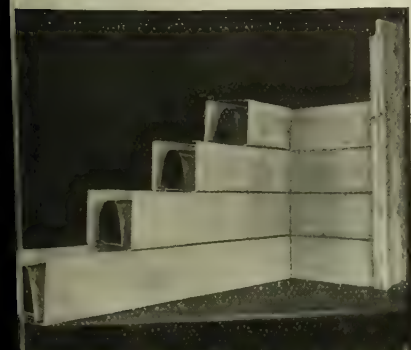
*Plaster work—Moodie & Gilchrist.

*Painter and Glazier work—J. G. Lindsay & Son

(All of Galashiels.)

GLASGOW.—Lavatory at St. Andrew's Hall, for T.C.:—

†G. & D. Carrick..... £258 10 8



New System of Concrete Construction for Houses.

GOOLE.—Two houses at West Cowick, and six houses at Snaith, for the R.D.C. :—
 *M. L. Durham, Snaith..... £3,539
 HUDDERSFIELD.—Forty-two houses on a site off New-street, for the C.B. :—
 *Masons—J. Wimpenny & Co., Linthwaite.
 *Joiners—M. Grant & Son.
 *Plumbers—E. Bould & Son.
 *Plasterers—J. Robinson & Son.
 *Slaters—Ellis, Partridge & Co.
 *Painter—J. H. Hamilton.
 *Electrician—E. Rayner.
 *Concretor—J. Cooke.
 KILKENNY.—Reinforced concrete water tank at the Sanatorium, for the C.C. Tuberculosis Committee :—
 *Connolly & Cullen, Kilkenny..... £199 10
 LEEDS.—Extensions to the Blenheim Council school, Blackman-lane, for the E.C. :—
 *A. Pickard & Co., Carlton Hill.
 LEEDS.—Dancing floor at Cookridge-street Baths for T.C. :—
 *H. & D. Leslie..... £549 13 2
 LEEDS.—Conveniences, for T.C. :—
 *A. Lambert & Son—
 Junction of Whitehall-road and Springwell-road..... £341 3 8
 Junction of Low-road and Pepper-road..... 354 15 7
 Cross Flatts-park..... 314 12 5
 Hunslet-lake..... 220 15 2
 Junction of Jack-lane and Nineveh-road..... 332 12 1
 Male and Female conveniences, Holbeck Moor..... 832 4 5
 LEEDS.—Painting at the meat market, for T.C. :—
 *Carter & Frankland..... £588 12 6

LEEDS.—Filter house at Holbeck Baths, for T.C. :—
 *H. & D. Leslie..... £727 11 10
 LEEK.—Twenty "A" type and 24 "B" type houses on the Junction-road site, for the U.D.C. :—
 *Ainsworth Cox Waiting Co., Preston—
 "A" type..... per house 4473
 "B" type..... per house 493
 LONDON.—Alterations to 8 and 9, Upper Belsize-terrace, Hampstead, for Messrs. Pitts Stores, Ltd. Mr. Wm. Gilbert, L.R.I.B.A., architect. Quantities by the architect :—
 Vigor & Co..... £1,469
 Snelling & Rayment..... 1,357
 Slade & Son..... 1,288
 Schooley & Son..... 1,234
 W. Harper, Ltd..... 1,210
 Snewin Bros..... 1,189
 MAIDSTONE.—Widening of the High-street bridge, for the T.C. :—
 *Holloway Bros, London..... £49,341
 MARKET HARBOUROUGH.—Shelter, &c., at Springfield-street depot, for U.D.C. :—
 *T. Hickman & Sons..... £934
 NEWCASTLE.—Erection of offices at the corner of New Market-street and Pilgrim-street, for the Carlisle House Co. :—
 *S. Easton, Ltd., Newcastle.. (about) £170,000
 OLDHAM.—Bridge over Ironmonger's-lane, for Messrs. F. & G. Pollard, of Longley-street. Plans prepared by Messrs. Dixon Hill & Co., 52, Union-street :—
 *General building work—S. & J. Smethurst, Ltd., Oldham.
 *Steelwork—Heenan & Froude, Ltd., Newton Heath.
 ORRELL.—Eight houses in Moor-road, for the Corporation :—
 *Clough & Gaskell, Ltd.
 OXENDON.—Six houses at Wilbarston, for the R.D.C. :—
 G. Norman & Janes..... £3,057
 *Tailby & Son..... 2,739
 SAXMUNDHAM.—Culvert, for East Suffolk C.C. :—
 *Gibbs & Rodwell..... £286 6
 SHILDON.—New sewerage disposal works, for the U.D.C. Messrs. D. Balfour & Son, engineers, New-castle :—
 *N. Davison, Shildon..... £11,331
 SKELLOW.—Baptist Chapel. Messrs. Garside & Pennington, architects, Ropergate, Pontefract :—
 *Leadby, Firth & Whittington, Don-caster..... £9,000
 SOUTH SHIELDS.—Eighty-six houses at Boldon Colliery, for the R.D.C. :—
 *W. D. Allison, of Whitburn..... £34,386
 SWEFFLING.—Culvert, for East Suffolk C.C. :—
 *C. A. Green & Sons, Ltd., Ipswich.. £327 5
 THORNE.—Forty houses in Ellison-street, for the R.D.C. :—
 *Franks & Thorley, Thorne.
 THORNTON.—Church and school, for the Mission of St. John's, Little Thornton :—
 T. Riley, Ltd., Fleetwood..... £1,600
 YEOVIL.—New municipal offices, public library and museum, for the T.C. :—
 *Bird & Pippard, Yeovil..... £18,950

BEST SEASONED
OAK FLOORING

AUSTRIAN
 RUSSIAN
 JAPANESE

PREPARATION TO ANY SECTION
 CAN BE UNDERTAKEN AT ONCE

SYDNEY PRIDAY & Sons

WAINSCOT OAK MERCHANTS (EST. 1880)

Phone
 CLISSOLD
 6254
 (2 lines)

OAK WHARF
 RAVENSDALE ROAD
 LONDON. N.16.

FITZPATRICK & SON

Masons and Paviors,

455, OLD FORD ROAD, BOW, E.3

Phone: EAST 4808.

Granite Setts and Kerb (redressed and second-hand), York Paving Spur Stones, Granite Chippings, and Granolithic and Sett Paving.

HIGH-CLASS
FLOORINGS

of every description in

WOOD BLOCKS. PARQUETRY
 SEASONED T. & G. WAINSCOT OAK
 TEAK AND MAPLE.

FACTORY AND ROADWAY PAVING

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASANT

WANDSWORTH, S.W.18.

(Phones: Putney 1700 & 2457)

School & Hospital Stoves

MAKERS OF

WRIGHT'S IMPROVED and also SHORLAND PATENT
 WARM AIR VENTILATING PATTERNS.

GEO. WRIGHT (LONDON) LIMITED

19, Newman St, Oxford St., London, W.1
 Burton Weir Works, Rotherham.

J. GLIKSTEN & SON

LIMITED

Specialities in

SEASONED

HARDWOODS

MAHOGANY WALNUT
 JAPANESE, AMERICAN and
 WAINSCOT OAK, TEAK,
 WHITEWOOD, &c.

REGISTERED OFFICE AND WHARF

CARPENTERS RD.
 STRATFORD
 LONDON E.15

Telephone :
 EAST 3771
 (5 lines)

Telegrams
 GLIKSTEN 'PHONE
 LONDON

J. J. ETRIDGE, J^r. Ltd

SLATING AND TILING

SLATE MERCHANTS

CONTRACTORS.

Inspections and Reports made on
OLD OR FAULTY ROOFS

in any part of the country.

Telephone: Bishopsgate 1944/5, or write,

Bethnal Green Slate Works,

BETHNAL GREEN, LONDON, E

BRABY'S

CALVANIZED

WORKS:

LONDON

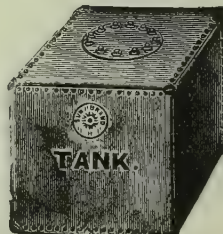
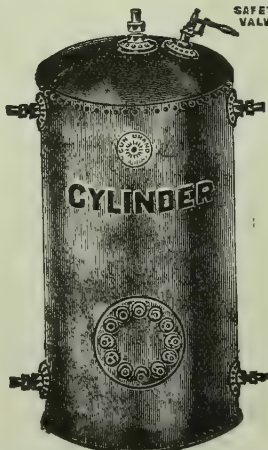
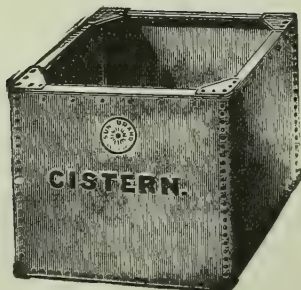
DEPTFORD

LIVERPOOL

BRISTOL

GLASGOW

FALKIRK



Chief Offices :

352 to 364

EUSTON RD

LONDON,

N.W.1

SATISFACTION GUARANTEED.

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

DL. CXXIX.—No. 4,310

SEPTEMBER 11, 1925

THE INVESTIGATION OF TIMBER DISEASES

WE have often pressed the claims of investigation which shall lead to the betterment of building, to the conservation of supplies, and to improvements which shall, by increasing the life of structures, decrease their ultimate cost. The promotion of investigations is always difficult in this country, which, in past days of Britain's trade supremacy, managed so comably on the rule-of-thumb methods of our forefathers, and specially difficult in lean years when funds, even for the necessary necessities of carrying on trade, are difficult enough to obtain. That much can be done, however, by propaganda and personal effort is evidenced by progress in certain fields which attention has been specially drawn, the importance of research in which has eventually been sufficiently impressed to produce some definite action, either officially or by private munificence or both. Recent instances of such munificence in this country are not wanting; for example, there are the gifts to the chemical department at Cambridge University of a great trading combination, and the Rockefeller bequest, aided by a substantial Treasury grant, for a coming research institution in London.

Among researches which have recently received stimulus those on the diseases of plants, more particularly in reference to conditions in our tropical colonies. The need and facilities and the aim of such researches have been ably advocated and explained by Sir Arthur Shipley in *The Times*, and one of the recent articles referred to losses due to fungi. Now, while in general have nothing to do with buildings, there are certain species of such importance where timber is concerned that a plea of research upon them should hardly require arguing, as pointed out in correspondence following the articles referred to, very little is being done to grapple with these. We refer, of course, to what is known as "dry rot," a popular designation for diseases caused by various fungi in rotting timber. Let us first try to visualise the case for investigation.

Prior to the war the value of imported timber for constructional purposes was computed at worth eighty millions, which home production must be added, and it is thus evident that the question of its preservation is no insignificant matter. We have no statistics before us, but to visualise the position, we assume our annual consumption of such timber as worth £100 millions, and that half of this goes into permanent buildings. On a life of forty years, the capital value of such material is £2,000 millions. The timber now procurable is admittedly inferior to that of past times when only well matured trees were felled. Now a very large proportion of all soft timber is sapwood. This bears on the problem, as dry rot attacks much more readily in sapwood than in heart wood, the former being of more open structure and containing nutrient starch, upon which it can feed. Again, in the efforts to provide cheap houses there is a growing tendency to use soft timber, which is not looked upon with disfavour by the authorities responsible for housing schemes, and owing to the scantlings of such timber, most of it—we had nearly said soft—is sapwood. There is yet another aspect of the case for investigation. American writers tell us that it has been found that wood infected by dry rot is more inflammable than sound timber. It has, indeed, been stated that under favourable conditions large pieces of half-rotted timber will ignite at a temperature as 290 deg. F. Here is an inducement for insurance offices to interest themselves in this problem. It may be fairly asked: "Is the disease sufficiently prevalent and widespread to justify any concerted action to prevent or reduce it?" Unfortunately the general indifference

to this plague has resulted in an entire absence of statistics on its extent, but inasmuch as the malady is known by almost every householder and cases are the common experience of everyone responsible for building structures, the extent of the malady should be sufficiently apparent. To the reader of this journal, at least, no argument on this point will be necessary.

We may therefore turn to consider what is being done to mitigate a very serious cause of national loss. The Natural History Museum possesses a department devoted to mycology, which is always ready to assist the public in identifying fungi, and which, we believe, carries out some work on dry rot fungi, but only as a small part of an enormous field covered by this science, which embraces hundreds of genera, not to speak of species which have nothing to do with building timbers whatever. The Ministry of Agriculture, which used to issue a leaflet on dry rot, but as far as we know did not engage in investigation, has discontinued this publication. The Imperial College possesses a department of woods and fibres under a teaching professor, who has made a considerable study of dry rot, but whose duties cover a very wide field of which this is merely a fraction. The Industrial Research Department, after an existence of more than a decade, and representations from the R.I.B.A. almost since its inception, has now taken up this subject, but as far as we have any information only in a limited manner.

Briefly, therefore, it would appear that we have no organization in this country which is dealing with the problems of diseases in structural timbers on a scale at all adequate to the importance of the subject. That there is much to be learnt no one will deny. As yet we cannot be told the genesis of dry rot, at what stage in the history of timber its appearance is possible, whether it is necessarily associated with certain other forms of life (as, for instance, with the presence of *Coniophora*), which seems so common a circumstance with most diseases, the exact conditions of spore germination, the limit of spore life, the most efficient fungicides, and a host of other information necessary for the retention of house timber in a healthy condition. Some excuse might be made for a lack of knowledge which is in part admittedly only obtainable by protracted research, if any action were being taken to mitigate this disease. Such action appears to be nobody's business, and the building owner, and thus the nation, suffers accordingly. The condition under which timber is stacked at our docks, where new timber is frequently piled upon decaying and infected material, is most discreditable, while many timber yards show entire disregard for the danger involved by insanitary conditions. The R.I.B.A. has recently taken up the former matter with the prospect of useful results.

Meantime the architect and the building contractor remain in a most difficult position as regards this disease. The former may usually be relied upon to provide in his construction such safeguards against damp, stagnant air, and infection as are possible, while the contractor looks to the timber merchant to sell him sound timber, but the constant actions at law show that the element of risk is always present, and it will remain present until this matter is taken up on a large scale as a serious national problem. No private person can be expected to embark on the work requisite, but if the Government were to come forward with a really adequate scheme it would be spending money which, as the correspondent alluded to remarks, would produce a very large return in the saving annually of many thousands of pounds, and surely in these days when so much depends upon adequate knowledge, one of our largest industries, in which so much public money is being sunk in connection with housing, has a right to such expert investigation.

NOTES.

Housing Progress. SPEAKING at the opening of the Building and Allied Trades Exhibition at Birmingham (which is reviewed elsewhere in this issue), Sir Kingsley Wood, Parliamentary Secretary to the Minister of Health, gave some interesting figures on the progress now being made in housing. For the first time to our knowledge a member of the Government has been optimistic enough to state in public that not only are houses now being built in sufficient numbers to meet the normal requirements of the population, but that at last some headway is being made in reducing the actual shortage. In the year ended March 31 last, no fewer than 136,889 houses were completed, of which total 117,817 were working-class dwellings. From the information at his disposal, Sir Kingsley Wood was able to tell us that last year's total would this year not only be equalled but passed, provided that no stoppage occurs.

Private Enterprise in Housing. AFTER the experience with municipal and Government building during the past few years, it would appear from the figures given by Sir Kingsley Wood that private enterprise in house building is again becoming firmly estab-

lished. Out of the total number of houses built during last year no less than 116,261 were put up by builders, and only 20,628 by local authorities. We have always contended that the erection of houses should be left in the hands of those who have made a lifelong study of the business, and it is a significant confirmation of our views that private enterprise has been responsible for 82 per cent. of the total during the record house-building year.

Payment for Wet Time.

DEFINITE steps are now being taken to secure payment to building operatives for time lost when it is impossible to carry on during inclement weather, and all with the best interests of the industry at heart will wish the idea success. The proposal has been formulated by the operatives, and the cost is put at 1s. per week per head. This, we take it, is only a tentatively suggested figure, for it is highly probable that the cost would be very much less; that, however, is a point to be discussed with the advice of actuaries, and the question as to whether such a fund should be controlled by the operatives alone or by a joint committee representative of employers as well as workers is to be decided. It is a sound feature of the suggestion that only 50 per cent. of

the full rate should be paid for "time, for there are few who would stand about on half wages in inclement weather when they could earn a wage. This is an instance of the work which architects can do when they take an active interest in the mundane affairs of the industry which they are so vitally connected with. It is undoubtedly an outcome of the suggestion made by Mr. Maurice Webb, Mr. Fletcher, Mr. Alan Slater and a few other architects who investigated the problem a few months ago, and surprised not only themselves but many building employers as well when they showed how small a sum would be necessary to ensure that the operatives should have at least their normal income when prevented from working through no fault of their own.

Crosby Hall.

It is good news that Crosby Hall, removed from the City so long ago as 1885, and re-erected at Chelsea under the skilful direction of Messrs. Wright and Godfrey, is at last likely to be put to new uses for which it was intended. It will be recalled that when the Hall was threatened with destruction—its value as a site in Bishopsgate having been appreciated for commercial development—the University and City Association decided to rebuild it in Chelsea (by a happy



A View in the Basilica, Palace of Arts, British Empire Exhibition.

SIR JOHN W. SIMPSON, P.P.R.I.B.A., and MR. MAXWELL AYRTON, F.R.I.B.A., Architects.

on, on the garden of Sir Thomas More, e-time occupant of the Hall) with a view its being ultimately incorporated with home for women graduates of the mpire. This scheme, owing to the lack funds, has languished through the serving years, and though the Hall s been used for functions associated th the British Federation of University omen's movement, it has always looked her forlorn in its isolated position and her unkempt surroundings. At last e buildings with which it is to be linked as an organic element are, it is reported, out to be commenced in part, though it ll be some time before the whole scheme n be carried through to completion. e learn that there will be ultimately a idential wing at the north corner, placing No. 15, Danvers-street, and a ath tower and a main frontage in eyne-walk, the total accommodation the new buildings being sufficient for 0 graduates, with a large quadrangle. e Great Hall will be used normally as e common dining-room except when quired for more important occasions. is gratifying to know that this uncom- only interesting scheme is at last coming fruition. To preserve old buildings is laudable aim enough, but to put them a really useful purpose is better still, d the final justification of preservation.

Town Planning. VERY instructive and interesting is the paper just issued by the Ministry of ealth in the form of extracts from its annual report. That some real activity being shown by local authorities and hers in the development of town- nning is evident enough; the increase the number of local authorities engaged the preparation of schemes is one of the idences, especially as in so many cases ir action is not obligatory. Whatever y be the outcome of the coal mining ustry in Kent it is well to know that need not devastate "the fair land of nt" if the recommendations of the ent elaborate report are followed. (See East Kent Regional Planning Scheme iew, by Professor Abercrombie.) It is ively that real difficulties lie in the h of anticipatory plans for the pro- tion of areas against the encroachment industrial enterprise and the securing more and more open spaces, but if l authorities once fully realise their onsibilities and opportunities we may e for a reasonable measure of security the future of suburban and country s. If the East Kent coal and iron elopment assumes the proportions ed for and the population is more a doubled, it will readily be seen t a serious problem such development gs before us.

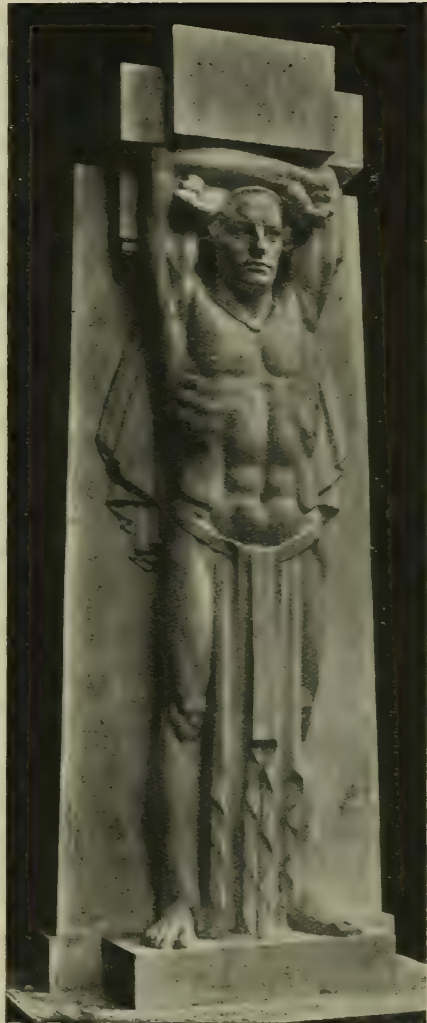
Bronze foundry. IN a letter from the chairman of a bronze foundry in this country ding for the special patronage of our industry against that of other atries, we may note the difficulty

which besets our sculptors in placing orders for bronze castings. Mr. Wm. Morris complains that Mr. John Tweed insists on placing bronze foundry on a strictly commercial basis, but if bronze founding in this country does not pay whilst it is trying to compete with foreign production, what is to be done? Mr. Tweed says if bronze foundries here do not reduce their prices he will give his work to Belgium, but we suppose he will not refuse to let them try what they can do in competition.

On the Choice of an Architect. YEARS and experience do not necessarily go with the production of the finest art, though they may count for much in the practical things of life. Ideality, imagination, and generosity of sentiment are mostly the gifts of our younger men, but we think the Leeds and Yorkshire Architectural Society have raised rather an awkward question when they plead for the essential right of Leeds architects to make the design of a new street in that city. There is a certain sweet reasonableness in the idea that Leeds should be able to look after itself in the matter of art, and that if the art of Leeds is not as good as the very best that could be obtained elsewhere, Leeds should anyhow be satisfied with it. We have great sympathy with local ambitions and would see them encouraged to the utmost, and we have also great sympathy for the young, but we fear Leeds has invited some rather awkward comparisons. After all, would not an open competition for the new street be a more satisfactory affair than an attempt to nail the matter entirely down to Leeds itself?

The "Voice" of the Public. WHEN the new temporary Waterloo Bridge was first opened it was generally noted that the bulk of pedestrians made a point of using it in preference to the old one. Now that the novelty of the new bridge has worn off the old one has returned to favour; whereas its pavements are again almost as crowded as they ever were, especially during the morning and evening rush hours, the one gangway of the steel bridge attracts a mere handful of pedestrians. Without wishing to attach any undue significance to this phenomenon (for it has to be remembered that the new bridge deviates twice from the straight line of crossing—and your Londoner is not given to unnecessary peripatetics) it is not unreasonable to deduce that the old bridge has an appeal that the new one does not, and consequently that any substitute bridge will not, possess. Can it be that in this instinctive selection we have, at last, some reliable evidence of the real views of the inarticulate public?

Sculpture in Concrete. THE figure illustrated on this page is the work of Mr. F. W. Doyle-Jones, A.R.B.S. A massive male figure supporting a masonry block, symbolising



A Figure in Cast Concrete.
By Mr. F. DOYLE-JONES, A.R.B.S.

Strength and Immutability, the statue has been made to demonstrate the possibilities of carved concrete or synthetic stone as a medium of expression for sculpture—particularly when the method of casting the preliminary shape is that of the latest sand mould procedure, a method similar to that used for bronze casting. The colour difficulty has been overcome by a "mix" of Portland cement and crushed Portland stone. This concrete, especially when "tooled" has all the appearance of Portland stone.

A Walpole Hanging Cabinet. THE Victoria and Albert Museum has recently acquired by purchase, out of funds of the Murray Bequest, a hanging cabinet of kingwood, designed by and for Horace Walpole in 1743. The doors are enriched with eighteen ivory plaques, mostly of Italian seventeenth-century work, and on the pediment are ivory figures of Palladio, Fiammingo and Inigo Jones, by Ver-skovis after Rysbrack. It is exhibited for the present, together with other important new acquisitions, on the ground floor of the Museum in the Central Court (Room No. 43).

GENERAL NEWS

Irish Beet Sugar Factory.

Messrs. Lippens have decided to erect their new £400,000 factory at Carlow, and are acquiring thirty acres of land for the site.

Asthall Manor.

Lord Redesdale has sold 2,000 acres of the Asthall estate. The mansion and about 120 acres remain for sale by private treaty. Asthall is an "E"-shaped Tudor manor house.

Peterborough Road Scheme.

Peterborough's £250,000 scheme for widening Narrow-street has been confirmed by Parliament. State help towards the scheme is being sought by the Peterborough City Council.

Central London Site Sold.

The Beecham Trust have completed negotiations for the purchase from Mr. S. B. Joel of the important London site which was formerly Meux's brewery, Tottenham Court-road, an area of 2½ acres.

Proposed Hudson Bridge.

Preliminary surveys are now being made for a 3,500 ft. bridge across the Hudson River from Manhattan to New Jersey to relieve the growing congestion of motor traffic in and out of New York.

Major Tibbets' Memorial.

The Benares Hindu University has accepted from Mrs. Walter Tibbets a museum of Eastern and Western Art and Travel, to be erected to the memory of her late husband. The museum will be designed by Sir Edwin Lutyens.

Proposed Whitechapel Road.

A new arterial road to be constructed between Whitechapel High-street and the new Beckton by-pass road has been suggested by Mr. B. J. Belsher, Borough Engineer and Surveyor of Stepney. The proposal is receiving the consideration of the officials of the Ministry of Transport.

Future of Platt Hall.

The Manchester Corporation Committee which is considering possible uses for the Georgian mansion known as Platt Hall, recently decided to ask the Council for another month's time. It has been suggested that the hall might be used for an exhibition place for such things as architectural models; as an adult education centre, a welfare centre, a nurses' home, a convalescent home, a branch of the tuberculosis office, an art gallery, or a place of amusement.

Housing Figures.

A chart has just been prepared by the Garden Cities and Town-planning Association, showing the total result of the housing energy of this country in the last five and a half years. The yearly totals of all classes of house building are of special interest.

	Houses.
1920	15,811
1921	86,669
1922	102,298
1923	80,816
1924	121,679
1925 (six months)	60,982
Total	468,255

Central London Estate Sold.

Lord Howard de Walden has sold a large block of his estate to the Audley Trust, Ltd., of Moorgate, London, E.C. The portion of the estate sold comprises about forty acres extending northwards from Oxford-street to Euston-road and eastwards from Oxford Circus and Regent-street to Wells-street. The price is said to be about three million pounds.

The Cambrian Archaeological Association.

The Cambrian Archaeological Association recently held its annual meeting at Llandilo. In the general committee's report reference was made to the excavations at the Gaer, Brecon, and on Offa's Dyke, and the Ysceiog Circle, Flintshire, the dyke having been surveyed and

the original contours of its ditch determined in three places. The excavation committee reported that Mrs. Gough, the owner, had granted permission for the excavation of the Roman fort at Caerhun, and that Dr. Wheeler had promised to undertake the work after the completion of the Gaer.

Newcastle Gaol.

Newcastle Gaol having been closed by Home Office order, the building and site have been acquired by the Newcastle Corporation, and demolition work is being carried out. One-third of the site is to be occupied by a new telephone exchange, and the remainder will be utilised for business premises.

Proposed Glasgow Cinema.

The Dean of Guild Court has recently passed plans for the erection of what will be Britain's largest cinema, to accommodate 4,000 persons, which will be situated at the corner of Renfield and Renfrew streets. The plans also provide for a dance hall, and have been drawn up by Mr. John Fairweather, F.R.I.B.A.

New Hartlepool Lighthouse.

At a recent meeting of the Hartlepool Port and Harbour Commissioners it was decided to invite tenders for the erection of a new lighthouse in place of the existing temporary building, on the site at Hartlepool Heugh approved by Trinity House.

East Sheen Lodge.

East Sheen Lodge, Richmond, formerly the residence of the Duke and Duchess of Fife, and in the eighteenth century the home of the first Lord Palmerston, is being converted into flats.

Manchester Town Planning.

The Town-planning Committee is proposing a number of new road works estimated to cost £300,000, and to provide employment for 1,270 men for an average period of six months.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

Proposed New Shirehouse Extension, Norwich.

SIR,—I was an unsuccessful competitor in this competition, and therefore not "an outside observer" (as is Mr. Sositts, whose letter you published last week) and beg to be permitted to pay a tribute to the simple solution to a very difficult problem achieved by Mr. A. Dunbar Smith (to whom I am personally unknown). I think that the existing building has little or no architectural merit; but, in any case, I cannot conceive that any one would attempt to introduce its general feeling into any building planned primarily for offices. It must be a matter of opinion as to whether the successful competitor has "made too great a contrast between the old and new"—mathematics or any exact science will never determine such questions; and, following Mr. Sositts, one cannot give reasons, but only opinions, or "general feelings."

My main point in writing, however, is to protest against the growing tendency to criticise competition awards. If the competition principle is wrong, either as a whole or in part, let us scrap the thing and introduce a new system. I am not going to argue for or against the system as we know it, but I would insist that the time to criticise a competition is when the conditions are issued. In any case let us abide by the umpire's decision. Next to winning a competition it is always the greatest pleasure to be beaten by a better man. Whatever can be said against the competition system as we know it, the best designs, in my opinion, are invariably placed first.

Bristol.

J. H. H.

COMPETITION NEWS

Dundee Secondary School.

In response to an invitation by Dundee Education Authority, thirty designs for a proposed new academy in the West End of the city have been submitted to Mr. J. A. Carfrae, assessor, Edinburgh, who has made the following award:—1, Messrs. Thoms & Wilkie, architects, Dundee, probable cost £104,554; 2, Messrs. Maclaren, Soutar, & Salmond, architects, Dundee, probable cost £88,700; 3, Messrs. Gall & Hay, architects, Aberdeen, probable cost £82,334 19s. [The winning design is illustrated on pages 392-395 of this issue.]

Manchester Town Hall, Extension.

The scheme for the extension of Manchester Town Hall by the erection of a new Reference Library and other buildings, on the large plot of land bounded by Lloyd Street, St. Peter's-square, Peter-street, and Mount-street, has been approved by the Manchester City Council. It is recommended that the report and scheme of the city architect be generally adopted and that competitive designs be obtained for the erection of the necessary buildings, which will be put up "as opportunity arises and occasion requires."

Coventry and Warwickshire Hospital.

Proposed New Ward Block.

The promoters of this competition having decided to revise the conditions in accordance with the R.I.B.A. Regulations, the President has appointed Mr. C. E. Bateman, F.R.I.B.A. as Assessor.

Competitions Open.

	Particulars published in "Builder."	Sending in date.
Drammen Bridge (Drammen-selven). Premiums: 10,000 Norwegian crms., 8,000, 6,000. Apply Gov. Eng., Drammen..	May 29 ..	Oct. 1
Newcastle Fire and Police Station. Premiums: £500, £300, £100. Mr. P. S. Worthington, F.R.I.B.A., Assessor..	June 12 ..	Oct. 8
Town Hall, &c., Pretoria. Open to architects residing in South Africa or Registered under Architects' Act, of 1909, Transvaal. Assessor to be appointed by R.I.B.A. Premiums: £250, £150, £100..	— ..	Nov. 30
Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply parties, 35, Old Queen-street, S.W.1	April 24 ..	Dec. 3
New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300, and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool	Aug 7 ..	1926. Jan.
Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London	Aug. 14 ..	Mar. 1
Plan for construction of Conference Hall, for League of Nations, Geneva. International Competition. Sir John Burnet being British representative on Jury of Assessors. 100,000 Swiss francs to be divided among architects submitting best plans. Programmes will be deposited in due course with R.I.B.A., 9, Conduit-street, where intending competitors should apply. Single copies from Secretary-General, League of Nations, Geneva, on payment of 20 Swiss francs.	Jan. 2 ..	—
*Sevenoaks Housing Scheme...	— ..	—
*Topsam Public Hall	— ..	—
*Enlargement of Carnegie Hall, Dingwall	— ..	—
*Flee-wood Hospital	— ..	—

* Competitions when "warned" or vetoed by R.I.B.A. are starred.

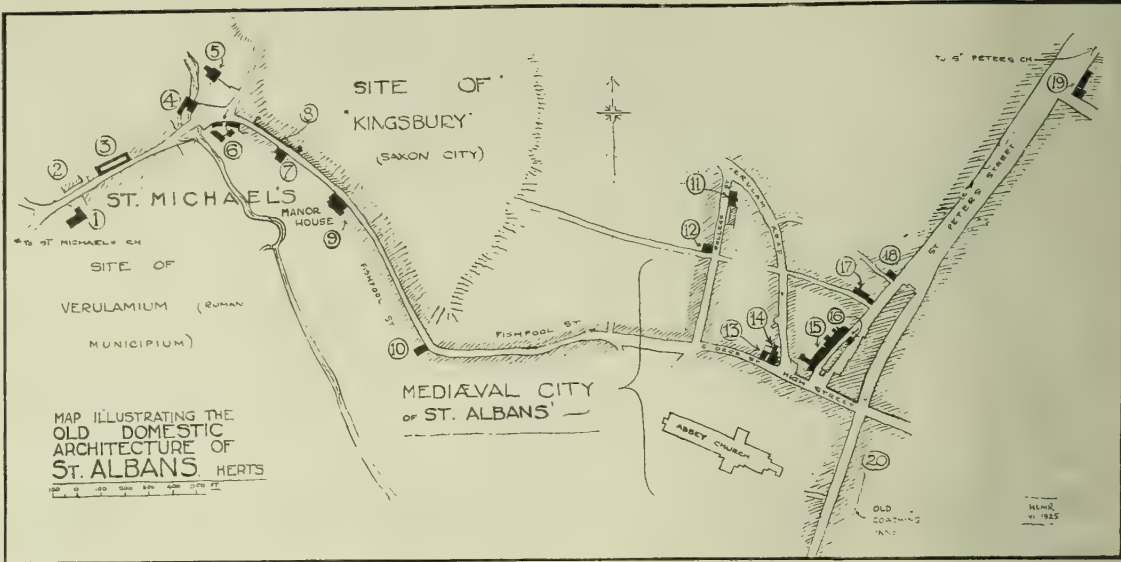
The Monument Urn.

The Urn at the top of the Monument is being regilded. The Urn, which was last gilded in 1914, is made of copper and is 46 ft. de The contractors estimate that they will 700 books of British double-beaten gold.



Arley Colliery Housing Scheme, Gun Hill, Arley.

MESSRS. DOUGLAS G. TANNER & ARTHUR L. HORSBURGH, Architects. (See p. 386.)



OLD DOMESTIC ARCHITECTURE OF ST. ALBANS

By H. V. MOLESWORTH ROBERTS

Part I.—Mediæval and Early Renaissance.

REPEATED visits to St. Albans, Hertfordshire, have endeared this romantic town to the writer and revealed more and more of its hidden and little-known treasures; but they have also shown how insidiously yet rapidly some ancient landmarks are being effaced or mutilated, and have implanted the conviction that such relics of a more beautiful past must, as far as possible, be described and recorded, ere they are lost for ever. A brief but, it is hoped, stimulating sketch of the smaller domestic architecture of St. Albans is here given.

St. Albans, like many other ancient cities, retains in its streets and by-ways many charming houses and cottages, ranging from perhaps the late fourteenth and fifteenth centuries to the eighteenth century and later, the earlier ones half-timbered and sometimes targetted, with overhanging upper stories, and the later ones weatherboarded or of brick. The oldest of all are to be found in those streets in the heart of the town which together form the site of the mediæval city.

One of the earliest, as far as we are able to determine, is that used as a furniture warehouse by Messrs. Mayle, on the north side of George-street, near the angle of the modern Verulam-road (14 on plan), though an unsightly brick edifice has been built on the actual corner.

This building, probably dating from the fifteenth century, is of two stories; on the south (George-street) front, the lower story has been converted into a shop front, but the projecting upper stage, slightly inclining forward with age, is of vertical timbering with restored filling, retaining several ancient oak mullioned lights with foliated heads; larger windows seem to have been inserted in the seventeenth century. The side of the rear part of the building, overlooking a yard to Verulam-road, is stuccoed, but has a long, many-light mullioned window of early date. The George Inn, adjoining Messrs. Mayle's on the west of its George-street front (13 on plan), claims an early fifteenth-century date, but has long since been refronted in brick.

Another and more celebrated building is the Moot House, on the west side of the Market-place (17 on plan), now used by local publishers and printers (Messrs. Gibbs & Bamforth). It probably belongs to the fifteenth century, though now much mutilated and difficult therefore to adjudge. Its projecting upper story has been stuccoed over for years, and regrettably enough has been recently pebble-cast, with

apparently false timbering; a fine opportunity has here been lost, one feels, for exposing the old timbering, which is probably *in situ*, and merely repairing the infilling where necessary.

The old houses in French-row, farther south than the Moot House, make up a very romantic group looking from the market place (15 on plan), and include the historic Fleur-de-Lys Inn. These are likewise probably of the fifteenth century, though the overhanging gables, somewhat out of the perpendicular, have been plastered over. Opposite, and looking on to the market place, is a higher building of the same character, bearing a seventeenth-century date, but probably earlier, now occupied by Messrs. Boots (16 on plan). A Tudor fireplace has recently been discovered and rebuilt in an upper room.

Two larger monuments further from the mediæval city, but outside the scope of this article, should be mentioned here in chronological order—the red-brick ruins of the so-called Sopwell Nunnery, south-east of the city, really a Tudor house on the site of a nunnery; and the larger ruin at Gorhambury, several miles to the west, an Elizabethan mansion built for Lord Bacon, but now half destroyed.

Afterwards the City of St. Albans came to be extended, when what is known as the Early Renaissance period developed its own manners of design. The High-street and George-street were continued westward by a long winding road (Fishpool-street), which dipped southward and then north-westward to skirt the strip of



HALF-TIMBERED BUILDING, GEORGE-STREET.



MOOT HOUSE, MARKET-PLACE: VIEW FROM DAGNALL-STREET.



EARLY BUILDINGS IN FRENCH-ROW,
LOOKING SOUTH.

land between the Anglo-Saxon mound called Kingsbury Castle on its right, and on its left the old fish-pool of those early times; the delightful river Ver, almost the sole survivor of the pool, still washes the foot of the gardens behind the unpretentious houses in the street to which we have referred. Building operations were apparently carried along this Fishpool-street about the late sixteenth and seventeenth centuries, from which period much work of the character of this time survives.

The earlier buildings in this street appear to be those at its north-western end, near the bridge by which it is continued into the picturesque village of St. Michael's; several cottages at this spot, containing early leaded windows, appear to come down from the sixteenth or early seventeenth century (6 on plan). There are some half-timbered houses (3 on plan), with brick filling possibly later in date, in St. Michael's-street, across the bridge, including the "Three Bells" public house. In Fishpool-street, again, are the buildings of St. Michael's Manor; the westernmost or Garden House (7 on plan) is of Stuart type, with its one-mullion one-transom ground-floor windows, and its pargeted panelled treatment; the house proper, farther east, is more distinctively Georgian, at any rate in its fenestration (9 on plan). Proceeding along the same curious and tortuous thoroughfare, terraced on the north side at a higher level because of the Saxon elevated ground behind it, one finds many and various houses of different dates; a tall building in the re-entering angle (10 on



HOUSES AT FOOT OF FISHPOOL-STREET, LOOKING SOUTH.

plan) is especially interesting as having once formed part of an inn, and has the same traditional treatment of pargeted bands carried round the windows and along the framing—a characteristic relic. The top story is a projecting one, well emphasising the angle of the street, and the same may be said of many two-storied cottages, stuccoed and re-windowed, but undoubtedly early in origin, intermixed with vertical fronted work of the "Anne" type, with wooden casements.

The more imposing but less picturesque work of the late seventeenth and eighteenth centuries, built in the so-called "Queen Anne" and "Georgian" styles, will be considered in Part II.

(St. Michael's Church was fully described in *The Builder* of March 4, 1921. Remains of the fourteenth-century domestic buildings of the Benedictine Abbey, recently excavated, were illustrated and described in the issue of June 6, 1924).

BOOK REVIEW

Principles of Architectural Composition. By ARTHUR STRATTON, F.S.A., F.R.I.B.A. (London: Messrs. B. T. Batsford, Ltd., High Holborn.) Folio. 25s. net.

Of recent years many books have been compiled dealing with the history of different phases of historic building. While these books have the merit of describing the pictorial qualities of the buildings, the text, more often than not, fails to give that analytical criticism which is essential. This book, which is primarily intended for students, is to be regarded as a key to certain forms followed by architects in Classic and Renaissance times. The author does not attempt to explain the theory of architectural design, neither does he enter upon the discussion of rules which are binding. On the contrary it is evident that he has researched among rare examples of Classic architecture and has had recourse to prints and drawings which are not generally known. The bias of the book is towards the best examples of the late Renaissance architecture, but models which became general in the eighteenth and nineteenth centuries are included. The various chapters of the book deal with the plans, elevations and sections. The work begins with examples of squares, circles and octagons, and from thence leads on to combinations of these figures. There are numerous drawings and diagrams of staircases, halls, vestibules and corridors. In another place, the dome, the spherical vault, and variations of these features, are dealt with. There are a few elevations which demonstrate the principle of rhythm and simplicity, some interesting screens, and other examples.

Nearly one hundred years have passed since a book of this nature was issued for the benefit of architectural students, the classic example being Durand. Perusing the book, one finds little to disagree with. There is no effort, either

obtuse or obscure, on the author's part to force the study of period architecture. He deals with the simpler types of building. The author approaches his subject as a teacher with a wide knowledge of the needs of his students, and he has demonstrated in each chapter a need for sequence in three dimensions.

The book has the distinction of being clear in its statements and sound in its historic references. Most people will be familiar with some of the buildings illustrated, but they should be delighted with the small scale diagrams which show the true value of simplicity. The author has produced a work which architects will regard as giving tangibility to ideas which have long been nebulous. Most people acquainted with historical buildings have retained some general idea of plans and geometrical form. The system advocated by the author was worked upon by the architects of the Renaissance, and later, who sought form from amidst the ruins or antiquity; and who, by ingeniously combining certain time-honoured classical ideas, produced buildings which they claimed to be original. Such methods are not exactly applicable to-day, but without a guide there is a danger of architects' designs becoming reminiscent of precedent and lacking in value of composition. That this fault is prevalent in the work of students becomes obvious when the elementary works of the schools are reviewed. Architects also are often prone to be careless in matters of geometrical arrangement. The author's book, excellent as it is, does not provide a remedy for illiteracy in architectural composition; it has been composed with a view to demonstrating the principles which underlie designs which are Classic in inspiration.

The author wisely keeps to forms which are in the main symmetrical. He has endeavoured to show that buildings must have a geometrical basis, and, within the limits he has imposed upon himself, he has reduced the motives to a reasonable summary.



HALF-TIMBERED AND PARGETED HOUSE,
FISHPOOL-STREET.



HOUSES IN FISHPOOL-STREET.

LEADING CONTENTS. PAGE

THE INVESTIGATION OF TIMBER DISEASES..	379
NOTES	380
GENERAL NEWS	382
COMPETITION NEWS	382
CORRESPONDENCE	382
OLD DOMESTIC ARCHITECTURE OF ST. ALBANS	384
BOOK REVIEW.....	385
DUNDEE SECONDARY SCHOOL COMPETITION	395
ARCHITECTS' AND BUILDERS' INQUIRY	
BUREAU	398
THE BUILDING TRADE	399
SETTING OUT A STAIRCASE.—II.....	399
BIRMINGHAM BUILDING EXHIBITION	401
NEW BUILDINGS IN LONDON	404
BAD WEATHER BUILDING INSURANCE	
SCHEME	405
CONTRACTS, COMPETITIONS, ETC.....	406
PROPOSED NEW BUILDINGS AND OTHER	
WORKS	409
NEW BUILDINGS IN SCOTLAND.....	411
TRADE NEWS	411

ILLUSTRATIONS

Working Drawings of a City Bank and Office Building.

The working drawings, by Mr. H. Thearle, which we illustrate in this issue, have been awarded the Holland & Hannen and Cubitts Prize, Liverpool University School of Architecture. A subject such as a "City Bank and Office Building" is set first as an "esquisse and projet," and then afterwards as a problem in construction, for all students during the fourth year of their course. Those specialising in design make it their final "working drawings" scheme, but students taking Constructional Honours proceed from this to the more advanced problems of architectural construction. The programme asked for a combined bank and office building, the basement, first floor and mezzanine to comprise the bank accommodation, while the remaining floors were to be utilised for office purposes. The restricted size and rectangular simplicity of the subject enables the student to go very thoroughly into all the minor difficulties which would arise in actual practice. During the preparation of the drawings, lectures in steelwork design and construction are given, and very careful calculations of the steel frame to the building are demanded, the rough workings, from the concrete under the grillage to the rivets in the sections, having to be presented along with the completed drawings. It is necessary that the drawings should be in accordance with the local by-laws.

The Arley Colliery Company's Housing Scheme.

We published in our issue of December 1, 1922, a plan showing the proposed layout of this scheme, and at the same time the contractor began the erection of the houses. After 2½ years' work, the main roads are made complete with drainage, water supply, and sewage disposal work, and nearly 300 houses are occupied with a population of 1,700 inhabitants. Shops have been built to provide for the needs of these people, and it is now proposed to extend the scheme by a further 250 houses, complete with playing fields and recreation ground. In order to complete the village, it is proposed to erect a hotel, designed on the most up-to-date principles. The building will contain a large club room and public bar, both of which will be supervised by the landlord from one point, and will be capable of accommodating about 600 people at one time. In addition to this, ample provision will be made for supplying food in a comfortable coffee room. Adjoining this building are to be spacious gardens with a bowling green, skittle lawn and tea gardens. It is also proposed to erect a mission church, which can be used for meetings and social events. A site has also been reserved for a cinema. In the centre of the village is a good recreation ground surrounding a bandstand. The majority of the houses contain a living room, parlour and three bed-

rooms with a scullery and bathroom. The external walls are constructed with Haunchwood common red facing bricks, with the plinth and chimneys in brindle bricks; the internal walls with Messrs. Morris & Shaw's common bricks, and roofed with Rosemary tiles of varying shades. The architects are Messrs. Douglas G. Tanner and Arthur L. Horsburgh, of Birmingham, and the contractor Mr. F. G. Bursill, of Leamington Spa.

Warehouse and Offices, Lancaster.

This building is a steel-framed structure, and had to be strongly constructed for use as a linoleum depot. It is built of brick generally with a stone front to Cable-street in local dressed stone. The long front to Water-street is in buff bricks supplied by the London Brick Co. The floors are of steel and concrete with boarded or wood block finish. The roofs are flat, covered with asphalt. The general contractors were Messrs. Rainey Bros., Barrow-in-Furness, and the following were sub-contractors: Steelwork, Messrs. Banister Walton & Co., Manchester; asphalters, Messrs. T. Faldo & Co., Ltd., London; steel windows, Messrs. H. Hope & Sons, Ltd., Birmingham; lifts, Messrs. Wm. Wadsworth, Bolton; wood block floors, Messrs. Hollis Bros., Hull; heating, Messrs. Saunders & Taylor, Manchester; electric lighting, Mr. Inman, Lancaster. Mr. Charles B. Pearson, F.R.I.B.A., of Lancaster, was the architect.

Irlam Conservative Club.

This club provides the following accommodation:—Basement: Beer cellar, heating chamber, engine room for electric light plant, storage. Ground floor: Entrance hall and lounge bar, smoke room, card room, billiard room (4 tables), lavatories. First floor: Public hall to seat 450, supper room, servery, ladies' and gentlemen's lavatories, crush hall. Second floor: Steward's quarters. The general

contractors were Messrs. The Hall Construction Co., Ltd., Salford, and the sub-contractors were as follows: Plumbing and glazing, Mr. James Fletcher, Weaste, Manchester; plastering, Mr. J. Grundy, Irlam; slating and tiling, Messrs. Porter & Brew, Irlam; painting, Messrs. Jones & Jackson, Ltd., Manchester; wood block & maple flooring, Messrs. Hollis Bros. & Co., Ltd., Hull; terrazzo, Messrs. Diespeker Ltd., London; terra-cotta, Messrs. Hathern Station Brick and Terra-Cotta Co., Ltd., Loughborough; heating and ventilating, Messrs. E. Hatton & Co., Ltd., Manchester; 2½-in. facing bricks, Mr. Samuel Appleton, Northwich; steps, Messrs. The Christie Patent Stone Co., Stretford; steelwork, Messrs. Heenan & Froude, Ltd., Manchester. The architect is Mr. J. E. Kewell, L.R.I.B.A., of Manchester and Irlam.

Dundee Secondary School.

Some notes on the design placed first in this competition are given on page 395.

MEETING

MONDAY, September 14.

Institution of Public Lighting Engineers.—Second annual meeting and conference. At Leeds, Monday, September 14 to Wednesday, September 16.

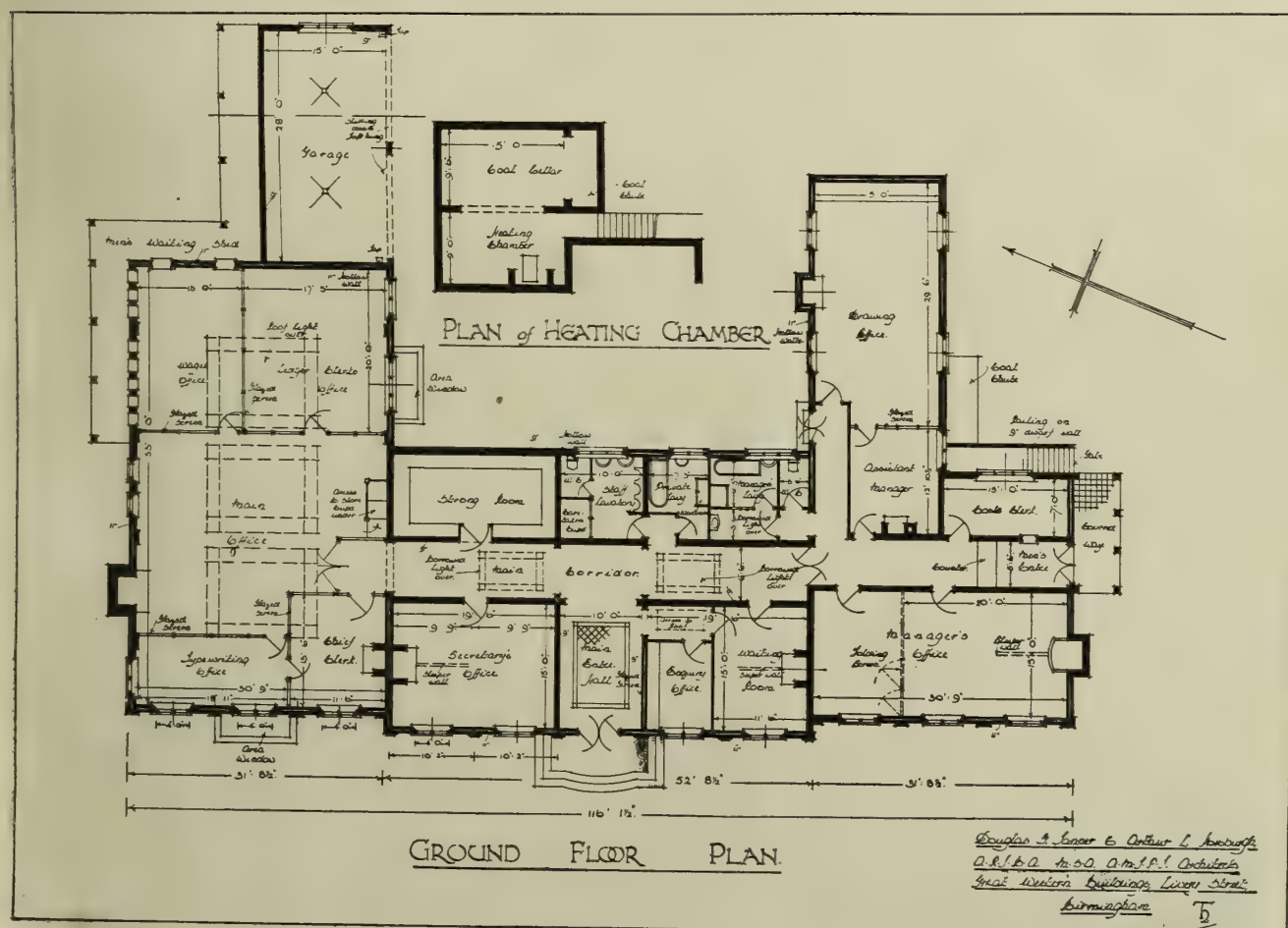
Crosby Hall.

The erection of the residential wing at the north corner of Crosby Hall, Chelsea, will be begun within the next month or two, and when completed this old City Hall, built in 1499, will become the centre of hall of residence in London for 200 university women doing post-graduate work. Messrs. Wratten & Godfrey are the architects.



Design for a Bank and Office Building.

By MR. H. THEARLE, Liverpool University School of Architecture.
(See Working Drawings in this issue.)



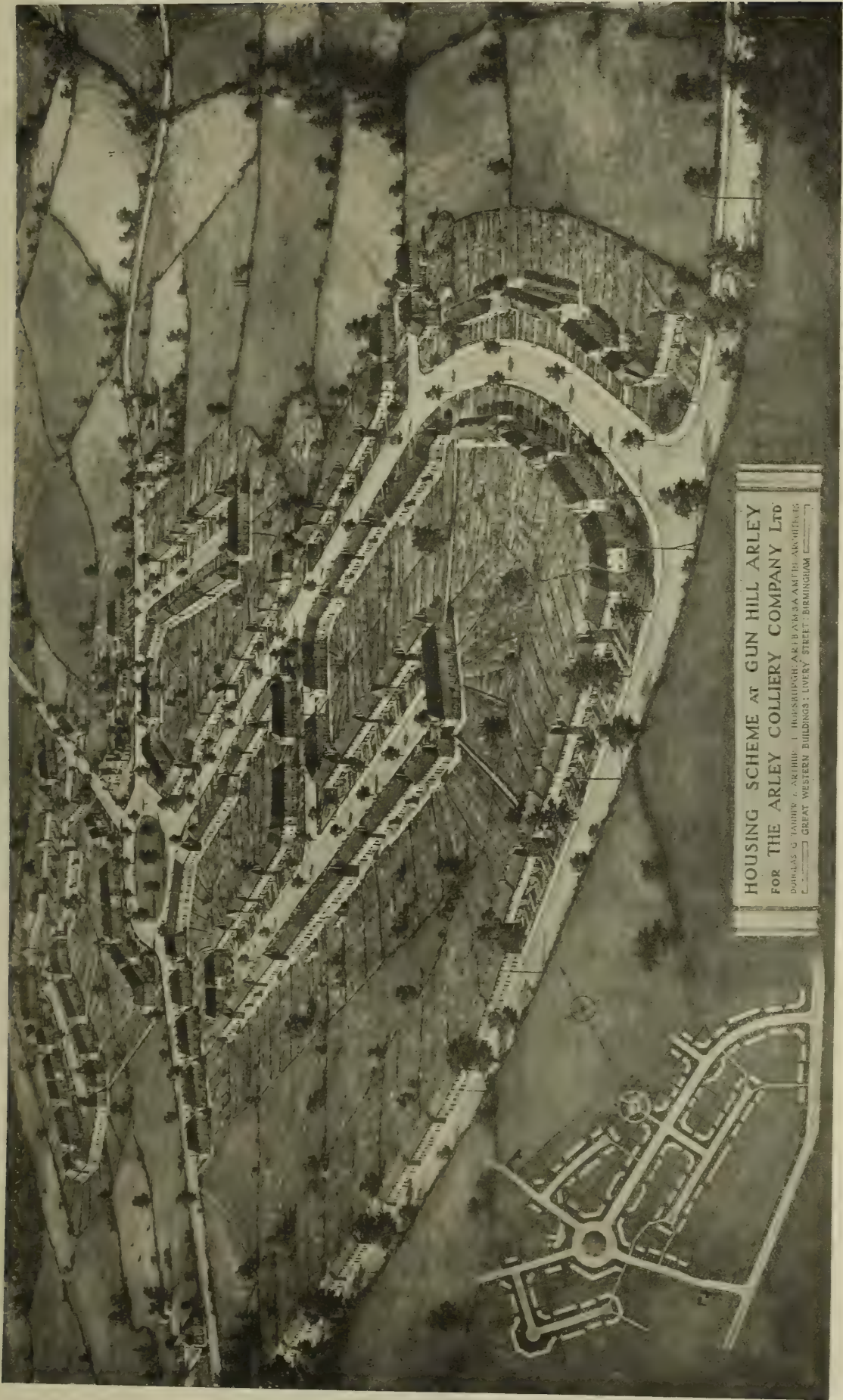
Arley Colliery Housing Scheme, Gun Hill, Arley: The Company's Offices.

MESSES. DOUGLAS G. TANNER & ARTHUR L. HORSBURGH, Architects.

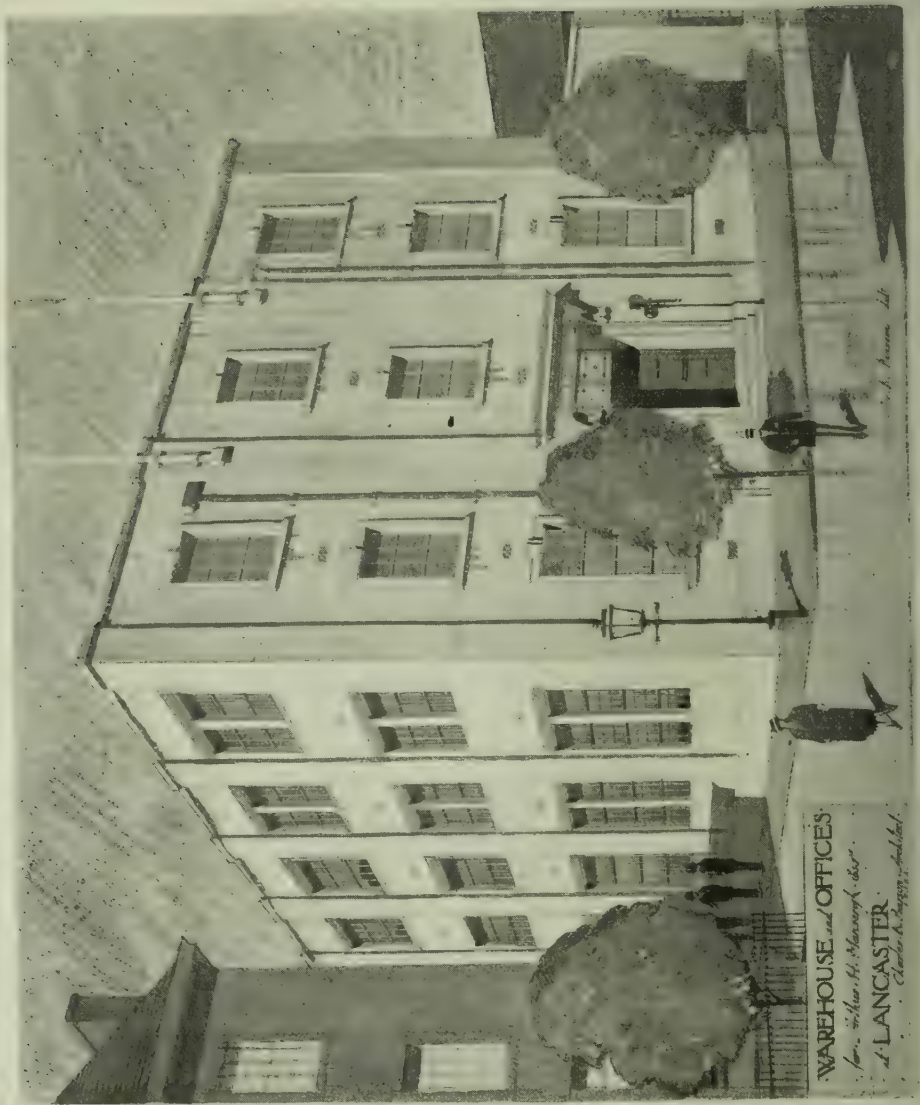


Arley Colliery Housing Scheme, Gun Hill, Arley.

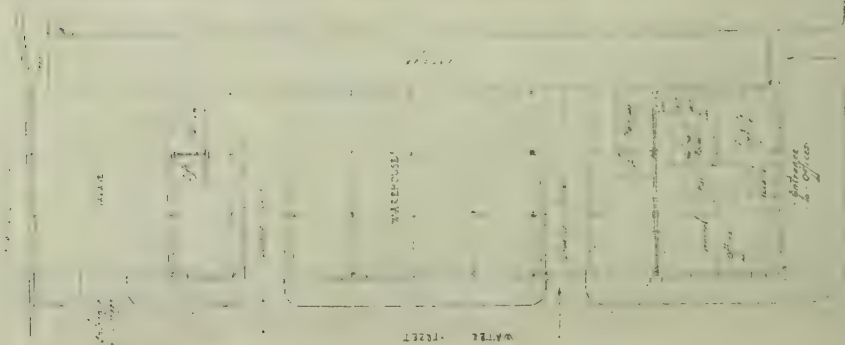
MESSRS. DOUGLAS G. TANNER & ARTHUR L. HORSBURGH, Architects.



HOUSING SCHEME AT GUN HILL ARLEY
FOR THE ARLEY COLLIERY COMPANY LTD
DOUGLAS & TAYLOR & ARTHUR
HUGHES & CO
ARLEY & CO
LIVERY STREET
BIRMINGHAM

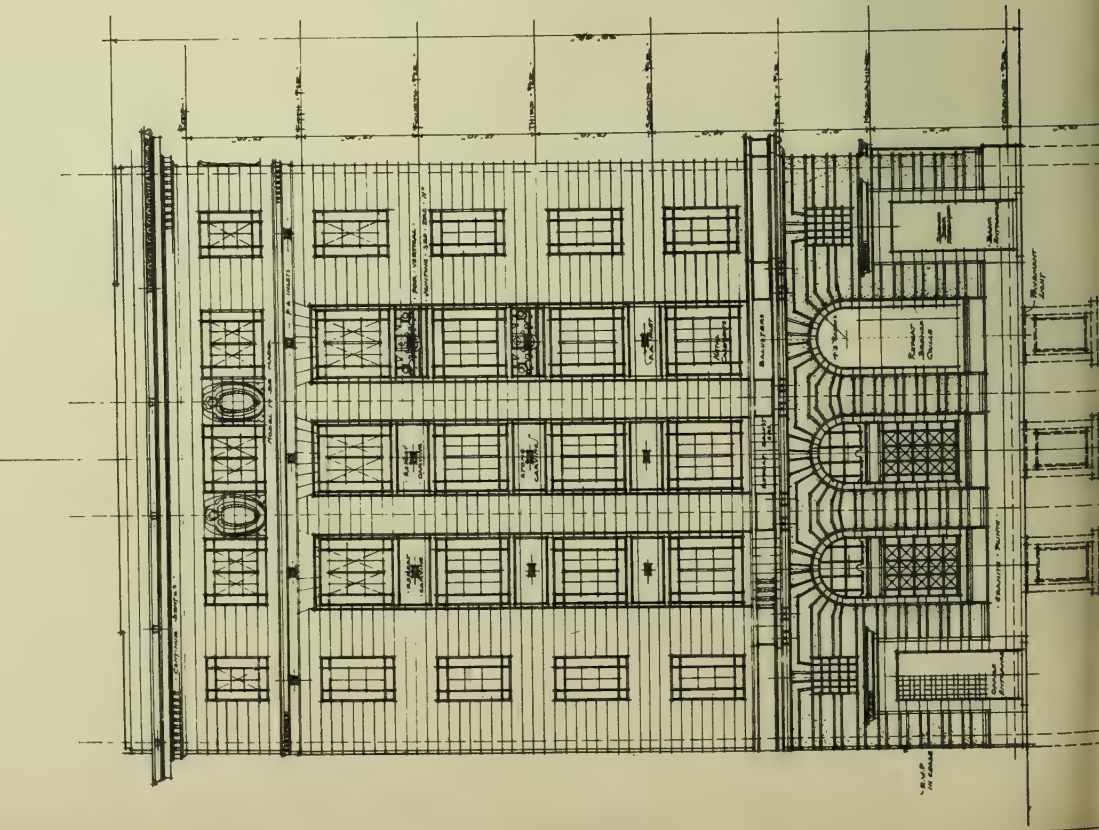
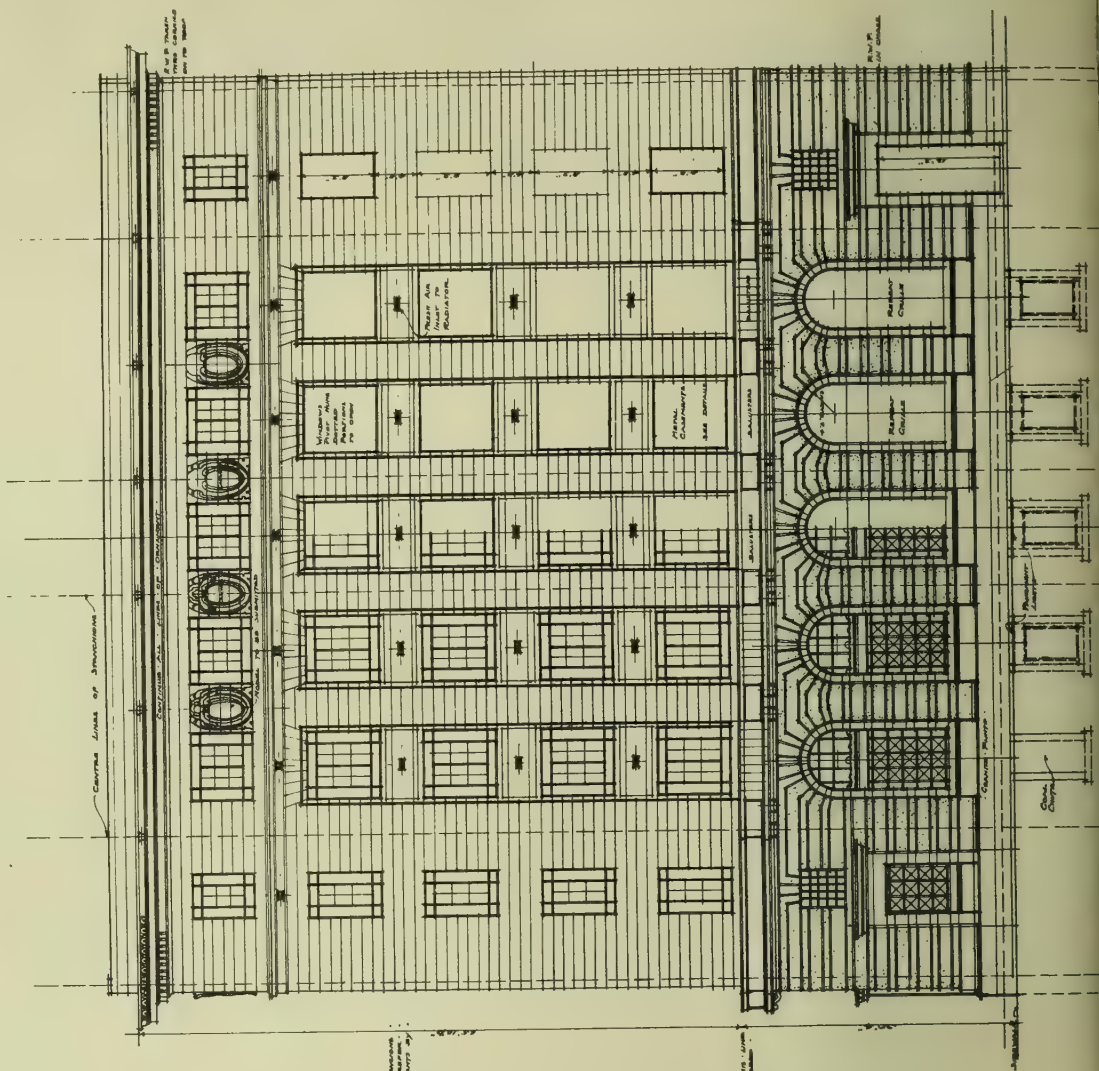


Warehouse and Offices, Lancaster.
MR. CHARLES B. PEARSON, F.R.I.B.A., Architect.



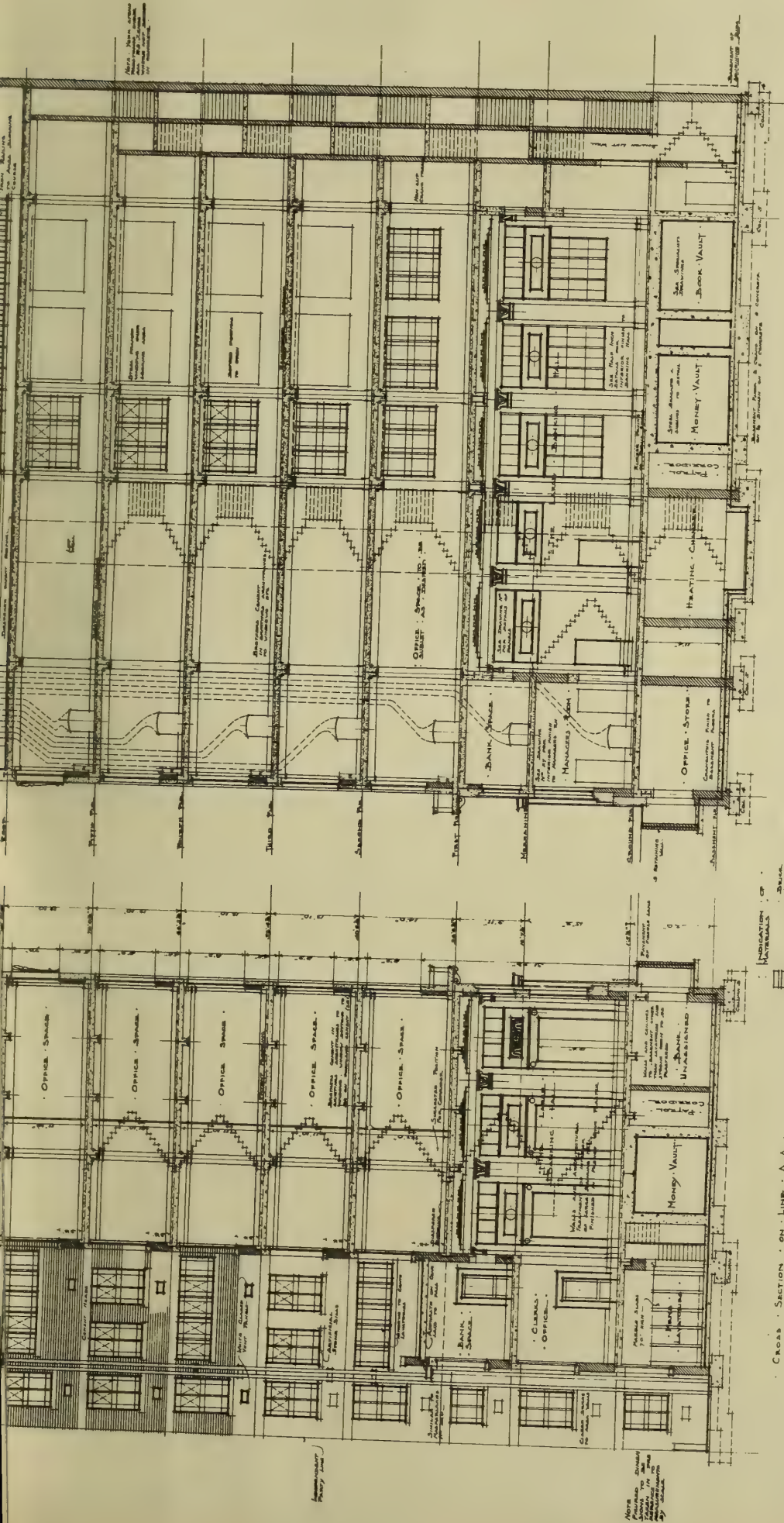
THE GROUND FLOOR PLAN
of the Warehouse and Offices
at Lancaster.
J. Pearson Ltd.





Notes: - Planes - Dimensions
- for all parts of building
- for all parts of building
- for all parts of building

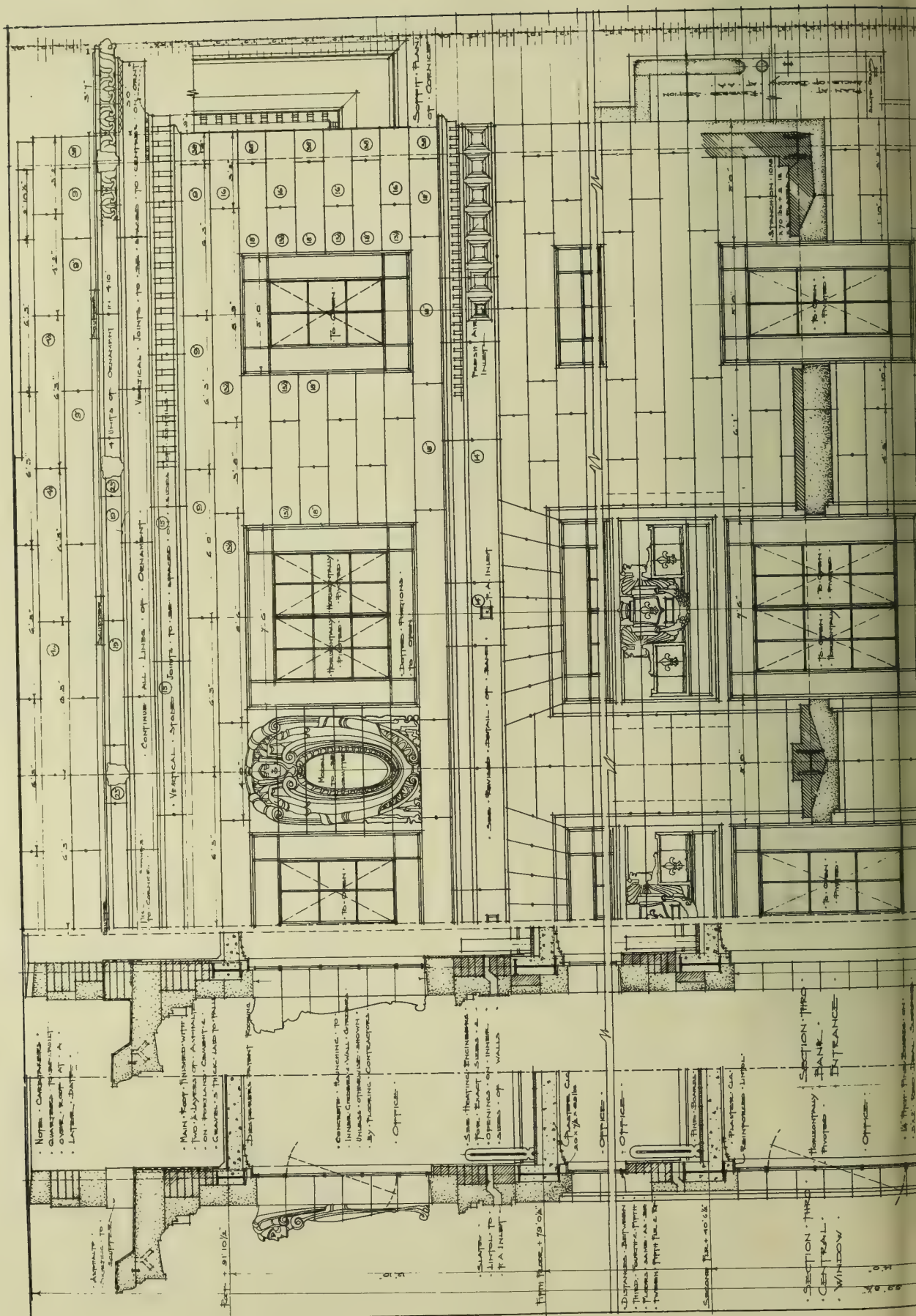
Notes: - Planes - Dimensions
- for all parts of building
- for all parts of building
- for all parts of building

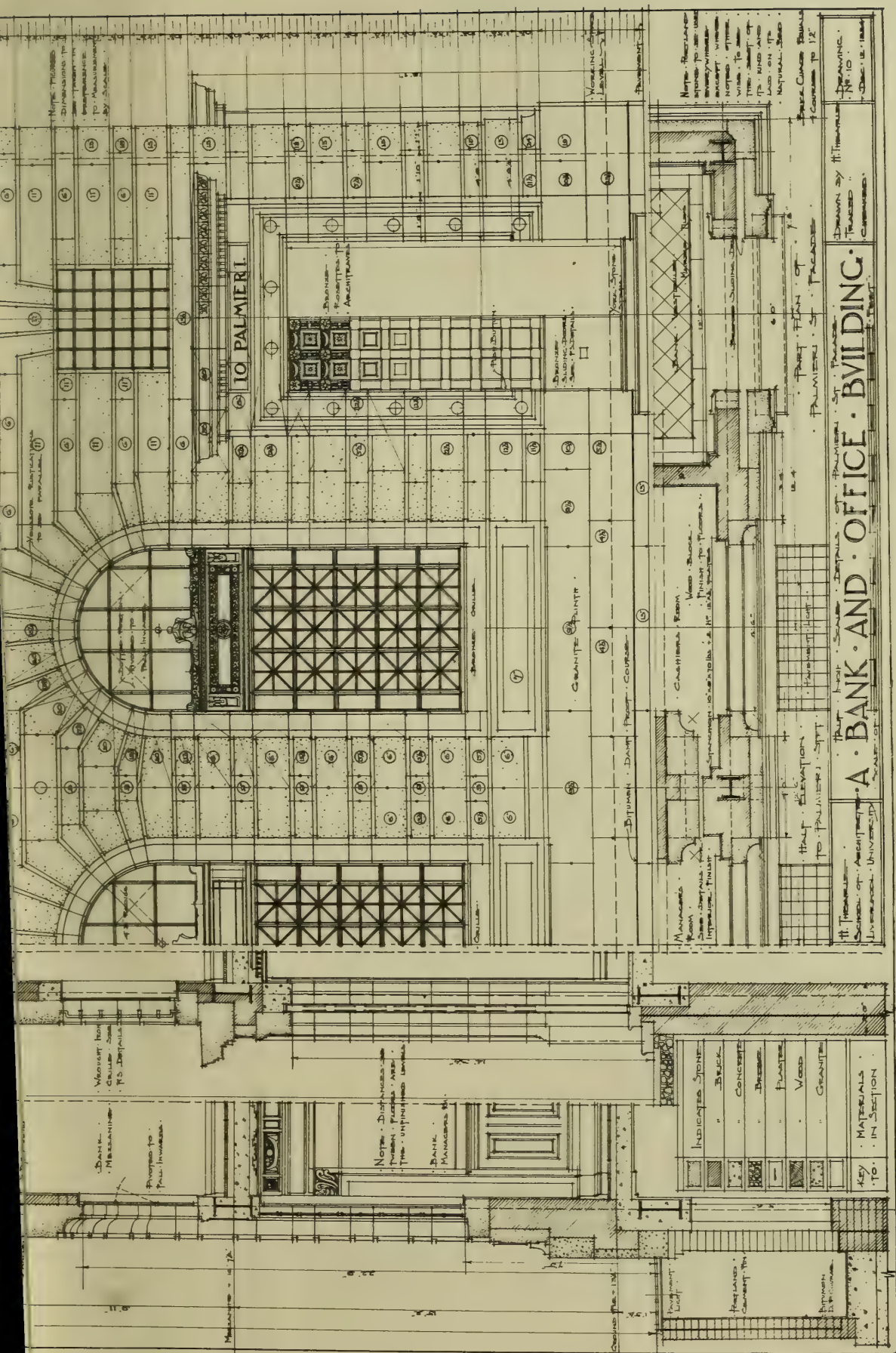


SECTIONS TO EIGHTH SCALE.
A CITY BANK AND OFFICE BUILDING.
SCALE OF 1/8" = 1'-0"

DRAWING NO. 1
DATE: APRIL 1925

WORKING DRAWINGS AWARDED THE HOLLAND & HANNEN AND CUBITT'S PRIZE,
LIVERPOOL UNIVERSITY SCHOOL OF ARCHITECTURE. BY MR. H. THEARLE.

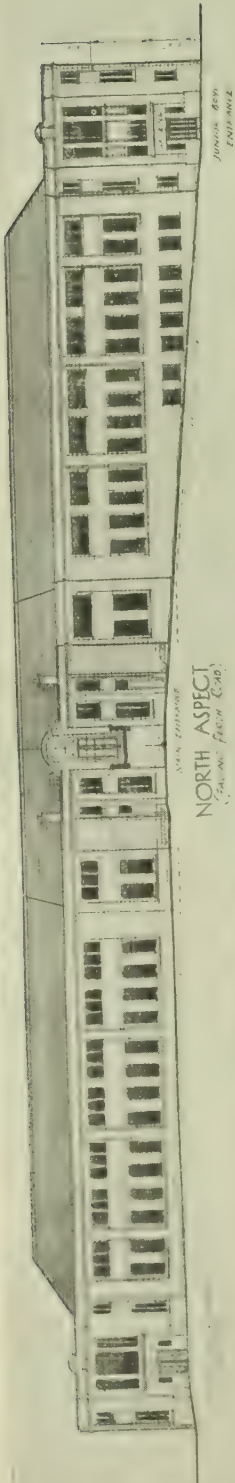




WORKING DRAWINGS AWARDED THE HOLLAND & HANNEN AND CUBITT'S PRIZE,
LIVERPOOL UNIVERSITY SCHOOL OF ARCHITECTURE, BY MR. H. THEARLE.



Irlam Conservative Club. Mr. J. E. KEWELL, Lic.R.I.B.A., Architect.



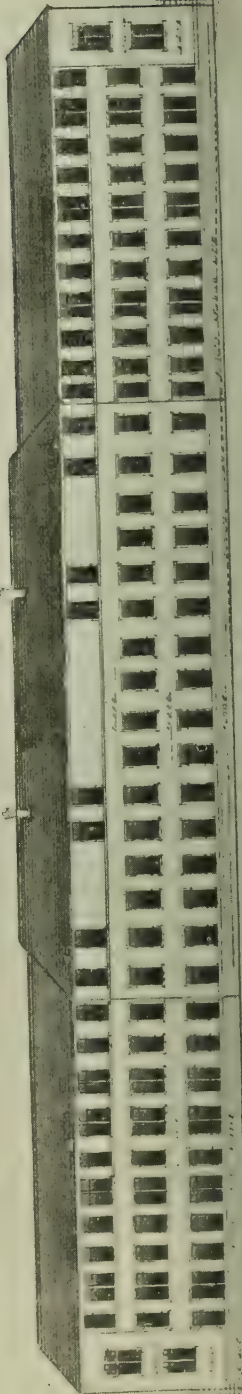
NORTH ASPECT
TAKEN FROM C&O



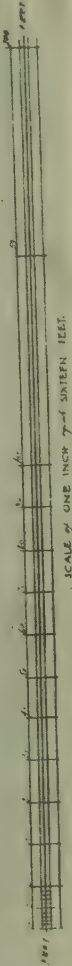
WEST ASPECT

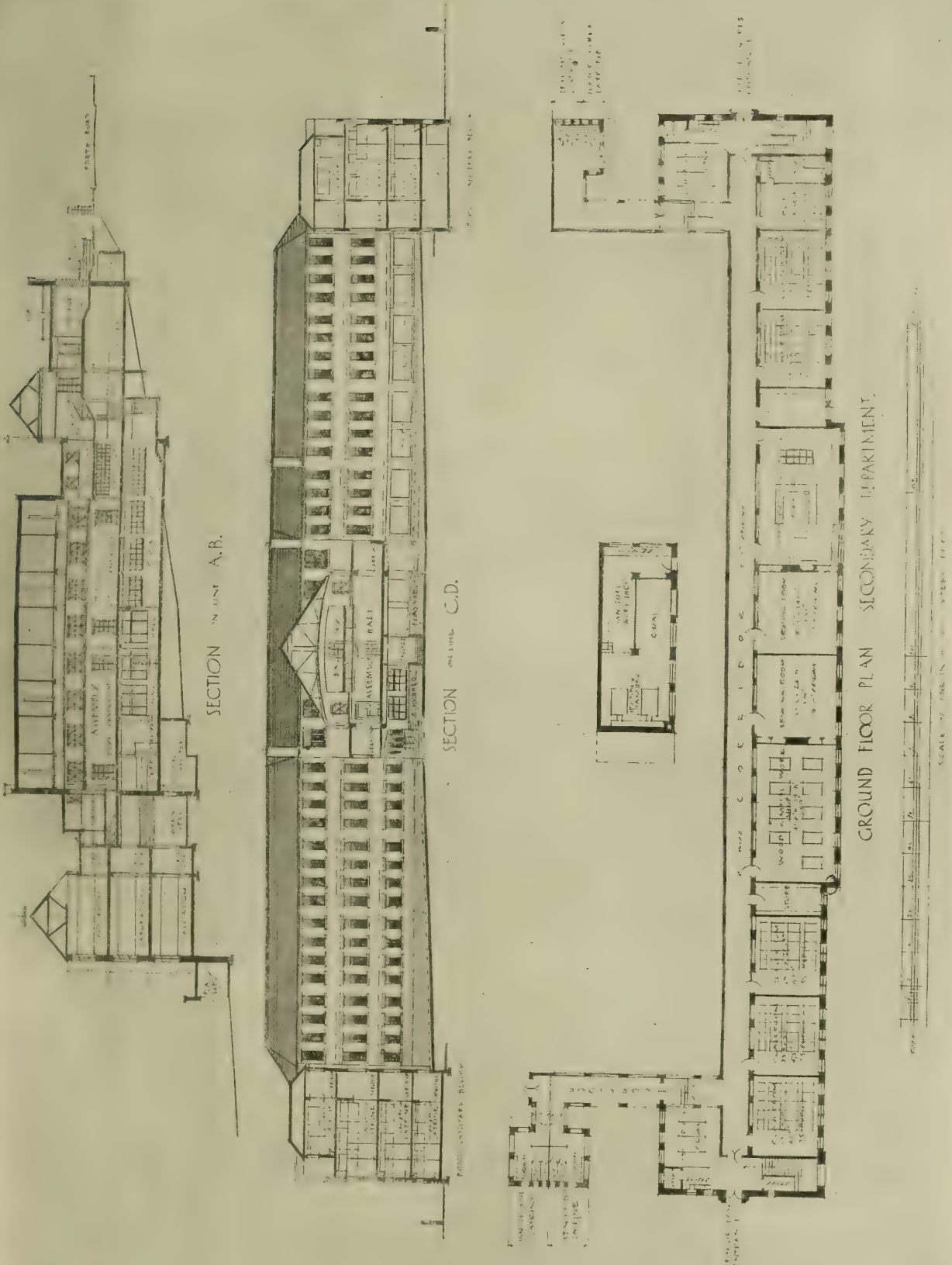


EAST ASPECT

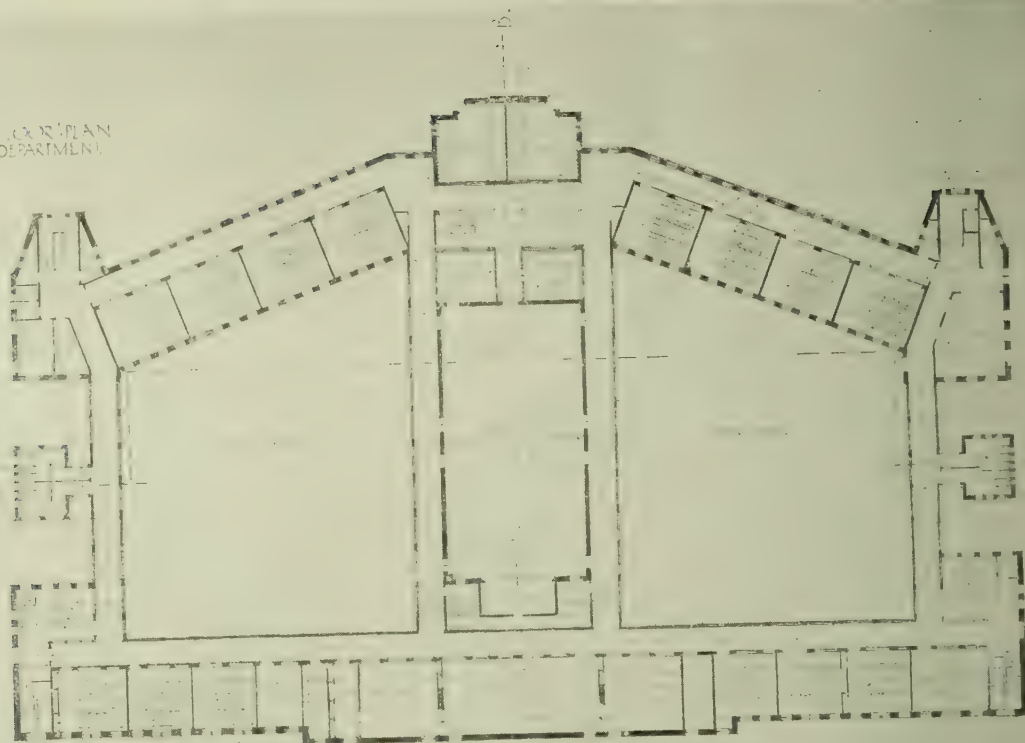


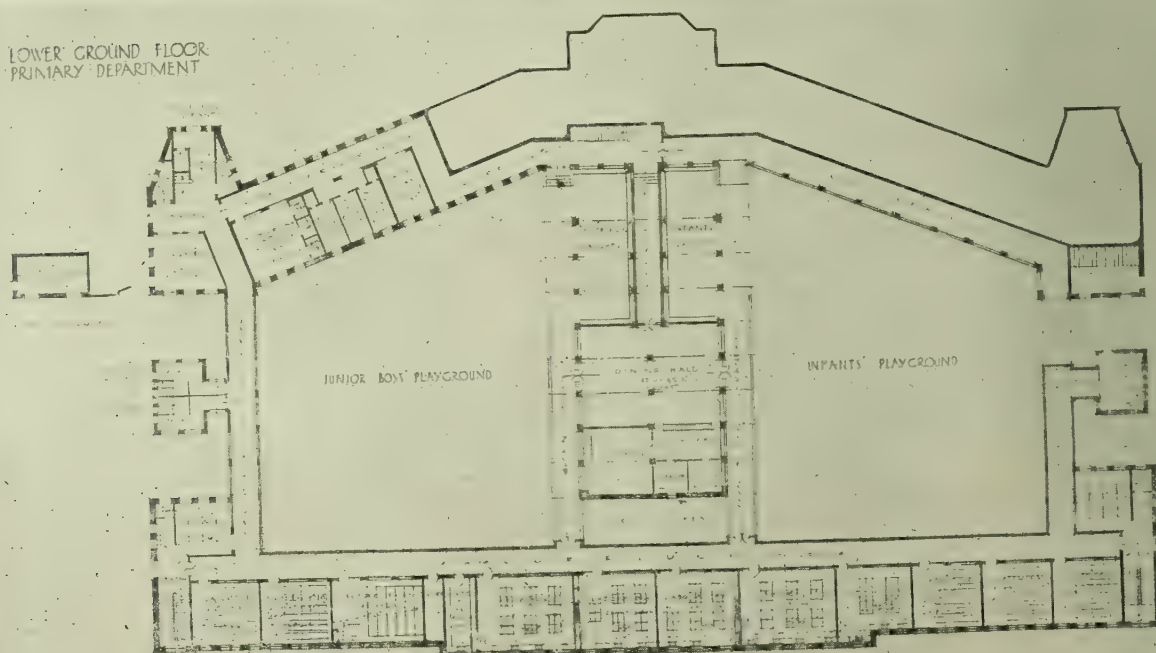
SOUTH ASPECT





Dundee Secondary School Competition : The Winning Design.
Messrs. THOMS & WILKIE, Architects.

SECOND FLOOR PLAN
 PRIMARY DEPARTMENT

 SECOND FLOOR PLAN
 SECONDARY DEPARTMENT

 LOWER GROUND FLOOR
 PRIMARY DEPARTMENT

 FIRST FLOOR PLAN
 SECONDARY DEPARTMENT

Dundee Secondary School Competition : The Winning Design.

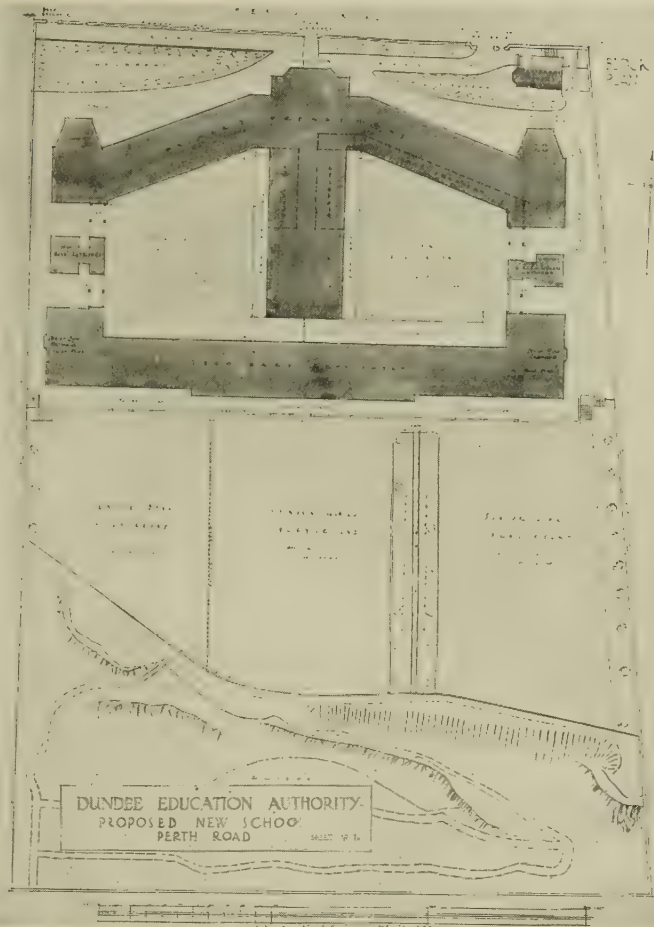
MESSRS. THOMS & WILKIE, Architects.

DUNDEE SECONDARY SCHOOL COMPETITION.

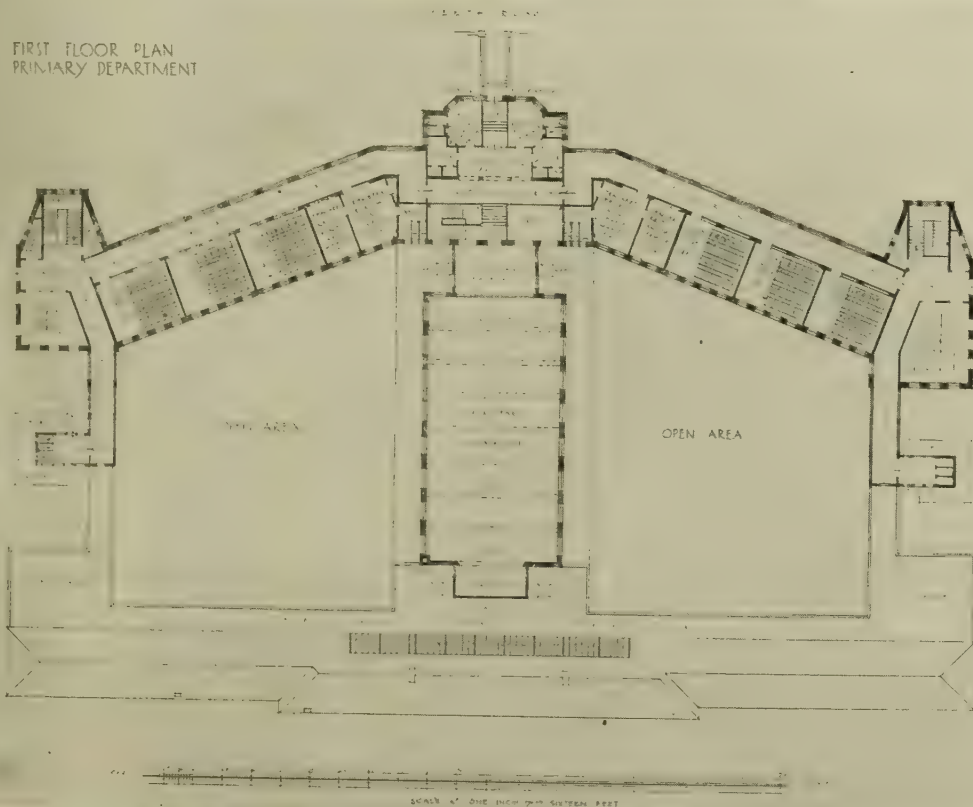
The awards in the architectural competition in connection with the proposed new secondary school at Ashcliff, Perth-road, Dundee, are given in the Competition News on p. 382. We illustrate this week the first premiated design by Messrs. Thoms & Wilkie, of Dundee. The competition was limited to architects practising in Scotland on their own account.

The assessor, Mr. J. A. Carfrae, reports of the first prize design that it shows the required accommodation suitably arranged in a building of two stories facing Perth-road, and of three stories at the rear, connected at the sides with corridors, while a hall, dining-room, etc., which form a centre block, are convenient of access from the whole school. The areas of ground apportioned to playgrounds are of good shape. The author states (says the assessor) that cross-ventilation has been provided throughout, but he (the assessor) points out that on the two lower floors this would be obtained through the corridors. It might be considered desirable to provide a lower ceiling in these, so that openings opposite classroom windows might be independent of corridor windows and have more direct outlet, like those on top floors. The south aspect of the building might be made a little more interesting without great expense.

The assessor, in a letter to the authority on the subject of costs, states that the first design has been estimated at a uniform rate, and that is high one. There is a greater number of cubic feet in this design (than in the others) but in architectural features it is of a simpler character than the second. The specification provides for a more complete system of fire-proof flooring, which, in his opinion, could be modified. He is therefore of opinion that the cost of this design (£104,554) has been over-estimated.



FIRST FLOOR PLAN
PRIMARY DEPARTMENT



Dundee Secondary School Competition : The Winning Design.

MESSRS. THOMS & WILKIE, Architects.

A PLEA FOR THE LAYMAN

By WILLIAM W. WOOD, A.R.I.B.A.

"BEAUTY," says my dictionary, is "a particular grace or excellence," and it is just this quality in architecture that is so difficult to define. All buildings cannot be beautiful to all people, but many buildings are beautiful to most people. There is a fallacy amongst architects that the layman is not interested in architecture. Actually he is interested, but in the company of architects he is afraid to express an opinion; he has heard so much about styles and influences that he is fearful lest he should praise a building of the type not then in vogue. And surely it is that important person "the man-in-the-street" who is the best judge of what is beautiful in architecture and not the practitioner himself, brought up in some particular school of thought, often a confirmed Classicist or Gothickist before he has reached maturity? Might not beauty be defined as that combination of good qualities which makes the greatest appeal to the greatest number?

A setting sun in a sullen sky and a group of factory chimneys in silhouette—the passer-by is arrested by the sight and perhaps wonders why. The explanation lies in the combined effect of colour, composition and contrast. A winding narrow street, projecting gables, casement windows, shabby lines, and we have picturesqueness. The Parthenon on its hill, perfection of form—idealism. A Gothic cathedral, pointed arches, slender columns, misty heights, ugly details—etherealism, decoration, individuality, glamour. Two marble pavilions linked by a colonnade, approached by many steps—realism, symmetry, proportion, dignity. The Colosseum—magnitude. But in addition to all this there

is nationality, tradition and personal association, and to the layman no building is so beautiful as the one possessing these three qualities. The last is outside the influence of the architect, but the others are not, although too often disregarded, or there would not be so many unsuccessful buildings in our midst.

The Renaissance naturally originated and flowered to perfection in Italy, the renaissance of a national form of expression, and was unnaturally introduced into France and England—a hot-house plant in a northern clime—where society made it the fashion. If some individual decided to erect a pyramid on his country estate people would go to see it, call him eccentric, probably mad, and the thing a curiosity. But in its natural setting, a survival of a past civilisation, an upcropping in a flat landscape, the pyramid is felt to be logical, the tomb of a great man.

If we look into the history of the birth of Gothic architecture in this country we shall find eclecticism, foreign forms adapted to the clime, and the needs of the times. Churches built to the glory of God, but not forgetting the frailties of man. So, too, the Romans borrowed from the Greeks. Eclecticism is a fine thing—let us go out and learn from the Chinese, the Indians, the ancient Egyptians, the Greeks, the Romans and Americans, but let us come home and present posterity with a thing of beauty, possessing the qualities of nationality and tradition, expressed in the terms and the materials of our era.

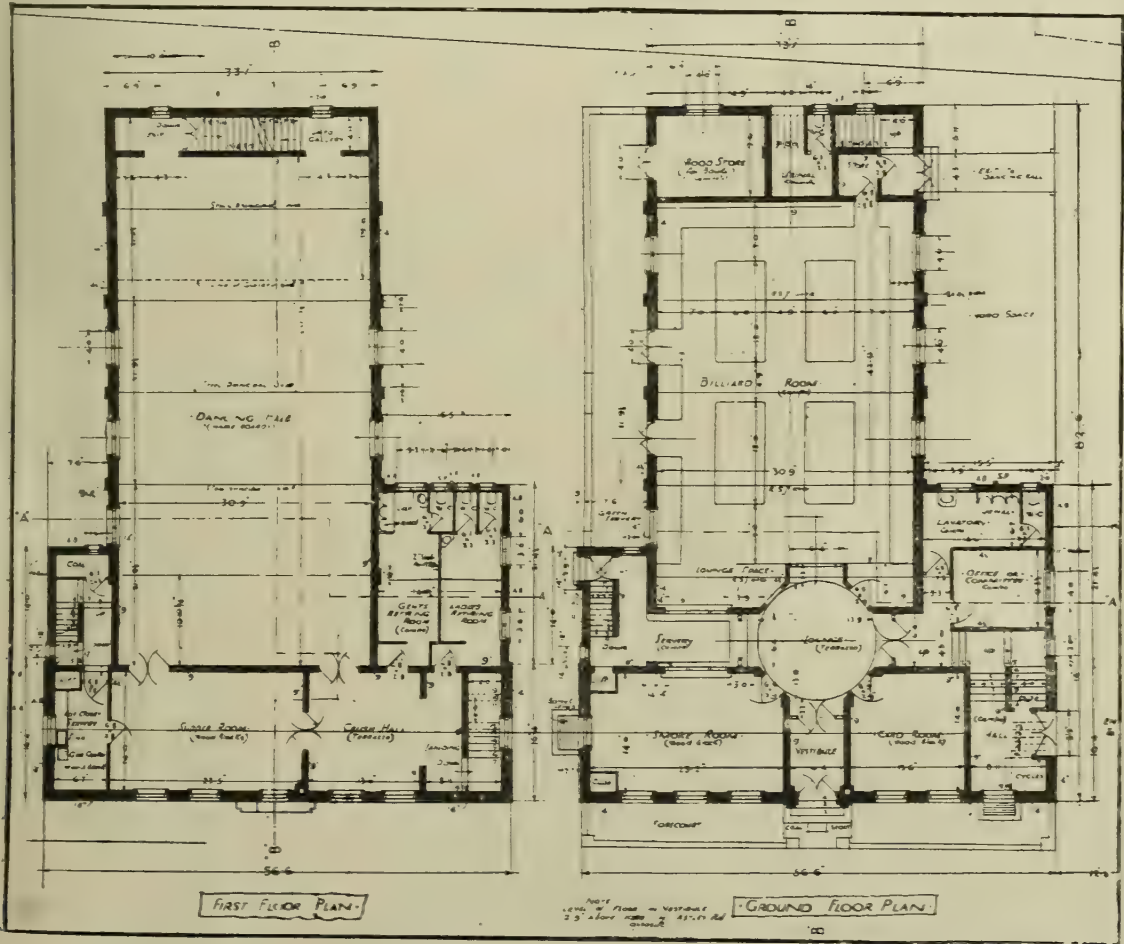
Tradition has been wonderfully preserved in

the domestic architecture of Norfolk and a few other counties where, founded on local conditions, materials, and usages, it is still very much alive.

I do not want to be accused of taking refuge behind my present title in order to advocate Gothicism. My desire is rather to discover the real essence of beauty, and sometimes if we cast off our professional mantle and look at it from a distance we see more clearly the cut of the cloth. I am, of course, only discussing the exterior of buildings, for it is a first principle that a building must be planned in a manner best fitted to its particular needs, and it is pedantic to say that the elevation must express the plan.

Our domestic architecture is probably the most beautiful in the world—even the Americans tell us we can beat them in this direction—it is chiefly in our public buildings that we fail. Some recent exceptions, however, point the way, and amongst these Liverpool Cathedral, the Middlesex Guildhall, and Heal's shop in Tottenham Court-road stand out as striking examples of three quite dissimilar types. Liverpool Cathedral is first and foremost an English cathedral, although Sir Gilbert Scott is credited with saying that he was influenced a good deal by Spanish work. The Middlesex Guildhall speaks of Gothic and Classic influences, and so successfully occupies its site between the Abbey and the pseudo-Classic block of Government buildings, but it is also essentially modern. Heal's is simply a twentieth century furniture shop and therefore, fulfilling all the other canons of good design, is beautiful.

The average man says, in effect, "What have I to do with thee, O thou of little faith?" Let architects have faith in their own country, in their own buildings, and in their own times, and this apparent apathy will disappear, for "a thing of beauty is a joy for ever."



Plans of Irlam Conservative Club.

MR. J. E. KEWELL, Lic. R.I.B.A., Architect. (See p. 391.)

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting!—ED.

Hot Water System.

[REPLY TO "SEEKER," JULY 31.]

SIR,—The size of storage tank required for the system proposed by your correspondent depends very much upon the times when it is intended to pump and the type of propulsion. If the latter is economical and attendance is regular a two days' supply of water might be sufficient, but in the event of a breakdown in the plant serious inconvenience might be felt and a week's supply or more is desirable. If there are baths in the house, a daily consumption of 30 gallons per head should form the basis of calculation. The domestic hot water supply system should have its own independent cold supply tank, so that the unusual demands upon the cold supply would not exhaust the hot water system. It is quite sufficient if the water level in the domestic hot water supply tank is kept only just below the level of the bottom of the storage tank. If the well is properly proofed and judiciously sunk, its proximity to the house or pump is of quite immaterial concern, but it is advisable to sink it at least 50ft. away from any drains, soil or surface water. FINDER.

Architect's Fee for Abandoned Work.

SIR,—I should be glad if you would, through the medium of your Bureau, give me a ruling as far as is known on the following point.

A client desirous of building a house interviewed an architect bringing his own design, which, after certain re-modelling and obtaining of tenders, was found to cost too much, so this was quashed and the architect remunerated for the abandoned scheme. A fee had been agreed upon for the whole supervision, &c., had that particular design been carried out, the client asking the architect "What would he do it for?" and the architect taking that as meaning, "would he do it at a lesser figure than the usual scale?" rightly or wrongly named a fee below the usual scale (he is not a member of the R.I.B.A.). It was then decided that the architect should prepare a design for a different house, and finally this was adopted and the architect said he would accept the originally agreed fee.

The point is, when should the client settle the architect's account—when he has taken possession of his house, or at the end of the three months allowed to elapse after that, and before the builder does certain repairs and making good? It is assumed that completion of the house was when the client took possession in this case, roughly eight months from the start.

The architect had no payments on account of his fee and holds a letter from his client to the effect that the fee agreed upon would be, of course, paid on completion.

B. WARE.

Dry Rot.

[REPLY TO "ANXIOUS," AUGUST 28.]

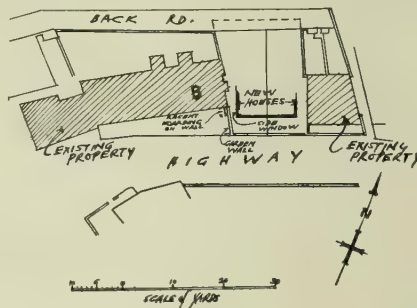
SIR,—Your correspondent must recognise dry rot as an infectious disease that will readily develop into an epidemic unless the most rigorous measures are taken. It is not sufficient to create a healthy condition that would be a preventive in the first instance. It is not even sufficient to cut away all affected timber, as the fungus may still be germinating in the adjacent soil or on the surface of adjacent brickwork. The affected parts (and be sure to go well beyond them and well into the healthy timber) should be cut out and together with the adjacent soil, be burnt. The walls and the adjacent ends of sound timber should then be thoroughly washed over with corrosive sublimate in strong solution. Then, and then only, is the time to consider creating the healthy

conditions that should ensure that the disease will not recur, and the well ventilated floor space is very necessary for this purpose. Your correspondent will find the pamphlet issued by the R.I.B.A. full of very valuable information upon the subject.

FUNGUS.

Obstruction of Light to Window.

SIR,—The two new houses shown on the accompanying sketch are being erected on a piece of land which divides two existing terraces of houses. The front face of the new houses projects about 4ft. beyond the face of the terrace of houses on the south-westerly side of the site. A little side window (about 18 in. width of opening), has been placed in the gable end of the left-hand new house. This new window overlooks the front entrance garden and entrance doorway of the end cottage, marked "B" on sketch. The tenant of the cottage "B" has erected a hoarding projecting about 4 ft. from his wall face on to the garden wall, which separates the cottage "B" from the new houses. This new hoarding defeats the purpose of the new end window, and, therefore, annoys the owners of the new houses. Has the tenant of cottage "B" the right to erect the hoarding; and, if so, are there any methods of compromise by which he can be made to take it away? "MONTAGUE."



The owner of the left-hand new house "A" was entitled to place the small side window in the position shown; but, although he has the natural right to receive vertically the light appertaining to the situation of his tenement, he has not the natural right to the light laterally. If, in respect to any tenement, light received laterally has been actually and continuously enjoyed for twenty years by the owner or lessee of the property, he acquires an easement to the light so received. That easement consists in the right to require the servient owner (in this case "B"), to abstain from obstructing the passage of light communicated from the direction of the servient tenement to the dominant tenement. "A" has obviously not acquired an easement; therefore, it is clear that "B" is within his rights and is entitled to erect the hoarding referred to; provided the obstruction is on his own ground, and there is no restrictive covenant in the title deeds of the land restraining him from making such an erection, and he does no more than will enable him effectually to prevent excessive enjoyment. Indeed, it is the one method usually employed to preserve one's rights in such cases, and "A" has no method of "compromise" by which "B" can be made to take it away. "B" can dictate terms, and, perhaps, in the circumstances, he will be somewhat tardy in making them—if at all. B. D. K.

Tiles Splashed with Cement.

[REPLY TO "CEMENT," SEPTEMBER 4.]

SIR,—Rub off the stains of cement and mortar with fine carborundum stone, and if they still show, colour the tiles with red ochre mixed with copperas melted in boiling water and allowed to cool, and apply two coats. I presume the tiles are red. G. W. H.

British Thermal Unit.

(REPLY TO "CHERCHER," AUG. 14.)

SIR,—Replying to "Chercher," as per your issue of August 14, the British Thermal Unit (B.T.U.) is the accepted standard unit of measurement, in English-speaking countries, the quantity of heat action, and is "the amount of heat required to raise 1 lb. of water 1° Fahr. (from 39 deg. to 40 deg. F.), i.e., at the point of greatest density." For all practical purposes it may, however, be defined as "the amount of heat required to raise 1 lb. of water per degree Fahr." W. G. W.

Boundary Wall Question.

[REPLIES TO "J," AUGUST 28.]

SIR,—It appears from the query, that the question of liability for payment does not arise, but that "B" is bound to pay "A" half the cost of the wall. In making up his claim "A" should therefore include in his account the actual expense of the work done, and at the time it was done, allowing for old materials, &c. He need not consider the pre-war rates at all. If the work is in the Metropolis, see section 96 of the London Building Act, 1894. A. J.

SIR,—The share in cost of the wall payable by "B" is half the actual cost of the wall, "A," that is, providing use is being made of the former of half the entire wall, or, in other words, that the entire wall abuts upon "B" property. If the share in cost were assessed upon to-day's prices, "A" would obviously be making a profit on the transaction, and all probability would find the half value to be the first cost of the whole wall. This will react upon the agreement. A certain reverse case may be quoted to make the matter still more clear. I can vouch for the facts. The owners of city property (X) underpinned an old party wall to form a basement. In doing so they went down something like 30 ft. to gravel, indeed they did with all walls of the building. Their neighbours "Y" building a year or two afterwards, built a raft instead of going down to gravel, thereby, it was calculated, saving half the cost of the foundations, and they claimed that they could equally have had the cost of the foundations of the party wall. The Party Wall Award, however, ruled that "Y" must pay for half the actual cost of underpinning as executed by "X" in spite of any protest as to extravagance of means. LEX.

Preserving Post Ends.

[REPLY TO MR. T. BURTON, AUGUST 21.]

SIR,—While recently at Birmingham Race Course, I noticed a quantity of close board fencing erected entirely on concrete posts which were slotted for the horizontal rails, which were in wood, and the whole bolted together. As a fence I should consider to be practically everlasting, and I have yet to know of a method whereby a wood post can be rendered secure from rot. Even where the feet are buried in concrete, a slight shrinkage in timber opens a small gap through which water can soak in and ultimately set up rot. FIFTE

Cold Water Supply.

[REPLY TO "QUERY," SEPTEMBER 4.]

SIR,—It would be inadvisable not to insulate the cold water pipe. What will keep the heat will keep out the cold (frost). Wrap the cold service pipe in felt with canvas backing and coat the heating pipes with asbestos in position, which will conserve the heat for radiators, &c., and stop the cold water from turning into warm. G. W.

Partnership.

SIR,—Can one of your readers inform me the probable sum required to enter a practical partner in a country market town? ZEN.

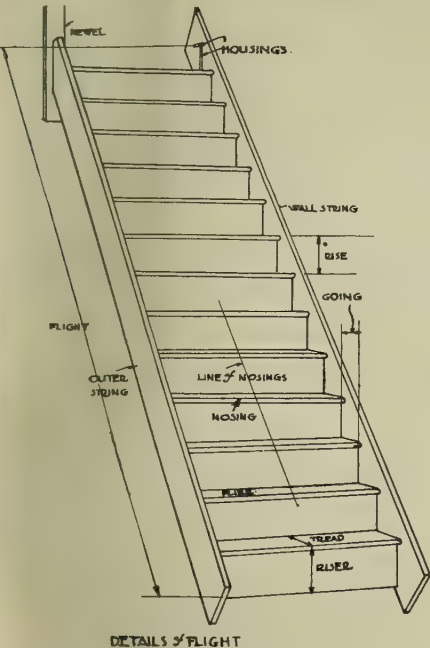
THE BUILDING TRADE.

SETTING OUT A STAIRCASE.—II.

(Continued from page 3 5, September 4.)

Definition of Parts of Staircases.

Stairs consist in their simplest form of two parallel bearing timbers known as *strings* placed at an angle from the point of departure to the point of arrival, the space between them being filled in with boards forming rectangles having the upper surface horizontal and the upright surface vertical.

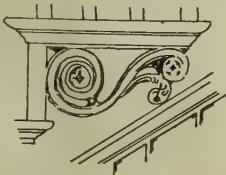


DETAILS OF FLIGHT

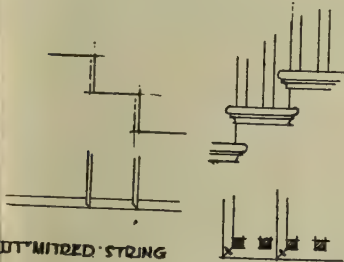
The horizontal surface being the portion stepped on is termed the *Tread*; and the vertical face is known as the *Riser*.

Of the side supports or *strings*, that against the wall is known as the *Inner or Wall String*, and that further from the wall is termed the *Outer String*.

Outer strings are sometimes notched out on their upper surface to conform with the tread and riser of each step, their lower edge being



CUT STRING



CUT-MITRED STRING



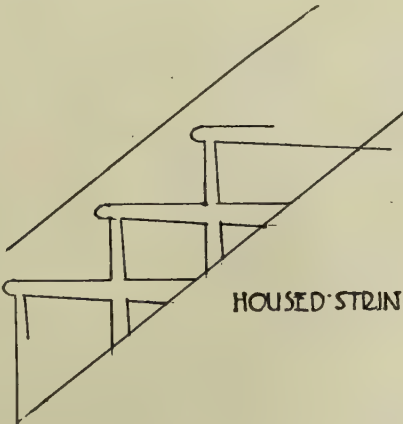
CUT-MITRED-MOULDED

parallel to the slope of the stair, as in ordinary solid strings. Such notched strings are known as *Cut Strings*; and in all but the cheapest work

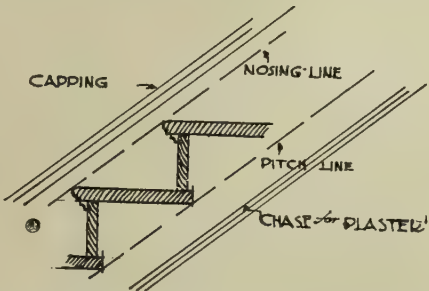
the vertical portion of the notch is cut splayed and the riser mitred therewith. The string is then termed a *cut-and-mitred string*. Cut strings are generally of greater thickness than ordinary solid strings, being $2\frac{1}{2}$ in. and they have the effect of saving the *carriages* described later. Cut strings in newel stairs are mortised and tenoned into the newel posts at the top and bottom.

Housed Strings.—Solid or closed strings have both upper and lower strings running parallel to the slope of the stairs, and housings or grooves are cut in their inner faces to receive the ends of the treads and risers. The method of cutting the housings or grooves is as follows. After the steps have been marked on the face of the string as has been already described, the next operation is the marking of the underside of the grooves for the treads and the inner sides of the grooves for the risers to a shape suitable to take the thickness of the treads and risers, together with the wedges which are driven in and glued for stiffening.

As has been indicated, two thin templates are prepared, a riser template and a tread template, and applied to the lines of the steps already drawn on the inner faces of the strings. A brad-awl hole is made in the centre of the nosing of one of the treads so that the template may be held in position by means of a brad-awl passing through the hole. The riser template



HOUSED STRING



is pushed up against the tread template, having its outer edge coinciding with the line already drawn for the outer face of the riser. The underside and inner side are then marked round and the shape of the grooves obtained on the strings. The grooves are then cut by means of a brace and bit having its centre placed in the brad-awl hole when a rounded sinking is cut, the outer half of which becomes the grooving for the nosing of the tread. Then one or two further circular borings are made with the same bit for both tread and riser, being so placed that their circumference is tangential to the outer faces of both tread and

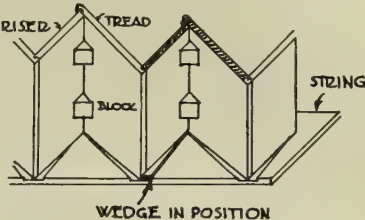
riser. The intervening portions of wood left are then chiselled out, by means of which a portion of the tread and riser groove is obtained at the nosing end of the tread and its junction with the riser. This preliminary boring, besides giving the rounded sinking for the nosing, permits the use of tenon-saw for the cutting of the rest of the lines marked.

The tenon-saw used is that known as a *stair builders' saw*, which is of the type here shown



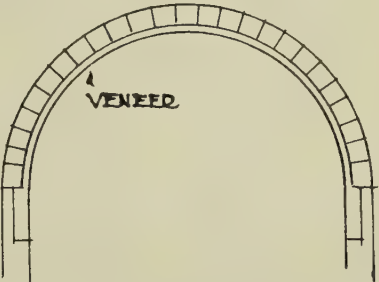
and has a raised point on the back for the left hand to rest upon. The wedge-shaped grooves having been cut top and bottom, the intermediate wood is removed by a chisel, and the grooves are then smoothed by the use of a router plane.

The finished string with a tread and riser in position then bears an appearance as shown



here, the wedges being shown driven in and glued.

Wreathed Strings are the curved portions around a cylinder of the outer string in geometrical stairs. It should be cut out of stuff at least 2 in. thick. Illustrations below show the



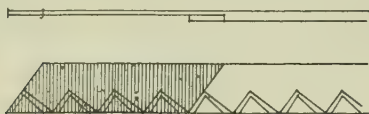
WREATHED STRING



DRUM for bending STRING

method of bending and cutting the curved piece of the string around a drum built up of narrow strips glued together on a frame. The wreathed or curved part of the string is either a veneer or made by cutting away all but a thin outer surface of the string until only a thin veneer is left. After this has been bent upon the drum or framed cylinder, wedge-shaped battens are glued on to bring it up to its original thickness and to maintain its new bent shape. After the battens or keys have set, the curved

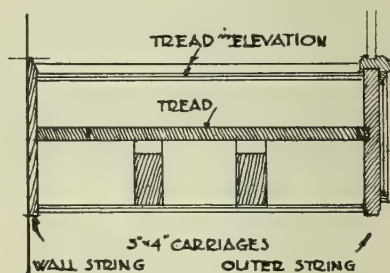
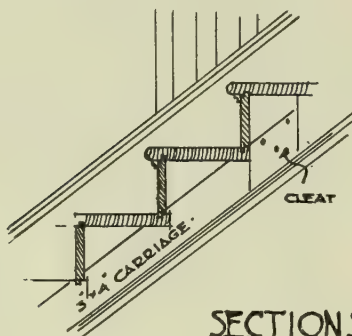
string is cut for treads and risers. The elevation and plan are shown below of a string prepared for bending. The string being marked for treads and risers before it is bent round the drum, it is necessary to prepare and lay out a pattern or template of its true form.



PLAN & ELEVATION OF STRING before BENDING

Carriages, sometimes termed rough strings, are placed in between the inner and outer strings, and run parallel to them from floor to trimmer. They are used to give intermediate support to the steps and add very considerably to the stiffness of the stairs. Their underside provides a fixing for the laths where the soffit is plastered; in which case they should be spaced apart not more than 15 in. on centres. Creaking stairs denote either the omission of carriages or that the carriages are too weak and sag when weight is put upon them. They should be of a size not less than 2 in. by 3 in., but are better 3 in. by 4 in. and are formed out of rough unplanned stuff. Sometimes the carriages are cut to the angle of the treads and risers, so as to fit tight under the treads and against the inner faces of the risers, but more often they consist of straight timbers of the sizes mentioned, having 1 in. to 2 in. cleats nailed on their sides to support the treads.

TRUE CURVE OF STRING round CYLINDER



SECTIONS OF STAIRS

This form, necessitating no cutting of the carriage, is consequently stronger. In very economical construction the carriages are omitted, and the soffit of the stairs is prepared for plastering by having strips nailed to the lower angular intersection of the steps.

Steps.—The steps being composite consist of a horizontal surface upon which the foot rests, and known as the *tread* and a vertical surface known as the *riser*. The treads and risers are mortised and tenoned, rebated and grooved or housed together, and housed at their ends into the strings.

Fliers.—The parallel rectangular steps in a geometrical stair, as distinguished from irregular-shaped steps such as winders, dancing steps, commode step and curtail steps, are termed fliers. Diminished fliers are those steps next above and below dancing steps, which are narrowed at one end only in order to permit the extra width necessary to enable the centres from which the risers of the dancing steps are struck to be obtained.

Winders are steps, the risers of which radiate from a central point of a single newel post, or from the centre of a cylinder. They are found necessary for the purpose of gaining extra height of ascent with a saving of floor area used. In newel stairs the inner ends of the winders are housed into the newel posts. As the carriage is stopped by the *pitching* piece and cannot be continued to carry the winders, these are supported by means of bearers built at one end into the staircase wall and framed into

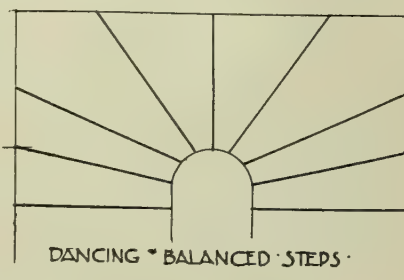
the newel at the other. The bearer at the back is flush with that of the riser immediately over it. Cross bearers to support the treads are framed between the risers and the bearers behind them.

Bearers framed round a cylinder, as in geometrical stairs, have a *wreathed string* and cross bearers similar to those used in a newel stair.

In connection with winders the *walking line* is a term used for an arc of a circle having the newel as centre and 18 in. as radius, upon which the winders are set out on plan.

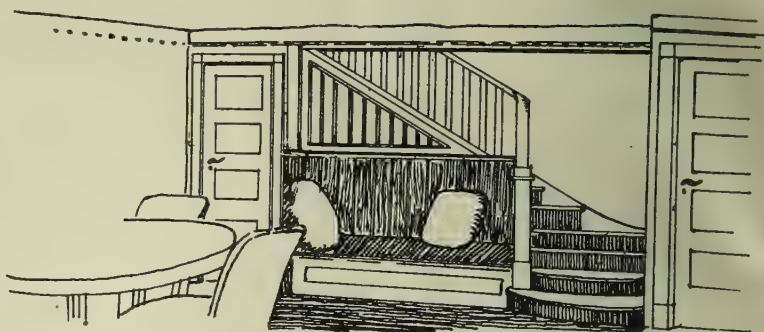
As has been said, winders should only be used where it is desired to be economical of floor area. They increase the cost of construction, being more complicated, and where several are formed radiating from a central newel, they are dangerous on account of the vertical drop formed

at the newel. A rule-of-thumb for safety is that the width of the head of a winder at the walking line should never be less than the width of an ordinary rectangular tread in the straight flight.



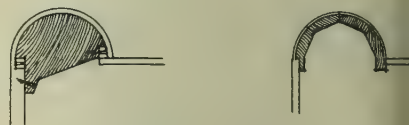
DANCING or BALANCED STEPS

Dancing Steps are winders that do not radiate from a common centre. They are provided to overcome in some degree the danger occasioned by having a direct vertical drop of several risers in the height of the newel post. They are sometimes termed *Balanced Steps*, being then diminished fliers having their outer end narrower than the inner or wall end. They are useful also for easing the break between winders and fliers. *Commode Steps* are those the plan of which is a parabolic curve, and are often met with in the bottom step or steps of a geometrical stair.



SKETCH showing WINDERS and COMMODE STEPS

A *Bull-nosed Step* is one with a round quadrant or hexagonal end. The ends of the and curtail steps are formed of shaped blocks made up in three or four thicknesses or built-up blocks covered by the riser face cut to a thin veneer. The joint is secured by wedges and the block being screwed to the thick portion of the riser as shown below.

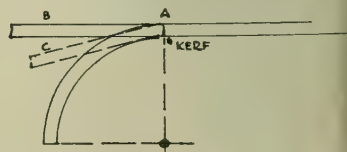


ALTERNATIVE METHODS of forming BULL-NOSE

Such stairs are often fixed in hallways where an improved appearance is desired, the newel being placed on either the first, second or third riser. One method of bending these risers is that shown above, where a solid block prepared to support the veneer as mentioned above. The solid portion of the riser is screwed to the block, the veneer being bent round the block, two wedges being driven in tight to clamp the veneer to the block after the back of the veneer has been covered with glue.

In another method the veneer extends to the end of the curved portion, and the place of the block supports or shoulders is framed up in sections and nailed together the form required. The veneer is kept in position whilst being glued up by means of hand screws, though where these are not available, as when the work is done out of the shop, it is fastened by means of cleats nailed to the form, pressing the veneer tight all round.

To prepare the end of the riser for bending by a third method known as "kerfing," saw cuts at equal distances are made on the inner face of the riser to leave a thickness uncut on the face equal to the thickness of the veneer to be used, as already described. To find the distance between the saw cuts, which will guarantee the best results in bending, the method is as follows: A cut is made at the first point of bend



KERFING

and marked A above, and from A along the portion to be bent marked AB, equal to the radius of the curve desired. Next bend the wood as far as it will go from the cut at A, the new position of B is marked as C, and the distance between B and C gives the distance apart at which the kerfs should be cut.

(To be continued).

BIRMINGHAM BUILDING EXHIBITION

It is a sign of the vitality of the building and allied trades that in spite of the difficulties besetting them from different directions they are able to support really good exhibitions, either in London or the provinces, year after year. And it is the difficulties under which building is carried out that make exhibitions so necessary if progress is to be made. High labour costs give rise to the invention of labour-saving devices; increased prices of materials, or the inability to secure them at all, result in the production of new materials or more economical methods of making use of what we have; and to the busy architect and builder there is no more convenient way of seeing these latest developments than a visit to an exhibition, where, in the course of a few hours, he can see them collected together and judge their respective merits for himself.

Such an opportunity is now available at Bingley Hall, Birmingham, where the Birmingham and Midland Building and Allied Trades' Exhibition is now open. The opening ceremony took place on Monday afternoon, and the show remains open until September 19. Organised by the Birmingham Chamber of Commerce, this exhibition should provide an attraction to all interested in building within the vast industrial area of the Midlands. The Chairman is the Right Hon. the Lord Mayor of Birmingham (Alderman P. Bower, M.B.E.); the Vice-Presidents include the Presidents of most of the associations in the Midland Counties concerned with building, including Mr. A. E. McKewan, A.R.I.B.A. (President of the Birmingham Architectural Association), Mr. H. H. Crump, (President of the Birmingham Association of Building Trades Employers), Mr. William H. Penn (President of the Midland Federation of Building Trades Employers), Mr. J. Grimson (President of the Birmingham and District House Builders' Association), Alderman S. T. Talbot (Chairman of the Public Works and Town-planning Committee of the Birmingham Corporation), Councillor I. A. Kenning (Chairman of the Estates Committee of the Birmingham Corporation), and Mr. J. E. Wilcox (President of the Institution of Civil Engineers); the Vice-Presidents also include several Borough Surveyors and architects of neighbouring cities and districts.

A special conference hall has been provided for the delivery of lectures on subjects bearing on the building industry, and a series of conferences has also been arranged.

Like the last one or two building exhibitions which have been held, a falling off is noticeable in new methods of building and new materials compared with the exhibitions in the years immediately following the Armistice, when at many stands it was only by stretching the imagination that we were able to realise that the exhibits had anything to do with building at all. The extraordinary variety of systems and materials which were then put forward by their optimistic inventors or sponsors as solutions of all the ills construction is heir to, have had time to be thoroughly tested. Many—the majority, in fact—have been found wanting; a few have proved their worth and are now in general use; others have been developed into something useful.

Thus we find at this exhibition nothing of a revolutionary character, but a great deal that is of sound merit. As will be seen from the following notes of the more interesting stands, the display is a very comprehensive one, covering building materials, constructional steelwork, reinforced concrete, sanitary appliances and fittings, machinery and plant, fittings, paints and varnishes, decorators' materials, heating and lighting plant and apparatus, and road-making plant and materials.

THE OPENING CEREMONY.

The Exhibition was opened by Sir Kingsley Wood, in introducing whom the Lord Mayor of Birmingham said the Exhibition then being

opened was in the front rank of the exhibitions held in Birmingham during recent years. It had been organised by a representative organisation of the professional and trade interests, and the result would be of considerable benefit, not only to Birmingham, but to the Midland Counties and the country as a whole. The primary object of the Exhibition was to stimulate progress in one of the most important social problems of the day and to secure co-ordination of knowledge and science, and a systematic promotion of research in order to assist the orderly development of all the agencies which made for the betterment of the industry. The display presented an exceptionally good opportunity for all interested in building to exhibit their products under the best conditions to the architects and builders of the country. In Birmingham alone there were 20,783 people on the waiting list for municipal houses. So far, they had built 6,500 houses, but that only touched the fringe of the problem, and it appeared that those who were to-day in want of a house would live to see their children grown up into adults before their wants could be satisfied. If the building industry needed an assurance of continuity of work they could find it in the programme of the Birmingham City Council, which had decided to build no less than 100,000 houses within the next twenty years.

Sir Kingsley Wood, M.P., in declaring the Exhibition open, said the housing problem was one of the most difficult of the present time. The position of Birmingham was typical of other great cities all over the country. Even after six years strenuous work our housing difficulties had not been overcome, and there was still a large unsatisfied number of people desiring houses. Thanks to the efforts of a number of people, last year was a record so far as house building was concerned, however, and during the twelve months ended March 31 last no less than 136,000 houses were completed. Of these, no less than 117,000 could be classed as workmen's houses, and that showed that the greater proportion of house building that took place last year was directed to relieving the needs of the poorer classes. By far the greater number of these houses were built by private enterprise. If the rate of building were maintained and the increase continued, the number of houses built this year would be in excess of the number built last year. There was no doubt that some headway was being made. That remarkable success was attributable to a national policy being pursued, and at last we had arrived at the time when we were not only building for the natural increase in population, but were also beginning to catch up with the shortage.

THE STANDS.

"The Builder," Ltd., have a large stand for the display of their publications, including *The Builder*; the new monthly architectural journal, *Architecture*; and the comprehensive *Builder* series of technical books of interest to architects, surveyors, builders, students, clerks of works, foremen, and all concerned with building. A new book on sale here is "Estimating for Small Builders," by J. H. Barns, which will be found invaluable in preparing estimates for building work. The two models of the small houses which were awarded first premiums in an architectural competition organised by *The Builder* a year or two ago are attracting much attention.

Heating and Sanitary Fittings.

With the advent of winter, it is opportune that a good show is made of heating and lighting fittings and apparatus. The rival claims of gas and electricity for alleviating the lot of the housewife are well set out by the CITY OF BIRMINGHAM GAS AND ELECTRICITY DEPARTMENTS, each of whom shows a wide range of domestic appliances, from fires and coppers heated by gas to shaving mugs and flat-irons heated by electricity.

A good variety of ranges is to be seen on the stand of MESSRS. SAMUEL SMITH & SONS, LTD., of Beehive Foundry, Smethwick. These ranges have well stood the test of time, and have proved very successful in housing schemes all over the country. They are made in various patterns and sizes suitable for different size houses, and most of them are embodied in attractive and labour-saving surroundings. They are specially designed to be economical in fuel and to provide all the cooking capacity necessary for a large family.

Safety geysers are shown by MESSRS. THE POLLARD ENGINEERING CO., LTD. (Palace House, Shaftesbury-avenue, W.1). The principle on which these geysers is designed is that the cold water, after flowing up an outer jacket, falls by gravity over a number of trays arranged in the interior and then flows out at the bottom through a spout. The trays are in one unit, and can be easily removed. This geyser is made in two sizes, with an output of $1\frac{1}{2}$ and 3 gallons per minute respectively, and in various finishes—a white enamel finish obviating a great deal of cleaning. A geyser of the same type, but with a wickless paraffin oil stove as the heating unit, is also on view on this stand.

MESSRS. PARKER, WINDER & ACHURCH, LTD., of Broad-street, Birmingham, as befits a firm with one of the largest showrooms devoted to builders' materials in the Midlands, have one of the largest stands in the Exhibition. One part is devoted to heating apparatus, and several attractively-designed fireplaces and surrounds are to be seen here, a Dutch tile pattern looking particularly pleasing. A new grate, known as the "Eagle Bijou," seems to be a particularly serviceable cooking and heating apparatus, and is fitted with a bath boiler at the back. A selection of sanitary goods shown by this firm is particularly noticeable for the care which has obviously been taken to dispense with cleaning wherever possible; porcelain and nickel-plating for baths and taps are freely used, and the same thought for labour-saving is also to be seen in the door and window fittings exhibited. The other section of the stand is dealt with under the heading "Machinery."

MESSRS. JONES & ATTWOOD, LTD., of Titan Works, Stourbridge, have for many years specialised in the production of apparatus for providing domestic hot water supplies, and the result of the experience gained during that period is embodied in the exhibits demonstrated on their stand. The "Domestikatum" is claimed to be the only boiler with a grate which is quite open, and which at the same time heats a room, does the cooking, and supplies hot water for bath and domestic purposes throughout a house. For cases where hot water is the main consideration, the "Bather" boiler is recommended; it is a combined boiler and hot water storage cylinder, and is specially noticeable for the way it has been designed so that every part is easily get-at-able for cleaning purposes. Other exhibits are the "Cultivatum" boiler, specially made for heating green houses, a boiler for heating garages, cast-iron boilers for central heating.

Owing to a belief that copper would affect water supplies to the detriment of health, copper pipes have been but little used for that purpose in the past. This idea has, however, been thoroughly exploded in recent years by eminent scientists, and owing to their cheapness and better appearance copper pipes are now being increasingly used for both hot and cold water services, not only for everyday purposes, but also in hospitals, public institutions and housing schemes. A speciality in light gauge copper tubes for these purposes is being made by MESSRS. THE YORKSHIRE COPPER WORKS, LTD., Leeds, and on their stand is to be seen a selection ranging from $\frac{1}{2}$ in. to $2\frac{1}{2}$ in. in diameter. Demonstrations are being given in support of the claim that they are the easiest type of tube for bending and drifting, and that combined with low initial cost they give a sound and reliable installation.

Mantel registers, chimney-pieces, gas grates and gas mantel registers, gas cookers, and portable stoves are to be seen on the stand of

MESSRS. G. MATTHEWS, LTD., of 89, New Cavendish-street, W.1, and will appeal to those who appreciate a good appearance combined with sound construction and economy.

Those concerned with the construction of small houses or bungalows where saving of space is an important consideration, will be interested in the patent tip-up baths demonstrated by the PATENT TIP-UP BATH CO., of Bath House, Broad-street, Birmingham. When not in use these baths are tipped up on end, on hinges, and may be hidden out of sight in a cupboard.

As is indicated by their title, the HURRY WATER HEATER CO. (39, Broad-street, Birmingham) specialise in apparatus for the rapid supply of hot water, and a good range of such gas and coal heated apparatus is shown on their stand.

An exceptionally cheap selection of bath and sanitary goods are exhibited by the BUDERUS TRADING CO., LTD., of 107-9, Cannon-street, E.C.4, including cast-iron white porcelain enamelled baths, basins, sinks and fittings; cast-iron central heating boilers and radiators; roofing tiles, hollow flooring blocks, white glazed wall tiles, &c. We are informed that the company has large stocks of these goods available in London, and will deliver direct by lorry to any part of the country.

Those who realise the advantages of chemical sanitation compared with more primitive methods will be interested in the stand of the ELSAN MANUFACTURING CO., of 34-35, High Holborn, W.C.1, where the "Elsan" closet is on view. This apparatus may be said to bring town methods of sanitation to the most remote rural area. It is quite odourless, and requires no running water. Two models are made, one for permanent fixture and one of a portable type specially suitable for sports clubs, caravans, camps, and similar uses. The permanent model may be had in single or multiple units, and should be investigated by those responsible for hygiene in schools, factories, or similar buildings in rural areas. On this stand is also to be seen a new oil cooking stove, which operates without a wick and is claimed to be capable of cooking a meal for a family in one operation on one burner.

Materials and Fittings.

The stand of the COURTRAI-DU-NORD TILE CO., & LANGLEY, LONDON (161, Borough High-street, S.E.1), has been specially designed to demonstrate the advantages and appearance of Courtrai-du-Nord, Beauvais, and Marseilles roofing tiles. These three tiles all have a distinctive claim on account of their individuality. The Courtrai-du-Nord, an interlocking tile, has the appearance of a pantile; Beauvais tiles are supplied in various shades from yellowish-brown to deep maroon, the standard colour of rich red being especially attractive. Both on account of their quality and cheapness these tiles have become firmly established in this country, and have been used for a great many housing schemes as well as for larger buildings.

Roofing materials, gutters, down pipes, cowls, ventilators, skylights, perforated metals, ventilators, and other roof accessories are shown by MESSRS. ASH & LACEY (Meriden-street, Birmingham), whose stand also displays a variety of nails, fencing, hollow ware, and sheet metal work.

Bangor, Portmadoc, Westmorland green, Delabole green and grey, and brown natural slates, hand and machine-made tiles, pantiles, Roman pattern, and other clay tiles, shown by MESSRS. THE ASTON JUNCTION CO., LTD (Aston, nr. Birmingham), give an excellent idea of the pleasant effects which these home products give to a house. On this stand are also shown asbestos slates, in grey, red, blue, and russet, Swedish redwood doors, and other fittings.

MESSRS. MELLOWE & CO., LTD., of Corporation-street, Sheffield, demonstrate to good effect the application of metal casements, steel doors, partitions, and sashes to a variety of purposes. The windows are specially effective, and show how they can be used to give an air of distinction, while at the same time admitting the maximum daylight. A new feature is a patent cable-hinge and stay, which allows the casement

to open in such a way that the outside of the window can be cleaned from the inside of the room. A variety of casements specially made for factory work, both of heavy and light sections, are on view.

MESSRS. STANDARD METAL WINDOWS, of Houghton-street, West Bromwich, make a special display of three grades of windows specially designed for housing schemes, and steel windows for shops, factories, and other types of building make a good show.

Some excellent examples of the modern craftsman's work are to be seen on the stand of the MIDLAND JOINERY WORKS, LTD. (Lichfield-street, Burton-on-Trent), where a special feature is made of doors which show not only good workmanship, but also good taste in design. The selection on view comprises French doors, a top-glass front door in Columbian pine, inside doors in the same wood, and inside doors in red deal and Japanese oak. The specimens are only prepared ready for staining, so that the quality of the wood and workmanship can be seen.

Another good selection of doors is to be seen on the stand of the MERCHANT TRADING CO., LTD. (34, Bishopsgate, E.C.2), and here again sound, well-seasoned wood, and first-class workmanship are the keynote. The exhibits are made of Columbian pine, of which the company carries large stocks in London and Liverpool. The ovolo moulding is so designed that it shows up the beauty of the panels, and at the same time cannot harbour dust. The stand itself is formed of Douglas fir plywood, stained to bring out the natural beauty of the grain of the wood; this plywood is made up of three cross-plyed layers of wood of equal thickness glued with waterproof cement.

Cheapness combined with sound construction and workmanship is the chief claim for the "Woco" door, and that this is appreciated by purchasers is proved by the very large number of these doors which have been used on the housing schemes of local authorities. The stand of the "Woco" Door Co. (Dashwood House, London, E.C.2), comprises a large selection of these well-known doors, so exhibited that they can be thoroughly examined. A superior door is shown, in the "Woco Laminex," which is made by a special process, whereby thin ribbons of Columbian pine, strengthened with waterproof cement, are crossed and welded together under a pressure of about 200,000 lbs. These doors, besides being exceptionally strong, have a particularly good appearance, and it is claimed that they will not warp or shrink when subjected to severe tests by heat, pressure, or water.

The series of well-known reinforcements manufactured by the EXPANDED METAL CO., LTD., of York Mansion, Petty France, S.W.1, is well displayed, and its uses illustrated by photographs of a few of the many works on which they have been used. For concrete floors, bridges, foundations, and heavy work generally, there is "Expamet" expanded steel reinforcement, which has been so extensively used during the past thirty years, and a mesh of similar manufacture specially produced for concrete roads and pavings. For works which call for specially heavy reinforcement, such as roads or rafts on unreliable soil, or soil liable to subsidence, there is a new treble-layer expanded steel reinforcement with a centre corrugated layer. Reinforcements are shown for brick and concrete-block work and for concrete kerbs, the latter acting as a protection as well as reinforcement. A new product of this company, known as "Ribmet," is also shown, and should be specially useful for use in the construction of small-span roofs and floors. It is of the combined reinforcement and centering type, the concrete being applied without the use of shuttering or close-boarding. The possibilities of this material for partitions and ceilings are shown by sections, and the saving which may be effected with its use by the elimination of expensive timber formwork will be obvious.

As usual, MESSRS. BELL'S POILITE & EVERITE CO., LTD. (59½, Southwark-street, S.E.), have a comprehensive display, including all their

asbestos specialties, which may be tested on the spot to prove the claims which are put forward on their behalf. Slates and tiles, flat and corrugated sheeting, combine to make an attractive show, and to demonstrate the artistic possibilities of this comparatively new but well tried material, while a testimony to its strength is to be seen in a photograph of a group of men standing in the centre of a suspended sheet. A special display is made of rainwater goods, gas flues, and suchlike uses of asbestos-cement, a use which is increasing amongst those who realise the value of the material as one which needs no painting or other maintenance expense. Asbestos-cement products of this type are not only non-corrosive but are stated to be actually stronger than cast-iron.

Asbestos-cement goods are again shown to advantage on the stand of MESSRS. TURNER BROS. ASBESTOS CO., LTD., of Rochdale, which takes the form of a pavilion in which as many as possible of their products are displayed in position on the roof and walls. The specimens include "Trafford" tiles 4 ft. by 3 ft. 8 in. for large roof areas, and a new tile for the same purpose measuring 24 in. by 12 in.; a tile in three colours, giving a pantile effect; diagonal slates in grey, blue, red, and russet brown; rough surface English pattern slates in different colours; plain and corrugated sheets, &c. A lasting, pleasing, and economical roof or walling may be built of these materials.

The stand of the BRITISH FIBROCEMENT WORKS, LTD. (Erith, Kent) has also been specially designed to demonstrate the application of their products in a practical manner. Here are to be seen asbestos-cement products for practically every purpose for which they can be used in building, including slates and tiles, flat and corrugated sheets, panel sheeting, high pressure jointing, boiler and pipe coverings, &c. The stand well illustrates the attractive appearance of asbestos-cement when judiciously selected for colour values.

With the appliances shown by the SIMPLEX FLOOR PLANING TREATMENT CO., LTD., of 7, Finch-street, London, E.1, the most disreputable and worn wooden floor can be made to look as new. There are three machines to complete the process, all electrically driven. The first is a planing machine for levelling the floor, followed by a sandpapering machine which leaves a smooth and splinterless surface. Wax is then applied, and worked to a hard and durable surface by a polishing machine. These machines may be used on all types of wooden floors, and are fitted with exhausting devices which automatically collect shavings and dust and deposits them in a container.

A manufactured product which has every appearance and many of the properties of real marble is demonstrated by MESSRS. THE MANU-MARBLE CO. (Taffley-crescent, Gloucester). The material is in fact reconstructed marble, and has practically the same chemical composition as real marble. It has the advantage, however, of being considerably cheaper, and should thus prove a useful decorative material where the price of marble would make its use prohibitive. It is almost impossible to distinguish "Manu-Marble" from the real thing, and even the veins go right through the slabs. Again, like marble, the surface of the reconstructed product is polished by friction, so that a damaged surface can easily be made good. In addition to its uses in building construction, such as the interior decoration of cinemas, theatres, banks, public buildings, &c., it is also used for floors and for lining the walls of lavatories, bathrooms, &c.

"Granwood" blocks and slabs, an alternative to tiles, are exhibited by the GRANWOOD FLOORING CO., LTD., of 158, City-road, E.C.1. These blocks, which are made in one size, 6 in. by 2 in. by ½ in., form a durable and hygienic flooring, and are made in different colours so that they can be arranged in patterns if desired. They are also used for fireplace surrounds, which the manufacturers supply complete.

Scaffolding.

Everything in the way of scaffolding plant is supplied by MESSRS. SCAFFOLDING (GREAT

BRITAIN), LTD., of 43, Lansdown-road, London, S.W.8, and a good selection of their products is to be seen here. A special feature is made of tubular scaffolding and this firm's patent method of tubular steel construction. The latter may be advantageously used for all types of buildings, and is being largely adopted by leading builders for temporary stagings, huts, canteens, &c., on account of its cheapness over a period when compared with wood erections which must inevitably result in the cutting to waste of a good deal of timber when they are dismantled and re-erected for a different purpose or on a different site. The parts are interlocking, and simple to erect and take down. "Scaffixer" scaffold ties, and a particularly strong and durable type of suspended scaffold are on view, as well as a variety of more usual scaffolding plant. Demonstrations of the various exhibits are given.

In addition to the ladders and steps for all purposes for which they are well known, MESSRS. DREW, CLARK & Co. (Leyton, E.10) are making a special show of their new "Raprig" patent scaffold. For interior painting work in buildings where a great deal of scaffolding is necessary it will sometimes be found that the cost of providing, erecting, and dismantling the necessary scaffolding will amount to 50 per cent. or more of the total, and it is for such work that this new method has been devised. It is built up on a unit system so that with an adequate equipment it can be used for works of any magnitude. Also, it may be erected on wheels, so that if it is used for, say, a large ceiling area it can be moved along as the work progresses without being taken down at all. We understand that this scaffolding is already being extensively used by different Government Departments. It is claimed to be 50 per cent. cheaper than pole-and-cord scaffolding, and deserves the attention of master decorators who carry out work involving any considerable amount of scaffolding.

"Acme" telescopic extension ladders provide the chief feature of interest on the stand of the ACME PATENT LADDER CO., of Earlsfield. These are made in a variety of sizes and patterns suitable for different requirements, and are now well-known to the building and decorating trades. Various types of ladders and steps, trucks, trolleys, barrows, and scaffold trestles are also exhibited on this stand.

Paints and Varnishes.

The excellent work of the BIRMINGHAM & DISTRICT PAINTERS' AND DECORATORS' JOINT COMMITTEE is clearly to be seen in the exhibits on their stand. The lettering, sign-writing, heraldic work, colour decoration, &c., here to be seen give an idea of what can be done when proper training and guidance on right lines are available, and make one wish that more of this class of display work were to be seen in our streets instead of the deplorable signs so often to be seen, which, while apparently satisfying the owner, are an eyesore to every passer-by.

Amongst the products of MESSRS. ROBERTS, GLAZEBROOK & Co., LTD., of Tyseley, Birmingham, prominence is given to their well-known speciality "Glazebrook's No. 1 Flat White" for undercoating and flat oil-finishing. A new product is "Permoglaze," a liquid glaze for walls; when applied to brick, plaster or concrete it gives a hard and tile-like surface which can be washed and does not chip or soften. Other exhibits are a paint for metal which should interest those concerned with the protection of iron and steel structures, corrugated iron buildings and roofs, &c.; a high-gloss paint with an enamel-like finish for indoor or outdoor work; a durable white enamel; finely-ground colours in oil, varnishes, &c., the whole making a display of exceptional interest to those interested in the decorating and preservation of buildings.

To show that there is no noticeable difference in the appearance, finish, and "feel" of surfaces treated with paint mixed with "Decco" turps and those in which other thinners are used, the ALICO-PETROLEUM, LTD. (Alexandra House, Queen-square, W.C.1), are displaying in a practical manner a series of panels on which

different types of thinners have been used in the painted finish.

MESSRS. THOS. PARSONS & SONS (315-17, Oxford-street, W.1) have arranged a series of panels to show what a high degree of perfection can be obtained with their various paints and varnishes. These include all kinds of materials used in building and decorating work, such as undercoating, scumbling, flat wall paints, enamels, and varnishes. A new product is "Parsoglaze" scumbling paint, which is an easily handled paint giving an excellent broken colour effect.

Dry paste for mixing with cold water, concentrated size in powder form, soap powder, liquid cold-water glue, and similar products made up in packets containing small quantities are exhibited by MESSRS. KIRKWOOD, CRAIG & Co., LTD. (Eighth-avenue Works, Manor Park, E.12).

Samples of white and red lead are exhibited by the old-established firm of LOCKE, BLACKETT & Co., LTD., of Newcastle-on-Tyne, who specialise in its manufacture. Litharge, sheet lead and pipe are also included in the display to be seen on this stand.

Machinery and Plant.

A new concrete mixer exhibited here, we believe, for the first time, is shown by the RANSOME MACHINERY Co. (1920), LTD., of Windsor House, Victoria-street, S.W.1. This is a featherweight machine which should specially appeal to builders and road contractors. Mounted on a pair of road wheels of large diameter, the open mixing drum is perfectly balanced, and may be loaded or discharged from either side. It is driven by a 1½ h.p. petrol engine, arranged so as to be easily accessible. The capacity is 4 cub. ft. per batch, and the machine may be easily transported by one man. Other well-known specialties of this firm, such as the "Lightweight" mixer, a hand-power moulding press for the manufacture of all kinds of concrete products, tip-carts in steel, roof trusses, are also exhibited.

Another new machine is the combination slab, block and brick machine shown by the LINER CONCRETE MACHINERY Co., of Newcastle-on-Tyne. This is a particularly sound proposition for the small builder, being strongly built and simple in operation. This firm's large stone-moulding machine, which will manufacture products up to about 5 ft. in length, or which by inserting liners can be adapted to the multiple manufacture of smaller concrete units, is also on view. Both these machines are shown in operation.

A selection of the engines and pumps for which they are well-known is shown by MESSRS. TANGYES, LTD., of Cornwall Works, Birmingham. These include a heavy-fuel oil engine, a vertical petrol engine mounted on skids, a centrifugal pump, a double-lift hand hoist, chain lifting blocks, and screw and hydraulic lifting jacks.

"Fowler" mixers, the special feature of which is their strong construction, are shown in different patterns by MESSRS. JOHN FOWLER & Co. (LEEDS), LTD., of Leeds. Two patterns are on view, namely, the standard 10-7 model and a 6-4 model fitted with a 10 cwt. friction winch. The drums of these mixers are made of two different metals, the portion subject to the hardest wear being a semi-steel casting and the sides of pressed steel plate. Power loaders are fitted to both models.

Among the exhibits on the stand of MESSRS. BUILDERS' & CONTRACTORS' PLANT, LTD. (11, Victoria-street, S.W.1) the "Exe" patent hoist is attracting considerable attention on account of its labour and time saving possibilities. This hoist has been in use for some years now, and the firm is able to point to a large number of important contracts on which it has been, or is being, used. It is made in two sizes, one with a lifting capacity of 10 cwt. at a speed of 200 ft. a minute, and the other with a capacity of 5 cwt. Also to be seen here are the "Roll" concrete mixer, which mixes the batches by centrifugal force and gravity without the use of paddles in the drum. A new product of this firm is an all-metal machine (hand-operated) for the manufacture of concrete blocks, slabs,

or bricks; this is a strong, simple and inexpensive machine which should appeal to those builders who realise the advantage of having a machine which is practically indestructible and foolproof when it is to be operated by unskilled labour. Tipping carts, steel barrows, a clinker breaker, winches and general builders' equipment are other features of this stand.

Apart from its simplicity of construction, the most noticeable feature of the "Empire" concrete mixer shown by MESSRS. PARKER, WINDER & ACHURCH, LTD., of Broad-street, Birmingham, is the fact that the drum may be charged and discharged from either of three directions, namely, the front and each side. It is of the open drum type, mounted on a wheeled truck, and is adapted for hand or power operation. This firm's "Excelsior" screens are now well-known, and have the advantage that the blades are wedge shape so that there is no possibility of the screen becoming choked with the material. A rotary screen, with the blades made on the same principle and adapted for hand or power drive, is also on view. Another section of this stand is devoted to fencing, and three kinds are exhibited; a woven wire fence, strongly made, and specially suitable for enclosing large areas; a diamond-mesh wire fencing supplied in various meshes and of different heights; and a paling, with a rustic appearance, such as has been used for so many housing schemes.

Woodworking Machinery.

As usual, MESSRS. J. SAGAR & Co., LTD. (Halifax) show a wide range of useful wood-working machines, several of which will appeal to the builder, and are here to be seen in operation. Included in the selection on view are a combined hand and roller-feed surface planing, thicknessing and moulding machine for planing out-of-twist, making glue joints, bevelling, and chamfering, rebating, tonguing, grooving, moulding, &c.; a circular saw bench for light and general work; a circular saw bench with rising and falling table for general sawing, deep cutting, ripping, cross-cutting, bevel-cutting, rebating, tonguing, and grooving, sticking beads and small mouldings, boring, &c.; a band-sawing machine for straight or curved work; a builders' tenoning machine which is also convenient for cross-cutting and grooving; and machines for mortising; moulding outlines; planing and thicknessing framing, panels, boards, and heavy timber, sawing, cutting, grooving, rebating, &c., boards up to 36 in. wide; dovetailing, &c. A machine for grinding and sharpening cutters and joiners' tools is also exhibited, the whole forming a display from which a machine suitable for practically any purpose may be selected.

On the stand of MESSRS. PERKINS & Co., LTD. (Junction Works, Whitehall-road, Leeds), the attention of the builder will probably be chiefly directed to a new stair housing attachment for use on a vertical spindle moulder. It is claimed that this machine can in 25 minutes rout a pair of stair strings that would take a joiner eight hours to do by hand. The attachment is listed at a low price, and should be seen by all interested in reducing joinery costs.

MESSRS. GULLIET, SONS, & Co. (13A, Finsbury-square, London, E.C.2), have a comprehensive selection of wood-working machinery on view, including a few hand-power machines and a belt-sander suitable for sandpapering panels, doors, &c., with rise and fall table.

Miscellaneous.

Fire-extinguishing appliances of practically every description are to be seen on the stand of MESSRS. CHARLES WINN & Co., LTD., of Granville-street, Birmingham. The "Simplex" extinciteur, so often to be seen in important buildings, is designed to meet the requirements of the Board of Trade, the Fire Office Committee, and the Fire Brigade, and provides a ready means of extinguishing fires before they become serious enough to do much damage. Hose, couplings, pipes, hydrants and hydrant fittings, and special fittings for motor fire-engines go to make up a very comprehensive exhibit of fire-protection apparatus. Messrs.

Winn devote a portion of their stand to a display of sanitary goods and fittings.

MESSRS. ALLEN-LIVERSIDGE, LTD., (Victoria Station House, Westminster, S.W.1) make a special display of a welcome improvement in methods of lead burning, for which purpose they have put on the market a method embodying the use of oxy-acetylene. A thorough series of experiments has shown that the amount of dissolved acetylene required for welding sheet lead is only 25 per cent. of the volume of coal gas and only 15 per cent. of the volume of hydrogen necessary for the same amount of work, and that the volume of oxygen consumed is only 50 per cent. of that consumed with either of the other methods. We are informed that this process is effecting a saving of about one-third compared with the two older methods.

The elimination of cords, pulleys, and unsightly gear for windows is achieved by the "Skylux" method of window opening gear shown by MESSRS. SKYLUX, LTD., of 22, Gt. St. Andrew's street, W.C.2, which can be applied to both wood and metal sashes of whatever size or wherever placed. An idea of the adaptability of the system will be realised when it is said that it has been used for small houses and also for the very long spans of opening roof-lights at the new Olympia Annexe.

The "Rawlplug" method of fixing screws into hard substances such as brick, concrete, tiles, &c., shown by the RAWLPLUG CO., LTD., (Gloucester House, Cromwell-road, S.W.7) is too well known to need description. This firm is, however, showing several new products, a particularly useful one being a device for fixing machinery down to concrete floors or for suspending shafting from concrete beams.

MESSRS. MORRIS COMMERCIAL CARS, LTD., (Foundry-lane Works, Soho, Birmingham), show one of their 1-ton general purpose vehicles which should make a special appeal to the builder who requires a light van for his business. It has a usual pattern hand tipping screw for the body, which has a length of 7 ft. 6 in., and a width of 5 ft. 6 in.

The products of MESSRS. W. T. NICHOLSON & CLIPPER CO., LTD., of Salford, Manchester, including belt-lacing machines, belt fasteners, wire tools for belting, mallet tools for use with belt fasteners, and belt cutters, are shown in profusion, and demonstrate the claim of this firm that they supply everything for the user of belt drives.

Safes, strong-room doors, strong-room shelving and other burglar and fire-proof fittings are shown by MESSRS. SAMUEL WITHERS & CO., LTD. (Park Works, West Bromwich). This firm's "Grip" doors are not fitted until the masonry is completed, and it is therefore only necessary to leave a rectangular hole of the required size.

The advantages of their belt-treating compounds and jointing materials are demonstrated in a practical manner by MESSRS. THOMAS & BISHOP, LTD., (37, Tabernacle-street, E.C.2), who also show a selection of high quality leather and textile beltings for various purposes.

In addition to their well-known waterproofing paints and compounds, an exhibit of special interest on the stand of MESSRS. CURRASS PRODUCTS, LTD., (Abbey House, Victoria-street, S.W.1) is a method of treating worn and leaking corrugated iron or zinc roofings by patching with a fabric, such as canvas. The metal is first coated with the firm's "No. 6 liquid," to which a sheet or strip of fabric is applied. The fabric adheres to the liquid, and a further coat is then applied to the outside of the fabric; the result being a weather proof repair job at a very low cost.

Birmingham has a particular significance in connection with "Easilit" blow-lamps, as they were first exhibited there in 1908, and we are informed that some of these original lamps are still in use in good working order in the city. In addition to these burning-off and plumbers' lamps, the EASILIT BLOW LAMP CO., LTD., of Watford-road, Kings' Norton, Birmingham, show plumbers' stoves of petrol or paraffin, a machine for cutting mitres at different angles in Lincrusta and other borders, and an egg-shell gloss varnish.

NEW BUILDINGS IN LONDON.

Barking.—The "Crooked Billett" public-house at Creeksmouth, Barking, is to be rebuilt for Messrs. Charrington & Co., Mile End Brewery, E.1. Messrs. George Porter & Sons, Ltd., builders, 124, Sumner-road, Peckham, S.E. Mr. Samuel A. S. Yeo, F.R.I.B.A., Bank-chambers, St. John-street, E.C.2.

Barking.—Extensions are to be carried out to the works of the Cape Asbestos Co., Ltd., at Hart's-lane. Mr. E. L. Haynes, architect, 123, Newgate-street, E.C. Messrs. W. F. Blay, Ltd., builders, Dowgate-hill, Common-street, E.C., and Dartford, Kent.

Bishopsgate.—On the important freehold property, 203-211, Bishopsgate, having a frontage of about 100 ft., it is intended to erect a large office building and business premises with shops on the ground floor. Mr. Paul Hoffmann, Capel House, New Broad-street, E.C.2, architect.

Charing Cross.—The premises at Nos. 22-24, Charing Cross, S.W.1, are being converted into offices, with lift, and two shops on ground floor. Messrs. Bovis, Ltd., builders, 43, Upper Berkeley-street, W.1.

City-road.—The Royal London Ophthalmic Hospital in City-road, E.C.1, are raising £10,000 for the purpose of extensions. Messrs. Young & Hall, architects, 17, Southampton-street, W.C.1.

Ebury-street.—Steelwork has now been placed in position for the extension of the Goring Hotel, in Ebury-street, S.W.1, by Messrs. Dorman, Long & Co., Ltd., 3, Central-buildings, Westminster, S.W.1. The floors are to be constructed by Messrs. The Kleine Patent Fire-Resisting Flooring Syndicate, Ltd., 133, High Holborn, W.C. Messrs. Dove Bros., Ltd., builders, Cloudesley-place, N.1. Messrs. Giles, Gouch & Trollope, architects, 28, Craven-street, W.C.2.

Epsom.—A new hall, to cost about £7,000, is to be erected for the Epsom Brotherhood Movement. Mr. A. C. Williams, architect, Ashley-road, Epsom.

Fleet-street.—Nos. 22, 23 and 24, Bride-lane, and Nos. 2 and 7, Bride-court, are to be demolished to make room for a new block of buildings which Messrs. J. Lyons & Co., Ltd., are to erect in connection with the extension of their Ludgate-circus shop.

Fleet-street.—The site of No. 124, Fleet-street, E.C.4, covering about 4,200 feet, is to be let on building lease for a term of years. The surveyors and agents are Messrs. St. Quinten, Son & Stanley, 34, Clements-lane, E.C.3.

High Holborn.—The lease which has been acquired by the British Bureau, Ltd., 19, Abingdon-street, S.W.1, of Nos. 95-99, High Holborn, and 14-17, Eagle-street, W.C.1, as a site for "Monomark House," stipulates that not less than £75,000 shall be expended on rebuilding within the next ten years.

Jermyn-street.—A block of residential flats and shops is to be erected in Jermyn-street, W.1, to plans prepared by Messrs. Yates, Cook & Darbyshire, 43, Great Marlborough-street, W.1. Steelwork by Messrs. Archibald D. Dawney & Co., Ltd., Steelworks-road, Battersea, S.W.

King William-street.—Extensive alterations are being carried out at Messrs. Gatti's Restaurant in King William-street and Strand, W.C. Messrs. Higgs & Hill, Ltd., builders, Crown Works, South Lambeth-road, S.W. Steelwork by Messrs. Smith-Walker, Ltd., 33, Tothill-street, S.W.1.

King William-street.—Messrs. B. Goodman, Ltd., Haggerston-road, N., are clearing the site in King William-street, E.C.3, bounded by Nicholas-lane and Nicholas-passage, upon which it is proposed to build the new head offices for the London Life and Clergy Mutual

Insurance Co. Mr. W. Curtis Green, A.R.A., architect, 5, Pickering-place, S.W.1.

Kingston.—The Governors of the Kingston Grammar School propose to spend about £13,000 on new classrooms, assembly hall and cloakrooms. Messrs. Jarvis & Richards, architects, 60, Tufton-street, Westminster.

Lambeth.—The South London Palace Varieties in London-road, S.E.1, owned by the Variety Theatres Consolidated, Ltd., 25, Charing Cross-road, W.C., has been closed for reconstruction at a cost of about £50,000. Messrs. Griggs & Son, builders, 100, Victoria-street, S.W.1. Work to be carried out under the direction of Mr. Cecil Masey, 18, Devereux-court, Strand, W.C.2.

Limehouse.—Messrs. W. J. Maddison, Ltd., 124-127, Minorities, E.1, are the contractors for the rebuilding of the St. Paul's School in St. Paul's-road, Limehouse, E., at a cost of £30,000. Mr. G. Topham Forrest, F.R.I.B.A., County Hall, S.E.1.

Mansion House.—Extensive alterations and improvements are being carried out by Messrs. Sims & Russell, Bloomsbury-street, W.C., at Mansion House District Station, E.C.4, for the Metropolitan District Railway Co. Plans by the Company's architect, 55, Broadway, S.W.1.

New Bond-street.—The site of the new premises at the corner of New Bond-street and Burlington-gardens, W.1, for Messrs. J. & P. Atkinson, Ltd., perfumery manufacturers, has now been taken over by the contractor Messrs. E. A. Roome & Co., Ltd., Warwick-street, E.9. Steelwork will be by Messrs. Archibald D. Dawney & Sons, Ltd., Steelworks-road, Battersea, S.W. Messrs. Stanbrough & Harris, architects, 29, James's-square, S.W.1.

New Bond-street.—Important improvements are to be made to the Æolian Hall, in New Bond-street, W.1. Messrs. Griggs & Son, contractors, 100, Victoria-street, S.W. Joinery and metal work to be installed by Messrs. Samuel Haskins & Bros., Ltd., Watnamstow, E.17.

Piccadilly.—The site at one corner of Piccadilly and Bolton-street, W.1, has been cleared for the erection of a large block of shops and flats. Messrs. Griggs & Son, contractors, 100, Victoria-street, S.W.1. Messrs. Trehearne Norman, architects, Windsor House, King's-way, W.C.2.

Putney.—Extensions are to be carried out to the works of Messrs. Joseph Thorley, Ltd., cattle food manufacturers, Point Pleasant S.W.18. Messrs. Holliday & Greenwood Ltd., contractors, Stewarts-road, Battersea, S.W. Mr. G. E. F. Smedley, architect, T. Island, Rickmansworth.

Regent-street.—New premises, consisting of a large restaurant and shops, with office above on five floors, are to be erected at the corner of Regent-street and Air-street, W.1, for Messrs. Stewarts. Messrs. Howard & C. builders, 3, Broad Court-chambers, W.C. Steelwork by Messrs. H. Young & Co., N.1. Elms Ironworks, S.E. Masonry will be erected by Messrs. Dawe Bros., Culvert-place, S.W. Messrs. William Woodward & Sons, architects, 15, Gt. James-street, W.C.1.

Regent-street.—Quadrant House, a block of shops and offices, is being erected on western side of Regent-street, W.1, to designs of Messrs. Yates, Cook & Darbyshire, 43, Great Marlborough-street, W.1. Messrs. Holliday & Greenwood, Ltd., contractors, Stewarts-road, Battersea, S.W.

Regent-street.—The main stanchions being erected for the superstructure of the Regent Arcade in Regent-street and Air-street, W.1. Messrs. Kirk & Randall, J. contractors, 146, Grosvenor-road, S.W.1. S. Gordon Jeeves, architect, 16, Hanover square, W.1. Quantities by Mr. W. Webber, 33, Furnival-street, E.C.4.

Stamford Hill.—A new picture theatre is to be erected on the site at the corner of St.

ford Hill and Clapton Common, E.5. Messrs. D. Morris & Sons, architects, 91, Moorgate, E.C.2.

Tottenham.—Premises in Lawrence-road, N., have been acquired by Messrs. Pictos. Ltd., for use, after extensive alterations and equipment, as cinematograph film laboratories. Mr. E. A. Stone, F.S.I., architect, 20, Berkeley-street, W.1.

Victoria-street.—The premises adjoining the Army and Navy Co-operative Society's Stores, in Victoria-street, S.W.1. including the Army and Navy Mansions, are shortly to be taken over by the Society. Improvements projected include an extension of the range of shop fronts and showrooms. Sir Aston Webb & Sons, architects, 19, Queen Anne's-gate, S.W.1.

Wandsworth.—A group of 40 houses is to be erected on the Southfields housing estate at Wandsworth, S.W. Messrs. G. I. & H. B. Elkington, architects, 7, Laurence Pountney-hill, Cannon-street, E.C.4.

Wembley Hill.—A new church hall and vicarage are to be erected in a new parish of St. Michael, at Tokington, Wembley Hill, at a cost of about £20,000. Mr. G. Percy Pratt, architect, 174, Acton High-street, W.3.

With regard to the paragraph in our last issue under New Buildings in London, referring to the new building for the International Fur Company, in Regent-street, we are asked to state that the contract for the steelwork is being carried out by Messrs. Moreland, Hayne & Co., Ltd., and not by Messrs. H. Young & Co., as stated.

BAD WEATHER BUILDING INSURANCE SCHEME

The National Federation of Building Trades Operatives have formulated a scheme for the payment of time lost through inclement weather. As submitted to the employers, the proposal provided for an employers' contribution of 1s. a week for every operative, paid into a central fund called "The Inclement Insurance and Welfare Fund," for which a special account would be opened by the Operatives' Federation, who would be responsible for its administration. The employers were to have the right to appoint an accountant periodically to inspect the books. To build up a fund it was proposed that no payment should be made until an agreed period after the initiation of the system of contributions. Payment, it was suggested, should be of a maximum sum of 50 per cent. of the actual time lost by the operatives or such lesser amount as the fund would allow in respect of wet weather. It was further recommended that after the scheme had been in operation for an agreed number of years, and the average calls on the fund could be properly estimated, any surplus should be utilised for the purpose of assisting welfare schemes in the interests of workmen engaged in the building trades.

Mr. R. Coppock, the Secretary of the Federation, writing in the *Operative Builder*, states that as the result of study of the proposals by a joint committee, the employers who had opposed the idea of payment for lost time began to change their views, and it was agreed that it might be possible to reduce the contribution from 1s. to 6d. "The operatives," he adds, "quite rightly consider that this question is not merely one of profit and loss, but that the cost to the industry must be subordinated to the more vital issue of decasualising labour." Mr. Coppock adds that a scheme of this kind has got to be a matter of round-table negotiation in the end and cannot rest on any but an actuarial basis.

We learn that owing to a fire the works of the National Bituminous Products, Ltd., of 67A, Aversham-road, Reading were completely gutted on Monday last. It is understood, however, that the firm will do their very best to execute orders that are sent to them at 28, Victoria-street, S.W.1.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Bricklayers.	Cp'ters. Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Bedford	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Birkenhead	1/9	1/9	1/8	1/9	1/9	1/9	1/8
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bournemouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Bridgewater	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Brighton	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Cambridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chesham	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Crews	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8
E. Glam.(Mon. Val.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Eastbourne	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Ekester	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Grays	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Griusby	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Haliux	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hartlepool	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Ipswich	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Lancaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Liverpool	1/9	1/9	1/8	1/9	1/9	1/9	1/8
Llanelli	1/8	1/8	1/8	1/8	1/8	1/8	1/8
London (12 m. radius)	1/9	1/9	1/9	1/9	1/9	1/9	1/8
London (12-15 m. radius)	1/9	1/9	1/9	1/9	1/9	1/9	1/8
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Maidstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Newport Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Norwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Oakham	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Southampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Southend-on-Sea	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stoke-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stroud	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Swansea	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Tannton	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, &c.

SEPTEMBER 14.—**Adwick-le-Street.**—ELECTRIC LIGHTING.—Internal wiring for electric lighting of Council houses, for the U.D.C. W. M. Selvey, consulting engineer, Independent Buildings, Sheffield.

SEPTEMBER 14.—**Bedwas and Machen.**—HOUSES.—Forty semi-detached parlour type houses and the completion of roads and sewers on a site near the Schools at Maesycwmmer, for the U.D.C. Housing Architect, Council Offices, Bedwas. Deposit £3 3s.

SEPTEMBER 14.—**Belfast.**—WIRING.—Plumbing, electric wiring, &c., of medical superintendent's residence at Purdysburn, for the C.B. Tulloch & Fitzsimons, architects, 21, Castle-place. Deposit £2 2s.

SEPTEMBER 14.—**Bury.**—Twenty houses in Woodley-street, Market-street, and Morley-street, for the C.B. J. Ainsworth Settle, the Borough Engineer. Deposit £2.

SEPTEMBER 14.—**Carlisle.**—PAINTING.—External painting of 74 houses at Garden City, Stanwix; 32 houses at Boustead's Grassing; 24 houses at Denton-street, Carlisle, for the T.C. Henry C. Marks, City Engineer and Surveyor.

SEPTEMBER 14.—**Dublin.**—HOUSES.—Fifty-nine houses, L.G.D. type, at Fairbrothers' Fields, for the C.B. John J. Murphy, Town Clerk. Deposit £2 2s.

SEPTEMBER 14.—**Dublin.**—RESTORATION.—Of the central portion of the east front of the Custom House, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath. Deposit £5.

SEPTEMBER 14.—**Dublin.**—PAINTING.—Certain painting works, and works incidental thereto, at Eastern Command Hospital, Portobello Barracks, Dublin. Felix Cronin, Major-General, Quartermaster-General. Deposit £1 1s.

SEPTEMBER 14.—**Dunmow.**—HOUSES.—Pair of houses at Barnston and one pair of houses at Bishop's Green, Great Dunmow, for the R.D.C. J. Plumley, Sanitary Surveyor, New-street.

SEPTEMBER 14.—**Feltham.**—HOUSES.—10 houses in Sunbury-road, for the U.D.C. H. W. A. Carter, surveyor. Deposit £2 2s.

SEPTEMBER 14.—**Leeds.**—PAINTING.—Painting and cleaning of pavilions "A" and "B" and part of the administration block at the infectious diseases hospital, Seacroft, for the T.C. Thos. Thornton, Town Clerk.

SEPTEMBER 14.—**London.**—BUILDING.—For the erection of two blocks of dwellings: (a) on the Wapping estate, (b) on the Holland estate, Spitalfields, for the L.C.C. The Architect of the Council, the County Hall, (Room No. 3), Westminster Bridge, S.E.1. Deposit £2 in respect of each block.

SEPTEMBER 14.—**London, N.W.**—The following works for the Hendon U.D.C.:—(1) Public convenience (adjoining "The Castle" P.H.), Hermitage-lane, Child's Hill, N.W.2; (2) alterations to miniature rifle range and new convenience, Child's Hill, Recreation Ground, N.W.2. Mr. A. O. Knight, A.M.I.C.E., Engineer to the Council, Town Hall, Hendon, N.W.4.

SEPTEMBER 14.—**Manchester.**—BUILDING WORK.—Building work, including all trades, in the superstructure of the Company's new offices, situate on the west side of Kings-street, Manchester. F. A. Eyre, Secretary, Manchester Ship Canal Co., 41, Spring Gardens, Manchester.

SEPTEMBER 14.—**Marsh.**—BUNGALOW.—At Le-Marchant-avenue, Marsh. J. Ainley, architect and surveyor, 55, New-street, Huddersfield.

SEPTEMBER 14.—**Merthyr Tydfil.**—HEATING.—Heating installation in connection with the extensions to the female wards of the Poor Law Institution Infirmary, for the B.G. Herbert Brown, consulting engineer, 2, Park-grove, Cardiff.

SEPTEMBER 14.—**Misea.**—HOUSES.—Fifty-six parlour type houses on the Meadows site, for the U.D.C. A. J. Dardis, Surveyor and Engineer. Deposit £2 2s.

SEPTEMBER 14.—**Rotherham.**—HOUSES.—Thirty-four houses on the East Dene estate, for the C.B. Chas. A. Broadhead, architect, Devonshire House, Moorgate. Deposit £2 2s.

SEPTEMBER 14.—**Wolviston.**—REPAIRS.—Alterations and repairs to Sundial House Farm, for the Durham C.C. Wm. Carter, A.R.I.B.A., architect, Shire Hall, Durham.

SEPTEMBER 15.—**Borris.**—RESTORATION.—Of Borris ex-R.I.C. Barracks, Co. Carlow, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

SEPTEMBER 15.—**Godstone.**—HOUSES.—Twenty-four Class "A" houses at Harrow-road site, Warrington, for the R.D.C. S. F. Evershed, L.R.I.B.A., surveyor, Lloyds Bank Chambers, Oxted. Deposit £3 3s.

SEPTEMBER 15.—**Hursley.**—PAINTING.—External painting of 44 houses at Fryern Hill, Chandler's Ford, for the R.D.C. J. P. Game, surveyor.

SEPTEMBER 15.—**Huthwaite.**—HOUSES.—Eight non-parlour type houses, and 10 parlour type houses, for the U.D.C. G. Bostock, surveyor. Deposit £1.

SEPTEMBER 15.—**London.**—CONVENIENCE.—Certain work in connection with the erection of the new underground sanitary conveniences, and renewals of existing sanitary work, &c., at the Institution, Shepherdess-walk, City-road, N.1, for the Guardians of the Poor of the Holborn Union. Clerk to the Guardians, Administrative Offices, 53, Clerkenwell-road, E.C. 1. Deposit £1 1s.

SEPTEMBER 15.—**Rochdale.**—PAINTING.—External and internal painting work at Falinge Park, Broadfield Park, Wet Rake Gardens, Cronkshaw Recreation Ground, Small bridge Recreation Ground, Newbold Recreation Ground, for the C.B. Borough Surveyor.

SEPTEMBER 15.—**Wandsworth.**—HORSES.—On Southfields housing estate, (a) group of 40 houses, (b) two small flats, On Furzedown housing estate, (c) group of 43 houses; (d) group of 68 houses; (e) group of 58 houses, for the E.C. G. I. and H. B. Elkington, architects, Norfolk House, 7, Laurence Pountney-hill, Cannon-street, E.C.4. Deposit £2 2s. each.

SEPTEMBER 15.—**Warringham.**—COTTAGES.—Twelve cottages for the Visiting Committee of the Croydon Mental Hospital; erection of two pairs of parlour cottages in Harrow-road, Warringham; also two pairs of non-parlour and one block of four non-parlour cottages in Green-lane, Warringham. The Borough Engineer, Town Hall, Croydon. Deposit £2 2s.

SEPTEMBER 15.—**Warwickshire.**—POLICE BUILDINGS.—Erection of two police houses, a parade ground, two drill sheds, and other consequent work, at Nuneaton, for the C.C. A. C. Bunch, F.R.I.B.A., County Architect, 27, Binswood-avenue, Leamington Spa. Deposit £2 2s.

SEPTEMBER 15.—**Warwickshire.**—BUILDING ADDITIONS.—Erection of steward's quarters, office, additional staff bedrooms and storage accommodation at the Memorial Sanatorium, Hertford Hill, Warwick, for the Warwickshire and Coventry Joint Committee for Tuberculosis. A. C. Bunch, F.R.I.B.A., architect, 27, Binswood-avenue, Leamington Spa. Deposit £2 2s.

SEPTEMBER 15.—**Wath-on-Dearne.**—ADDITIONS.—Additions to Wath-on-Dearne Victoria Council School, for the West Riding E.C. Education Department, County Hall, Wakefield.

SEPTEMBER 15.—**Workshop.**—HOUSES.—Twelve type "A" and 12 type "B" houses, together with the street works, sewers and surface water drains in connection therewith, at Langold, in the parish of Hodsock; also six type "A" houses and 14 type "B" houses, together with the street works, sewers and surface water drains in connection therewith, in the parish of Harworth, for the R.D.C. A. Edwin Hewitt, surveyor, 66, Bridge-street. Deposit £2 2s.

SEPTEMBER 16.—**Burnmouth.**—WALL.—Stone faced concrete retaining wall to the Bath-road frontage of St. Peter's Vicarage, for the C.B. F. P. Dolamore, Borough Engineer. Deposit £1 1s.

SEPTEMBER 16.—**Chorley.**—SCHOOL.—On the site of Duke-street Council school, for the T.C. Biram & Fletcher, L. & F.R.I.B.A., architects, 17, George-street, St. Helens.

SEPTEMBER 16.—**Hatch, near Basingstoke.**—Erection of a pair of cottages for roadmen, for the Southampton C.C. Mr. A. L. Roberts, County Architect, The Castle, Winchester.

SEPTEMBER 16.—**Leeds.**—PIPING.—For (1) structure, (2) calorifier piping, &c., for the erection of public washhouses and slipper baths at Stocks Hill, Holbeck, for the T.C. W. T. Lancashire, City Engineer.

SEPTEMBER 16.—**London.**—HEATING.—Providing and applying non-conducting composition to heating hot water and condensed steam mains, &c., at Tooting Bec Hospital, Tooting, S.W.17, for the M.A.B., T. Cooper, Engineer-in-Chief. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

SEPTEMBER 16.—**Mansfield.**—SCHOOL.—For erection of a new Central School for 720 children, at High Oakham, Nottingham. Borough Engineer and Surveyor, Market-street, Mansfield. Deposit £2 2s.

SEPTEMBER 16.—**New Barnet.**—SCHOOL.—Erection of an extension to the school at Barnet, for the Governors of the Queen Elizabeth Girls' Grammar School, Barnet. J. W. Fisher, architect (of Talbot, Brown & Fisher, architects), Burystead-place Wellingborough. Deposit £2 2s.

SEPTEMBER 16.—**Newmill.**—HOUSES.—Twenty-five houses in Kirkroyds-lane, for the U.D.C. J. Berry & Sons, architects, 3, Market-place, Huddersfield.

SEPTEMBER 16.—**Ormskirk.**—HOUSES.—Forty houses on the Tank-lane site, for the U.D.C. W. Chadwick, surveyor. Deposit £2 2s.

SEPTEMBER 16.—**Rochdale.**—REPAIRS.—For (1) construction of timber ventilating turret on the Assembly Hall roof; (2) alterations and additions in basement together with erection of conveniences at the town hall, for the C.B. Borough Surveyor.

SEPTEMBER 16.—**Salford.**—PAINTING.—Exterior painting work required at the Union Infirmary and Nurses' Home, Stott-lane, Pendleton, for the B.G. E. H. Inchley, Clerk to the Guardians, Poor Law Offices, Eccles New-road, Salford.

SEPTEMBER 16.—**Sheffield.**—HOUSES.—12 houses at Retford-road, Handsworth, for the T.C. F. E. P. Edwards, F.R.I.B.A., City Architect. Deposit £2.

SEPTEMBER 16.—**Sunderland.**—HOUSES.—Erection of 78 four-roomed houses and 58 three-roomed houses at the Spark Farm estate, under the terms of the Housing (Financial Provisions) Act, 1924, for the County Borough. Borough Engineer's Office, Town Hall. Deposit £2 2s.

SEPTEMBER 16.—**Whifflet.**—EXTENSION.—To St Mary's R.C. School, for the Lanarkshire E.C. John Stewart, Master of Works, 20, Albert-street, Motherwell.

SEPTEMBER 17.—**Aberaman.**—PAINTING.—Painting the iron-work of the whole of the outside of the Aberaman public hall and institute, library and grand theatre, for the Committee. H. Vause, General Manager.

SEPTEMBER 17.—**Ballymoney.**—PAINTING.—The outside iron and woodwork of 119 labourer's cottages and executing minor repairs to same, for the R.D.C. T. B. Hamilton, Clerk of R.D. Council.

SEPTEMBER 17.—**Glasgow.**—PLASTERING.—Plaster work of 204 houses of the Hamiltonhill extension housing scheme, for the T.C. J. Lindsay, Town Clerk.

SEPTEMBER 17.—**Liverpool.**—PAINTING.—Interior painting and general repairs at Mill-lane Hospital, Old Swan, for the T.C. Land Steward and Surveyor.

SEPTEMBER 17.—**Rossington.**—HOUSE.—Caretaker's house and paths at the cemetery for the P.C. J. Bly he Richardson, architect, 26, Printing Office-street, Doncaster.

SEPTEMBER 17.—**St. Austell.**—ADDITIONS.—Alterations and additions to the White Hart Hotel, St. Austell. Leonard Winn, architect and surveyor, 27, Boscawen-street, Truro.

SEPTEMBER 17.—**Salford.**—EXTENSIONS.—Structural extensions at the Broughton High School for Girls, for the E.C. Secretary, for Education, Education Offices.

SEPTEMBER 17.—**Whickham.**—FLATS.—64 flats in sixteen blocks of four each on the housing site at Dunston, for the U.D.C. Mr. Thos. Fenbow, surveyor. Deposit £3 3s.

SEPTEMBER 18.—**Burton-on-Trent.**—SCHOOL.—Girls' school at the Woodlands, Winhill, for the Governors of the Endowed Schools. R. S. Litherland, L.R.I.B.A., Quantity Surveyor, 10, High-street. Deposit £2 2s.

SEPTEMBER 18.—**Devon.**—SCHOOL.—Erection of a new secondary school for girls at Totnes. County Architect (Education), 1, Blackall-road, Exeter. Deposit £2 2s.

SEPTEMBER 18.—**Durham.**—RAILING.—Dwarf walling and ornamental pillars and iron railing opposite Pennypot House, on the main road between Stockton and Yarm, for the C.C. Wm. J. Merrett, County Engineer and Surveyor, County Surveyor's Office, 43, Old Elvet, Durham.

SEPTEMBER 18.—**Oldmeldrum.**—REPAIRS.—Mason, carpenter, slater, plumber, painter and glazier works of additions and alterations to workmen's cottages at Glangarioch Distillery, Oldmeldrum. J. G. Marr, A.R.I.B.A., 173a, Union-street, Aberdeen.

SEPTEMBER 18.—**Orpington.**—For the execution of ordinary works and repairs to buildings in the Orpington District. The Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit 10s. 6d.

SEPTEMBER 18.—**Southport.**—BUILDINGS.—Block of new buildings and extensions to existing Art Gallery, at the corner of Eastbank-street and Sharrock-street, for the C.B. A. E. Jackson, Borough Engineer. Deposit £3 3s.

SEPTEMBER 18.—**Sunderland.**—PREMISES.—For the demolition of present buildings and the erection and completion of new business premises, High-street West and Bridge-street corner, J. Eltringham, architect, 69, John-street. Deposit £1 1s.

SEPTEMBER 18.—**West Riding.**—POLICE STATION.—Erection of new Police Station at Saddleworth (Upper-mill) near Oldham. Percy O. Platts, A.R.I.B.A., County Architect, County Hall, Wakefield.

SEPTEMBER 19.—**Abergavenny.**—ADDITIONS.—Carrying out proposed alterations and additions at King Henry VIII. Grammar School, for the Monmouthshire E.C. J. Bain, F.R.I.B.A., County-hall, Newport. Deposit £1 1s.

SEPTEMBER 19.—**Bangor.**—ALTERATIONS.—Alterations and additions at the Hospital. S. C. Hunter, Building Surveyor, Scottish Provident Buildings, Belfast. Deposit £2 2s.

SEPTEMBER 19.—**Bolton.**—EXTENSIONS.—To Townleys Hospital, and improvements at the Fishpool Institution, Farnworth, near Bolton, for the B.G. J. Ward, architect, 24, Mawdsley-street. Deposit £3 3s.

SEPTEMBER 19.—**Cranbrook.**—RENOVATIONS, &c.—To the Isolation Hospital, including additional ward accommodation for twelve beds, administrative and nurses' quarters, central heating, drainage, &c., for the Cranbrook and Tenterden Joint Hospital Committee. Eric Clarke, Clerk to the Board. Deposit £2 2s.

SEPTEMBER 19.—**London, N.**—SCHOOL.—Erection of a school for 910 children in Rokesby-avenue, for the Hornsey R.C. Mr. H. Carter Pegg, F.R.I.B.A., architect, 35, Parliament-street, S.W.1. Deposit £1.

SEPTEMBER 19.—**Northwold.**—COTTAGE.—Police cottage, for the Norfolk C.C. J. L. Camell, F.R.I.B.A. and W. Dymoke White, L.R.I.B.A., architects, Paradise Chambers, King's Lynn. Deposit £1 1s.

SEPTEMBER 19.—**Pewsey.**—HOUSES.—Erection of 20 houses in certain districts, for the R.D.C. Mr. Robert Dixon, Clerk to the R.D.C., Pewsey, Wilts. Deposit £3 3s.

SEPTEMBER 21.—**Bethnal Green.**—TENEMENTS.—Erection of 32 tenements at Parmenter-street, Bethnal Green, for the Bethnal Green Borough Council. Mr. E. C. P. Monson, Architect, Finsbury-pavement House, 120, Moorgate, E.C.2. Deposit £2.

SEPTEMBER 21.—**Dublin.**—PAINTING.—Painting works and works incidental thereto, at Collins Barracks Dublin. Felix Cronin, Major-General, Quartermaster-General. Deposit, £1 1s.

SEPTEMBER 21.—**Fowey.**—HOUSE.—Residence at Fowey, Cornwall. J. Cornelius, F.R.I.B.A., Architect, Truro.

SEPTEMBER 21.—**Hants.**—REPAIRS AND MATERIALS.—For artificers' work (Maintenance Contracts), from October 6, 1925, at the Blackdown and Deepcut. Commanding Royal Engineer, Marlborough Lines, North Aldershot, Hants.

SEPTEMBER 21.—**Shipley.**—CONVENIENCES.—Public conveniences at Stead-street, for the U.D.C. Surveyor and Architect.

SEPTEMBER 22.—**Blackpool.**—For adaption work at the old Post office building, Corporation-street Blackpool, for the Commissioners H.M. Works. Th Contracts Branch, H.M. Office of Works, King Charles street, S.W.1. Deposit £1 1s.

SEPTEMBER 22.—**Brentford**.—WIRING.—Electric wiring of and other work at the Institution, Warkworth use, Twickenham-road, Isleworth, for the B.G. E. Harnsworth, Clerk to the Guardians, Toolanda use, Isl-wor h. Deposit £5 5s.

SEPTEMBER 22.—**Headington**.—HOUSES.—Erection of 24 houses on the Barton-road, for the R.D.C. Mr. Page Webb, architect and surveyor, 23, High-street, w Headington, Oxford. Deposit £2 2s.

SEPTEMBER 22.—**Lisburn**.—COTTAGES.—Ninety-eight labourers' cottages, and for fencing the plots same, for the R.D.C. S. J. Crail, Clerk of the Council. arge, 5s.

SEPTEMBER 22.—**London, S.W.**—PUBLIC LIBRARY.—Erection of a public library in Magdalen-road, rlsfield, S.W., for the Wandsworth B.C. Mr. nest J. Elford, Borough Engineer, 215, Balham gh-road, S.W.17.

SEPTEMBER 22.—**Mexborough**.—HEATING.—Heating the Technical Centre premises, for the West Riding Education Department, County Hall, Wakefield.

SEPTEMBER 22.—**Plymouth**.—REPAIRS.—To police stations at Prince Rock, Laïra No. 1, Laïra No. 2, d Ford Park-road, for the C.B. J. Wibberley, ough Engineer and Surveyor. Deposit, £1 1s.

SEPTEMBER 22.—**Rathmines and Rathgar**.—REPAIRS.—To screening chamber, Ballyboden, for the U.D.C. Mason, Clerk of the Council, Town Hall, Rathmines, Dublin.

SEPTEMBER 22.—**Wharfedale**.—PAINTING.—External d internal painting and decorating of the Guardians' stitution at New Hall, Otley, for the B.G. E. C. ewstead, Clerk to the Guardians, Union Offices, Otley.

SEPTEMBER 23.—**East Elloe**.—COTTAGES.—Pair of ttages at Whaplode Washway on land adjoining e Council Cottages, for the R.D.C. S. S. Mossop, r., Clerk to the Council, Holbeach.

SEPTEMBER 23.—**Edinburgh**.—HALL.—Temporary hit hall and store, at the Royal Scottish Museum, r H.M. Office of Works. Architect, H.M. Office of orks, 122, George-street. Deposit, £1 1s.

SEPTEMBER 23.—**Gilfach Coch**.—HALL.—New urch-hall, for the Vicar and Churchwardens of . Barnabas. Gibb & Smith, L. & A.R.I.B.A., chitects and surveyors, Post Office Chambers, Port lbot. Deposit, £1 1s.

SEPTEMBER 23.—**Hammersmith**.—Erection of an derground water-tight ferro-concrete pump chamber d an overhead brick pump house, for the Metrolitan Borough of Hammersmith. F. Hill, Borough ectrical Engineer, Electricity Works, 85, Fulham lace-road, W.6.

SEPTEMBER 23.—**London, N. 18**.—MORTUARY.—Erection and finishing fit for use of a mortuary l post mortem room at the North Middlesex Hospital, ver-street, Upper Edmonton, for the Guardians f Edmonton Union. J. C. S. Mummery, A.R.I.B.A., Bloombury-square, W.C.1.

SEPTEMBER 23.—**London, W.C.**—Erection of the "trand" Telephone Exchange, Contracts Branch, M. Office of Works, King Charles-street, S.W.1. osit £1 1s.

SEPTEMBER 23.—**Rochdale**.—PAINTING.—Internal nting work required in houses on the Kilworthet, Ivor-street, and Deepdish Estates, for the C.B. ough Surveyor.

SEPTEMBER 23.—**Wanstead**.—SCHOOL.—For the ction of a secondary school, for the Essex County ncil. The County Architect, Springfield Old Court, lmsford. Deposit £2 2s.

SEPTEMBER 24.—**London**.—WIRING.—Electric wir- nstallation at the White Wing, British Museum, H.M. Office of Works. Contracts Branch, H.M. ce of Works, King Charles-street, S.W.1. Deposit 1s.

SEPTEMBER 24.—**London, S.E.**—ADDITIONS.— n option of, and construction of additions to Millburn use. Knight's Hill, West Norwood, S.E., for the urses of a Maternity Home, for the Lambeth B.C. Mr. onard Cattlin, Borough Engineer, Lambeth Town ll, Brixton Hill, S.W.2. Deposit £2 2s.

SEPTEMBER 24.—**Salford**.—HEATING.—Installation eating system, for the C.B. J. C. Evans, Town k.

SEPTEMBER 25.—**Biggleswade**.—HOUSES.—Erec- n of 41 houses of two types, for the U.D.C. Mr. A. Howitt, Council's Surveyor, Biggleswade, Beds. osit £2 2s.

SEPTEMBER 25.—**Bridge water**.—HOUSES.—Thirty-one ouses in blocks of two, four and six, for the T.C. son & Colthrust, architects, 51, High-street, osit £2 2s.

SEPTEMBER 25.—**London**.—For the erection of a hone exchange at Seven Kings, London, for H.M. ce of Works. The Contracts Branch, H.M. Office f ks, King Charles-street, S.W.1. Deposit £1 1s.

SEPTEMBER 26.—**Bournemouth**.—BUILINGS.—Ex- utive school buildings adjoining the present Stourfield ol, for the C.B. F. P. Dolamore, Borough Engi- . Deposit £1 1s.

SEPTEMBER 26.—**Bournemouth**.—EXTENSIONS.— itional class rooms, &c., to the Malmesbury-park nil School, Shelbourne-road, for the C.B. F. P. amore, Borough Engineer. Deposit £1 1s.

SEPTEMBER 26.—**Purgatory**.—C. U.R.C.—New church f. Patrick's Purgatory, Lough Derg, co. Donegal, e Rev. Patrick McKenna, D.D., Lord Bishop logher. T. J. Cullen, F.R.I.A.I., architect, 25, k-street, Dublin. Deposit £5 5s.

SEPTEMBER 26.—**Stockton-on-Tees**.—SCHOOL.—E- rection of open-air school, Norton, for the E.C. V. T. Richardson, F.R.I.B.A., 57, High-street, ton-on-Tees.

SEPTEMBER 28.—**Carlisle**.—BUILDING.—Screening umping chambers at the new electricity power n, Willow Holme, for the T.C. Henry C. Marks, Engineer and Surveyor. Deposit 10s.

SEPTEMBER 28.—**Durham**.—ADDITIONS, &c.—To rton Hill Council school, for the Durham C.C. J. Willey, F.R.I.B.A., architect, 34, Old Elvet, am.

SEPTEMBER 28.—**East Molesey**.—HOUSES.—Erection of 28 houses at Beauchamp-road, for the East and West Molesey U.D.C. Mr. Gordon Condell, Clerk, Council Offices, St. Mary's-road, East Molesey. Deposit £1 1s.

SEPTEMBER 28.—**London, N.W.**—Development of new housing estate at Hendon, for the L.C.C. Administrator of Housing Development Schemes, Old County Hall, Spring-gardens, S.W.1. Deposit £10.

SEPTEMBER 28.—**Stoke-on-Trent**.—CONVERSION.—Conversion into water-closets of about 70 privies and pails, in Hanford, for the T.C. Chief Sanitary Inspector, St. Peter's Chambers, Giebs-street.

SEPTEMBER 29.—**Durham**.—SCHOOL.—General builders' work required in connection with the erection of Monkton new Council School, for the C.C. F. Willey, F.R.I.B.A., F.S.I., 34, Old Elvet, Durham.

SEPTEMBER 29.—**Montrose**.—COTTAGES.—Cottages at H.M. Coastguard Station, for H.M. Office of Works. Architect, H.M. Office of Works, 122, George-street, Edinburgh. Deposit, £1 1s.

SEPTEMBER 30.—**London**.—CONVENIENCES.—Con- struction of public conveniences at the south end of Philipot-street, Mile End, E. 1, for the Stepney B.C. B. J. Belsher, Borough Engineer and Surveyor. De- posit £2.

SEPTEMBER 30.—**Nantwich**.—HOUSES.—Forty-six houses on the Wallfields housing site, for the U.D.C. P. H. Paton, surveyor. Deposit £2 2s.

SEPTEMBER 30.—**Wandsworth, S.W.**—POST OFFICE.—Erection and completion of a branch post office at Wandsworth, S.W., for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles street, London, S.W.1. Deposit, £1 1s. (cheques payable to the Commissioners).

SEPTEMBER.—**Malling**.—CONVERSION.—Of the house known as "Elverdale", the Freehold, East Peckham, into two cottages, for the R.D.C. C. Souter, Sanitary Surveyor, West Malling.

OCTOBER 1.—**Dublin**.—REBUILDING.—Taking down and rebuilding upon portion of the front wall of the premises, No. 2, Kildare-place, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath. Deposit £1.

OCTOBER 1.—**Ireland (Free State)**.—RESTORATIONS.—Of Cong. ex R.I.C. Barracks, co. Mayo; Ardahan ex R.I.C. Barracks, Galway; Kilbrittain ex R.I.C. Barracks, co. Cork; Waterville ex R.I.C. Barracks, co. Kerry, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath (Dublin). Deposit £1 each.

OCTOBER 1.—**Litherland**.—HOUSES.—Erection of 50 houses on the housing site belonging to the U.D.C. of Litherland between Sefton-road and Moss-lane. Mr. G. Ponsford, Engineer and Surveyor, Council Offices, Litherland.

OCTOBER 1.—**London, S.W.**—DEMOLITION.—Tak- ing down and clearing away temporary iron buildings complete with fittings, &c., at Tooting Home, Church- lane, Tooting, S.W., for the Guardians of the Wands- worth Union. Mr. F. J. Curtis, clerk, Union Offices, St. John's Hill, S.W.18.

OCTOBER 2.—**Didcot**.—ADDITIONS AND ALTERA- TIONS.—Erection of six new classrooms, new offices, drainage, and other works at Didcot Council School, for the Berkshire E.C. Mr. W. C. F. Anderson, Education Secretary, Shire Hall, Reading. Deposit £2 2s.

OCTOBER 5.—**Hindley**.—SCHOOL.—School off Leigh- road, Hindley Green, to accommodate 450 scholars, for the U.D.C. H. Wade, 2, Birley-street, Blackpool. Deposit £5 5s.

OCTOBER 5.—**Newmarket**.—HOUSES.—Erection of 12 brick and slated parlour houses, in six pairs, at Laureate Paddocks site, for the Newmarket U.D.C. Mr. W. H. Eley, Surveyor, Godolphin House, New- market.

OCTOBER 7.—**East Stow**.—HOUSES.—For sixteen houses at Combs and fourteen houses at Stowupland, for the R.D.C. Hunt & Coates, architects, 51A, Abbey- gate-street, Bury St. Edmunds.

NO DATE.—**Barnsley**.—HOUSE.—At Dodworth- road, for Mr. S. E. Totty. Dyson, Cawthorne & Coles, architects and surveyors, 10, Regent-street.

NO DATE.—**Barnsley**.—ALTERATIONS.—To the "Guide Post" Inn, Wombwell, and the "Rose and Thistle", Wellington-street, Barnsley. Dyson, Cawthorne & Coles, architects and surveyors, 10, Regent-street, Barnsley.

NO DATE.—**Belfast**.—RESIDENCE.—At Malone Park, Belfast. T. Houston, architect, 17, Wellington- place.

NO DATE.—**Bootle**.—PAINTING.—For (1) Lither- land-road Canal Bridge, and (2) Stanley-road Canal Bridge, for the C.B. Borough Engineer.

NO DATE.—**Craghead**.—HOMES.—Six aged miners' homes and a hostel at Craghead. T. Welsh, 1, Holly- terrace, Stanley, co. Durham.

NO DATE.—**Farnham**.—HOUSES.—Erection of four small houses near Frensham-road. H. Faulkner, architect, 24, West-street, Farnham.

NO DATE.—**Govan**.—BUILING.—Construction of nurses' accommodation, Mental Wards, at the Hospital, for the P.C. H. & D. Barclay, architects, 222, Wellin- gton-street, Glasgow.

NO DATE.—**Newport**.—DAIRY.—New dairy, Rodney-road, for the Co-operative Industrial Society. W. T. Springall, L.R.I.B.A., Architects' Department, Co-operative Wholesale Society, Ltd., St. Mary-street, Cardiff. Deposit £2 2s.

NO DATE.—**Phillipstown**.—PAINTING.—Internal painting and decorating and outside painting of the Workmen's Constitutional Club, Phillipstown, New Tredegar, for the Committee. G. Jenkins, secretary.

MATERIALS, etc.

SEPTEMBER 14.—**Edmonton**.—MATERIALS.—Broken granite and Portland cement, for the U.D.C. Engineer.

SEPTEMBER 15.—**Durham**.—PIPING.—Lead piping, &c., for the C.B. J. J. Murphy, Town Clerk.

SEPTEMBER 14.—**Ilkley**.—PIPES.—For (a) 200 yds. of 9 in., 300 yards of 6 in., and 100 yds. of 4 in. best quality earthenware pipes; (b) 100 yds. of 9 in., 200 yds. of 6 in., and 100 yds. of 4 in. second quality earthenware pipes, for the U.D.C. J. Montague Gameson, Surveyor and Water Engineer.

SEPTEMBER 14.—**Leicester**.—MATERIALS.—Building material and timber, &c., for the B.G. H. Mansfield, clerk.

SEPTEMBER 15.—**Brighton**.—MATERIALS.—Brick- layers', plasterers' and masons' materials; carpenters' and joiners' materials; electrical fittings, &c.; painters' and glaziers' materials, &c., for the B.G.

SEPTEMBER 15.—**Esrick**.—MATERIALS.—Best whin- stone, limestone, slag, and tar, for the R.D.C. J. R. Hudson, Highway Surveyor, Wheldrake, York.

SEPTEMBER 15.—**France and Belgium**.—HEAD- STONES.—Total supply of 15,000 headstones, packed and delivered f.o.r., to be divided into a number of contracts, none of which shall be for less than 100 head- stones. The Secretary, Works Department, Imperial War Graves Commission, 62, Baker-street, W.1, and marked "Headstone Contract, 5079/Z."

SEPTEMBER 15.—**Ilkley**.—KERB.—3,000 yds. of 8 in. by 12 in. concrete kerb, for the U.D.C. J. Montague Gameson, Surveyor.

SEPTEMBER 15.—**London**.—FENCING.—Fencing mat- erials for the Madras and Southern Mahratta Railway Co. Directors, 25, Buckingham Palace-road, S.W.1. Charge £1 1s.

SEPTEMBER 16.—**Dublin**.—MATERIALS.—Building materials, timber, cement, bricks, stone, slate, &c., for the B.G. Clerk, 1, James's-street.

SEPTEMBER 16.—**Dublin**.—PIPES.—Hume reinforced concrete pipes, delivered to Drumcondra, for the C.B. J. J. Murphy, Town Clerk.

SEPTEMBER 16.—**Dublin**.—MATERIALS.—Hardware, plumbing, steam fittings, &c., timber, cement, slates, and building materials; white lead, paints, oils, turpentine, &c., for the Grangegorman Mental Hospital Committee. Clerk.

SEPTEMBER 16.—**Poole**.—GRANITE.—Broken granite, coarse and fine tarmacadam, for the T.C. Samuel J. Newman, F.R.I.B.A., Borough Surveyor.

SEPTEMBER 17.—**Birkenhead**.—MATERIALS.—Asbes- tos, cement, bricks, &c.; lead sheet, piping, &c.; metals; paints, varnish, &c.; wooden shafts, &c.; wrought iron piping and fittings for gas, steam, &c., for the Mersey Railway Co. J. Shaw, General Manager and Secretary, Central Station.

SEPTEMBER 17.—**Dewsbury**.—PIPING.—Piping and fittings, for the B.G. E. T. Tunncliffe, Clerk to the Guardians, Union Offices, Wellington-street.

SEPTEMBER 17.—**South Africa**.—FOOTBRIDGE.—Supply and delivery only of structural steel and wood- work for a footbridge at Nottingham-road, Natal Province, the approximate weight of the material being 37 tons. 35, Old Queen-street, S.W.1.

SEPTEMBER 19.—**Bucklow**.—MATERIALS.—Granite setts, broken granite, tarred macadam, chippings, slag, for the R.D.C. R. C. Cordon, Engineer and Surveyor, 25, Station-buildings, Altrincham.

SEPTEMBER 21.—**Bolton-upon-Dearne**.—MATERIALS.—Tarred blast furnace slag, tarred limestone, slag lumps, slag rejections, granite, granite chippings, sanitary pipes, &c., for the U.D.C. Surveyor.

SEPTEMBER 21.—**Great Yarmouth**.—MATERIALS.—Painters' and plumbers' materials, timber, English timber, gully grates, manhole covers, and general castings, wrought iron, steel, &c., for the C.B. S. P. Thompson, Borough Engineer.

SEPTEMBER 23.—**Norton**.—STONE.—Stone, for the R.D.C. L. Richmond, Clerk to the Council, Union Offices, Westbar, Sheffield.

SEPTEMBER 24.—**Anerley**.—MATERIALS.—Building materials, &c., for the North Surrey School District. Managers.

SEPTEMBER 24.—**Wortley**.—PIPES.—Sanitary pipes, for the R.D.C. F. Thurlby, Engineer and Surveyor, Grenoside, near Sheffield.

SEPTEMBER 25.—**London**.—MATERIALS.—For (1) Points and crossings; (2) steelwork for bridges, for the South Indian Railway Co. A. Muirhead, Managing Director, 91, Petty France, Westminster, S.W.1. Charge £1 each.

SEPTEMBER 30.—**Gellygaer**.—MATERIALS.—Paving, kerb and channel concrete fence posts, drain pipes, cement and lime, cast-iron goods, smithwork, iron- mongery, for the U.D.C. F. Read, surveyor.

OCTOBER 2.—**Durban**.—PIPES.—Cast-iron pipes and specials, for the T.C. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

OCTOBER 2.—**Durban**.—VALVES.—Six reflux valves and 363 sluice valves, for the T.C. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

NO DATE.—**Looe**.—PIPES.—Provision of cast-iron pipes and other pipe castings, for the U.D.C. G. H. Ivory, chartered civil engineer. Deposit £2 2s.

ENGINEERING, IRON AND STEEL

SEPTEMBER 16.—**Cornwall**.—BRIDGE.—Construction of a large floating bridge propelled by steam for use on ferry service between Devon and Cornwall, for the C.C. W. L. Platts, Clerk of the County Council, County Hall, Truro. Deposit £2 2s.

SEPTEMBER 16.—**London, W.C.**—Supply and erection of a steel chimney at Somerset House, Strand, W.C. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

SEPTEMBER 17.—**Wolverhampton**.—TANKS.—Con- struction of aeration tanks, settling tanks, and con- tinent works in concrete and power-house in brickwork, at the Sewage Outfall Works, Barnhurst, for the C.B. G. Green, Borough Engineer. Deposit £5 5s.

SEPTEMBER 18.—**Middleton-in-Teesdale**.—REBUILD- ING.—Taking down and rebuilding parapet walls and minor repairs at the county bridge, for the Durham C.C. Wm. J. Merrett, County Engineer and Surveyor, County Surveyor's Office, 43, Old Elvet, Durham.

SEPTEMBER 21.—**Buxton**.—**CULVERT**.—Reinforced concrete culvert, 100 yds. long, over the River Wye, together with river wall supports, curbing, &c., and other incidental works, for the T.C. F. Langley, Borough Engineer. Deposit £3 3s.

SEPTEMBER 21.—**Hong Kong**.—**HARBOUR CROSSING**.—The Crown Agents for the Colonies, acting on behalf of the Government of Hong Kong, invite tenders from experienced and approved firms for the construction of two lines of steel pipe main across Hong Kong Harbour, between Kowloon and the city of Victoria, with all works in connection therewith. The Crown Agents for the Colonies, Z Department, 4, Millbank, Westminster, S.W.1. Deposit £5.

SEPTEMBER 26.—**Donington**.—**BRIDGE**.—Reinforced concrete bridge and contingent works, over the South Forty Foot drain, Donington, for the Holland C.C. Wm. A. Rogerson, County Surveyor, Sessions House, Boston, Lincs. Deposit £3 3s.

OCTOBER 1.—**London**.—**STEELWORK**.—Structural steelwork for wagon shop, Perambur, for the Madras and Southern Mahratta Railway Co. Directors, 25, Buckingham Palace-road, S.W.1. Charge £1 1s.

ROAD, SEWERAGE, AND WATER WORKS

SEPTEMBER 14.—**Bellingham**.—**SEWER**.—Provision and laying of about 150 lin. yds. of 6 in. sewer, with manholes, &c., complete; also the provision and laying of 150 lin. yds. of 2 in. cast-iron water main, for the R.D.C. H. Moody, surveyor.

SEPTEMBER 14.—**Birmingham**.—**RECONSTRUCTION**.—Of Soho-road, Handsworth (between Grove-lane and Oaklands-road), comprising new reinforced concrete foundation, new granite kerbing, and concrete slab paving and relaying existing kerbing, brick paving, &c., for the T.C. H. H. Humphries, City Engineer and Surveyor. Deposit £2.

SEPTEMBER 14.—**Birmingham**.—**ROAD**.—Construction of a new 80 ft. road, a new 50 ft. road, and the widening of parts of Deakin's, Holder, and Hob Moor-roads, Yardley, for the T.C. H. H. Humphries, City Engineer and Surveyor. Deposit £2.

SEPTEMBER 14.—**Dunfermline**.—**MAINS**.—Providing, laying, and jointing one and a-half miles of 12 in. diameter cast-iron water main, for the D.C. H. F. Hodge, District Engineer, County Buildings, Dunfermline. Deposit £2 2s.

SEPTEMBER 14.—**Dunmow**.—**SEWER**.—Supply and laying of about 780 yards of 6 in. salt-glazed ware piped sewer, and the laying of about 960 yards of 3 in. cast-iron water main, for the R.D.C. J. Plumbley, Sanitary Surveyor, New-street. Deposit £1 1s.

SEPTEMBER 14.—**Dunstable**.—**SEWER**.—Laying of about 328 yds. of 9 in. stoneware pipe sewer across land and along Capron-road, for the T.C. W. F. Wilkins, Borough Surveyor.

SEPTEMBER 14.—**Edmonton**.—**MAKING-UP**.—Elsiedene-road, for the U.D.C. C. Brown, Engineer and Surveyor. Deposit £2 2s.

SEPTEMBER 14.—**Hendon**.—**MAKING-UP**.—Lyndale, Lyndale-avenue, Ranulf-road, Hampstead Way, Dersingham-road, and Somerton-road, for the U.D.C. A. O. Knight, Engineer and Surveyor. Deposit £5.

SEPTEMBER 14.—**Kent**.—**ROAD**.—Construction work in connection with the Orplington By-pass road with Spur, Kent, for the M.T. H. H. Piggott, Assistant Secretary, 17, Whitehall, S.W.1. Deposit £25.

SEPTEMBER 14.—**Okehampton**.—**PIPES**.—Supply, laying and jointing of about 1,340 yards of 6 in. and 200 yards of 4 in. cast-iron socket pipes, with their appendages, including all necessary sluice valves, hydrants and other works, for the improvement of the water supply, for the R.D.C. Nichols & Unwin, engineers, 13, Victoria-street, Westminster, S.W.1. Deposit £2.

SEPTEMBER 14.—**Paddington**.—**PAVING**.—With reinforced concrete, the carriageway, and, with artificial flags and gravel, the footways of Ashworth-road between Lauderdale-road and a line drawn across Ashworth-road from the party fence of Nos. 7 and 9, Ashworth-road, to the north fence of the garage of No. 24, Ashworth-road, for the Paddington B.C. Borough Engineer's Office, Town Hall, Paddington, W.2. Deposit £1 1s.

SEPTEMBER 14.—**Reigate**.—**WIDENING**.—Of the western end of Wonham-lane, near Wonham Mill, for the T.C. F. T. Clayton, Borough Engineer and Surveyor. Deposit £2 2s.

SEPTEMBER 14.—**Reigate**.—**WIDENING**.—Widening and improvement of Blackborough-road, together with the construction of a length of new road, for the T.C. F. T. Clayton, Borough Engineer and Surveyor. Deposit £3 3s.

SEPTEMBER 14.—**Rochdale**.—**REPAIRS**.—Granited rock asphalt work required at Smith-street, for the C.B. Borough Surveyor.

SEPTEMBER 14.—**Uxbridge**.—**FENCING**.—1,000 yards run of straight and curved vertical iron fencing and gates to be fixed round Recreation Ground, for the U.D.C. W. L. Eves, F.R.I.B.A., surveyor, 54, High-street.

SEPTEMBER 15.—**Barnoldswick**.—**RECONSTRUCTING**.—The carriageways and footways in Albert-road, Fern Lea-avenue (part of), and Brook-street, for the U.D.C. W. Ellis, Surveyor. Deposit £1 1s.

SEPTEMBER 15.—**Bootle**.—**REPAIRS**.—Construction of tarred macadam carriageways and kerbing to various roads on the Linacre Park housing site, for the C.B. Borough Engineer. Deposit £1 1s.

SEPTEMBER 15.—**Maldon**.—**PIPES**.—Provision and laying of 1,810 lin. yards of 2 in. cast-iron water main, for the R.D.C. Wm. Almond, Engineer.

SEPTEMBER 15.—**Sedgefield**.—**MAKING-UP**.—Of front Lawson-street, at Trimdon Colliery, Trimdon, for the R.D.C. J. Stones, Surveyor, Union Offices.

SEPTEMBER 16.—**Bilston**.—**PAVING**.—Paving Millfields-road with granite setts, for the U.D.C. A. F. B. Sidwick, Acting Engineer and Surveyor. Deposit £2 2s.

SEPTEMBER 16.—**Bournemouth**.—**MAKING-UP**.—Of Browning-avenue, for the C.B. F. P. Dolamore, Borough Engineer. Deposit £1 1s.

SEPTEMBER 16.—**Buxton**.—**SEWER**.—Construction of 260 lineal yds. of 12 in. sewer with manholes and other incidental works, in Park Ring, for the T.C. F. Langley, Borough Engineer.

SEPTEMBER 16.—**Chichester**.—**RESERVOIR**.—Construction of a ferro-concrete reservoir of 2,000,000 gallons capacity or thereabouts at the Chalk Pit-lane Plantation, Lavant, near Chichester, to be constructed upon the Hennebique or other approved system of ferro-concrete. City Engineer's Office, North-street. Deposit £2 2s.

SEPTEMBER 16.—**Halesowen**.—**PAVING**.—Laying of about 4,600 super. yards of Leicestershire granite sett paving, together with a similar area of reinforced concrete foundation for same, for the Worcestershire C.C. C. F. Gettings, County Surveyor, 30, Foregate-street, Worcester. Deposit £1.

SEPTEMBER 16.—**Leeds**.—**ROADS**.—Paving, tar macadamising, rocamac round macadam, kerbing, and laying of tar paved footpaths in the following streets: Part of East-park View, Elmnet-avenue, part of Oakwood Grange-lane, part of Barrack-road; also for kerbing, paving of channels, and flagging, at the Moorfield-road improvement; also for kerbing and paving of channels at the Stonegate-road improvement, Middleton-road improvement, new road (south accommodation road to Knostrop-lane), Ring-road (Smithy Mills-lane to Tongue-lane), for the T.C. Highways and Permanent Way Engineer, 1, Swinegate. Deposit £1 1s.

SEPTEMBER 18.—**Plymouth**.—**SEWERS**.—Construction of about 370 yards of 12 in. stoneware pipe sewers, together with manholes and other incidental works, in Mutley-Plain-lane and Moor View-terrace, for the C.B. I. Wiberley, Borough Engineer and Surveyor.

SEPTEMBER 19.—**West Riding**.—**ASPHALTING**.—Asphalt surfacing (1) Leeds and Barnsdale main road, at Leeds Hill, Oulton; (2) Leeds and Barnsdale (Hook Moor Branch) main road, at Glasshoughton; (3) Wakefield and Castleford main road, at Whitwood; and granite sett paving (4) concrete foundation and granite sett paving at Leeds Hill, Oulton, on the Leeds and Barnsdale main road; (5) concrete foundation and granite sett paving at Glasshoughton, on the Leeds and Barnsdale (Hook Moor Branch) main road; (6) concrete foundation and footpath works at Whitwood, on the Wakefield and Castleford main road, for the C.C. West Riding Surveyor, County Hall, Wakefield. Deposit £1 each.

SEPTEMBER 21.—**Ilkerton**.—**SEWERS**.—Construction of roads, sewers and footpaths on the Southern housing scheme, approximately 600 yds. lineal, for the T.C. Borough Engineer. Deposit £2 2s.

SEPTEMBER 21.—**Manchester**.—**SEWER**.—Intercepting sewer from Barlow Moor-road, Didsbury, to Palatine-road, Withington, for the T.C. City Engineer. Deposit £5 5s.

SEPTEMBER 22.—**Folkestone**.—**PIPES**.—Concrete pipes and manholes (approximately 1,050 tons) for the High Level Intercepting Sewer, for the T.C. A. E. Nichols, Borough Engineer, 11, Church-street. Deposit £5 5s.

SEPTEMBER 23.—**Hemsworth**.—**SEWERAGE SCHEME**.—Laying 2,800 yards of 12 in., and 425 yards 9 in. pipe sewer, manholes, &c., and construction of a new sewage disposal works in the parishes of Upton and North Elmsall, for the Hemsworth R.D.C. Mr. W. T. Lynem, Engineer to the Council, Market-street, Cross Hill, Hemsworth. Deposit £2 2s.

SEPTEMBER 25.—**Beddington and Wallington**.—**SEWERS**.—Construction of about 450 lineal yds. of 9 in. diameter stoneware pipe sewers, with the works appurtenant thereto, in Woodmansterne-lane, for the U.D.C. S. F. R. Carter, Engineer and Surveyor. Deposit, £1 1s.

SEPTEMBER 25.—**Hackbridge**.—**ROAD WORKS**.—For certain road works in Park-road, Hackbridge, for the Beddington and Wallington U.D.C. S. F. R. Carter, Engineer and Surveyor, Council Offices, Wallington. Deposit £1 1s.

SEPTEMBER 25.—**Wath-upon-Dearne**.—**ALTERATIONS**.—Construction of (1) detritus tanks at the sewage works, (2) an ejector chamber in Station-road, (3) about 600 yds. of 9 in. sewers, and (4) about 400 yds. of 18 in. sewers, together with manholes, &c., for the U.D.C. H. Cranage, Surveyor. Deposit £2.

SEPTEMBER 26.—**Lymington**.—**REPAIRS**.—Surface water drains, kerbing, paving, &c., to certain roads, for the T.C. H. E. Tizard, Town Clerk. Deposit £2 2s.

SEPTEMBER 28.—**Basford**.—**ASPHALTING**.—Asphalt-ing and retopping paths and yard pavings, and also for external painting to 88 council houses situate as follows: 30 houses, Colwick-vale, Colwick; 24 houses, Westdale-lane, Priory-road, and Vernon-avenue, Gedling; 22 houses, Baker-lane and Stamford-street, Newthorpe, Greasley; 12 houses, Church-lane and Broad-lane, Brinsley, for the R.D.C. S. Maylan, engineer and surveyor.

SEPTEMBER 28.—**Rugby**.—**RESERVOIR**.—Construction of impounding reservoir; 15 in. cast-iron main, with sluice valves, air valves, and washouts, about 7 miles in length; cottage, a recorder station, a chlorinating house, and tank, and alterations and additions to mains at the Council's Avon Water Works, for the U.D.C. G. Bertram Kershaw, Consulting Engineer, 9, Victoria-street, Westminster, S.W.1. Deposit £5.

SEPTEMBER.—**Epsom**.—**WIDENING**.—Of Sutton-lane, Banstead, for the R.D.C. T. E. Ware, surveyor, Waterloo-road, Epsom.

OCTOBER 6.—**Spalding**.—**SEWERS**.—Supplying and laying of about 21,230 lineal yds. of 12 in., 9 in., and 6 in. stoneware pipe sewers, together with manholes and appurtenant works, for the U.D.C. C. Franklin Murphy, chartered civil engineer, Lloyds Bank Chambers, Morpeth. Deposit £5.

NO DATE.—**Birmingham**.—**FENCING**.—Wood or iron fencing for the Wolverhampton-road, for the Joint Committee. H. H. Humphries, Engineer, The Council House, Birmingham.

NO DATE.—**Hamilton**.—**IMPROVEMENTS**.—Improvements and widenings at Bothwell-road and Carlisle-road, for the T.C. W. H. Purdie, Burgh Surveyor.

NO DATE.—**Loos**.—**RESERVOIR**.—Constructing service reservoir in Morval parish, and for laying 8 in. 6 in., 4 in., and 3 in. mains from Craddock Moor St. Cleer, for the U.D.C. G. H. Ivory, chartered civil engineer. Deposit £3 3s.

NO DATE.—**Rawmarsh**.—**ROADWAY**.—Construction of section 2 of Barber's-avenue, for the U.D.C. J. A. Tonge, Engineer to the Council. Deposit £2 2s.

Competitions.

(See Competition News, page 382.)

Auction Sales, Tenders, etc.

SEPTEMBER 9 AND FOLLOWING DAYS.—**North Devon**.—J. T. Skelding & Co. will sell, for E. & W. Anderson, Ltd. (in liquidation), by order of the Receiver for the Debenture Holders, at The Dump, adjoining the North Devon Clay Co.'s sidings (by their kind permission), Peter's Marland, Dunsbear Station, North Devon, contractors' plant and machinery, tools, buildings, and effects used in the construction of the new line from Torrington to Halwill. Auctioneers, 48, Gresham street, London, E.C.2.

SEPTEMBER 15.—**Merton, S.W.**—Vervard Yates will sell at Merton (opposite "Six Bells" Hotel), various timbers and building materials. Auctioneers, 365, Norwood-road, S.E.27.

SEPTEMBER 15 AND 16.—**Frampton-on-Severn**.—Jackson Stopps will sell, on the premises, the mansion, Fretherne Court, near Frampton-on-Severn, with about 14 acres of heavily timbered grounds; all building sites with views over the Severn. Auctioneers, 32, St. James-street, S.W.1, Bridge-street Northampton; Town Hall, Tewchester.

SEPTEMBER 29.—**London, N.W.**—Ernest Owen Ltd., will sell: (a) Edgware, a building estate; (b) Child's Hill, Hampstead, two freehold sites; Church End, Finchley main road, freehold site. Auctioneers, Estate Offices, Golders Green, N.W.

*OCTOBER 6-10.—**Newmarket**.—Messrs. Perry Phillips will sell, on the premises, Cheveley Mansion near Newmarket, the whole of the interior and external fittings. The fabric of the mansion will be sold for demolition. Auctioneers, 59, High-street, Bridgton.

*DURING OCTOBER.—**Sussex**.—Knight, Frank Rutley will sell, by direction of Mr. Edward Hunt at The Goldings Hotel, Hayward's Heath Station (unless previously disposed of privately as a whole, the freehold residential sporting and building property known as the Wykehurst Park Estate (remaining portions), Bolney, including the Stanley Mansion also private residence known as "Hazeldean," 1, extending to about 380 acres. Auctioneers, 2, Hanover-square, W.1.

Public Appointments.

SEPTEMBER 12.—**Bucks**.—Clerk of Works required by Bucks C.C. in connection with the erection of small country police station. Mr. C. H. Riley, Court Architect, Aylesbury.

SEPTEMBER 14.—**London, N.**—Architectural Assistant required by the Southgate U.D.C. Mr. A. Lauder, Clerk to the Council, Town Hall, Palm Green, N.13.

SEPTEMBER 15.—**London, S.E.**—Sanitary Inspector required by the Bermondsey B.C. Mr. Fredk. Ry Town Clerk, Town Hall, Spa-road, S.E.

SEPTEMBER 16.—**Essex**.—Town Planning Assistant required by Orsett R.D.C. for the preparation of Town Planning scheme for the whole area in conjunction with the South-East Essex Regional scheme. H. Wright, Clerk to the Council, 2, Orsett-road, Gr. Essex.

*SEPTEMBER 17.—**Doncaster**.—Clerk of Works required by the Building Committee of the Doncaster Royal Infirmary to supervise the erection of the Hospital buildings on the site in Thorne-road, 1, caster.

*SEPTEMBER 23.—**Glamorgan**.—Temporary Architectural Assistant in the Architect's Department (Western Division) required by the C.C. W. J. Nash, F.R.I.B.A., County Architect, Midland Chambers, Neath.

*SEPTEMBER 25.—**Essex**.—QUANTITY SURVEYOR. Qualified quantity surveyor on the temporary staff of the County Architect's Department, required by the Essex County Council. John Stuart, F.R.I.B.A., County Architect, Old Court, Springfield, Chelms.

SEPTEMBER 25.—**Manchester**.—Assistant Lecturer in Building Construction in the College of Technology, The Registrar, College of Technology, Manchester. *SEPTEMBER 28.—**Southampton**.—One Draughtsman (Grade I) required in the County Architect's Department. A. L. Roberts, County Architect, Castle, Winchester, on receipt of stamped address envelope.

*SEPTEMBER 30.—**Bengal**.—Architectural Assistant required, under the Bengal Government, by the Commissioner for India. The Secretary to the Commissioner for India, 42, Grosvenor-gardens, S.W.

SEPTEMBER 30.—**Newcastle-upon-Tyne**.—Clerk of Works required for the proposed secondary school Heaton. Director of Education, Education Office Northumberland-road, Newcastle-upon-Tyne.

*NO DATE.—**London, N.7**.—LECTURERS.—time lecturers in the Architectural and Building Department required by the Governors of the North Polytechnic, Holloway, London, N.7. Apply to Secretary.

*NO DATE.—**Warwickshire**.—Clerk of Works wanted to take charge of the erection of extensive public elementary schools near Birmingham. Bunch, F.R.I.B.A., County Architect, 27, Binsley-avenue, Leamington Spa.

PROPOSED NEW BUILDINGS & OTHER WORKS.*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ABRAM.—Funds are being raised by the parishioners of Abram Parish Church for alterations at St. John's day school.

ACCRINGTON.—Funds are being raised for proposed extensions and a new nurses' home for the Victoria Home, the estimated cost being £40,000.

ALLERTON BYWATER.—The West Riding C.C. are proposing to erect a new public elementary school, with accommodation for 450 children. The site is at Great Preston. The plans are in course of preparation by the architects' section of the Education Department, Wakefield. Plans have been prepared by Messrs. Garside & Pennington, architects, Ropergate, Pontefract, for the erection of a mission hall at Bowers Row, Allerton Bywater, for the trustees.

ARDSLEY.—The Council is applying to the M.H. for sanction to borrow £3,260 for the drainage of certain portions of the West Ardsley Ward, and of improvements at the Fall Sewage Works.

ADENS A.W.—S. Hadfield is to erect 15 houses and a shop in Droydsden-road. Manchester Corporation are to erect an electricity sub-station in Delta-road.

BALROTHERY.—The Dublin R.D.C. has decided to build 52 cottages, from 270 to 300 each.

BILTINGHAM.—The U.D.C. has decided to make application to the Public Works Board for a loan of £5,000 for the erection of additional houses on the Chilton-lane site.

BINGLEY.—The M.H. have held an inquiry, in connection with the application of the U.D.C. for permission to proceed with the public swimming baths project, and also for borrowing powers to the extent of £27,000, the estimated cost of the work.

BIRKENHEAD.—Messrs. Cammell, Laird, shipbuilders, are to spend £150,000 on extending and rebuilding their old slipways.

BLACKPOOL.—Funds are being raised for a new vicarage and renovation of St. Thomas's Church, at an estimated cost of £1,000.

BOLTON.—The T.C. passed plans: Leigh Bros., Ltd., two houses, Kingston-avenue, four houses, Shelbourne-avenue, 10 houses, Kingston-avenue; E. Taylor, Son & Co., eight houses, Hampton-road; T. Blakley, eight houses, new road, off Green-lane, two houses, Rish-ton-road; J. S. Hughes, fourteen houses, Normanby-street; E. Howarth, six houses, Lever Edge-lane; Ainsworth, Son & Co., transformer house, Halliwell Bleachworks.

BRIGHTON.—The new Sussex Hospital for Women and Children is appealing for £25,000 to enable a new wing for 30 beds to be built.

BRISTOL.—Bristol Housing, Ltd., have arranged to lay out a site near Soundwell-road and Two Mile-road for dwellings; the estate is to be developed on town-planning lines. The Bristol Diocesan Church Extension Committee have purchased a site of 1½ acres on the Speedwell estate for the erection of a church and church buildings.

BURNLEY.—Plans passed by the T.C.: Conveniences at Marley Shed, submitted by M. Kippax & Sons, Ltd.; urinal in Boathorse-lane, submitted by the Health Committee; school in Lionel-street, submitted by the T.C.; gas works at Old Hall, submitted by the Gas Committee. The Housing Committee propose to build 14 more houses on the Palace House site at an estimated cost of £13,000.

BURTON-ON-TRENT.—The Corporation have acquired land at High Bank for the erection of about 100 houses, and tenders are to be invited for sewer works estimated to cost £2,000.

BUXTON.—Norfolk E.C. has arranged for the enlargement of the mixed school, at a cost of about £1,000.

CAERPHILLY.—The G.W.R. Railway Co. propose to erect 200 houses at Caerphilly. Plans are being prepared by the Railway architect's department.

CARLISLE.—The Corporation schemes for the construction of new bridges at Roath Park, include the erection of two bridges, one at Lake-road West, and the other at Lake-road East. The cost of the work, including road improvements, will be about £30,000.

CHERTENHAM.—The Borough Engineer is to prepare plans for an underground convenience at Promenade and Garden.

CHORLEY.—The M.H. has approved plans for a public swimming bath, at an estimated cost of £19,000. The Chorley Joint Hospital Board has approved plans for central heating at an estimated cost of £200.

CLAYTON (BRAIFORD).—The U.D.C. are seeking the M.H.'s approval to erect 12 houses on the Central housing estate.

CLITHEROE.—The B.E. is to visit the town in order to inspect sites for two schools.

CLOUGHFOLD.—Funds are being raised for the proposed extensions to the Cloughfold Wesleyan School Chapel, at an estimated cost of £1,200.

COLNE.—Sanction has been received from the M.H. for the borrowing of £29,474 in connection with the Haverholt Housing Scheme.

DEVON.—The condemnation by the B.E. of a number of church schools in Devon will necessitate their replacement with a series of new buildings, the cost of which is put at from £3,000 to £6,000 each.

DONCASTER.—The plans for the new infirmary have been approved by the Building Committee of the T.C.

DUBLIN.—The Local Government have held an inquiry into the application of the City Commissioners for sanction to a loan of £664,787 17s. 0d. for the erection of working-class dwellings on an area lying between Drumcondra and Glasnevin.

DUNSCROFT (YORKS.).—A site has been acquired for a transformer station, for the R.D.C.

EASINGTON.—An inquiry has been held into the application of the R.D.C. for sanction to borrow £40,000 for a sewerage scheme.

EASTBOURNE.—The T.C. are negotiating with Lord Willington for the purchase of 150 acres of land on the Crumbles on which to erect houses for the working classes.

ELLESMERE PORT.—The U.D.C. has launched a scheme of town improvements which with a recreation ground as a central idea, will include tennis courts, bowling greens, croquet lawns, a bandstand, and a children's paddling pool. The lay-out plan has been prepared by the Surveyor.

ELSECAR.—Extensions are to be made at the Park, and include a new shelter, tea rooms, &c.

EMNETE.—Norfolk County E.C. has acquired a site for an elementary school.

FELLING.—The U.D.C. has decided to offer the L.N.E.R. £1,368 for land at Pellaw for housing purposes.

GLOUCESTER.—A new £50,000 shopping centre, involving the destruction of 50 houses, is being proposed.

HALESOWEN.—The extension of the grammar school is to cost £20,000.

HALLIWELL.—Houses are being erected by Leigh Bros., Ltd., of Bark-street, at Halliwell Hall Estate and Tonge Park Estate.

HORBERY.—A faculty has been granted for a memorial screen in St. John's Parish Church, at an estimated cost of £256.

HORSFORD.—The U.D.C. propose erecting 100 more houses.

KENDAL.—Plans have been prepared for a concrete factory at Netherfield Works, Kendal, for Messrs. Somerville Bros. The architects are Messrs. Carby, Hull & Sons, Leeds.

KINGSWOOD.—The U.D.C. resolved to apply to the M.H. for sanction to borrow £8,000 for the erection of 18 houses.

LEMINGTON.—A pavilion is to be erected at the Recreation Ground at a cost of £350.

LLANOVER.—The M.H. has agreed to sanction the erection of 180 houses, in addition to the first instalment of 300 already decided upon, to be completed within two years for the Estate Co.

LONDON (FINCHLEY).—Christ's College, Finchley, is to be enlarged at a cost of £33,000.

LONDON (GREENWICH).—The B.G. are spending £15,000 on extending offices and building a new board room.

LONDON (LAMBETH).—The Charity Commissioners have offered to sell the Governors of St. Thomas's Hospital ground in Paris-street, Lambeth Palace-road, for the erection of a mothers' and babies' centre.

CHAIRS FOR ALL PURPOSES STRONG & INEXPENSIVE.



GEO. M. HAMMER & CO. LTD.
CROWN WORKS, ST. JAMES'S RD.,
BERMONDSEY, LONDON, S.E. 16

The total cost of the extension, including the ground will be about £4,500.

MACCLESFIELD.—The R.D.C. has decided to build twenty-two houses fronting on to the London-road at Lyme Green.

MANCHESTER.—The Council are proposing to erect a new open air school in Middleton-road, and the E.C. are seeking approval of a scheme to acquire two plots of land at a cost of about £4,100. The Committee are also seeking to establish a clinic in Ashton Old-road, at a cost of £1,241, and a handicraft centre in Heald-place, Rusholme, at a cost of £2,894.

NANTWICH.—The Council are inviting tenders for the erection of 46 houses on the Wallfields housing site. Plans by the Borough Surveyor.

NEWBURY.—The R.D.C. has received sanction from the M.H. to a loan of £4,000 for the Boxford housing scheme.

NEWCASTLE.—The M.H. has approved plans of 84 houses by the Corporation at Slater's Quarry, Barrack-road. The Council is also to commence upon the erection of 325 houses at Cow Gate in the near future.

NEW MILL.—The U.D.C. has approved a scheme for 24 stone-built houses at Kirkroyd's-lane, New Mill. The sanction of the M.H. is awaited.

NEWPORT (I.O.W.).—The M.H. has sanctioned a loan of £1,300 for the purchase by the Corporation of a housing site at Elm-grove.

NORFOLK.—The Standing Joint Committee have decided to obtain plans for police houses at Ashwell-thorpe and Northwood. A committee has been appointed to deal with the question of the provision of accommodation for men, defectives.

NOTTINGHAM.—Important structural alterations which may cost about £8,000, are in contemplation at the Arkwright-street Wesleyan Chapel.

OUTWELL.—Norfolk C.C. have now obtained the faculty for the alteration of the churchyard wall, so that there is now no obstacle in the way of the reconstruction of the Norfolk Bridge.

PLYMOUTH.—The C.B. recommend that application be made to the M.H. for sanction to borrow £2,340, for the erection of four houses. The C.B. passed plans for 21 houses in Watts Park-road, for Messrs. Pearse.

PONTEFRAC.—The M.H. has held an inquiry into an application by the T.C. for permission to borrow £65,000 for laying down a new 16 in. main.

PRESTWOOD.—The Staffordshire, Wolverhampton and Dudley Joint Committee have under consideration proposals for extensions at Prestwood and Himley Sanatoria.

RIPLEY.—The M.H. have approved of a further fifty houses to be erected on the Corporation's Housing site.

ROCHDALE.—An amended plan of the lay-out of the Clarke's-lane housing site, providing for 54 houses was approved by the Committee.

RUNCORN.—The E.C. are urging the County authority to provide additional accommodation at the Runcorn County Secondary School, and to erect a new school in the Halton end of the parish.

SABEN.—The St. Nicholas School are making efforts to raise funds for extensions.

SEAFIELD.—The sanction of the M.H. has been obtained to the borrowing of £20,000 for the construction of streets and sewers on the Wybourne Estate. With regard to the Overton-road scheme, the Estates Committee states that the M.H. has approved formal sanctions to the borrowing of £10,920 for houses.

SOLTHILL.—The R.D.C. are to make application to the M.H. for approval of the erection of the following houses: Baddesley Clinton (6), Elmdon (4), Lapworth (6), Solihull, Olton, and Shirley (18), and Tanworth-in-Arden (20).

SOUTHEND-ON-SEA.—The C.B. passed various plans including twelve lock-up garages, Western-road, for A. Hood; twenty-four houses and twelve garages, Brunswick-road, for Purkiss Bros.; nine houses, Ambleside-drive, for H. Goldsworthy.

SOUTHWICK.—The U.D.C. has decided to proceed with erection of 44 additional houses on its Marley Potts estate.

STOCKPORT.—The Surveyor submitted to the General Purposes Committee plans of under ground conveniences on the land in St. Petersgate, adjoining the public baths, and reported: he, to construct the conveniences entirely underground, the site was not large enough, and suggested the construction of underground conveniences in Duke-street, near the junction with Lord-street. It was resolved that the Borough Surveyor prepare plans of underground conveniences on the site suggested.

TORQUAY.—The E.C. has approved plans for the new elementary school at Westhill, with the omission of baths, to which the B.E. objected. Plans have been prepared for the conversion of the St. Mary-church C.E. school into a junior mixed school. Plans passed: Twenty-four houses, Daison estate, for T. V. Mstone & Sons; 24 houses, Daison estate, for J. Lloyd; fifteen houses, Daison estate, for W. Rowe.

TOTTINGTON.—Tenders are being invited by the U.D.C. for the alterations at the Collector's Office at the Town Hall. Plans have been prepared by the Surveyor.

TULLAMORE.—The King's C.C. have received a communication from the King's County Civic Reform Association recommending, in connection with the rebuilding of the County Courthouse, Tullamore, the provision of a large public hall.

WAKEFIELD.—Tenders are being invited for the erection of a house at the Balk, Walton. Plans have been prepared by Messrs. Bell & Kay, A.R.I.B.A., Wakefield.

WALPOLE.—Norfolk E.C. has decided to erect a permanent school in place of the temporary buildings at Walpole Cross Keys.

WARMSWORTH.—Plans have been prepared by the architect's department of the West Riding C.C. for the erection of a proposed open-air school, at an estimated cost of £19,500.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.	£ s. d.	4 3 6
Per 1,000, Delivered at London Goods Stations.	£ s. d.	3 18 3
Flettons, at	£ s. d.	2 13 3
King's Cross	£ s. d.	2 13 3
Do. grooved for plaster	£ s. d.	2 15 3
Do. Bullnose	£ s. d.	3 8 3
Best Stourbridge Fire brick:—	£ s. d.	8 11 0
2½ in.	£ s. d.	10 3 0
GLAZED BRICKS—	£ s. d.	
Best White	£ s. d.	30 0 0
Ivory, and	£ s. d.	27 0 0
Salt Glazed	£ s. d.	31 0 0
Stretchers	£ s. d.	21 10 0
Headers	£ s. d.	21 0 0
Quoins, Bullnose and 4½ in.	£ s. d.	32 0 0
Flats	£ s. d.	28 0 0
Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.	£ s. d.	29 10 0

BREEZE CONCRETE SLABS.

Delivered London	£ s. d.	
2 in. per yd. super	£ s. d.	1 11
2½ in.	£ s. d.	2 4
3 in. per yd. super	£ s. d.	3 6
4 in.	£ s. d.	4 8
Thames Ballast	£ s. d.	10 6 per yd.
Pit Sand	£ s. d.	13 9
Thames Sand	£ s. d.	14 6
Best Washed Sand	£ s. d.	14 6
¾ in. Shingle for Ferro-Concrete	£ s. d.	12 9
¾ in. Broken Brick	£ s. d.	11 6
Pan Breeze	£ s. d.	7 6
Per ton delivered in London area in full van loads.	£ s. d.	
Standard Specification, Test £2 18 0 to £3 3 6	£ s. d.	
51s. alongside at Vauxhall in 80-ton lots.	£ s. d.	
Super concrete per ton extra on above	£ s. d.	0 10 0
Super Cement (Waterproof)	£ s. d.	4 8 0
Roman Cement	£ s. d.	8 15 0
Parian Cement	£ s. d.	5 15 0
Keene's Cement, White	£ s. d.	5 15 0
Plaster, Coarse, Pink	£ s. d.	3 0 0
White	£ s. d.	3 12 0
Fine	£ s. d.	5 12 0
Finch	£ s. d.	3 9 0
Firebrick, Coarse	£ s. d.	3 17 0
Grey Stone Lime	£ s. d.	2 11 9
Best Ground Blue Lias Lime	£ s. d.	2 4 6
Granite Chippings	£ s. d.	1 12 0
NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, cart. pd.	£ s. d.	
Stourbridge Fireclay in sacks 35s. 0d. per ton at rly. dpt.	£ s. d.	

STONE.

BATH STONE—delivered in railway trucks at	£ s. d.	
Westbourne Park, Paddington, G.W.R., or	£ s. d.	2 9½
South Lambeth, G.W.R., per ft. cube.	£ s. d.	2 11½
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube.	£ s. d.	2 11½
PORTLAND STONE—	£ s. d.	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube.	£ s. d.	4 4
Do. do. delivered on road wagons at above stations, per ft. cube.	£ s. d.	4 5
White basebed, 3d. per ft. cube extra for every foot over 20 ft. average, and 1d. beyond 30 ft.	£ s. d.	
TOPPING-WOOD STONE—	£ s. d.	
Delivered at any Goods Station, London.	£ s. d.	
Small random blocks, up to 10 ft. cube, P. ft. cb.	£ s. d.	7 0
Random blocks from 10 ft. and over	£ s. d.	17 0
Sawn two sides	£ s. d.	27 0
Sawn three or four sides	£ s. d.	32 0
YORK STONE, BLUE—Robin Hood Quality.	£ s. d.	
Delivered at any Goods Station, London.	£ s. d.	
6 in. sawn two sides landings to sizes (under 30 ft. super.)	£ s. d.	5 6
6 in. rubbed two sides, ditto	£ s. d.	2 3½
3 in. sawn two sides slabs (random sizes)	£ s. d.	1 6½
2 in. to 2½ in. sawn one side slabs (random sizes)	£ s. d.	1 4
1½ in. to 2 in. ditto, ditto	£ s. d.	1 4
HARD YORK—	£ s. d.	
Delivered at any Goods Station, London.	£ s. d.	
Scrapped random blocks	£ s. d.	6 3
6 in. sawn two sides landing to sizes (under 30 ft. super.)	£ s. d.	5 1½
6 in. rubbed two sides, ditto	£ s. d.	2 10
4 in. sawn two sides slabs (random sizes)	£ s. d.	2 1½
2 in. ditto	£ s. d.	9 0
2 in. self-landed random flags	£ s. d.	9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Chills 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£22 0	3 × 6	£23 0
4 × 9	28 0	3 × 11	28 0
4 × 8	26 0	3 × 11	28 0
4 × 7	25 0	3 × 9	25 0
3 × 8	24 0	2½ × 9	25 0
3 × 7	23 0	3 × 4½	23 0
2½ × 7	22 0	3 × 4	23 0
1 × 11	£32 0	1 × 9	30 0

PLANED BOARDS.

1 × 11	£32 0	1 × 9	30 0
--------	-------	-------	------

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	21/-	1½	32/6
1	23/-	1½	37/3
1	25/-		
TONGUED AND GROOVED FLOORING.	£ s. d.		
Inches.	per sq.	Inches.	per sq.
1	25/-	1½	16/6
1½	32/6	1	20/-
1½	37/6	1	25/-
BATTENS.	£ s. d.		
2 × 2	2 6 per 100 ft.		
SAWN LATHS.	£ s. d.		
Per bundle	£ s. d.		
1" AND UP THICK.	£ s. d.		
Dry Austrian Wainscoat, per ft. cube	£ s. d.	0 16 0 to 0 18 0	
Dry American and/or Japanese Figured Oak, ft. cube	£ s. d.	0 15 0	
Dry American and/or Japanese Plain Oak, ft. cube	£ s. d.	0 11 0 to 0 13 0	
Dry sq. edged Honduras Mahogany, ft. cube	£ s. d.	0 16 0 to 0 18 0	
Dry Log cut Honduras Mahogany, ft. cube	£ s. d.	0 18 0 to 1 1 0	
Dry Cuba Mahogany, ft. cube	£ s. d.	1 4 0 to 1 10 0	
Dry Teak, ft. cube	£ s. d.	0 13 0 to 0 15 0	
Dry American Whitewood, ft. cube	£ s. d.	0 11 0 to 0 14 0	
Best Scotch glue, per cwt.	£ s. d.	4 10 0 to —	
Liquid Glue, per cwt.	£ s. d.	4 7 0 to 5 10 0	

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.	£ s. d.	£ s. d.
24 by 12	£ s. d.	37 12 6
22 by 12	£ s. d.	34 0 0
22 by 11	£ s. d.	31 5 0
20 by 12	£ s. d.	29 15 0
20 by 10	£ s. d.	25 12 6
18 by 10	£ s. d.	21 2 6
18 by 9	£ s. d.	18 12 6
16 by 10	£ s. d.	17 12 6
16 by 8	£ s. d.	13 15 0

TILES.

Best machine-made tiles from Brosely or £ s. d.	£ s. d.
Staffordshire district	5 12 6
Ditto hand-made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen)	0 9 6
Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—	£ s. d.
R.S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
Stanchions	17 10 0
In Roof Work	20 10 0
MILD STEEL ROUNDS.	£ s. d.
To London Station, per ton.	£ s. d.
Diameter.	£ s. d.
½ in.	12 10 0
¾ in.	11 10 0
1 in.	11 0 0
1½ in.	11 0 0
2 in.	11 0 0
2½ in.	11 0 0
3 in.	11 0 0
4 in.	11 0 0
5 in.	11 0 0
6 in.	11 0 0
7 in.	11 0 0
8 in.	11 0 0
9 in.	11 0 0
10 in.	11 0 0
11 in.	11 0 0
12 in.	11 0 0
13 in.	11 0 0
14 in.	11 0 0
15 in.	11 0 0
16 in.	11 0 0
17 in.	11 0 0
18 in.	11 0 0
19 in.	11 0 0
20 in.	11 0 0
21 in.	11 0 0
22 in.	11 0 0
23 in.	11 0 0
24 in.	11 0 0
25 in.	11 0 0
26 in.	11 0 0
27 in.	11 0 0
28 in.	11 0 0
29 in.	11 0 0
30 in.	11 0 0
31 in.	11 0 0
32 in.	11 0 0
33 in.	11 0 0
34 in.	11 0 0
35 in.	11 0 0
36 in.	11 0 0
37 in.	11 0 0
38 in.	11 0 0
39 in.	11 0 0
40 in.	11 0 0
41 in.	11 0 0
42 in.	11 0 0
43 in.	11 0 0
44 in.	11 0 0
45 in.	11 0 0
46 in.	11 0 0
47 in.	11 0 0
48 in.	11 0 0
49 in.	11 0 0
50 in.	11 0 0
51 in.	11 0 0
52 in.	11 0 0
53 in.	11 0 0
54 in.	11 0 0
55 in.	11 0 0
56 in.	11 0 0
57 in.	11 0 0
58 in.	11 0 0
59 in.	11 0 0
60 in.	11 0 0
61 in.	11 0 0
62 in.	11 0 0
63 in.	11 0 0
64 in.	11 0 0
65 in.	11 0 0
66 in.	11 0 0
67 in.	11 0 0
68 in.	11 0 0
69 in.	11 0 0
70 in.	11 0 0
71 in.	11 0 0
72 in.	11 0 0
73 in.	11 0 0
74 in.	11 0 0
75 in.	11 0 0
76 in.	11 0 0
77 in.	11 0 0
78 in.	11 0 0
79 in.	11 0 0
80 in.	11 0 0
81 in.	11 0 0
82 in.	11 0 0
83 in.	11 0 0
84 in.	11 0 0
85 in.	11 0 0
86 in.	11 0 0
87 in.	11 0 0
88 in.	11 0 0
89 in.	11 0 0
90 in.	11 0 0
91 in.	11 0 0
92 in.	11 0 0
93 in.	11 0 0
94 in.	11 0 0
95 in.	11 0 0
96 in.	11 0 0
97 in.	11 0 0
98 in.	11 0 0
99 in.	11 0 0
100 in.	11 0 0

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

(London Stocks.)		Fittings.		Flanges.	
Tubes.		OVER		OVER	
Sizes		$\frac{1}{2}$ " & under.	$\frac{1}{2}$ " to 6"	$\frac{1}{2}$ " & under.	$\frac{1}{2}$ " to 6"
$\frac{1}{2}$ " to 6"	%				
Black Gas	55	47½	50	57½	60
Blue Water	50	42½	45	52½	55
Red Steam	45	37½	40	47½	50
Galv'd Gas	40	32½	35	42½	45
Water	33½	27½	30	37½	40
" Steam	27½	27½	30	37½	40
C.I. HALF-ROUND GUTTERS—London Prices, ex Works					
Per yd. in 6 ft. lengths.		Gutters.	Angles and Nozzles.	Stop Ends.	
3 in.		1 7/8	1 1/4	3 1/4	
3 1/2 in.		1 1/2	1 1/2	3 1/2	
4 in.		1 5/8	1 1/2	3 1/2	
4 1/2 in.		1 1/2	1 1/4	4 1/4	
5 in.		1 9/8	1 1/2	5 1/4	
O. G. GUTTERS.					
3 in.		1 7/8	1 1/4	3 1/4	
3 1/2 in.		1 7/8	1 1/2	3 1/2	
4 in.		1 1/2	1 1/4	3 1/2	
4 1/2 in.		1 10/8	1 1/2	4 1/4	
5 in.		2 3/8	1 9/8	5 1/4	

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

	s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	11 0
Add if in clay	" "	1 0
Add for every additional depth of 6 ft.	" "	0 6
Planking and strutting to trenches	per foot super	0 5
Do. to sides of excavation, including shoring ..	" "	1 0

CONCRETOR.

Portland cement concrete in foundation 1 to 6 ..	per yard cube	32 0
Add if in underpinning in short lengths	" "	7 0
Add if in floors 6 in. thick	" "	3 3
Add if in beams	" "	3 9
Add if aggregate 1: 2: 4	" "	10 0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2 6

BRICKLAYER.

BRICKLAYER.			
Reduced brickwork in lime mortar and Fletton bricks	per rod	£	s. d.
Add if in stocks	"	30	0 0
Add if in Staffordshire blues	"	7	10 0
Add if in Portland cement and sand	"	22	0 0
		1	10 0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0 0 1½
--	---------------	--------

POINTING.

Neat flat struck or weathered joint	" "	0 0 3
---	-----	-------

ARCHES.

Extra only to the price of ordinary brickwork:—		
Fair external in half brick rings	" "	0 0 10
Axed in stocks	" "	0 1 9
Rubbed and gauged jointed in putty camber or segmental	" "	0 6 0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0 1 0
Setting ordinary register grates and stoves	each	1 0 0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	" "	4 15 0

ASPHALTER.

	s.	d.
Half-inch horizontal damp course	per yard sup.	4 3
Three-quarter-inch vertical damp course	" "	8 6
¾ inch on flats in two thicknesses	" "	6 3
Angle fillet	per foot run	0 3
Skirting and fillet 6 in. high	" "	1 2

MASON.

York stone templates fixed	per foot cube	13 0
York stone sills fixed	" "	22 0
Bath stone and all labour fixed	" "	10 6
Portland stone fixed	" "	20 0

SLATER.

Welsh 16 in. x 8 in. 3 in. lap, including nails	per square	72 9
Do. 20 in. x 10 in. Do. Do.	" "	80 9
Do. 24 in. x 12 in. Do. Do.	" "	90 0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5 0
Do. joists	" "	5 6
Do. roofs, floors and partitions	" "	6 0
Do. trusses	" "	8 6

Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-
Flat centering for concrete floor, including struts or hangers ..	" "				50 0
Do. to beams	per ft. sup.				1 0
Centres for arches	" "				1 6
Gutter boards and bearers	" "				1 0

FLOORING.

	¾"	1"	1½"	1¾"
Deal-edges shot	per sq.	44/6	53/-	60/6
Do. tongued and grooved	" "	49/-	57/6	65/-
Do. matchings	" "	45/-	51/-	
Moulded skirting, including bakkings and grounds	per ft. sup.	1/6	1/9	2/0

SASHES AND FRAMES.

	s.	d.
One-and-a-half moulded sashes or casements	per foot super	1 10
Two Do. Do.	" "	2 1
Add for fitting and fixing	" "	0 3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights, average size	" "	3 9

DOORS.

	1½"	1¾"	2"
Two-panel square framed	per ft. sup.	2/1	2/4
Four-panel Do.	" "	2/5	2/8
Two-panel moulded both sides	" "	2/8	2/11
Four-panel Do. Do.	" "	2/11	3/2

CARPENTER AND JOINER—continued.

FRAMES.

	1"	1½"	1¾"	2"	2½"
Deal wrot moulded and rebated	per foot cube	14 0			
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/9	1/10
Deal shelves and bearers	" "	1/4	1/6	1/9	1/10
Add if cross tongued	" "	2d.	2d.	2d.	2d.

STAIRCASES.

	1"	1½"	1¾"	2"	2½"
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/	2/2	2/8	—

Housings for steps and risers	each	0 11
Deal balusters, 1 in. x 1½ in.	per ft. run.	0 9
Mahogany handrail; average 3 in. x 3 in.	" "	6 9
Add if ramped	" "	11 10
Add if wreathed	" "	23 9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

	s.	d.
Rolled steel joists	per cwt.	16 3
Plain compound girders	" "	19 0
Do. stanchions	" "	21 9
In roof work	" "	27 6

RAIN-WATER GOODS.

	3"	4"	5"	6"
Half-round plain rebated joints .. ft. run	1/6	1/9	2/-	2/8
Ogee Do. Do.	1/9	2/-	2/6	3/3
Rain-water pipes with ears	1/9	2/7		
Extra for shoes and bends	each	4/4	5/11	
Do. stopped ends	" "	1/11	2/4½	3/7
Do. nozzles for inlets	" "	2/2	2/7	3/10

PLUMBER.

	s.	d.
Milled lead and laying in flashings and gutters	per cwt.	67 6
Do. Do. in flats	" "	66 6
Extra labour and solder in coated cesspools	each	6 6
Weld joint	per ft. run.	0 6
Soldered seam	" "	1 6
Copper nailing	" "	0 6

	¾"	1"	1½"	1¾"	2"
Drawn lead waste per ft. run	1/2	1/9	2/0	3/4	4/0
Do. service ..	1/8	2/2	2/7	3/10	
Do. soil ..					6/9
Bends in lead pipe each					8/2
Soldered stop ends ..	1/2	1/8	2/1	2/10	3/8
Red lead joints	11d.	1/-	1/3	1/11	2/4
Wiped soldered joints ..	2/10	3/6	4/-	4/11	6/6
Lead traps and cleaning screws				14/7	19/6
Bib cocks and joints	6/4	9/7	15/4	41/-	
Stop cocks and joints ..	15/4	17/2	25/8	64/-	

PLASTERER.

	s.	d.
Render, float and set in lime and hair	per yard sup.	2 1
Do. Do. Sirapite	" "	2 1
Do. Do. Keen's	" "	3 1
Add sawn lathing	" "	1 1
Add metal lathing	" "	2 1
Portland cement screed	" "	2 1
Do. plain face	" "	8 1
Mouldings in plaster	per 1 girth	0 1
One-and-a-half granolithic pavings	per yard sup.	6 1

GLAZIER.

	s.	d.
21 oz. sheet plain	per foot sup.	0 1
26 oz. Do.	" "	1 1
Obscured sheet	" "	1 1
½ in. rolled plate	" "	0 1
½ in. rough rolled or cast plate	" "	0 1
½ in. wired cast plate	" "	1 1

PAINTER.

	s.	d.
Preparing and distempering, 2 coats	per yard sup.	0 1
Knocking and priming	" "	0 1
Plain painting 1 coat	" "	0 1
Do. 2 coats	" "	1 1
Do. 3 coats	" "	2 1
Do. 4 coats	" "	3 1
Graining	" "	1 1
Varnishing twice	" "	1 1
Sizing	" "	0 1
Flattening	" "	0 1
Enamel	" "	1 1
Wax polishing	per foot sup.	0 1
French polishing	" "	1 1
Preparing for and hanging paper	per piece 2/- to 4	

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. Percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of information given on this page is copyright. Prices include both materials and labour.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

Denotes accepted. † Denotes provisionally accepted. Denotes recommended for acceptance. Denotes accepted subject to modification.

BARNESLEY.—Entrance gates to Locke Park, for the T.C. :—

*Bayliss, Jones & Bayliss, Ltd. £145

BELFAST.—For (1) New school at Everton; (2) additions to Rosetta School; (3) additions to regional School; (4) heating, Strand School, for the B. Mr. W. G. Davies, A.R.I.B.A., Education Architect, Education Office, College-square :—

(1) W. McVicker. £27,150 0 0

(2) I. Copeland & Sons. 17,800 0 0

(3) W. McVicker. 709 9 5

(4) W. Coates & Son. 430 0 0

(All of Belfast.)

BIGGLESWADE.—Tank and laying 4,000 yds. of in. main, for the R.D.C. Mr. Henry Carne, engineer, Bedford :—

G. H. Yorke & Co., Wellington, Salop. £3,772 16 4

*Hodsons, Ltd., Nottingham. 3,401 19 3

Fred Hopper & Son, Parkstone, Dorset. 3,294 11 7

BOURNEMOUTH.—Tearooms at Overstrand, for the T.C. :—

*Tare & Son. £3,336

BOWLAND.—Improvements and renovations at Iminington County School, for the West Riding C.C. :—

*T. Frankland, Chathburn.

BOWLAND.—Reconstruction of about 50 miles of roads, for the U.D.C. :—

*Wm. Shepherd, Ltd., Rochdale.

BRADFORD.—House at Daisy Hill. Mr. F. Suddards, architect and surveyor, Exchange Buildings, Skipton. Quantities by the architect :—

*Mason's work—J. Barrett, Crosshills.

*Joiners' work—G. Laycock, Crosshills.

*Plaster work—F. Davy, Crosshills.

*Slater work—A. Garnett, Sutton.

*Painter work—R. H. Greenwood & Son, Crosshills.

*Plumber work—Fred Laycock, Crosshills.

BREDBURY.—Twenty-six houses on the Council's existing estate, for the U.D.C. Plans by Mr. A. J. Suddards, surveyor :—

*F. Booth, Gee Cross, Hyde.

BRENTWOOD.—Sixteen bungalows, near King's Road, for the U.D.C. Mr. A. J. Meeson, surveyor :—

Anderson, Armstrong & Co., Forest Gate. £9,694 0

Bell & Sons, Saffron Walden, Essex. 8,157 0

F. C. Fletcher, Southend-on-Sea. 7,360 10

Allen & England, Leigh-on-Sea. 6,826 16

F. Jarvis, Brentwood. 6,665 0

*A. Saunders, Brentwood. 6,215 15

BRIDLINGTON.—Eighty-eight houses, for the T.C. :—

*J. Sawdon. £39,250

BRISTOL.—Houses, for T.C. :—

Howle—

*E. A. W. Poole & Son. 8 houses

*A. J. Miller. 12 "

*J. J. Cunningham. 8 "

*J. J. Cunningham. 6 "

Gibbs & Davies. 14 "

Minster Down—

*Turner & Co. 14 "

BURNLEY.—New gasworks at Old Hall, for the Borough Surveyor :—

Actual steelwork—

*Drakes, Ltd. £3,334 0 0

Lifting and temporary sheeting—

*Weston & Co., Ltd. 839 0 0

Painters' work—

*Corporation Painting Department. 183 17 8

Gas and sewers—

*R. & T. Howarth. 3,753 12 0

Gravators', Masons' and Concrete's work—

*Wellerman Bros., Ltd. 19,065 0 0

(Subject to M.H. approval.)

BURTON-ON-TRENT.—Closet conversions and repairs at premises in Orchard-street, for T.C. :—

*T. Litherland & Sons.

BURTON-ON-TRENT.—Ten houses in Wellington-street, for T.C. :—

*T. Lowe & Sons, Ltd. £5,300

CARLISLE.—Re-erection of St. Nicholas Bridge, the T.C. :—

*J. Laing & Son, Carlisle. £57,000

CHORLEY.—School at Highfield, for E.C. :—

*W. Lee & Co., Chorley.

CLYFNYDD.—War memorial, for the Committee.

H. M. R. Burgess, hon. architect :—

S. W. Ward Willis, Hampstead. £792 10

A. & F. Manuelle, Ltd., London. 600 0

W. Kirkpatrick, Ltd., Manchester. 516 0

A. W. Julian, Ltd., Pontypridd. 489 0

Archie Jones, Pontypridd. 439 10

T. A. Jones, Ltd., Cardiff. 430 0

H. Davis & Son, Newport (Mon). 416 0

J. Jenkins & Sons, Trefores. 410 0

Morgan Williams, Pontypridd. 375 0

G. Evans & Son, Trearlaw. 372 14

COLNE.—Construction of the river wall for the sewage disposal works, for the T.C. :—

*Earnshaw & Bottomley, Colne. £1,777 9

COLNE.—Repairs to the tiling at the Park Council School, for the E.C. :—

*J. Laycock & Son.

DARENTH.—Rebuilding gas retorts at Darent Training Colony, for the M.A.B. :—

Timmis & Co., Ltd., Stourbridge. £507

Firth, Blakeley, Sons & Co., Ltd., Leeds. 475

F. C. Sugden & Co., Ltd., Leeds. 452

R. Dempster & Sons, Ltd., Elland. 428

Drakes, Ltd., Halifax. 410

W. H. Simey & Co., Ltd., Halifax. 385

*Standard Furnace & Setting Co., Southport. 324

DONCASTER.—For conveniences in Elmfield Park, for the T.C. :—

*Hemsworth Bros., Doncaster. £468 13 11

DONCASTER.—Water main extensions, for the Doncaster and Tickhill Water Board :—

*W. Wilson & Co., Ltd., Newcastle. £120,000

DONCASTER.—Foundation work for the new General Infirmary on the Thorne-road site, for the Infirmary Committee :—

*H. Arnold & Son, Ltd.

DRIFLINGTON.—Fifteen scullery-type houses, for the U.D.C. :—

*Briggs & Roberts, Driflington.

FOREHOE.—Five pairs of cottages at Browick, Wymondham, for the Council :—

Palmer, Aylsham. £4,928

Blyth & Son, Foulsham. 4,500

Bridwell, Wymondham. 4,150

Tofts, Hingham. 4,120

Blazey, Wymondham. 4,100

*Hipperson, Great Melton. 3,850

HECKMONDWIKE.—Forty-six type "A" houses on the Heckmondwike housing estate, for the U.D.C. :—

*Mason—J. B. Allatt & Son.

*Joiner—J. Brook & Son.

*Plumber—E. Ineson.

*Plasterer—A. Idle & Son.

*Slater—Amos Thompson.

*Painter—J. Burnhill & Son.

*Electrician—Heckmondwike Council.

HEMSWORTH.—Master's house, for the B.G. :—

*W. Hanley & Sons, Hemsworth. £1,122 7 6

HEMSWORTH.—Porter's lodge at the Union Infirmary, for the Hemsforth B.G. :—

*W. Hanley & Sons, Hemsworth. £422 2

HORSFORTH.—100 houses, for the U.D.C. :—

*J. N. Walker, Ltd., Leeds. £47,100

IRLAM.—Public conveniences in Princes Park and Recreation Ground, for the U.D.C. :—

*J. A. Brew, Junr., Cadishead.

KINGSWOOD.—Eighteen houses at Worcester-road, for the U.D.C. :—

*Willmott Bros., Kingswood. £7,380

LEEDS.—Garages and conveniences at the Royal Hotel, Lower Briggate, for Messrs. Ind Coope & Co., Burton-on-Trent. Messrs. A. & F. Mosley, architects, Leeds :—

*R. Lawson, Leeds.

LEEDS.—Installation of electric lighting at premises 40, Park-lane, for the T.C. :—

*T. M. West. £569 15 6

LEEDS.—Repairs to the hot-water installation in Ward K5 at Killingbeck Sanatorium, for the T.C. :—

*W. Miller. £182 12

LONDON.—Cleaning, painting and repairs at the Chelsea Casual Ward, for the M.A.B. :—

W. Simms. £890 0

J. Hocking & Co. 679 0

Burnand & Pickett, Ltd. 665 0

†D. C. Bowyer. 587 18

(All of London.)

LONDON.—Repairs to the causeway at shore buildings, for the M.A.B. :—

F. E. Smith, Purfleet. £342 6 5

J. Shelbourne & Co., London. 325 0 0

†Woodwork Construction Co., London. 298 13 4

LONDON.—Alterations to laundry, kitchen and disinfecting chamber, and formation of wood-chopping shed, &c., at the Poplar Casual Ward, for the M.A.B. :—

W. S. Sharplin. £252 2 6

W. Simms. 223 0 4

†D. C. Bowyer. 196 17 0

(All of London.)

LONDON.—Painting and repairs at New Cross-road property, for the M.A.B. :—

Burnand & Pickett, Ltd. £447 0

Boekbinder, Ltd. 373 0

L. Leatham. 285 10

A. H. Inns, Ltd. 253 0

Smith, Clifton & Co. 208 10

De'Ath & Speechley. 193 16

D. C. Bowyer. 176 0

†Barton & Morris. 135 5

(All of London.)

LONDON.—Erection of wood-chopping sheds, at Woolwich Casual Ward, for the M.A.B. :—

D. C. Bowyer. £231 0

J. Hocking & Co. 221 3

Douglass, Halse & Co. 207 0

†J. Darch, Ltd. 195 0

(All of London.)

LONDON.—Cleaning, painting and repairs at the North-Western Ambulance Station, for the M.A.B. :—

Boekbinder, Ltd. £648 0

L. Leatham. 598 10

De'Ath & Speechley. 546 13

A. H. Inns, Ltd. 459 0

C. H. Boyd & Son. 473 0

†J. Hocking & Co. 385 0

(All of London.)

LONDON.—Cleaning and painting work at T.S. Exmouth, for the M.A.B. :—

†J. Hocking & Co., Charlton. £455

LONDON.—Alterations and extensions to electric lighting in wards at the North-Eastern Hospital, for the M.A.B. :—

Best & Wilson. £880 0 0

M. Greenwood & Son, Ltd. 821 0 0

North Metropolitan Electric Power Supply Co. 812 6 0

H. R. Hall & Co. 804 10 0

Coley & Swinnerton, Ltd., Wolverhampton. 723 0 0

Berry Bros. 650 0 0

L. J. Godfrey. 638 17 4

T. Clark & Co., Ltd. 636 0 0

Alex. Hawkins & Sons. 630 0 0

Toy & Winslow. 585 0 0

Riddle & Goddard, Ltd. 557 0 0

Smethurst & Co. (London), Ltd. 521 0 0

†Alpha Manufacturing and Electrical Co., Ltd. 465 0 0

(All of London.)

MANCHESTER.—Rouensbury-street Municipal School, for the E.C. :—

*Geo. Macfarlane & Son, Ltd., Manchester.

MANCHESTER.—Sub-contractors :—

*Bricklayer and concretor—G. & W. Smith, Manchester.

*Mason—Hughes & Wagg, Oldham.

*Slater—Huntington's, Ltd., Manchester.

*Plumber and glazier—J. B. Crawford, Ltd., Manchester.

*Steel and cast-iron work—Joseph Webb & Sons, Ltd., Bury.

*Plasterer and painter—J. Broomhead & Sons, Ltd., Manchester.

MANCHESTER.—Sub-contractors for the erection of the Wilbraham-road School, for the E.C. :—

*Excavator, concretor, bricklayer, &c.—G. & W. Smith, Manchester.

*Mason—W. Radcliffe & Sons, Ltd., Manchester.

*Cast-iron work—John Hall & Sons, Oldham.

*Steelwork—Redpath, Brown & Co., Manchester.

*Slater—T. Kilburn & Son, Manchester.

*Plumber, &c.—A. Tinker, Manchester.

*Plasterer and painter—Jones & Jackson, Manchester.

MANCHESTER.—Excavating and concreting foundations for purifier house at Parlington Gasworks, for the T.C. :—

*A. Monk & Co., Irlam.

MANCHESTER.—Sub-contractors for the additions at the Queen-street School, for the E.C. :—

*Brickwork and concrete—H. Green & Son, Manchester.

*Plumber and glazier—A. J. Heron, Manchester.

*Plasterer and painter—Horrocks & Hogg, Manchester.

*Slater—Royle & Co., Manchester.

MANCHESTER.—Sub-contractors for additions at Upper Jackson-street School, for the E.C. :—

*Brickwork and concrete—Thos. Campion & Son, Manchester.

*Slater—Exors. of Joseph Toft, Eccles.

*Plumber and glazier—A. Tinker, Manchester.

*Plasterer and painter—Jones & Jackson, Manchester.

MANCHESTER.—Sub-contractors for the additions at the Grange-street School, for the E.C. :—

*Stonemason—Mather & Ellis, Manchester.

*Slater—F. Brown & Son, Walkden.

*Plumber and glazier—J. Turton & Sons, Manchester.

*Plasterer and painter—Horrocks & Hogg, Manchester.

MANCHESTER.—Steelwork for bridge at Holt Tram Depot, for T.C. :—

*Edward Wood & Co., Ltd., Manchester.

MARGATE.—Cleaning, painting and repairs at the Princess Mary's Hospital for Children, for the M.A.B. :—

Baker & Sons, Margate. £839 0

C. H. Boyd & Son, Ltd., London. 723 0



NEWBURY.—Installation of electric light at the Institution, for the B.G. :—

*R. J. & H. Wilder, Wallingford £598 10

NORWICH.—Sixteen houses at Mile Cross Estate, for the T.C. Mr. S. J. Wearing, A.R.I.B.A., architect, 3, Redwell-street :—

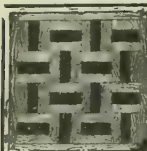
J. Anderson & Son £2,597
— Fisher 2,390
F. J. Harman 2,386
F. Amos 2,295
*W. Evans & Son 1,987
(All of Norwich.)

OSSETT.—School at Gawthorpe, for the E.C. Messrs. W. A. & C. Kendall, A.R.I.B.A., architects, Bank-street, Ossett; quantities by architects :—

*H. Oldroyd (excavator, mason and bricklayer), Ossett £7,196 18 7
*M. Lockwood & Sons (carpenters and joiners), Ossett 2,184 15 0
*J. A. Fawcett (plumber and glazier), Ossett 984 0 0
*R. H. Lockwood (plasterer), Horbury 805 1 7
*Jno. Kellett (slater), Morley 816 0 0
*John Hancock & Son (painters and decorators), Horbury .. 246 6 9

PERTH.—Second section of the Inverness-Perth road reconstruction for the Perthshire C.C. and the M.T. :—

*W. Shepherd & Sons, Ltd., Milkstone, Rochdale.



PORTABLE PARQUET
In Oak or Oak and Walnut, also
Spring Foundation Dance Floors
Post or Phone (Park 1885)
enquiries to

**TURPIN'S PARQUET
FLOORING CO.,**
25, NOTTING HILL GATE,
LONDON. W. 11.

Phone:
PARK 1885

J. GLIKSTEN & SON

LIMITED

Specialities in

SEASONED

HARDWOODS

MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.

REGISTERED OFFICE AND WHARF

**CARPENTERS RD.
STRATFORD
LONDON E.15**

Telephone :
EAST 3771
(5 lines)

Telegrams
GLIKSTEN PHONE
LONDON

PINEWOOD. Painting and repairs at the Sanatorium, for the M.A.B. :—

M. Greenwood & Son, Ltd.,
Harlesden £628 11 3
Spear & King, Crowthorne 540 12 6
Thos. Carr, London 356 0 0
*F. J. Barrett, Wokingham 354 0 0

PLYMOUTH.—Four parlour-type houses on the Mount Gould estate, for the C.B. :—

*Wakeham Bros. £2,340

PONTEFRAC.—Twenty-two parlour type houses on the Love-lane estate, for the Corporation. W. H. Newton, A.M.I.C.E., surveyor :—

Plasterer—
*T. W. Senior & Sons £744 3 11

Plumber—
*W. Pearson & Sons 1,251 16 0

Joiner—
*C. L. Jackson 2,739 0 0

SHEFFIELD.—For (a) 48; (b) 98; and (c) 54

houses on the Wybourne estate, for the T.C. :—
(a) C. W. Alfalt £18,896
(b) M. J. Gleeson, Ltd. 38,576
(c) M. J. Gleeson, Ltd. 18,418

STANLEY.—Sixty houses on South Stanley Housing Estate, for the U.D.C. Mr. A. Routledge, surveyor :—

*G. E. Ridley, Stanley (20 "B3" type houses).
*T. W. Raper, Stanley (40 "A2" type houses).

SWANSEA.—Extensions to the Secondary Schools, for the C.B. :—

*Griffith Davies & Co., ... £70,966 9 7

TORQUAY.—Twenty-one houses at West Hill, for the T.C. :—

*R. E. Narracatt £10,500

TORQUAY.—Convenience at Plainmoor Field, for the T.C. :—

*R. E. Narracatt £185

TORQUAY.—Renovation of Upton School, for the E.C. :—

*Love & Boyer.

TYNEMOUTH.—Church hall at Holy Saviour Church. Mr. A. T. Tasker, architect, Newcastle :—

*B. Peel, Tynemouth.

WALLASEY.—Wrought iron unclimbable fencing at the generating station, and a double gate over the railway siding, for the T.C. :—

*W. A. Parker & Co., Workington £518 6 8

WANDSWORTH.—External painting and repairs at Casual Ward, for the M.A.B. :—

Bookbinder, Ltd. £248 15
De' Ath & Speechley 168 10
A. H. Inns, Ltd. 167 0
*J. Hocking & Co., ... 157 0
(All of London.)

WANDSWORTH.—Underground coal store at Western Hospital, for the M.A.B. :—

C. H. Boyd & Son, Ltd. £983 0
Burnand & Pickett, Ltd. 977 0
W. Griffiths, Sons & Cromwell, Ltd. 935 0
W. H. Wagstaff & Sons 815 0
*W. Simms 620 10

J. J. ETRIDGE, J^r. Ltd

SLATING AND TILING
SLATE MERCHANTS
CONTRACTORS.

Inspections and Reports made on
OLD OR FAULTY ROOFS
in any part of the country.

Telephone: Bishopsgate 1944/5, or write.

Bethnal Green Slate Works,

BETHNAL GREEN, LONDON, E

WARRINGTON.—Mortuary at the White Institution, for the B.G. :—

*A. Swinton, Sankey Bridge £1,995

WEST WALTON.—School at West Walton, Norfolk E.C. :—

*J. E. Smith, Bunwell £7,400

YORKSHIRE.—Concrete retaining wall, protection works, and works of drainage adjacent the Richmond and Reeth main road, near Th House, for the North Riding C.C. County Survey Northallerton :—

*J. Busfield, Ltd., Leeds.

HIGH-CLASS

FLOORINGS

of every description in

WOOD BLOCKS. PARQUET

SEASONED T. & G. WAINSCOT OAK

TEAK AND MAPLE.

FACTORY AND ROADWAY PAVING

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASANT

WANDSWORTH, S.W.18.

(Phones: Putney 1700 & 24)

School & Hospital Stoves

MAKERS OF

WRIGHT'S IMPROVED and also SHORLAND PATENT

WARM AIR VENTILATING PATTERNS.

GEO. WRIGHT (LONDON LIMITED)

19, Newman St., Oxford St., London, W.1
Burton Weir Works, Rotherham.

FITZPATRICK & SON

Masons and Paviers,

455, OLD FORD ROAD, BOW, E

Phone: EAST 4908.

Granite Setts and Kerb (redressed and second hand), York Paving, Spur Stones, Grass Chippings, and Granolithic and Setts Paving

Telegrams: 'Frolic, Liverpool.' Phone 228 B

E. B. BURGESS & CO

6, CASTLE ST., LIVERPOOL

**WOOD BLOCK FLOORING
AND PARQUETRY.**

Telephone Office

OGILVIE & CO., Many years' experience with the late Mr. H. H. LARSEN of Bunhill Row

Mildmay Works, Mildmay Avenue, Islington

EXPERTS IN HIGH-CLASS JOINERY

ALTERATIONS AND DECORATIONS.



GRANITE
WM EDWARDS & SON
BERDEE

Supply all classes of Polished and Axed Granite Work in variety of colours and from quarries in any part of the world

Specialists in Carvings and Statuary, War Memorials, Columns, Pilasters, Dadoes, Facias, Shop and Bank Fronts.

Correspondence invited

**HEAD OFFICE AND WORKS,
PITTOBRIE, ABERDEEN**

HOWELL J. WILLIAMS

Builders Ltd.

High-Class Building

and
Joinery Work

11/17, BERMONDSEY STREET,

Telephone: LONDON BRIDGE, S.E.1
HOP 202

Builders of very many well-known Banks, Office and Business premises. Our works especially convenient for City Building and fittings.

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VOL. CXXIX.—No. 4,311

SEPTEMBER 18, 1925.

THE MINISTRY OF HEALTH'S REVIEW OF TOWN PLANNING

TO all who are interested in the future of our towns, the review of the subject of Town Planning, published as extracts from the Annual Report of the Ministry of Health will be of particular interest.

There can be little doubt that the subject of town planning is growing in interest to the general public, and its meaning is also beginning to be far better understood by the man in the street. Compulsory town planning for the boroughs and urban districts with a population of 20,000 and over may have something to do with this better understanding, but not by any means everything. Only about half of these authorities have so far taken the necessary steps, and the increase has been largely among those local authorities upon whom town planning is not obligatory.

So far Oxford is the only city which has availed itself of the power given by Section 21 of the Housing, &c., Act, 1923, to apply for authority to prepare a scheme to protect an already developed locality. Other authorities which, it is understood, have the question under consideration are the ancient towns of Chester and Stratford-upon-Avon, which should be preserved and protected, if they are to retain their present charm.

Local authorities have generally contented themselves with settling the main lines of development, wisely leaving reasonable scope for play and adjustment in smaller matters, and in the application of the main proposals to the actual development when it takes place.

The progress made in the submission of preliminary statements and schemes shows an improvement on the previous twelve months, but is still relatively small, possibly owing to the still too numerous formalities which have to be complied with to meet the Ministry's wishes. The importance of co-ordination between the schemes of adjoining authorities cannot be too strongly emphasized, and all who have had to deal with town planning schemes will desire to pay a tribute of appreciation both to the officials of the Ministry of Health and to the Divisional Engineers of the Ministry of Transport for their ready co-operation and assistance in the provision of new roads and the improvement of existing roads.

Much good work has already been done. Public open spaces have been secured. Low lying land has been preserved from building, new roads and bridges have been constructed in all directions, but one important omission must be drawn attention to in these columns. The most perfect of town plans and the best made of roads may be absolutely ruined by a fringe of shoddy bungalows, and this unfortunately is the state of far too many of the most important of our national highways in the vicinity of nearly all our large towns. It is not sufficient merely to lay down building lines, however generous, or to prescribe by-laws. Some control there must be over the design and material of these wayside bungalows, and the Ministry of Health would do well to look into the present series of model clauses for town planning schemes and see if a clause cannot be devised to meet this widespread cancer which threatens in some places to undo the good that has been done in other directions.

It is encouraging to note that there are now some thirty Joint Regional Town Planning Committees representing no less than 427 local authorities, established in various parts of the country, six new regions having been formed during the past year. Although these Regional Committees are at present in most cases only advisory, they are the beginning of a most fortunate and important movement in local government. Municipal councillors are beginning to look beyond their own boundaries and to consider the welfare of the whole of their region, and such widening of the municipal horizon has great possibilities for the future, especially in our industrial areas.

The Ministry of Health in their notes on special points of difficulty, point out that the main trouble experienced in connection with zoning has been to prevent areas most fitted for industrial purposes, and likely to be ultimately so used if kept long enough, from being used for the erection of houses. Human nature, being what it is, realises the possibility of a quicker sale for the more common type of development than for the more specialised form for which the land is really best suited. Shopping centres, too, are not readily established in new neighbourhoods, and all the skill of the town planner will be required to guide the shopping community into the desired channel.

It is satisfactory to note that the formal appeals to the Ministry against the decision of a local authority are fewer than in previous years. Many areas have already been extensively developed under the protection of the General Interim Development Order, 1922, while applications from local authorities for consent to departures from their by-laws as to streets in connection with interim development are becoming fairly common. Some of the subjects of appeal to the Ministry are of interest. An authority proposed to consent to the erection of a motor omnibus depot in a residential area. On appeal by neighbouring owners and residents, the Ministry, after careful consideration, disallowed the proposal; and in another case, the erection of a large garage in a shopping and business area was only permitted on condition that the garage was set back sufficiently to provide a standing place for vehicles.

Many points have arisen on the construction of roads of more than the usual by-law width, especially in the case of local authorities with small financial resources. It is not contemplated that roads so projected will necessarily be constructed by local authorities in advance of private development. It is essential, however, that when land is ripe for building the owner should be in a position to secure the construction of suitable streets for his own development, without waiting for the local Council to take the initiative and without greater cost than that of ordinary private street construction, and the Ministry point out that it is not obligatory that such roads when constructed should be made at once with the full width of paved carriageway and footways ultimately intended.

The model clauses provide for the alternative construction of the roads by the owner himself as private streets, when he wants them, subject merely to the approval of the lay-out and construction by the local authority, which, however, is not empowered to require a lay-out or specification involving greater cost than the normal cost of private street making unless the Council itself accepts responsibility for the difference. The majority of our existing highways are in need of widening to meet present day conditions, and it is essential that such widenings should be taken into account in the preparation of town-planning schemes.

Some 433 schemes, affecting 281 local authorities, have so far come before the Ministry in various stages, and it is a little disconcerting to learn that only 17 schemes (including two amending schemes) submitted by 12 local authorities, have been finally approved in the sixteen years since the first town-planning Act of 1909. This would seem to point, not to any lack of sympathy or understanding on the part of the Ministry or the local authorities, but to the cumbrous delays of the existing procedure, and the series of formalities extending in most cases over many years, which are apt seriously to imperil the ideals and dissipate the driving force of the most enlightened. The Ministry must sooner or later delegate many of its present powers, and the leading strings under which local authorities still continue to be kept must eventually be swept away.

NOTES.

Building Costs.

APPARENTLY the speculation which was characteristic of the unsettled state of the world a few years ago, and which caused prices to soar and fluctuate to such an extent that no one could buy ahead with any reasonable degree of safety, has subsided. We see a more stable level in the cost of every-day things, and according to the latest report (issued last week) of the Inter-Departmental Committee appointed by the Ministry of Health to survey the prices of building materials, there have been no violent changes in the prices of building materials during the past eighteen months. Since the beginning of last year some materials have gone up a little and others have slightly decreased in price, but these changes are such as can be attributed to ordinary market fluctuations always to be expected even under stable conditions. Building costs are still high, and one cannot look for a boom period until they are considerably reduced. It is an important asset, however, to be able to tell a prospective building owner with practical certainty that the final cost will not be altogether out of proportion with the original estimate owing to fluctuations in prices while the building is going up, and this alone should influence many who are withholding building operations until such time as they can know exactly what their commitments will be.

Steel Houses.

By a resolution of the Trades Union Congress, the building trade unions have now secured the support of that body in their opposition to steel houses. Nothing is said in the resolution against steel houses as such; the complaint is solely against "Lord Weir's attack on the rates of wages and working conditions in the building industry in

attempting to secure the erection of steel houses by non-building labour." Apparently, the work of the Government-appointed committee which considered this question in all its bearings, and reported in favour of steel houses being erected by other than the recognised building trade labour, is so much wasted time and effort, and a further attempt is to be made to prevent the erection of steel houses. No one wishes to see houses of steel if they can be built in sufficient numbers of materials to which we are accustomed. But houses are so badly wanted that we do not think the building operatives will get much public support in their contention. While there is a strong public dislike of the idea of the metal house, there is a still stronger objection to having no house at all. We do not think there can be much sympathy with any attempt on the part of building unions to keep for themselves more work than they can possibly carry out, while ignoring the existence of unemployed in the iron and steel trades who would be glad to do it.



Ruislip Church from the South-East.



Ruislip Church from the North-East. (See p. 420.)

House Design.

"WHEN you see the wretched little villas they are putting up, with their narrow little windows, their imitation pillars and pompous little lych-gates, you begin to realise that we are finding little improvement on the old Victorian atrocities," said a speaker at a gathering held in London last week. These remarks were widely reported and described by the Press as a "candid criticism of the modern architect's efforts," and words which we like to think were uttered in haste are doubtless construed by millions of readers to be an accurate description of the facts. Such statements are specially to be regretted at a time when an enormous improvement in small house design is to be seen all over the country as a result of the influence of the architectural profession in local authorities' housing schemes. Certainly no architect had a hand in the "wretched little villas" which aroused this speaker's ire, and it is equally certain that such villas are not being erected in large numbers. In these days of high costs, and when the operation of the Rent Restriction Act makes it cheaper to rent houses than to buy them, we find that the speculative builder who does not take professional advice has taken a leaf from the architect's note-book and is saving money by dispensing with the pillars and lych-gates which an improved public taste does not ask for. Surely it is unfair to blame architects for matters over which they have no more control than the author of the "candid criticism."

The Mansard Gallery.

THE very pleasant little exhibition in the Mansard Gallery, Tottenham Court Road, shows what some very energetic effort has been able to do together representative of artistic craftsmanship in the New Forest district. We feel some regret that nothing more than this can be obtained, we may at least hope that some encouragement may be given towards the development



Black Marble Font in Ruislip Church (Circa 1200).

Whatever talent may be found. The given materials from the Forest looms, perhaps, the best of the craftsman-ship shown, because of their textures and excellent colourings. There is much to be displayed in the setting and arrangement of the exhibits, which have every advantage that accrues from pleasant lighting in the gallery and their distinctive setting. It is a pity that the wooden candlesticks were not produced in better shapes, which might easily have been obtained. The illustrations of recent New Forest Roman pottery show that excellences the old pottery attained. They were used to be very good domestic pottery made at Symington some years ago, and we might have hoped it would have survived to the present time. Mr. Well Armfield shows some telling examples of colour decoration. Half-hour conferences are to take place in the series nearly every day up to October on various subjects connected with the development of local talent, with lectures by Mr. Harry Batsford on Art, Games, Crafts and Education by Mr. Percy Peach, School Art Library by Mrs. R. O. W. Gleadowe and Sidney Unslade, Architecture for Children by C. H. B. Quennell, and others.

Housing Bill. THERE is a suggestion that the present subsidy offered under the Wheatley Act should be capitalised and given to those responsible for certain novel methods, to build houses that could eventually be sold either to a local authority or to individual purchasers. A proposal would mean a cash sum of £160, available for each house erected in an industrial area, and of £222 in rural parishes. Thus a house costing in all £380 might be sold in a district for £158. It is proposed that the local authorities should not be required to find a subsidy out of the rate. Those who approve the proposal in

principle have urged on Mr. Chamberlain that such a scheme would encourage those developing new methods to erect factories and to install machinery, so that, given large orders, they could quote low prices. In such circumstances it is thought that local authorities would be prepared to place orders, especially as no burden is placed upon the rate-payers. Although the Ministry of Health has agreed that no doubt private buyers would be glad to take advantage of such a scheme, the officials are by no means assured that contractors would build the necessary factories or quote reasonable prices. Inquiries are, therefore, now taking place in order to see whether the scheme is worth pursuing, especially as, if adopted, it imposes an immediate additional demand on the Exchequer.

The Manchester Cenotaph.

It will have been noticed that the area in front of the new Art Gallery Buildings in Manchester was designed to have some outstanding monument or memorial. On the face of it one would be inclined to sympathise with the suggestion which has been put forward that the Cenotaph by Sir Edwin Lutyens, which has been erected in St. Peter's Square, should be removed and placed in this distinguished and honourable position. Alderman Todd says that according to the plans of the Art Gallery Buildings there would be

no room for the Cenotaph, as the lay-out of the design included "various statues and a clock tower." Whether "various statues and a clock tower" could have an equivalent value to the Cenotaph we may well feel doubtful. Perhaps Manchester may decide that the finest site they have in the city is not too good to do honour to its heroic dead.

Amongst the numberless The Willett Memorials constantly being placed all over the country, it is doubtful whether we

can be satisfied that the best memorial one can offer to the memory of notable folk is not something which shall be of lasting benefit to the public. We are, therefore, glad that the memory of the late Wm. Willett should be perpetuated by the dedication to public use of the beautiful Petts Wood, Chislehurst. We can recall talks we had with Mr. Willett in his well-founded hopes of a success which he did not live to see, and we remember his account of the visit paid by a lady to a lady X in the country which, unknowing by her had been enjoyed in the new anti-dated summer time, much to her chagrin when she found out that she, a determined opponent of the change, had been so completely deceived. Many of us realise in the enjoyment of added hours of daylight that we owe much to the sustained effort of reformers for an increase in our comfort and pleasure.



Fresco in Rood Turret, Ruislip Church.

[Above, St. Michael weighing souls, the Virgin Mary lightening scale with finger. Below, St. Lawrence.]

GENERAL NEWS

Birmingham Housing.

The Town Council have entered into contracts for something like 10,000 houses.

Trafalgar Square.

Several well-known architects are advocating fixing Gilbert's fountain, recently removed from Piccadilly-circus, in Trafalgar-square, in place of the two there at present.

Leverhulme Sale.

The late Viscount Leverhulme's art collection is to be dispersed, and the sale will be begun at The Hill, Hampstead Heath, on October 12.

Bridlington Spa Reconstruction.

The Town Council have passed the amended scheme for the reconstruction of the Spa. The scheme is estimated to cost £50,000, and has been prepared by Mr. A. P. Horsley, Borough Surveyor.

Big Birkenhead Scheme.

It was announced by the Liverpool City Council recently that Messrs. Cammell, Laird's are to extend and remodel their shipbuilding yards on the Birkenhead side of the Mersey, at a cost of £150,000.

Norwich Castle Moat.

A proposal to erect a new block of administration offices for the Norfolk County Council in the moat of the Norman castle at Norwich has aroused considerable opposition on the part of local archaeological societies.

New Kensington Museum.

The new Science Museum in Exhibition-road is to be completed after a long delay due to the war. The building has been designed by Mr. R. J. Allison, F.R.I.B.A., chief architect to the Office of Works.

Proposed Niagara Bridge.

The proposal for the construction of a bridge across the Niagara River, between Fort Erie and Buffalo, has been approved by the International Joint Commission. There is to be 100 ft. headroom under the bridge.

Reconstructing Paddington.

The Great Western Railway Company have decided to undertake the reconstruction of their Paddington goods station and the installation of up-to-date equipment, including electrically-operated labour-saving appliances.

The "Comparative" History.

Sir Banister Fletcher's "History of Architecture on the Comparative Method," which is now in its seventh edition, is being translated into the Spanish language. It has already been translated into Russian.

Excavations at York.

Systematic excavations were commenced recently on the ramparts of the mediæval city wall at York with a view to opening out the foundations of the multi-angular tower of the Roman fortress which lies buried below the rampart.

Stocksbridge Proposed Baths.

In connection with the proposed public swimming baths, the estimated cost of which is £12,000, the Council has asked Mr. G. Wishart, of Swansea, the architect whose design won the first prize in the competition, to prepare a less elaborate scheme.

Ancient Roman Statue.

During restoration work at the Thermae of Septimius Severus a marble statue of Minerva was recently discovered. The statue, which is headless, is in a good state of preservation, and is believed to be the work of a sculptor of the third century.

Manchester Town Planning.

Manchester's progress in town planning will be inspected on September 23, when a deputation of members of the Garden City and Town Planning Association are to visit the city. They will be guests of the City Council through the Housing and Town Planning Committee.

Tate Gallery Extensions.

Rapid progress is being made with the new extension at the back of the Tate Gallery, and it is expected that it will be finished in the late autumn. It will not be opened, however, until next June, as the walls must dry thoroughly before any pictures can be hung.

Annesley Bridge.

A start has been made with the work of constructing a new bridge to replace the present Annesley Bridge at Fairview, Ireland. The work, which is to cost £12,542, will extend over a period of ten months. The new bridge will consist of concrete piers and superstructural steel work, and will be 80 ft. wide.

Poole Harbour.

Work commenced recently on the construction of a "training bank" at the mouth of Poole Harbour, which forms the principal part of a £3,250,000 scheme to increase the depth of water in the harbour channels in order to admit vessels of 5,000 tons and upward. Sir John Wolfe Barry & Partners are the engineers.

Blackfriars Priory.

The excavations now taking place on a site in Carter-lane, at the corner of Church Entry, have brought to light remains of the ancient monastery or Priory Church of the Blackfriars. From an old plan of the monastery, the remains appear to be a portion of the foundations or walls of the choir; they consist of stones, four of which are segments, of the pedestal of a pillar.

A Super-Skyscraper.

In gratitude for his son's recovery from a serious illness, Mr. Oscar Konkle, President of a wealthy real estate company, announces that he will construct in New York the tallest building in the world, containing sixty-five storeys and towering 800 ft. above the street—8 ft. higher than the Woolworth Building—for the purpose of a modern hotel containing 4,500 rooms. The premises will provide for an inter-denominational church, a hospital, and twelve roof gardens, a bank for missionaries, and a dining-room seating 2,000 persons.

Dunbar Castle.

The First Commissioner of His Majesty's Board of Works has communicated with the Town Council stating it would be a pity if the high isolated mass of Dunbar Castle were demolished.

The late Mr. David B. Dick.

Mr. David B. Dick died recently at Hornsell Rise, aged eighty. Trained as an architect in Edinburgh, he went to Chicago after the great fire to help to rebuild it. Afterwards he went to Toronto, Canada, and settled there, Toronto University being among his many achievements. He was elected an Academician of the Royal Canadian Academy, and was a member of the Ontario Association of Architects, and later of the Canadian Institute of Architects.

The Late Mr. E. T. Jago.

The death occurred in New York, on September 4, of Mr. Ernest Thomas Jago, A.R.I.B.A., at the age of 53. Mr. Jago served his articles with J. F. Bentley during the time that Westminster Cathedral was being built, and afterwards spent several years in the office of Mr. J. N. Comper. He practised in the Adelphi for some time, but in 1914 he went to Canada, passing thence into the office of Mr. Bertram G. Goodhue, where he soon became a leader, and on Mr. Goodhue's death in June last year, joined with the other three heads in carrying on the practice. His body lay in the chancel of St. Thomas's Church, New York, till the day of his burial, which took place at Staten Island.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

Figures in Architectural Perspectives.

SIR,—I venture to call attention to an anomaly not infrequently observable in architectural perspective drawings, viz., that the artist, while meticulously observing the scale proportions, and vanishing lines of all parts of the building represented, introduces figures and objects apparently in total disregard of those points. As an instance, witness the figures in the foreground of the drawing reproduced on page 390 in *The Builder* of 11th inst. In that case the heads of all figures on the picture-plane—no matter in what part of it—should, of course, appear approximately at the level of the perspective horizontal line, slightly above rather than below, unless representing very diminutive persons.

WM. H. ATKIN-BERNARD.

Leeds Improvement Scheme.

Correspondence on the proposed Leeds Improvement Scheme is given on p. 428.

COMPETITION NEWS

Burnley Proposed New Buildings.

The Burnley Town Council are considering the question of having an open architectural competition for new buildings in the market street (St. James-street).

Pontardulais War Memorial.

The design submitted in this competition by Mr. D. Morgan, architect and surveyor, Glasfryn-road, Pontardulais, has been accepted. Seventy designs were received.

Competitions Open.

	Particulars published in "Builder."	See
Drammen Bridge (Drammen, Norway). Premiums: 10,000 Norwegian crms., 8,000, 6,000. Apply Gov. Eng., Drammen.	May 29 ..	O
Newcastle Fire and Police Station. Premiums: £500, £300, £100. Mr. P. S. Worthington, F.R.I.B.A., Assessor.	June 12 ..	O
Town Hall, &c., Pretoria. Open to architects residing in South Africa or Registered under Architects' Act, of 1909, Transvaal. Assessor to be appointed by R.I.B.A. Premiums: £250, £150, £100.	— ..	N
Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply parties., 35, Old Queen-street, S.W.1	April 24 ..	D
New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool.	Aug 7 ..	I
Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London.	Aug. 14 ..	I
Plan for construction of Conference Hall, for League of Nations, Geneva. International Competition, Sir John Burnet being British representative on Jury of Assessors. 100,000 Swiss francs to be divided among architects submitting best plans. Programmes will be deposited in due course with R.I.B.A., 9, Conduit-street, where intending competitors should apply. Single copies from Secretary-General, League of Nations, Geneva, on payment of 20 Swiss francs.	Jan. 2 ..	
*Sevenoaks Housing Scheme.	— ..	
*Topsam Public Hall.	— ..	
*Enlargement of Carnegie Hall, Dingwall.	— ..	
*Fleetwood Hospital.	— ..	
*Competitions when "warned" or voted R.I.B.A. are starred.		



BURNE-JONES TAPESTRIES AND FIGURE OF "ORPHEUS" BY MR. JOHN M. SWAN. R.A.



ONE OF THE GALLERIES OF MODERN BRITISH ART.

The Palace of Arts, British Empire Exhibition, Wembley.

SIR JOHN W. SIMPSON, P.P.R.I.B.A., & MR. MAXWELL AYTON, F.R.I.B.A., Architects.

ST. MARTIN'S CHURCH, RUISLIP

By F. HERBERT MANSFORD, L.R.I.B.A.

AT the Norman conquest "Riselepe" was a small settlement in the forest of Middlesex, which stretched right across the northern portion of the county from the Colne to the Lea. As Domesday Book refers to a priest attached to the parish in the reign of Edward the Confessor, it is clear that a Saxon church once existed. There being no building stone near Ruislip, nor any Roman remains to be used as a quarry, this church must have been built of timber and plastered wattle, or of timber logs like that at Greenstead, Essex. The walls of the present church are built of flint, doubtless from the chalk quarries near Harefield, and are about three feet in thickness. The general aspect externally is that of the fifteenth century, due to the details of buttresses, windows, parapet and roofs. Internally, greater antiquity is apparent. The Purbeck marble font is of transitional design, perhaps as late as the year 1200. Rev. J. Chas. Cox, F.S.A. in his "Account of the Ancient Churches of Middlesex," wrote "The arcades of the nave are of the date of Edward I at the close of the thirteenth century." But he seems to have overlooked several points enumerated later. These not only show that the two arcades can hardly have been contemporaneous, but indicate that in the south aisle, and there only, we have the walls of part, or the whole, of the thirteenth-century church.

The threshold of a built-up south door is now about two feet below the level of the ground. The threshold of the north door is level with the churchyard.

The arcade dividing the south aisle from the nave is very similar in character to that at Harrow Church, which is documentarily dated as being erected about 1240. We may assume that this arcade, too, dates from about the middle of the thirteenth century. Now the work to the north and south of this arcade must either have been contemporaneous or one portion must have been of earlier date than the other. There are no features in the nave to suggest that it could have been built before the middle of the thirteenth century. If we accept the idea of contemporaneous building, then we have to assume that the few monks who were then installed at Ruislip undertook a very great work indeed. That would be to build in addition to the dormitory, refectory, &c., a complete church with capacious nave and

aisle and the necessary chancel all at one time; a great undertaking for a community of 12 monks with only a small population to assist them and no materials for the walls conveniently at hand. Although the present flat roof of the aisle cannot, from its character, be later in date than the year 1500, it is obviously not the original roof. Internally it cuts right across the tower arch, and externally, upon the east face of the tower, a raking course of masonry can be clearly seen which protected the flashings at the line of junction with a steep pitched gable roof. A roof which required replacement before the year 1500, probably dated from two or three centuries earlier. The four south windows of the aisle are replacements of earlier and smaller windows. They are not centred opposite the arches of the arcade as they would naturally have been if contemporaneous. That these windows were inserted before the present roof was erected is apparent from the awkward way in which the corbels of the roof impinge upon the window arches.

Most of the piers of the arcade lean northwards, which could be explained if the arches were cut in an existing external wall which had been pushed outwards by roof thrust from the south.

The aisles of thirteenth-century village churches were usually narrow with lean-to roofs. It is clear that the original roof was double-pitched, and of the present width.

A stone corbel which projects aimlessly above the capital of the most easterly pier may have supported the original roof. But it may also have carried one end of the rood beam before that was moved eastward in line with the later existing chancel arch.

The lack of relation between the position of the buttresses and the portions of the door and windows points to the conclusion that these were added in the fourteenth or fifteenth century to a previously existing wall.

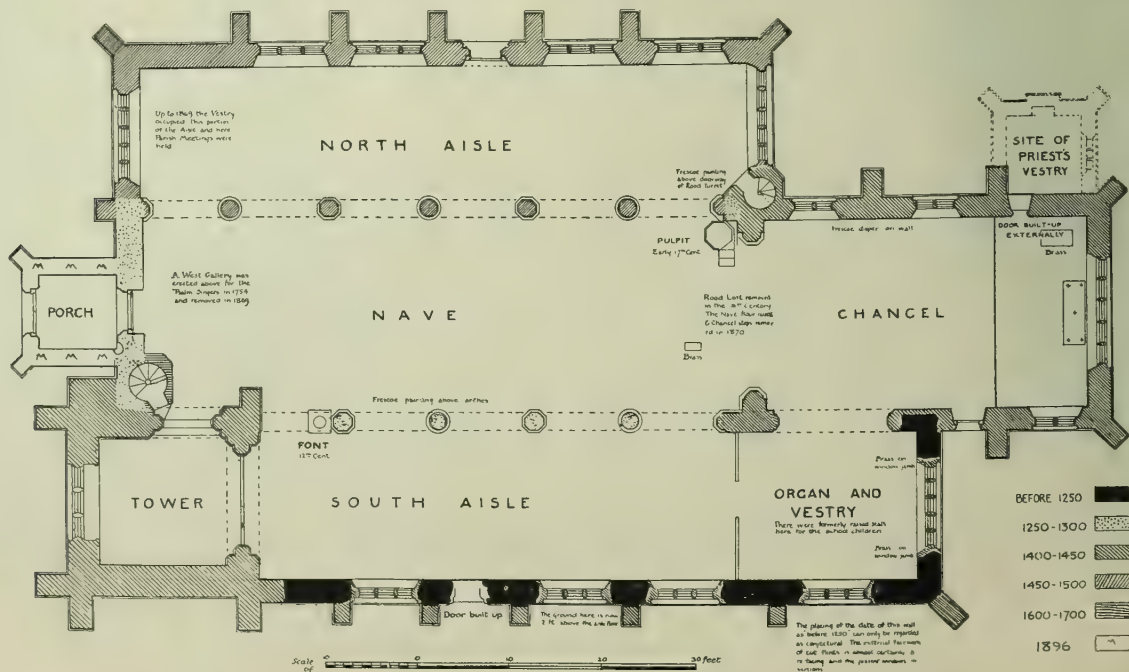
The built-up door affords little clue. The mouldings have completely weathered away, but the form of the arch suggests the thirteenth century. It is not unlikely that the entrance to the Norman church was at the west, and that it was destroyed when the tower was built.

These considerations suggest that the south aisle is not only the oldest part of the existing structure, but that the walls enclose

part, and perhaps the whole, of the Norman church.

The nave consists of six bays and measures approximately 63 ft. by 22 ft. internally. The only direct light which it receives is from the west window. There were once three dormer windows on the south side of the roof, as can be seen from an old print in the Vestry. Similar dormer windows still exist in neighbouring churches, e.g., Ickenham, Pinner and Hillingdon. The pointed arches are of two orders, both chamfered on the north arcade, but only the inner order on the south. The arches are enclosed with a label moulding on the side towards the nave only. It will be noticed from the plan that the piers of the two arcades are not opposite each other, but are irregularly placed and spaced. Those on the south have the hollow water-holding mould at the bases which is characteristic of the thirteenth century. The southern piers are built of small square blocks of stone usual when stones had to be carried from a distance on backs of mules and pack horses. The northern piers are of larger blocks, and the capitals a coarse imitation of those on the south. The details show that the north arcade is of later date than the south, and that is what the appearance of the north aisle would suggest as it is obviously of late Gothic design. It may be that the present aisle succeeded an earlier narrower one, but what evidences exist point the other way. If anyone stands near the pulpit and looks along the line of capitals westward, he will be struck with the awkward way in which the arches rest upon the capitals. Some arches rise from the edge of the abacus on one side, and leave a shelf of about 6 in. to the other. It seems as if the north wall of the nave must have been thrust outwards by roof pressure before the columns were erected, so that the capitals had to pick up their load where they could, as otherwise they themselves have had to be built out of the wall. The structure of the church confirms what would expect, namely, that it was enlarged gradually as the population increased.

The oak roof of the nave is a seven-trussed rafter roof with tie beams at intervals. The beam at the east end has been cut away to afford a better view of the formerly existing paintings over the chancel arch. The under of the rafter is ceiled with oak boarding to shut out the draught. This boarding is divided into intersecting ribs into rectangular panels of varied sizes. At the intersections are capitals, about two-thirds of which are ant-



Plan of Ruislip Church.



The Interior of Ruislip Church.

the carving of these can hardly be placed as early as the roof itself, and it is likely that the roof was originally an open one and that the ceiling boards were affixed in the fifteenth century. The eastern bay is not divided into compartments, and this difference is not without significance. Before the restoration in 1869-70 the eastern bay had a lath and plaster ceiling. Probably this was once painted to represent the sky above the Rood.

It seems fairly certain that the monks built the new nave about the middle of the thirteenth century, and that nave necessitated a chancel. It is not possible to identify any feature of the present chancel which could be earlier than the year 1400. It is probable that the chancel which the monks built was lengthened and heightened subsequently, apparently about a century later. There are two evidences of the earlier chancel. There are raking lines in the masonry above the chancel arch on its eastern side forming a slight "set off" below the present arch, and externally there is a small window, perhaps ventilation opening, which can be seen very high up in the gable forming the east end of the nave. But the cill of this opening is now below the ridge of the chancel roof. This is one of the braced collar type common in the thirteenth and fifteenth centuries, and the oak is beautifully grey in tone. There is no ridge piece, the heads of the stout rafters being lashed together and fastened with oak pins. The windows are all of Perpendicular character, with super mullions in the tracery and depressed arc-centred arches. The eastern window on the north side has its cill at a higher level than the others to afford headroom for a small door which led into a sacristy. The door remains with its ancient ironwork and fastenings, but is built-up externally, and the sacristy was demolished at some time unknown. The foundations have been recently uncovered by the writer, and remains of the lead flashing of the roof can be traced under the cill of the previously mentioned window. The fact that the buttresses at the east end of the chancel are placed diagonally and not in pairs at right-angles suggests that the east wall at least is earlier than 1400.

The tower cannot be definitely ascribed to any particular century. The belfry stage and battlemented parapet may be additions to an

earlier and lower structure. The stairs are a later insertion, being contained in a rather flimsily built turret which impinges both on to the north tower arch and the jamb of the west window of the nave and breaks quaintly through the nave roof. Probably the original ascent was made by short flights of elm logs roughly squared and built against the interior of the walls, as can still be seen at Hayes Church (Middlesex). There is a horizontal string course of stone built into the north wall of the tower above the gutter of the nave roof. The object of this must have been to protect the lead flashing of the gutter. This proves that the tower was built either at the same time as the nave or subsequently, and not before, when no gutter would have existed to need protection. Now, if the tower and nave were built together it would have been natural to have extended the nave as far westward as the tower, and made the north-west buttress of the tower part of the west wall of the nave. No more walling would have been necessary, and the nave would have been 5 ft. longer. We may conclude that the nave was built before the tower and that the cost was such that no further outlay was contemplated for a generation or two. Probably the bell or bells hung in a turret on the roof of the nave as at the neighbouring churches of Ickenham, Northolt and Cowley to this day. The way in which the east tower arch is cut by the present roof of the aisle, and the outline of the former roof visible on the outside of the north wall of the tower, prove that the tower cannot be later in date than, say, 1500, which is about the latest date for the present aisle roof. But towers of that date were nearly always erected with staircases and their buttresses were usually diagonal on plan. For this reason it seems more likely that the tower was erected at the beginning rather than the end of the fifteenth century; that was a time when peals of bells became common in parish churches. The lower part of the walls internally is built in a rough chequer work of squared stones and squares of cut flints. Externally no masonry is visible between the plinth and the string course beneath the belfry windows. Probably this was not always so. Stone lacing courses or blocks may have existed and decayed, and not been replaced when the flint facing was renewed, as it appears to have been. It should

be noted that the axes of the tower and aisle are not identical.

In the reign of Henry IV Ruislip ceased to be a priory. For two centuries it had been attached to the Abbey of Bec in Normandy. The lands at Ruislip were granted by the King to his son John, Duke of Bedford, who was Regent of the English possessions in France in the time of Joan of Arc. The further enlargement of the church by the erection of the north aisle, about half a century later, must be attributed to the needs of a growing population. This aisle fortunately remains as first built, and presents an unusually symmetrical and balanced elevation to the north. The equally spaced buttresses divide the length into six bays. The most westerly presents an unbroken wall, but four of the others are occupied by wide low windows identical in their tracery and with depressed arches springing from pier to pier, so that the only solid curtain walling is below and above the windows, thus giving the greatest possible area for stained glass. The centre bay contains a typical Perpendicular door with traceried spandrels inclosed within a label moulding. It is rather surprising that a north door should have remained so long in use unpierced. The roof is very low pitched and quite hidden by the battlemented parapet. The rood stair turret at the east end of this aisle belongs in date to the chancel and not to the later aisle. The bonding of the masonry with the wall of the former and the absence of proper bond with the aisle is evidence of this. Before the aisle was built there may have been a shallow transept affording approach to the turret internally, but there is no trace of this. As there are still two or three churches where the approach to the rood stair is only from the outside of the church, it is possible that here was another instance. The stairs of the turret ascend considerably beyond the level of the old rood beam and must have once led also to the roof, but the turret is now capped level with the top of the low parapet, and the opening on to the rood loft has been bricked-up.

No further addition to the fabric took place until a porch was built at the west end, about thirty years since. But various fittings have been altered, removed, or provided, to meet the changing fashions of worship since the Reformation. James I having ordered a sermon to be

preached in every parish church every Sunday. "a neat and comely pulpit" had to be provided. It is of the usual Jacobean type, of oak, hexagonal, with clumsy applied enrichments of lozenges, &c. The canopy and back board have disappeared and the pulpit lowered in height. An oak table inlaid with walnut served as the Communion table for about two centuries; it is now in the vestry. A finely carved case containing shelves for alms bread, is in the tower; it must be by Grinling Gibbons, or some pupil. Of mediæval furniture, there are two fine large chests of elm, about 500 years old, and several pre-Reformation pews.

A west gallery was erected for the "Psalm singers" in 1754, and remained until 1869, when the wave of "Restoration" reached Ruislip. The nave was restored by Sir Gilbert Scott and the chancel by Ewan Christian. The floor of the former was raised six inches, thus obliterating the chancel step and nearly submerging the bases of the piers. The plaster ceiling of the east bay was removed, also the three dormers. Roof timbers were renewed where necessary. The hatchments, which occupied the spandrels over the piers, were relegated to the tower. The gallery having been abolished, the organ (enlarged) was re-erected at the east end of the south aisle, where it blocks two stained windows and hinders the formation of a side chapel. The removal of the vicar's and the squire's pews from the chancel brought to view some ancient encaustic tiles, the fourteenth-century grave of Roger de Suthcote, and the fine series of Hawtrey slabs with their sculptured heraldry.

In 1857 some ancient wall paintings had been discovered, so that Scott gave instructions for the walls to be cleaned with care. Tracings of painting can be seen on both walls of the nave, on the north and east walls of the chancel, and at the east end of the north aisle. This last represents St. Michael weighing souls and the Virgin Mary deflecting the balance with her finger. Below is St. Laurence carrying his grid-iron.

EXEMPTED STUDENTS' DESIGNS

The designs by students exempted from the R.I.B.A. Final Examination (with the exception of the subject of professional practice) are on exhibition until Saturday, September 26, from 10 a.m. to 5 p.m. daily, in the Galleries of the R.I.B.A., 9, Conduit-street, W.1. The R.I.B.A. Board of Architectural Education Silver Medal for recognised schools is awarded for the best set of designs submitted in the exhibition of designs of students exempted from the R.I.B.A. Final Examination. This year the following schools, which have courses of five or more years' duration recognised by the Royal Institute for the purpose of exemption from the Final Examination, have sent exhibits:—

The Architectural Association, London; the London University School of Architecture, University College; Robert Gordon's Colleges, Aberdeen; Glasgow School of Architecture, Glasgow; School of Architecture, University of Liverpool; Department of Architecture, McGill University, Montreal, Canada.

The following schools of architecture recognised by the R.I.B.A. for the purpose of exemption from the Intermediate Examination have sent exhibits:—

The Architectural Association, London; London University School of Architecture, University College; Robert Gordon's Colleges, Aberdeen; Birmingham School of Architecture, Birmingham; Cambridge University School of Architecture, Cambridge; The Technical College, Cardiff; Edinburgh College of Art, Edinburgh; Glasgow School of Architecture, Glasgow; Leeds School of Art, Leeds; School of Architecture, University of Liverpool; School of Architecture, The Victoria University, Manchester; Department of Architecture, Surveying and Building, The Northern Polytechnic, London; Department of Architecture, McGill University, Montreal, Canada; Bombay School of Art, Bombay.

LEADING CONTENTS. PAGE

THE MINISTRY OF HEALTH'S REVIEW OF TOWN-PLANNING.....	415
NOTES.....	416
GENERAL NEWS.....	418
CORRESPONDENCE.....	418
COMPETITION NEWS.....	418
ST. MARTIN'S CHURCH, RUISLIP.....	420
BOOK REVIEWS.....	430
ARCHITECTS' AND BUILDERS' INQUIRY BUREAU.....	432
THE BUILDING TRADE.....	433
SETTING OUT A STAIRCASE—III.....	435
WAR MEMORIALS.....	436
NEW BUILDINGS IN LONDON.....	437
CONTRACTS, COMPETITIONS, &C.....	439
PROPOSED NEW BUILDINGS AND OTHER WORKS.....	442
THE BIRMINGHAM BUILDING EXHIBITION..	443
TENDERS.....	447

ILLUSTRATIONS

Birmingham University Extension.

The drawing in this issue shows the new extension of the Birmingham University buildings at Edgbaston. The view is from University-road, and the extension links the library with the chemistry laboratory. On the ground floor of the new buildings accommodation will be provided for the study of brewing and fermentation; on the first floor there will be departments for zoology and bio-chemistry; and the second floor will be given up to botany. In the higher part of the building, near the tower, will be situated a lecture theatre, which will afford accommodation for an audience of 200, and will be common to all departments. The extension is estimated to cost between £90,000 and £100,000. Sir Aston Webb & Son are the architects.

New Premises

for Messrs. Bourne & Hollingsworth.

These new premises, to occupy the site of the old buildings recently demolished, are now in course of erection in Oxford-street from the designs of Messrs. Slater & Moberly, A. & F.R.I.B.A.

Organ Case, St. Peter's Church, Medmenham, Bucks.

This case is of oak, carried out to the designs of Mr. A. G. R. Mackenzie, F.R.I.B.A., by Messrs. Elliott, of Reading. The organ is by Messrs. Norman & Beard, of London. The transept arch shown in the small photo is an old mediæval arch, found and restored when the new transept was built for the organ.

Holy Trinity Church Hall, Hounslow.

This design was placed first in a competition held at the end of 1923. The scheme consists, on the first floor, of a large hall to seat 450, a stage and retiring rooms. On the ground floor is a smaller hall 40 ft. by 28 ft., lavatory accommodation, kitchen and four classrooms. The class-rooms are so arranged that they can be used temporarily for cloak-rooms in connection with both halls. The colour scheme of the large hall is cream, generally with a dado of blue, black and orange. The frame enclosing the proscenium opening is black and gold, the curtain being of a mole-coloured velvet with blue trimmings. Mr. William Lacey, of Hounslow, was the general contractor, and the following are some of the sub-contractors: Wood block floor, Hollis Bros. & Co., Ltd., Hull; service lift, James Ritchie & Sons, Battersea; electrical work, J. Webb, Hammersmith; sculpture, Mrs. Phoebe Stabler, Hammersmith; stage curtains and scenery, J. H. Edgcombe, Ltd., London; electrical fittings, General Electric Co., Ltd.; footlights, Thomas J. Digby, London; heating, Broadhurst, Craig & Ching, London; ironmongery, Alfred Brown & Co., Birmingham; sanitary fittings, Tylors, Ltd., London; structural steelwork, Redpath, Brown & Co., Ltd., London; flats, Val de Travers Co., Ltd., London; fire appliances, J. H. Heathman, London;

roofing tiles, Roberts, Adlard & Co., London. The contract price was £6,495. Mr. Cyril Farey, A.R.I.B.A., is the architect.

Eleventh Church of Christ Scientist, London.

This church is now being built in Northfleet, near the Marble Arch. The site is an open one, bounded on three sides by roads. The planning and form of the church are simple and direct, and the elevations are an outcome of the plan. The church itself, which is to hold from 800 to 900 people, all seated the floor (there are no galleries) is on the ground floor of the building, and is approached by four staircases. Beneath it, on the ground floor, is a large entrance hall and the school room, and in the basement are the lavatories and cloak-rooms, boiler rooms, etc. The building is of multi-coloured brick and the dressings of Portland stone. The roof is covered with Italian tiles. The following firms are engaged on the construction, or on the supply of materials:—General contractors, Dove Brothers Ltd., Islington, N.1; bricks supplied by Dorking Brick Co., Holmwood, Dorking; structural steelwork, Aston Construction Co., Ltd., Hoxton, N.1; steel windows, William Gamon & Co. (Kaleyards), Ltd., Chesham, Bucks; heating and ventilating, Benham & Sons, Ltd., London; electric lighting, etc., Rashleigh & Phipps & Co., London; lift, The Express Lift Co., Ltd., Westminster; wrought-iron work, Garton & Thorne, Ltd., London; sanitary fittings, Mellowes & Co., Ltd. Dr. O. Faber, O.B.E., is the consulting engineer, Mr. Hope Bagenal, A.R.I.B.A., has been acting in an advisory capacity as to acoustics. Mr. Oswald P. Milne, F.R.I.B.A., is the architect.

Proposed Church of St. John the Divine, Earlsfield.

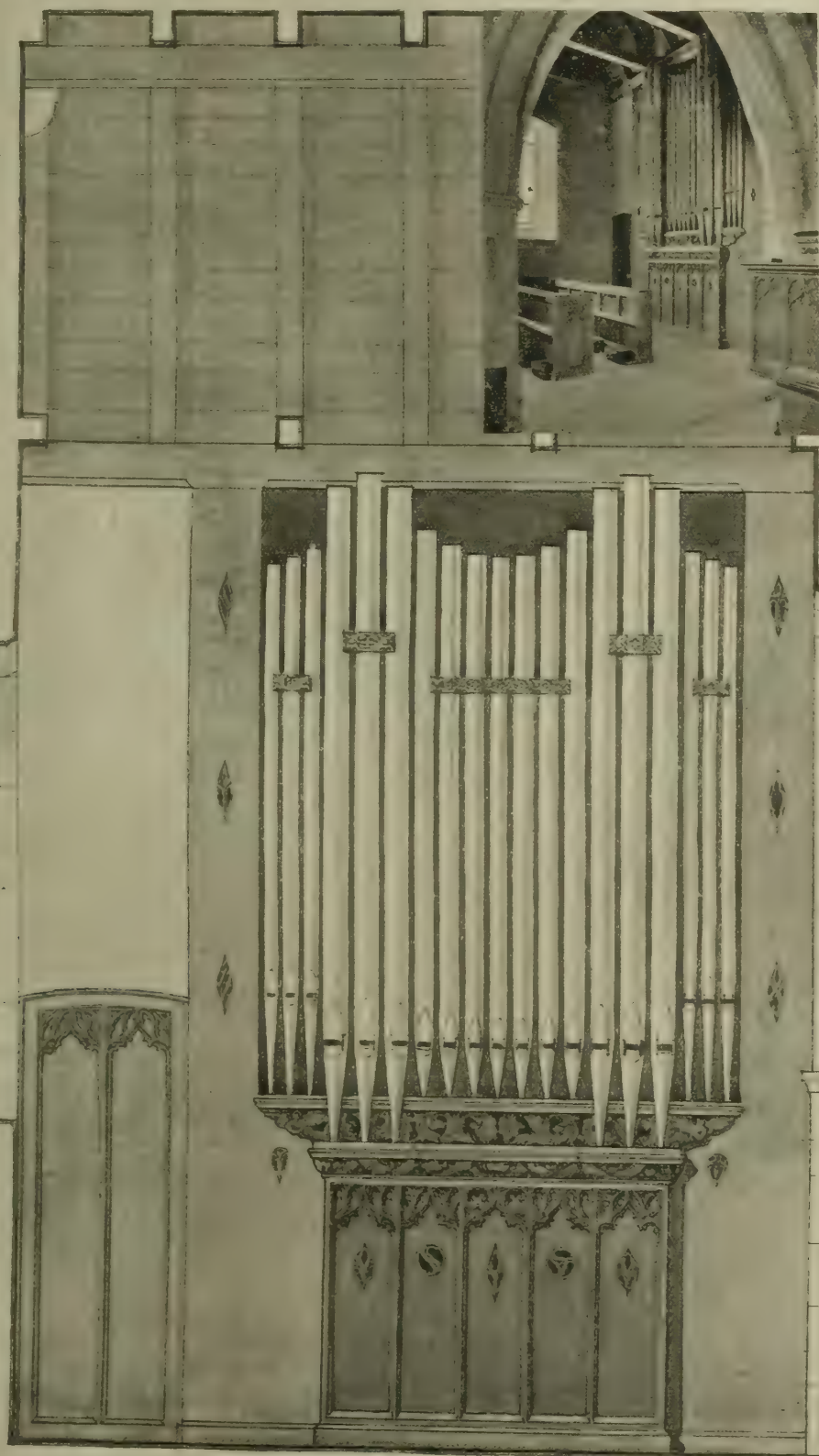
This drawing illustrates a design prepared a few years ago for a proposed new church at Earlsfield. The detail was kept as simple as possible, both externally and internally. The walls were to be in concrete, faced with yellow stocks and finished inside with smooth faced plaster. The main roofs were to be covered with Spanish tiles and the flat roofs, vestries, etc., asphalted. Stonework was reduced to the minimum. The completed design was designed to seat 600 people. The preliminary is by Mr. A. D. Reid and Mr. A. H. Mr. Allan D. Reid is the architect.

Church of the Royal Marine Artillery, Eastney Barracks.

The seating accommodation of this church is 1,000, the cost of execution being £11,000. The tower was omitted for reasons of economy but is shown as designed. The foundations were put in by Admiralty departmental staff. The contract for the superstructure was carried out by Messrs. Corke, of Southampton. Heating and ventilation were by Messrs. of London, and wood block flooring by Acme Flooring and Pavement Company, and mosaic by Messrs. Maw; marble pulpit font by Messrs. Jenkins; and furniture seating by the Bennett Furnishing Co. The stone is Portland outside and Bath inside.

Norwich Shirehouse Extension Competition.

We illustrated the winning design in our issue for August 2. That placed second in our issue for September. This week we publish the third prize design, by Messrs. Kieffer & Fleming. The whole of the accommodation asked for has been provided, with a certain amount of extra area on the upper floors. The wall will be built of Fletton or other approved facing externally with 2-in. Tudor brick. The roof to be covered with green slates. The windows and openings, string courses, etc., would all be Ancaster, Weldon, or approved stone, the windows to be iron set in the stonework. The floors would be concrete, finished with pitch pine block flooring in offices, and with marble in vestibules, halls, and corridors. The estimated cost is £46,640.



Organ Case, St. Peter's Church, Medmenham, Bucks. MR. A. G. R. MACKENZIE, F.R.I.B.A., Architect.



Holy Trinity Church Hall, Hounslow.

MR. CYRIL A. FAREY, A.R.C.S., Architect.

ELEVENTH CHURCH OF CHRIST, SCIENTIST, LONDON.





Rebuilding of Messrs. Bourne

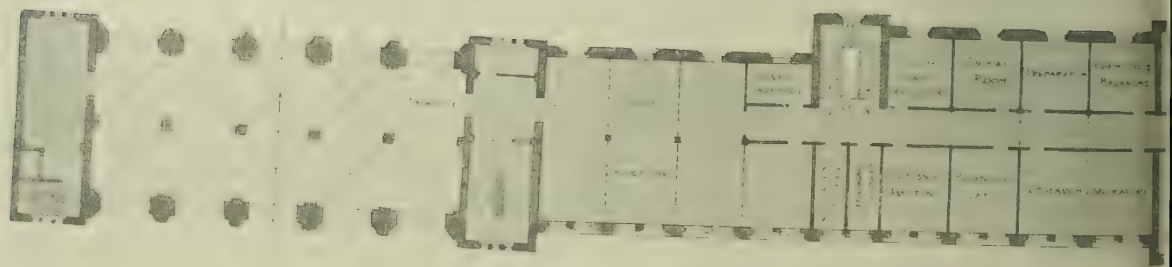
MESSRS. SLATE

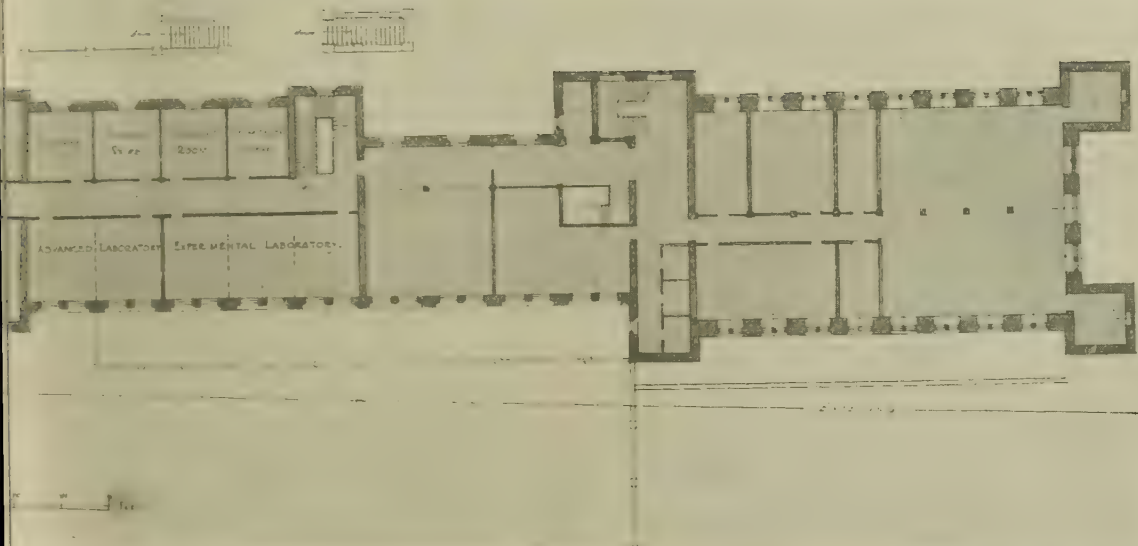
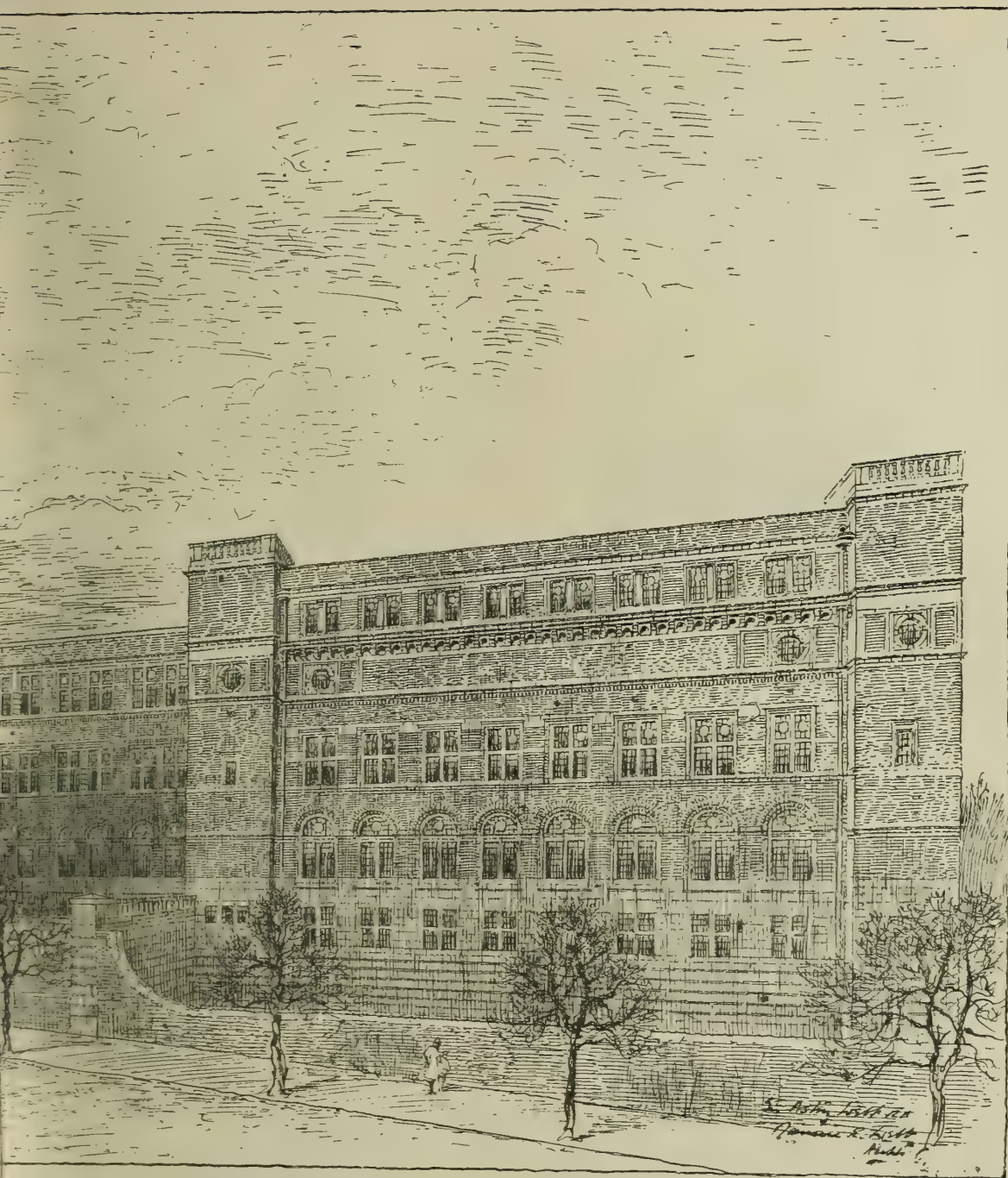


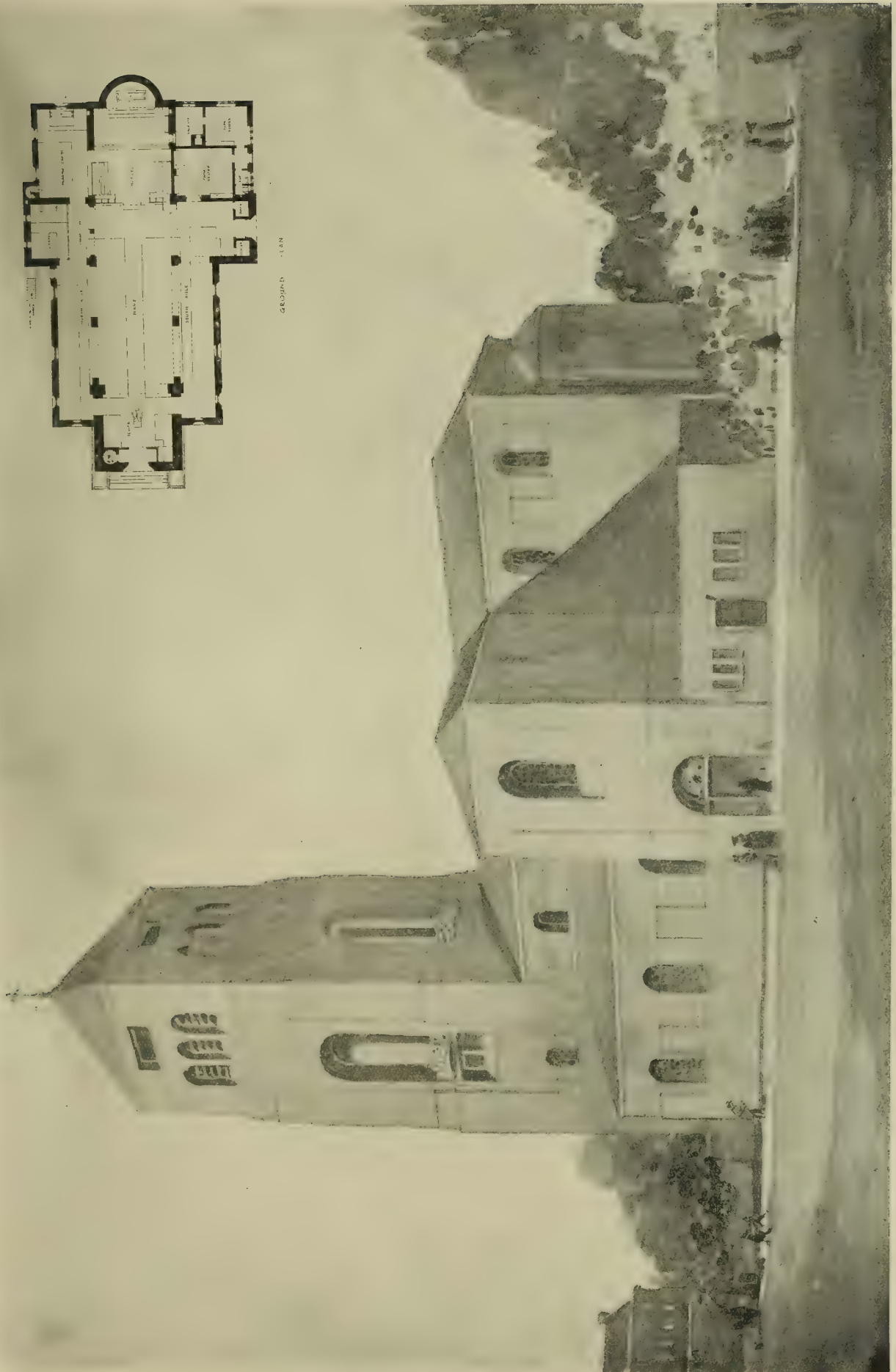
ROYAL ACADEMY EXHIBITION. 1925.

ses, Oxford Street, London, W.

A., Architects.







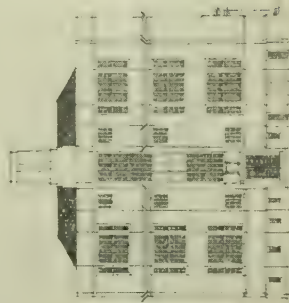
Proposed Church of St. John the Divine, Earlsfield. Mr. Allan D. Reid, Architect.



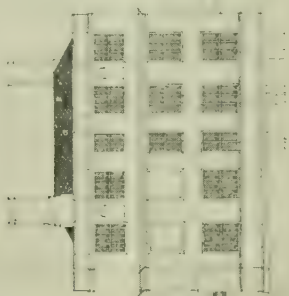
Royal Marine Artillery Church, Eastney Barracks. MR. PHILIP J. MARVIN, Architect.



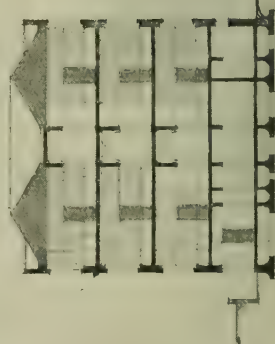
ELEVATION TO CASTLE MEADOW ROAD



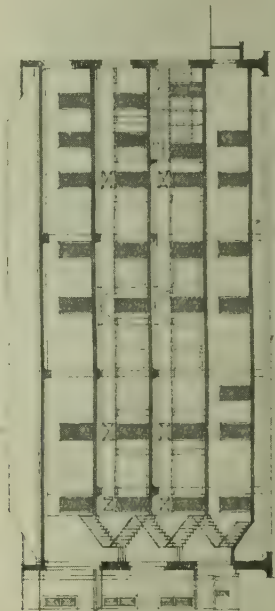
SIDE ELEVATION TO OLD SHEDHOUSE



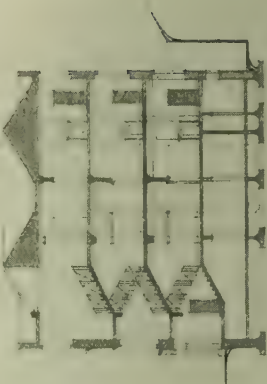
SIDE ELEVATION TO POLICE STATION



SECTION B-B



SECTION A-A



SECTION C-C

Editorial
Strenuously

The land will be continued
to the extent of the
the office land and other
the same.

The land on the corner
will be taken and the
the same.

The land will be
the same.

The land will be
the same.

The land will be
the same.

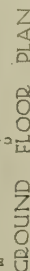
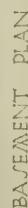
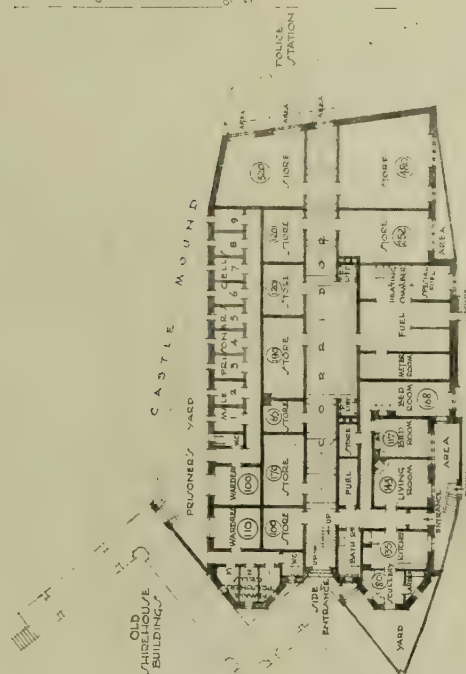
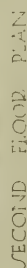
The land will be
the same.

The land will be
the same.

The land will be
the same.

The land will be
the same.

The land will be
the same.



The Shirehouse Extension Competition, Norwich : Plans of Third Premiated Design.
MESSRS. KIEFFER & FLEMING, Architects.

[illegible]

PROPOSED LEEDS IMPROVEMENT SCHEME

WE have received the following correspondence for publication:—

SIR,—I am directed by my Council to forward the enclosed copy of correspondence, from which you are at liberty to quote as you please, should you think the matter of more than local significance. We are not desirous of publicity at the present stage, but in view of statements already made in the local press, we think it better that the principle behind our action should be known.

Our attitude is a practical attempt to drive home locally the policy advocated by Barrie, of youth challenging their betters. It is also a protest at the mere lip service rendered to youth who, on returning from France, find even the war memorials are entrusted to their elders of round about seventy. The second plea involved is that of a chance for the development of local culture and its consequent architectural manifestation, as at Liverpool. The provinces call at least for the same competitive chance against London in art as in cricket.

We claim that experience in the past does not warrant a commission of this importance being given outright to a London man, as the average of the buildings in Leeds designed by provincial architects of yesterday is higher than those designed by the London architects of yesterday. As typical fair comparison, we may name the following: The Leeds University Buildings, by A. Waterhouse, R.A., compared with the Leeds Medical School, by a local architect (Mr. W. H. Thorp, now retired); Lloyds' Bank, by A. Waterhouse, R.A., compared with the Yorkshire Penny Bank, by local architects (the late Perkin & Bulmer). The Town Hall, Corn Exchange, and Brodric's other works in Leeds, stand out as instances of local architectural culture far superior to any from London or elsewhere.

F. L. CHARLTON,
Hon. Sec. Leeds and West
Yorkshire Architectural Society.

[COPIES.]
62, Woodhouse-lane, Leeds,
August 17, 1925.

DEAR JONES,—For a long time we, as architects, have known, together with the public,

that the Corporation had in mind a vast undertaking in connection with the formation of a new street from Victoria-square to St. Peter's-street, an undertaking likely to involve the ratepayers in a very large expenditure, and I think I am right in saying that we, as the Leeds and West Yorkshire Architectural Society, numbering a good many highly competent architects of standing, together with a considerable sprinkling of clever men of the younger if less generally known school of thought, have daily expected to be approached in an advisory capacity by the Improvements Committee of the Corporation.

More recently, in common with the general public, we have heard that the Corporation had obtained certain (very extensive) powers in connection with the proposed street, and had definitely engaged the services of an architect—Sir Reginald Blomfield—to carry out the whole of the work (as to design and working drawings) on the north side of the new street. I also noticed in the press that the services of this architect had been secured by the Corporation on the recommendation of our Society. You, together with the Society as a whole, are well aware that this statement is totally incorrect. If I remember right, some years ago, Sir Reginald Blomfield's name was one of several submitted by our Society at the request of the Improvements Committee as suitable to advise them in connection with a building about to be erected on an important site in City-square, the designs for the façade of which (not by a Leeds architect), they felt were not in keeping with their ideals or the surroundings. Sir Reginald Blomfield was selected by the Improvements Committee, and, as far as I know, his advice was useful to them, and of value in preserving the amenities of City-square.

Without going into detail, it will be obvious that a man considered suitable by our Society to advise the Corporation on the façade of one building, is not necessarily the man we should consider best fitted to undertake the design of nearly half-a-mile of what I suppose will be one of the most important provincial works ever undertaken by either a public or private body.

However, in this connection, is the method of "thinking of a name" the right one at all?

I imagine not. Obviously there is only one way of getting the very best in a case of this sort and that is by competition. Naturally, I am rather strongly of the opinion that Leeds would do well to go to Leeds people, and there are clever architects in Leeds. Why not a competition limited in the first case to architects practising in Leeds, and assessed by a jury of eminent men? If no thoroughly satisfying result was obtained in this manner, then a second competition, open to the architects of the world. Surely the contemplated works are of sufficient importance to warrant such a course?

You ask my opinion on the situation, and the following points occur to me:—

(1) To be of any real service to the ratepayers the Corporation, or Sir Reginald Blomfield, the Society should have been consulted in the initial stages of the proposed street improvement.

(2) We have no inside information as to the real intentions of the Improvements Committee, but from what we have read, and heard in common talk, we are, to put it mildly, far from certain that they are acting in the best interests of the ratepayers of the city.

(3) Being asked to come in at this, the eleventh hour, when we can obviously be of no honest service, makes me think it possible that we are desired to pledge ourselves to a course which we may later regret.

Under these circumstances I propose to move the following resolution at the next meeting of our Council:—

"Leeds Street Improvement, Victoria-square to St. Peter's-street.

"This Society, while appreciating the courtesy of the City of Leeds Improvements Committee in asking that a deputation should wait on them in the Council Chamber, at the Leeds Town Hall, at 3.30, on August 25, in connection with the proposed new street between Victoria-square and St. Peter's-street, and that this deputation should be empowered to name three architects to act in an advisory capacity with Sir Reginald Blomfield if so requested by the Improvements Committee, feel that the time has now passed when such a deputation could be of assistance to the Improvements Committee, and, having been informed of the duties, responsibilities or qualifications required of the advisory architects, do not feel competent to submit suitable names. Under these circumstances



The Palace of Arts, Wembley: View in Gallery of Applied Arts. (See also p. 419.)

ces this Society does not feel justified in
ing the time of the Improvements Com-
tee, and begs to be excused from the meeting
August the 25th. The Society would like
ake this opportunity of denying the state-
ent which has appeared in the Press that
y had suggested the name of Sir Reginald
Blomfield as a suitable architect for the present
et improvement, but assure the Improve-
ments Committee of their whole-hearted support
this or any other scheme for enhancing with
nity or beauty the amenities of the City con-
ent with a due consideration of the interests
the ratepayers.

I feel that the present situation is very
ortant in its bearings on our Society in its
tion to civic activities of this kind, and I
strongly that as a Society we should avoid
ting ourselves in a position which may
e incumbent on us to serve the interests
a Corporation until we are assured that
e are also the best interests of the city and
ens. With the information so far vouch-
ed to us, we are not in possession of this
arance.

"Yours sincerely,

"JOHN E. PROCTER.

W. Alban Jones, Esq., President, The Leeds
and West Yorkshire Architectural Society.

August 24, 1925.

erman Charles Lupton, J.P.,
hairman, The Improvements Committee,
Leeds City Council.

DEAR SIR,—At our interview on the 21st inst.
ut forward a private letter to myself from
of our members because it epitomised the
ons that led my Council unanimously to pass
resolution forwarded to Mr. Lancashire on
20th ult. I put forward Mr. Procter's
ession of opinion primarily because it was
rsed by my Council, but also because he is
osition to voice the opinions of the younger
bers of our profession through having
ted much voluntary service to the cause of
itectural education in Leeds.

ou stated on Friday that it was impractic-
to put into writing the duties and responsi-
bilities of the suggested three advisory archi-
ts, but mentioned that "goodwill" was one
he main essentials. I have a similar diffi-
y in exactly defining questions mainly of
netics, and am thus prompted to rely on
somewhat informal letter as being the best
ns of explaining the attitude of my Society.
Officially, aesthetics may not be recognised,
you will agree that they persist in being the
salt of life. I offer no excuse in referring
to the Charter of Youth contained in
rie's Rectorial Address at St. Andrews as
rding the right cue as to what has happened
his Society.

is the younger men challenging the favours
nually going to their elders. These
nger men look round and see a University
eds, standing for local culture, they view
outward architectural manifestation—the
k of accomplished Londoners of their day—
do not feel impressed.

he Victorians gave a young Brodrick his
ce to emerge with the Leeds Town Hall
other works, which alone almost of the
lings of yesterday in this town remain of
real architectural distinction. Why should
these men at least press for a similar chance?
r seniors, perhaps, whisper counsels of
macy, tell them they are exceeding the
of gentility in referring to these realities,
the die has once again been cast by their
s, and it but remains for them to serve
wait till they, too, are old, retaining only
nspiration of the aged.

the present case, these younger men,
ng how best they can serve, are told that
ecomplished London architect, whom all
et, full of years and honours, has already
ommissioned to design and fully detail
half a mile of street façade in Leeds, and
courteously requested that three local
ects should act in an advisory capacity
him. The duties of these architects may
y not, involve important mundane decisions

affecting the very essence of the scheme, which,
if efficiently collated, would leave a clear field
for the more alluring function of pure design.
These architects are told that these duties
cannot be reduced to terms of reference, and
may involve those of the critic, but with "good-
will" it is hoped that any differences between
them and Sir Reginald Blomfield may be
settled before the design is laid before the City
Council for approval.

The younger men (and many of the older
ones) whose opinion I voice, say that respect
for the years and honours of the designer
appointed forbid them, at any rate, rendering
efficient service as critics, and say, let our
resolution of the 18th stand, as we think it
wiser that they who appointed Sir Reginald
Blomfield should be free to appoint the advisers
(even if from members of our Society) whom
they may consider best adapted to avoid any
impasse that may hinder the scheme. I find,
Sir, that the McConnachie of Barrie in me
insists on my endorsing the position taken up
by the younger men with whatever weight
there may be in the presidential office of this
Society.

Yours faithfully,

W. ALBAN JONES, President.

6, Butts Court, Leeds,

August 27, 1925.

DEAR SIR,—Your kindness in sending me an
early reply enabled me to read your letter to
a meeting of the Improvements Committe
on Tuesday afternoon, and this resulted in our
asking three Leeds architects if they would act
in the capacity we suggest. Whilst sympathis-
ing with your idea that the fullest opportunities
should be given to younger men, I am still of
the opinion that the course the Committee has
adopted was best calculated to obtain power to
insist on a better architectural scheme for the
widened street than has resulted from previous
efforts, and I only regret that your Society will
not be officially connected with us in doing this.

Yours faithfully,

CHARLES LUPTON.

W. Alban Jones, Esq.,

56, Prudential Buildings, Leeds.

[Some passages which do not affect the
principle of the question at issue have been
omitted from the above letters.—Ed.]

SCHOOL PROSPECTUSES. CENTRAL SCHOOL OF ARTS AND CRAFTS.

WE have received the prospectus of the
L.C.C. Central School of Arts and Crafts,
Southampton Row, W.C.1, of which Mr. F. V.
Burridge, R.E., is the principal. Architecture
and the building crafts are dealt with ex-
haustively, the instruction being planned for
architects' pupils and assistants and those who
are working for the R.I.B.A. examinations. It
is also for craftsmen and others who require a
knowledge of architecture, and the day instruc-
tion under Mr. C. Spooner, F.R.I.B.A., is
limited to this purpose; it comprises the study
of historical examples, design, preparation of
detail drawings, perspective, etc., and weekly
visits to the museums. Drawing and T-squares
are provided, but students must have their own
instruments and materials. There are two
courses of building construction, a senior and
a junior, both of which can be attended simul-
taneously, if desired. The junior deals with
the elementary principles of building and a
grounding in the primary crafts, viz., brick-
work, slating, plumbing, etc. The senior is
advanced and covers such subjects as ferro-con-
crete construction, girdering, sanitation, etc.
Lectures are given on "The Growth of a
Building," being based on working drawings
and specifications of recent structures. There
is also a course on structural mechanics, the
syllabus of which deals with stress and strain,
factors of safety, reactions, etc.

MANCHESTER UNIVERSITY SCHOOL.

We have received the prospectus of the
coming session from the University of Man-

chester School of Architecture, of which Prof.
A. C. Dickie, M.A., F.S.A., A.R.I.B.A., is
the principal. The school is one of the "re-
cognised" schools of the R.I.B.A., and its
examinations are accepted as equivalent to
those set in the Intermediate and Final Ex-
aminations for the Associateship of the
R.I.B.A. The courses are intended to meet
the needs of students who desire (1) to take
a degree of the University with Honours in
Architecture in the Faculty of Arts, and (2)
to take the certificate of the University in
Architecture.

These degree and certificate courses are full-
time courses and are arranged to cover a period
of five years.

In Building Construction lectures and
demonstrations include construction in the
various building trades, sources of supply, and
qualities of materials. The second, third,
fourth, and fifth years include graphic statics
and calculations, structural steel work, and
ferro-concrete. Visits are made to buildings
in course of erection throughout the course.

There are many handsome scholarships
open to all members of the school; intending
students should write to the Secretary for par-
ticulars of the entrance scholarships before the
session commencing on October 8.

CITY OF LONDON COLLEGE

WE have received particulars of a two years'
evening course on timber from the City of
London College, White-street, Moorfields, E.C.2.
The course has received the formal approval of
the Timber Trades Federation, and has been
arranged under the supervision of the College
Timber Trade Advisory Committee; Mr.
E. H. B. Boulton, M.C., M.A., is the head of
this section.

Section 1 of the First Year, consisting of
twenty lectures on Fridays, 6.30 to 7.30, to be
followed by practical work from 7.30 to 8.30,
commencing October 2, deals with the identi-
fication and uses of common timbers, a general
outline of the structure of timber, the identi-
fications and uses of softwoods and hardwoods,
and the identification of some common timber
trees. Section II deals with the seasoning,
preservation, defects, and mensuration of
wood.

The Second Year embraces sections on the
identification, properties, and uses of special
timbers; the timber supply from the forests of
the world; timber contracts, arbitration,
grading rules, insurance, &c.; and a compre-
hensive study of botany. Year certificates are
awarded to successful candidates. Intending
students should see Mr. S. J. Duly or Mr.
E. H. B. Boulton, on Wednesday or Thursday
evenings, September 23 or 24, 1925, between
6 and 7.30 at the College.

BRIXTON SCHOOL OF BUILDING.

The School of Building, Ferndale-road,
Brixton, has been established by the L.C.C. to
enable artisans and others engaged in the
building trades and allied professions to acquire
an intimate knowledge of the principles that
underlie the processes which they have to carry
out in their daily work. Workshops have been
provided and equipped for the practical teach-
ing of the several building trades under con-
ditions similar to those met with on buildings
and in builders' shops. A School of Archi-
tecture, with courses of instruction in the
history of building and for the study of archi-
tectural design and planning, together with the
preparation of architectural drawings, forms
part of the complete scheme of the work of the
school.

Lecture and class-rooms, drawing offices and
laboratories have been arranged in connection
with the workshops, so that the practical work of
the school may be combined with class studies
in-building construction, drawing, architecture,
&c.

Structural engineering, surveying, estimating
and other branches are all dealt with exhaus-
tively. Intending students should write to the
secretary, Mr. H. N. Hawley, for particulars
before September 25.

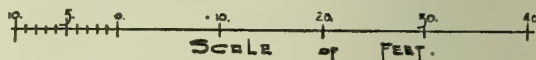
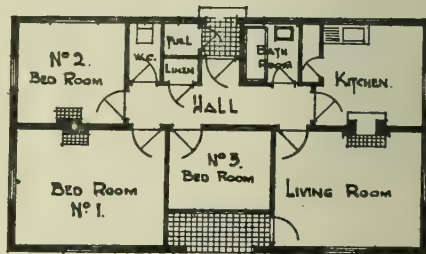
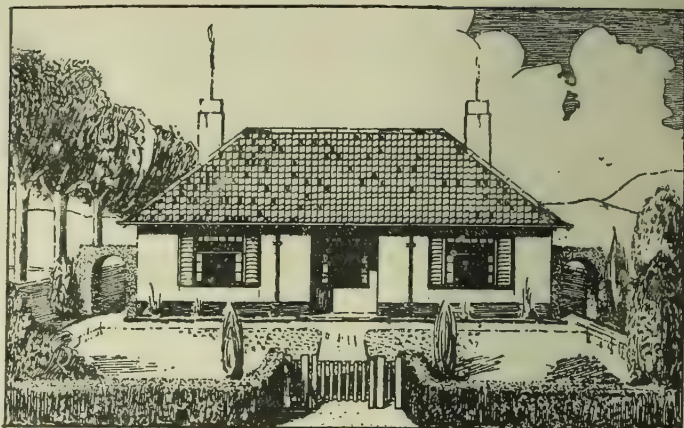
BOOK REVIEWS

Inigo Jones, by STANLEY C. RAMSEY; *Sir John Vanbrugh*, by CHRISTIAN BARMAN; *Nicholas Hawksmoor*, by H. S. GOODHART-RENDEL; *Sir William Chambers*, by A. TRYSTAN EDWARDS. (London: Ernest Benn, Ltd.) 10s. 6d. each.

Inigo Jones.—Inigo Jones is an outstanding figure in English history, a personality marking a definite revolution in English architecture, from that which was strictly national, or was at least of national growth, to that which was in all essentials Italian. During the Middle Ages English architects had solved the ecclesiastical, military and domestic problems set by their clients, as the change of conditions and advance of civilisation demanded, by the gradual development of a style of architecture having its origins in the earliest periods of the history of the race, and although foreign influence was considerable in practically all periods, the exotic elements were assimilated and the national character of the buildings was maintained. But by the end of the sixteenth century there was a growing desire for a change in line with the movements on the Continent, and it is a happy circumstance that the change when it occurred was introduced by a scholarly master. There are many points of resemblance between Inigo Jones and Brunelleschi, the great pioneer of the Italian Renaissance of about 200 years before, but the efforts of the former were in some respects more difficult in that while the change was more drastic a distinct national character was nevertheless imparted to the work produced. After two periods of study in Italy, the first about the end of the sixteenth century and the second in 1612-14, Jones returned to England and began that work which was to have such lasting effect. His earliest known building was erected in 1616 when he was in his forty-third year. The banqueting hall in Whitehall, admittedly one of the finest productions of Renaissance art, was built in 1619-21. What the result would be had Jones's Royal patrons been in possession of an ample exchequer or had he the opportunities of Wren it is not possible to determine, but there is a finish about his work which but few of his successors have attained.

The architecture of Inigo Jones was essentially civic in character, and this is observed even in those works executed in the country, such as Lees Court. But it finds its full expression in the colonnaded piazza of Covent Garden, with the church of St. Paul as its culminating point, and in the lay-out of Lincoln's Inn Fields. Jones, however, was probably not responsible for King Charles's Block at Greenwich, or for Coleshill House, traditions followed in this monograph. As Mr Alfred Gotch has clearly shown there is ample evidence to point to John Webb as the architect of the first and Sir Roger Pratt of the second. Further, the banqueting house in Whitehall was not built as part of a great palace, as so frequently stated, but the palace was designed many years afterwards, and probably by Webb, to include the banqueting house which was already built. Some fifteen buildings executed by or accredited to Inigo Jones are illustrated in this book by a set of very clear photographs, many of the works, such as Greenwich Hospital, Coleshill, and Wilton having several plates devoted to them.

Sir John Vanbrugh.—Vanbrugh is among those remarkable versatile characters who have been endowed with many gifts and have attained distinction in all fields of labour to which they have devoted their attention. A successful dramatist and operatic manager, he was, for some unknown reason, appointed in 1702 Comptroller of the Royal Works under Sir Christopher Wren, and the following year, when he was approaching forty years of age, we find him studying Palladio and entering definitely upon that architectural career in which he was to acquire such eminence.



Demonstration Bungalow, Winchester. MR. F. W. REES, L.R.I.B.A., Architect.

Castle Howard, Blenheim, additions to Greenwich Hospital, Vanbrugh Castle, and Duncombe Park, all of which are well illustrated in this volume, soon absorbed his attention and created for him a great reputation. Like most architects of great works Vanbrugh encountered determined opposition during the course of his work at Blenheim. In this case the opposition came from Sarah—the redoubtable Duchess of Marlborough—who accomplished his dismissal from his position of architect of the work in 1724, two years before his death, and twelve months later made an unsuccessful attempt to prevent his being paid for his services. Vanbrugh had the privilege of living in a period in which it could be said "There are several gentlemen in these parts of the world that are possessed with the spirit of building." This circumstance had its effect on the architects of the period, and is largely responsible for their designs for such desirable clients. Vanbrugh himself aptly expresses it by the order in which he states his reasons for the work he is carrying out at Lumley Castle. He says he is "altering the house for both State, beauty and convenience." In all criticism of his work this order must be remembered in which "State" comes first with convenience last.

Nicholas Hawksmoor.—That the bold outlines, the skilful distribution of solids and voids, and the monumental character of Hawksmoor's work have not been appreciated by all critics is obvious from the disparagement it has received from many quarters. Hawksmoor was born in 1661, became closely associated with Wren after 1679 and subsequently with Vanbrugh. Under the latter he assisted in the work at Castle Howard and Blenheim Palace, being in sole charge of Blenheim after Vanbrugh's dismissal in 1724. Many of his own masterpieces, including the churches of St. Ann, Limehouse, St. George, Bloomsbury, Christ Church, Spitalfields and St. Mary Woolnoth, the mausoleum at Castle Howard and the cupola and screen at Queen's College, Oxford, are all well illustrated here, and short descriptive notes are

given of each building. That fine pile, the west front of St. Mary Woolnoth, has been chosen as the frontispiece. St. Mary Woolnoth, is one of the nineteen churches not threatened with destruction, and it is hoped that the prominence here given to its fine facade will contribute its quota towards the prevention of the carrying out of that advised scheme.

Sir William Chambers.—The masterpiece by which the name of Sir William Chambers will always be known and honoured, which may well be placed among the great achievements of architecture in our country, is Somerset House. That merits of this building were not recognised all his contemporaries was but to be expected but there are few critics to-day, either professional or lay, who are not greatly impressed with the harmony and beauty of Somerset House. Both in respect to its fine front, rising above a terrace from a rustic base, admirably proportioned and having the reserved dignity which the river front of a great city building should possess; an respect to its general plan and the correspondence of that plan to its elevations, this building has indeed a grandeur combined with simplicity; it is fine in general conception in detail, which is all too rare. It is also a small tribute to the architect's ability to be able to state in regard to the planning of various blocks of offices of a great structure built nearly 150 years ago, that it appears to have given complete satisfaction to the occupants of these blocks.

Chambers was born in 1762, and spending many of his early years in travel to the East Indies and China, he turned his attention to the study of architecture, devoting some time to the study of the buildings of France and Italy. On his return to England he was fortunate in being introduced to Royal patronage, and in 1762 he was employed by George III. in the laying-out of Kew Gardens. He is responsible for many of the pavilions at Kew as well as for the Pagoda, in which his studies in China found expression. He also designed the entrance

at Blenheim and Wilton. As is desired, twenty-four of the photographs in this photograph are devoted to illustrations of the Rotherham House, of general views and details, and remaining ten illustrating work at Kew and elsewhere.

Rotherham Regional Planning Scheme, 1925. By W. R. DAVIDGE, F.R.I.B.A., F.S.I., Town-planning Inst. To be obtained, price 7s. 6d., from the Town Clerk, Municipal Offices, Rotherham.

The literature of Regional Planning is rapidly growing. To the several excellent reports on Regional areas already in existence, another has now been added—one dealing with Rotherham, by Mr. W. R. Davidge. This is a really comprehensive survey of the region, in the full meaning of that often loosely applied term. Mr. Davidge is an architect as well as a town-planner, and we are not disappointed in expecting from him a report that is not only entirely efficient in its analysis of the regional situation and in its practical recommendations, but one, also, that takes account of all the less material factors involved—topographical, architectural, historical. For example, the Report contains an instructive chapter on the growth of the region and its industries, wherein we find references to pre-Roman times, to ancient hill-forts, to the Roman occupation, to the Middle Ages, to mediæval developments, to the beginnings of Local Government, to the growth of nineteenth-century industrial enterprise. The historical survey is essential to a proper consideration of the problems of to-day. Mr. Davidge's brief though informative summary provides an excellent basis for the study of carefully arranged data and practical proposals which follow.

The Rotherham Regional Planning Scheme relates to an area of 70,127 acres, having a population of 168,895, a rateable value of £7109, and embracing no fewer than ten local authorities. It is an area that suggests active possibilities to the imaginative town-planner, (1) because of its close proximity with all the important manufacturing centres of South Yorkshire, embracing Sheffield on the west, Barnsley on the north-west, the busy manufacturing regions of Nottingham to the south, and the rapidly developing coal-fields of the Doncaster region on the east, (2) because the hilly nature of the region

as a whole has prevented the industrial development of the higher land away from the valleys, and, except for the development of the coal-mining industry, it is probable that the outlying villages will remain very largely agricultural communities.

This large, varied, and richly endowed area Mr. Davidge deals with according to the accepted principles of modern regional planning, dividing his recommendations under the general heads of (1) Improvement of present Transit Facilities; (2) New Road Proposals; (3) Preliminary Zoning of Areas for Industrial and Residential Use; (4) Reservation of Open Spaces; (5) Protection of Amenities; (6) Procedure Recommended. The Report is illustrated by a series of coloured folding maps and by many smaller maps and photographic views in the text.

Mr. Davidge has provided the Rotherham Region with a scheme that takes account of all the factors of future expansion. For its constructive ideas, well expressed in excellent English, it should be much in demand by students of Regional Planning as well as by those who are more intimately associated with the Rotherham district.

Elementary Guide to Reinforced Concrete. By ALBERT LAKEMAN, L.R.I.B.A., M.I. Struct. E. (London: Concrete Publications, Ltd., 20, Dartmouth-street, S.W.1.) Price, 2s.

This book has been specially written for all who wish to gain a knowledge of the principles of design and practice of reinforced concrete, and should appeal to the architect, builder, student, clerk-of-works, foreman, and all concerned with building. Differing from most text-books on the subject, it is written on the assumption that the reader has no previous knowledge whatever of reinforced concrete. The accepted methods of design and construction are explained in simple language, with a notable absence of equations. Seventy-nine diagrams are used to explain the text, and wherever possible such explanations are made clear by comparisons with everyday things in such a manner as to be readily understandable by the beginner. In the preface the hope is expressed that a study of this work by the builder's foreman will do much to improve the execution of reinforced concrete work, and if proficiency comes from greater knowledge this will be readily admitted. A simply written work such as this should also be of value to the student

and teacher, as the essentials of reinforced concrete design can be readily learnt therefrom by the student outside school hours. The chapters include: Loads, Reinforcement, Neutral Axis, Beams, Fixed and Supported Beams, Leverage of Beams, Bending Moments, Shearing, Stress, Slabs, Columns, Walls and Bases and Foundations.

Estimating for Builders. By J. H. BARNES, Fellow of the Institute of Builders. (Published by *The Builder*, Ltd., Catherine-street and York-street, Aldwych, London, W.C.2.) Price 6s. net; post free 6s. 6d.

The fact that the author is a director of one of the largest of the London building firms, and, in addition, is entitled to use those mystic letters, F.I.O.B., is some guarantee that any work to which his name is attached will be of practical value, and an examination of the volume before us will bear out this statement. Any work of this kind must necessarily confine itself to one district, in this case to the London area; but it will be a comparatively simple matter to apply the information to other districts by varying the basis of labour rates and also those of materials which go to make up the various prices.

In many works giving analyses of prices, the calculations are so detailed that it would not be possible to spend the time necessary in the hurry of modern business; those here given are not open to this objection, although quite sufficient as a guide to enable anyone who takes up this department of building practice to produce consistent estimates, always bearing in mind that no work, however detailed, can make the mere novice into a competent and reliable estimator. As a guide to the systematic building up of prices this work will be found most valuable. In addition to the various analyses, the various practical notes throughout the trades explaining the bases of the several factors both for labour and material add considerably to the value of the information.

Books Received.

STRUCTURAL DRAFTING AND THE DESIGN OF MATERIALS. By Carlton Thomas Bishop. (London: Chapman & Hall.) Price 25s. net.

RESISTANCE OF MATERIALS. By Fred B. Seely. (London: Chapman & Hall.) Price 18s. 6d. net.

CORNWALL. (London: The Homeland Association, Ltd.) Price 2s. 6d.



A Small House in Hertfordshire. MESSRS. GERALD WELLESLEY & TRENWITH WILLS, Architects

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting?—ED.

Architect's Fees for Abandoned Work.

[REPLY TO B. WARE, SEPTEMBER 11.]

SIR,—An architect's right to remuneration depends on a contract to pay what is reasonable; and if there is no agreement, then he is only entitled to a reasonable remuneration. In this case it is quite clear that there must, on the facts as stated, be in existence an express contract, made orally, fixing the remuneration of the architect for the house finally adopted and built at "the originally agreed fee," and this last is all he is entitled to recover. Certain institutions, e.g., the Royal Institute of British Architects, have prepared scales of professional charges, but, however reasonable they may be, unless they have been agreed to the parties are in no way bound by them. If there is no express or implied stipulation that no payment is to be made until the work is completed, the architect is entitled to payment, from time to time, for the work actually done; but here the fee was to be paid for the entire work on completion, therefore the right to payment does not arise until the whole of the work is completed—which would appear to be at the end of the maintenance period, and after any necessary repairs and making good are finished, and the final certificate has been given. The fact that the client took possession does not affect the question of when the remuneration is payable. See Cresswell on "Building Contracts," 143-147.

"LAW."

Water in Basement.

SIR,—Will you please tell me what I should do to make a basement floor absolutely waterproof? I have a job in hand where the basement floor is of 8 in. concrete (4:2:1 mixture with 50 per cent. waterproofer) with a coat of 1 in. cement plaster (2:1 with 50 per cent. waterproofer on the top), and yet water is coming through. I have got to dry it completely to lay three courses of damp-proof material. I have tried various methods to stop the water but have failed. It is the rainy season here now, and the subsoil is full of water.

"A BUILDER'S ASSISTANT."

Rangoon.

Roofing Felt.

[REPLY TO "CLIMATE," SEPTEMBER 4.]

SIR,—From personal experience, I find there is nothing to choose on the point of utility between bituminous roofing felt and hair felt, except on the question of cost. Bituminous is cheaper and quite suitable as an under lining.

G. W. H.

SIR,—The purpose of a roofing felt is to form a non-conductor of heat rather than to form a second line of defence against weather. For this reason a well-tarred hair felt is preferable to one of the more compact bituminous felts. To preserve it against decay and give it the longest life possible, the roof should be provided with vertical battens as well as horizontal slating battens to maintain a through current of air, and at the same time eliminate the series of damp collecting ledges that occur if the horizontal battens are laid direct upon the felt.

"EQUABLE."

Tiles Splashed with Cement.

[REPLY TO "CEMENT," SEPTEMBER 4.]

SIR,—I have found that such stains as described by your correspondent will yield to a good scrub with strong vinegar.

"ACID."

Cold Water Supply.

[REPLY TO "QUERY," SEPTEMBER 4.]

SIR,—Since your correspondent mentions a school building, it is obvious that there will be long intervals in the holidays during which the heat will not be on. It is therefore doubly necessary to wrap the cold pipes, because a burst pipe in a permanently-sealed trench may be a very serious matter, and at the same time cold pipes running alongside hot pipes will often run warm at the tap.

"INSULATE."

Provincial Architects' Practices.

[REPLY TO MR. FREEMAN, SEPTEMBER 4.]

SIR,—The practice described by your correspondent is, to say the least, "doubtful," and where cases are known and can be proved, it would be a public service to report the offenders to the R.I.B.A. All "buried fees" are objectionable, and where local practice admits of the architect drawing from the contractor, it behoves him to be extra scrupulous. Another pernicious practice of only slightly less guilt is to include in quantities a quantity of stuff which it is known will be varied in execution. In squaring up the accounts the offender charges 2½ per cent. on additions and 1½ per cent. on deductions, thus getting a double commission on perhaps a large bulk of the work. It is really only fair to charge for measuring variations that are directly required by the client or which other changes in the job render desirable for the good of the job.

"JUSTICE."

Quantities.

Please give me your opinion on the following clause taken from the bill of quantities supplied by a Rural District Council:—"If at any time during the progress of the said works or after the completion thereof any disputes or differences arise as to the manner of executing the said works or any part thereof as to the quality of the materials or as to any matter of charge or account between the Council and the contractor, or as to any matter or thing connected with the contract, they shall be referred to and finally settled by the surveyor, whose decision shall be final and binding on both parties."

C. H.

Permanent Colouring of Roughcast.

SIR,—Can you tell me how to make the cream colour of rough-casting permanent?

R. M. P.

Preservation of Bath Stone.

SIR,—Could you advise me as to the preservation of the Bath stone dressings of a small house in a western suburb of London? Is paint deleterious? I should like to avoid paint if possible, as it hides the appearance of the stone.

"VOX."

Preventing Verdigris on Copper Pipes.

SIR,—We should be glad if any of your readers could suggest a method of treating copper pipes to prevent verdigris forming. Would two coats of varnish be an efficient preventive? Opaque paint is not desired.

J. B. HUTCHINS, F.S.I.

(T. Wainwright & Sons).

A Boundary Wall Question.

[REPLY TO "J.," AUGUST 28.]

SIR,—My opinion is that the cost sustained by "A" in building the wall at pre-war prices should be halved, and one-half charged to "B." That seems to me to be equitable, as "A" has not suffered the increase of present-day prices.

E. J. P.

Penalty Clause in Contract.

SIR,—Could you inform me whether it is possible to enforce the penalty clause against a builder where the R.I.B.A. Contract has been signed, but no provision has been made for bonus, should the builder finish before the time agreed upon? Has any case been decided on this point?

W. L. CARTER.

Bituminous Paint.

SIR,—I should be obliged of any information or theories as to how to overcome the following difficulty:—

Several steel casement windows have been recently been glazed and puttied and painted with bitumen; as soon as the paint has been done it seems to "rise," and has a blistered appearance; the putty was smoothed down reasonably.

J. A.

Dry Rot.

[ANSWER TO "ANXIOUS," AUGUST 28.]

SIR,—(1) Take up boards of floor here and there and distribute evenly over all under surface from 1 to 2 in. thickness of quick-growth stone lime, or (2) Take up floor, remove to depth, or put on top, as there is said to be 2 ft. of space, 4 in. cement concrete, floated top with cement, waterproofed. Some years ago I had a floor under which evidently the sun had got in, and growth and mould had not been removed. The smell in the room was offensive, and the bleached fibres crept through the skirting and floor joists. I acted as in No. 1, and the nuisance was abated and destroyed.

E. D.

DOMESTIC HOT-WATER SUPPLIES AND PLUMBERS' CLAIMS

WE are asked by the Secretary of the Yorkshire Riding Federation of Master Plumbers' Association, 103, Beckett-street, Leeds, to publish the following letter received by him from the Leeds and West Yorkshire Architectural Society.

[COPY.]

AUGUST 20, 1925.

DEAR SIR,—The question of demarcating the work of domestic hot water supply as between plumbers and heating engineers has been referred to the Society by the National Association of Master Heating and Domestic Engineers for reconsideration of the resolution passed at the Council meeting of the Society on April 1924, and subsequently notified to you on May 11, 1924, viz:—

"That the domestic hot water supply should be kept as plumbers' work and not given over to the heating engineers."

And I have to inform you that in view of the information which the Sub-Committee appointed to inquire into this question placed before my Council, and having regard to the arbitration awards of the Board of Trade on November 30, 1909, and the Federation of Engineering and Shipping Trades of June 1920, in regard to this matter, and also of the decision of the Royal Institute of British Architects after their prolonged enquiry relative to this disputed question, the Council feel that the matter should not have been referred to the Society for local action in regard to a question which concerns the trades generally throughout the country, and is purely a trade question. The Society, being only concerned with the improvement and efficiency of craftsmanship, cannot lay down any rules regarding demarcation of work as between trades.

Further, I am to inform you that at a meeting of this Society, held July 24, 1925, it was resolved to rescind the resolution passed at their meeting on April 8, 1924, viz., "That domestic hot-water supply of a building should be kept as plumbers' work and not given to the heating engineers," and write this notifying your Association accordingly.

Yours faithfully,

(Signed) F. L. CHARLTON,

HON.

THE BUILDING TRADE.

THE ADMINISTRATION OF THE HOUSING, &c., ACT, 1923

By W. H. DUDLEY.

its adherence to the owner-occupier in housing, and its already proven success, the Chamberlain Act has certainly not the fact that it is a fine piece of constructive legislation. The figures enumerating the number of houses built, and in course of construction under its provisos, are sufficient evidence of this. The subsidy house figures at the passing of the Act (July 31, 1923) and July 1, 1925, are:—

	Private enterprise.	Local Authorities.
Completed houses ..	65,484	23,943
In construction ..	31,593	11,214
Proposed but not yet commenced ..	62,357	19,882
	159,434	55,039
Total	214,473	

representing two years' working, these figures constitute an average provision of 16 houses per annum towards the solving of the nation's housing problem. They also provide ample evidence that under wise and constructive legislation, the thrifty working class are quick to undertake the solution of their own individual housing burdens. The Chamberlain Act, makes for pride of ownership, resultant self-made effort, and is the means whereby a higher degree of citizenship is attained.

As at first a cause for disappointment, the enactments were of a permissive nature, and local authorities might use their own discretion as to adoption. The fact that they either accept or reject the proposals, and the event of acceptance might impose any conditions they deemed fit, led to a certain conservatism as to the outcome. And it must be noted that in certain parts of the country doubt has been justified, although, happily, there are now distinct signs of a more even distribution. In spite of this, however, it is very necessary that pressure be brought to bear on lagging local authorities to adopt the Act and operate them in the widest possible extension, so as to ensure that the thrifty working classes may be able to procure reasonable accommodation. The houses already erected represent only those districts where the local authorities have taken place and the number could be materially increased.

The importance of this Act cannot be too highly appreciated, seeing it is the only post-war enactment which has been attended with economical success. The former Acts, perhaps providing numbers of houses, have not financial burdens on the country, this is especially applicable to the Addison Act, which left behind it a bill for £1,000,000. The 1924 Wheatley Act has yet proved in full operation, and even if it is not the financial burden entailed will be less, amounting as it will do to £540 per house.

This figure is not the cost of building, but the assistance which will have to be borne by the tenants, over a period of 40 years, for the redemption of the houses. The vast amount may be gauged when it is realised that the proposed erection on this basis of 100,000 houses, up to the year 1934—thus the total subsidy £810,000,000. The fact stands alone, and without denial is the salvation of the housing shortage. Indeed, in comparison with that of the Addison Act, is trifling, and this alone, from the public's point of view, should be a great attraction.

When the Labour Government took office it was anticipated it would seek to nullify the 1923 Act and thus create a set-back to private enterprise. The Act had then been in operation only a few months, but its initial success had been so profound, and the figures of houses built were so overwhelming, that even the Labour Health Minister could not refute the claim that the Act should continue. Indeed, its fundamental basis of action was so sound that it was found a worthy foundation upon which to erect the framework of the Wheatley Act, with the result that the two Acts now run somewhat concurrently. Formerly, the 1923 Act subsidy was to cease in 1926, but under the 1924 Act it was made to continue for the period of the proposed Labour housing programme, i.e., until 1939; while the loan provisions were continued permanently.

In view of the rapid progress the Chamberlain Act has already made in housing, it cannot be too strongly urged that no curtailment of activities under its jurisdiction should be made, but that, on the other hand, as much stimulus as possible should be given still further to accelerate its operation.

It is evident that there is a prevailing ignorance in the ranks of local authorities of the wide powers the Act confers upon them, and the Act itself is little understood. In many districts there is a tendency to adopt only the subsidy clauses to the exclusion of the loan provisos, or to adopt the loan clauses without the subsidy. Such adoptions do not render full assistance to prospective purchasers; at the same time, they rob the Act of its most vital asset. To solve local housing problems quickly, it is necessary and of great importance that action be taken both in the subsidy and loan clauses, as only by this method can the assistance afforded reach the class for whom it is intended.

Ministry of Health Circular 571, with its Model Pamphlet to Local Councils, is invaluable in its advice as to mode of procedure recommended in operating the Act, and is worthy of diligent study by all members of local bodies. It suggests that these bodies should, by means of issuing handbills and by other like methods, bring the knowledge of the facilities offered before the general public. It further points out how, by a generous administration, a prospective purchaser might buy a subsidy house on an initial outlay of £50.

The fact is, however, that comparatively few councils have adopted the loan and subsidy provisos *in toto*. In the London districts generally there is little room for complaint as to advances on loan, but subsidy operations are somewhat lacking, while in parts of the Midlands and the North, the reverse seems the case, and the loan part of the Act is worked poorly.

It is encouraging, nevertheless, that the functioning is tending to become more even and rational, but it is imperative that still greater efforts should be made on an intensive scale to bring the Act to its full fruition. This can be accomplished by an understanding cohesion between municipalities and private enterprise house builders. It cannot be denied that, even though in some cases the conditions imposed have appeared onerous, private enterprise has shown its willingness to develop under the legislation afforded, and it is to the credit of the builder that the vast number of houses erected during the past two years have been built in a very difficult labour market and when a shortage of materials has existed.

It could not, of course, but be expected that

so bulky a scheme should have many difficult questions in its operation, and a due study of the practical inner details is of value. When the 1923 measure was in debate many builders changed their style of development from the larger class of villa to houses within the prescribed subsidy area, assuming that this would be sufficient qualification for the grant, Circular 388A, published soon after the Bill was made law, however, laid down that any houses erected prior to the Minister's approval would not rank for subsidy. On behalf of the builders it should be stated it was generally understood and anticipated that the date would be fixed from the time of the Bill's first meeting.

Until recently, provided they conformed to conditions as to size, &c., there was no fixed stipulation as to selling prices of subsidy houses. It was made a matter of understanding between the Council and the builder, according to the class of house erected. This method not only led to price variations in different districts, but tended to unevenness within localities themselves. During recent months, therefore, local authorities have, with the approval of the Ministry of Health, stipulated subsidy selling prices at a figure which they consider compatible with local conditions. There were many reasons no doubt why such a procedure was desirable, but the fixing of these prices has certainly proved a mixed blessing to private house builders. In the London areas especially was evidenced a distinct set-back, even in the comparatively small amount of subsidy building then in progress. The London County Council fixed their price at £725 freehold. In view of the extremely high cost of land in the Metropolitan area it was not to be wondered at that even the optimism of the house builder was somewhat quenched. Some of the Northern authorities, too, fixed their prices so as to include paving. In these districts a very large amount of paving has to be executed at the rear of the houses, in addition to the frontage, and it can well be imagined that this item of cost was a very serious one.

In many cases the present subsidy price limits preclude the house builder from developing in the manner habitual to him. He is unused to working to a fixed price. He does not build to contract, but shoulders the responsibility of his job from its inception, both financially and structurally, and completes it solely on his own initiative. He is dependent on sales for the return of his money. During the continuance of his development he watches carefully for opportunities of improvement, and each house erected is a progression on the last. To a bona-fide house builder the convenient planning and the design of his house is his stock-in-trade and advertisement, and though he is generally not accredited with the aesthetic eye, he is very well aware of the finishing touches which will appeal to his purchasers. Stereotyped designed houses have become an eyesore to him. In working to a price he is not able to indulge in any extras in finish, and has often to refuse the installation of more expensive fittings ordered by a purchaser, as any extras thus ordered, by being made an addition, might bring the price of the houses outside the bounds of a subsidy grant. Builders are, however, acclimatising themselves to these new conditions, and building rapidly.

The average of price limits imposed, apart from larger cities where harder conditions attach, is £650 to £675 freehold, including the subsidy. The impression that the subsidy goes to the builder is erroneous; the subsidy is granted on the house, and the purchaser in every case receives the benefit. Thus a builder would receive the full price of a £675 house, and the actual cost to the purchaser would be £600.

On the loan side, local authorities are allowed either to advance under Section 5 of the 1923 Act, or under the Small Dwellings Acquisition Act. The former allows an advance up to

90 per cent., with a repayment period up to 20 years, on houses to a fee simple value of £1,500, according to local authorities' surveys. The Small Dwellings Acquisition Act allows of like conditions, restricting, however, the fee simple value to £1,200, and making the repayment period up to 30 years. In either case, most authorities stipulate the repayment period as 20 years or less. The percentages of loans granted on certified values, however, show wide variance, and loans to the full 90 per cent. prescribed are the exception rather than the rule. The curtailment of loan percentages appears most apparent where local councils have adopted both sides of the Act. This is instanced in cases where the applicants are able to obtain a bigger advance under the ordinary building society regime than through the local council. There should be no hesitancy on the part of councils to assess the value of any house on a figure representing the purchase price, less the subsidy. In fixing the prices, they satisfy themselves that the figures are reasonable ones, and they are not asked to loan 90 per cent. of the purchase price, but on the "mortgagor's interest in the property"—which is the price fixed, less the subsidy. The £75 should take the place of the reduction made on current value and in forming the allowance made in arriving at the mortgage value. On this basis, with the subsidy assistance, a prospective purchaser might buy a £675 house on a cash outlay of £60, the local authority loaning £540 on £675. This would make the full 90 per cent. on the mortgage value, and a reasonable advance of 80 per cent. on the selling price. The working along these lines should prove quite effective, especially as the borrowing powers conferred on local authorities present no obstacle. The same applies to the procurator of subsidy benefit in those districts where it is proved to be needed.

The position of local authorities in regard to the administration, however, must not be lost sight of, especially in the extra work entailed on their surveyor's staff. This is undoubtedly heavy and is a serious addition to an already busy department. There are few districts where there is not a rapid erection of houses, and this alone would keep the staff fully employed. It is nevertheless important to bear in mind that the local and national housing needs call for the strictest urgency and that only good will and co-operation can tend to a rapid remedy. That it is sometimes extremely difficult for a local council effectively to set the necessary machinery in motion is granted, and owing to this, it would be well in the interests of the community for county councils seriously to consider the powers conferred on them by Section 12 of the 1924 Act (Section 85 of the Housing Act, 1925). This entitles them to borrow money for the purpose of loaning on houses, under Section 5 of the 1923 Act. Their larger working capacity allows of a wider and more easy administration, by which they are able to study the needs of borrowers more efficiently than is the case with the smaller councils. In leaving the administration of the subsidy to the local councils, and of the loans to county councils, the 1923 Act would, no doubt, be assisted to a very much greater measure of success. The county councils could work in cohesion with the urban councils and in this manner the work would be more evenly divided. The London and Middlesex County Councils have set a lead in this respect and their adoptions have been of the greatest benefit to owner occupiers. The time has certainly arrived when county councils should be urged to bear their part in the solving of housing, so that the needs of the areas they control might speedily be met.

There is no doubt that the thrifty working classes, who, with assistance, are capable of becoming owner-occupiers, should be made more cognisant of the facilities offered under the Chamberlain Act, and that no opportunity should be lost of creating an owner-occupier wherever possible. In this manner a very large part of the housing problem might be eased with the least expense to the nation.

THE TRADES UNION CONGRESS.

PRESIDENTIAL ADDRESS.

THE Trades Union Congress would be an event of the greatest importance, eagerly looked forward to, and its proceedings carefully weighed and studied, if the leaders of the trade unions made these proceedings an opportunity for expressing an opinion on how the difficulties experienced in the past year in the industrial world, as we know it, could be overcome, and the differences between employers and employed adjusted to the benefit of the nation as a whole, under the system which prevails throughout the world with the exception of Russia and possibly Mexico. But this year, as last year, the presidential chair was occupied by one who advocates sweeping away the whole system tried and known in every country except Russia and Mexico, and joining those countries in the ventures which have been made in them, and with what results we know, and as to the present position of which evidence is most conflicting. Mr. Purcell, the President last year, only recently, as we pointed out in these pages, again stated that, in his opinion, "the time has come when we have got frankly to admit the failure of capitalism and to take steps to break the capitalist system and reconstruct world economy on an entirely new basis; to do that it is necessary to develop a power capable of smashing capitalism and reconstructing society." His successor in the presidential chair (Mr. A. B. Swales) this year expresses the same views and advocates the abolition of the capitalist system, and holds up Russia and Mexico as the "beacon lights" we are to steer by. The first question the practical and unemotional British workman will ask himself will be, "Do those countries display 'beacon lights,' or are not his leaders rather following 'will-o'-the-wisp' vapours?" The evidence on this point should be overwhelming and convincing before any movement is put on foot, and what evidence does Mr. Swales offer? He tells Congress that the Report of the Trade Union Delegation of last year can be looked upon as the first text-book on the position in Russia.

We need hardly comment upon that Report. It is in conflict with observations made by the International Labour Office of the League of Nations (and the Labour Party expresses confidence in the League of Nations); it is also in conflict with the reports received from independent residents and eye observers of conditions in Russia, and it was also made by persons who, from their ignorance of the language and the country, were compelled to place themselves under the guidance of those experts in the art of propaganda, the members and officers of the Soviet Government. We would ask Mr. Purcell and Mr. Swales this question: If they were the controllers of a going concern in this country, would they scrap their machinery, dismiss their operatives, and reconvert their business because they had sent out a representative to a trade rival, ignorant of his language and the conditions of his trade, and thus completely in his hands, and this representative, on the strength of information imparted to him through an interpreter and under the guidance of a foreman, reported that the business methods of this trade rival were better than those they had tried for some centuries—they and their forbears? Would they not first ask to see the books? Would they not like first to see the actuarial reports? Would they not even then inquire into the different conditions prevailing in that business and see whether these did not go to the root of the matter?

The whole burden of Mr. Swales' presidential address is to hurry the nation towards taking this leap in the dark, or to set out on this voyage of adventure, with as its only chart or "Pilot's Handbook," the Report of the Trade Union Delegation of last year. It is somewhat difficult to reconcile the statements made in the earlier part of the presidential address as to conditions and movements here with the avowed

policy expressed in the rest of the address: overthrow and change the existing system of society. Mr. Swales is reported as saying working people here had been called upon to make enormous sacrifices during the period of depressed trade. This statement by itself is possibly exaggerated, but not untrue: a nation that has been engaged in a life and death war is compelled to make sacrifices, not only during active operations, but after the struggle is over. But then the report of his presidential address continues: "The organised workers had a great deal to say in the last four years an impressive demonstration to the whole world of their unity and purpose, their capacity to make sacrifices, the cause in which they believed, and to maintain the industrial organisation they had built up." This sentence appears to assume things; first, that the cause in which organised workers believe, i.e., trade unionism, is Mr. Swales' cause, the destruction of socialism and capitalism, and, secondly, that if a drastic course is adopted the industrial organisation will be maintained, and both these assumptions, we think, are not well founded. A great mass of the working population of this country, and by the working population we mean the population which earns its bread by the work of any kind, is by no means prepared to join the few leaders of the trade union movement in favour of a revolutionary change, and, clearly, despite oratorical perorations, that a course would not tend to maintain the industrial organisation which they have built up. They look to their trade unions to take steps to secure them the best terms as to wages and working hours which can be obtained, and in our opinion they certainly do not look to their unions to lead them to a revolution. It is time that the members of the trade unions should take note as to the course of their leaders such as Mr. Purcell and Mr. Swales are endeavouring to make them take.

This presidential address is to us very interesting reading. This country stands in a unique position since the war, as do all the countries which were directly or indirectly affected by it, which, in fact, means nearly all the countries of the world. Peace and goodwill are vitally important both at home and abroad, but a militant attitude is preached, strife is encouraged between employer and employed, and between the trade unions and the nation, and to attain this end, not improved industrial conditions on a basis as accepted by the great majority of civilised nations, but to wreck that basis, and to embark on a wild adventure—the creation of a system which it is incontrovertible has caused intense suffering, at any rate in the early stages, in the countries that have adopted it, the ultimate success of which has never been proved, and which at this moment is costing Russia for pecuniary assistance a large part of the financial world. The future Mr. Swales and Mr. Purcell point to is less charted than the one known in these days as the New South Wales.

Bricks for United States of America

The Acting British Consul-General in San Francisco (California) reports that a certain State desire to receive quotations for common bricks, fire bricks and enamelled bricks. United Kingdom firms desirous of obtaining quotations in this case can obtain all particulars of the inquiry upon application to the Department of Overseas Trade, Queen-street, London, S.W.1.

"Notes on Slates."

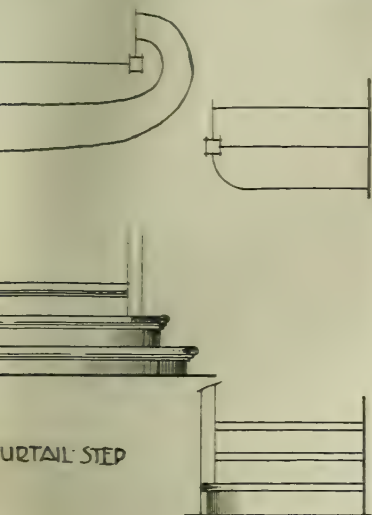
With reference to the paragraph above subject in the Editorial Note of the issue for August 28, Dr. F. J. North, of the National Museum of Wales, points out that the pamphlet referred to was prepared in connection with the Museum part of that institution's scheme for disseminating useful knowledge. It can be obtained from the Museum, price 7½d., post free, a sale justifies such a course, other pamphlets dealing with the natural resources of the Principality will appear in due course.

SETTING OUT A STAIRCASE.—III.

(Continued from page 400, September 11.)

better method than those described to risers and strings is that known as the *veneer method*, in which the piece required is made up of thin layers of thickness bent round a drum. Between each there is a coating of glue, and the layers are pressed together by means of hand-screws, and left round the drum to set.

Another method of bending the riser of a bull-nosed step is that in which the veneer is bent round a shaped block. This block is prepared to the shape desired on plan and is made up in three thicknesses, which are glued and screwed together. Rebates are cut on each side for the housing of the riser face, the one on the newel side being undercut. The veneer is sprung from the newel end of the riser, which is cut out of a piece of pitch free from knots, is then marked. The



BULL-NOSE STEP

veneer in the block is then placed on this mark, and rolled round carefully on the back of the drum, and when the opposite rebate is reached the position is also marked, an allowance for the room being made. The material in between these marks, allowing $\frac{1}{8}$ in. for veneer, is cut away with the hand-saw and chisel. Two holes are then bored in the corners of the block, and after the face of the veneer has been wet with boiling water, the block is fixed in position by rolling the veneer round it, pressing down until the end is tight. Wedges are then driven into the space between the veneer and the block, and the block is driven in.

Tread.—The tread is the horizontal board on which the foot rests in passing up or down the stairs. It is made out of $1\frac{1}{2}$ in. stuff and is fixed into the strings at its ends in the manner described above.

Riser.—The riser is the vertical board supporting the tread cut out of $\frac{3}{4}$ in. stuff and fixed into the strings and notched into the treads.

The treads and risers are morticed into each other, the tenon at the top of the riser being cut at the back of the riser, and a cover mould is inserted under the nosing.

The bottom of the riser is tenoned into the nosing of the tread; the tenon being in this case cut in the front edge of the riser and the tread being fixed beyond the back face of the riser.

Rise is the vertical distance between the surfaces of two successive treads.

Going is the horizontal distance between the faces of two successive risers as distinguished from the tread, which includes the *Nosing*, is the outer edge of the tread projecting beyond the line of the face of the riser produced forwards. The nosing is either rounded or

moulded to save wear on the carpet and generally has a cavetto mould or quarter-round bead mould to cover the joint. This mould is frequently let into the underside of the nosing and butts against the riser face.

Margin is that portion of the string which rises above the line tangential to the nosings of the treads, and is generally formed in part by a capping mould housed over the top of the string into which the balusters are housed or tenoned.

Open Strings are also called cut strings, and have their upper edge cut out to line with the treads and risers of each step, their lower edge being parallel with the slope of the stair as with closed strings. With open strings the balusters are dovetailed into the treads, the treads being prepared to receive the dovetails on the balusters and cut on the nosings to mitre with the return nosing.

Housed strings are also termed closed strings, and have their upper and lower edges parallel with the slope of the stair. The portion above the line of the nosings is termed the *margin*, and that below the line of the backs of treads known as the *pitch line* is projected to receive the battens for lathing to, and has a splayed chase to conceal the joint of the plaster and string. The outer string is cupped underneath by a moulding housed on to its bottom edge.

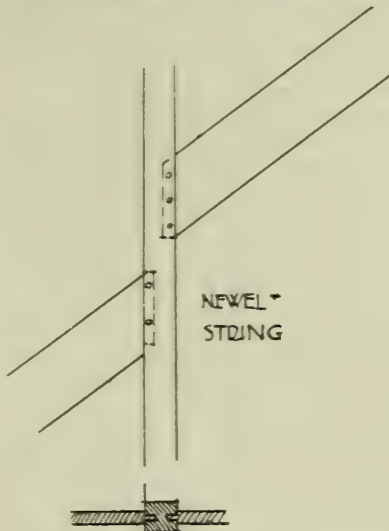
The strings are housed out in their inner faces to take the ends of the treads and risers in the manner already described.

Wall string.—Where strings come against walls they are termed wall strings. And where one comes against a wall and the other is free the distinction is made by terming them *inner* and *outer strings*. The portion of the wall string above the steps is cut to line with the skirting running round the landing and at the bottom of

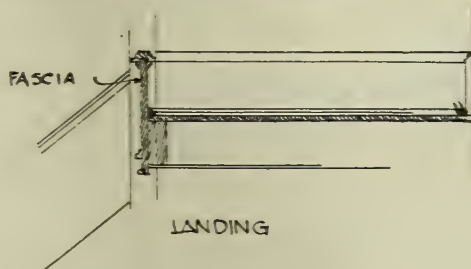
the flight a shoulder is formed to serve the same purpose, the strings being either halved, morticed or mitred to fit into the skirting.

Carriages are sometimes termed *rough strings*, and are the intermediate supports of unwrought timber $2\frac{1}{2}$ in. to 3 in. deep, placed at not more than 15 in. apart from centre to centre and notched out to receive the angles of the treads. To their underside are fixed laths to take the plaster of the soffit. As an alternative to notching the upper edges of the carriages, rough brackets are nailed to the sides of the carriages to fit up against the underside of the treads and against the backs of the risers. At the top and bottom ends of intermediate flights the carriages are birdsmouthed to the trimming joists and bolted to splayed pitching pieces.

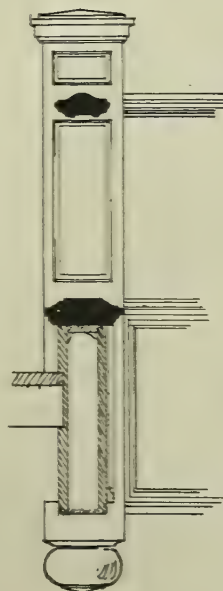
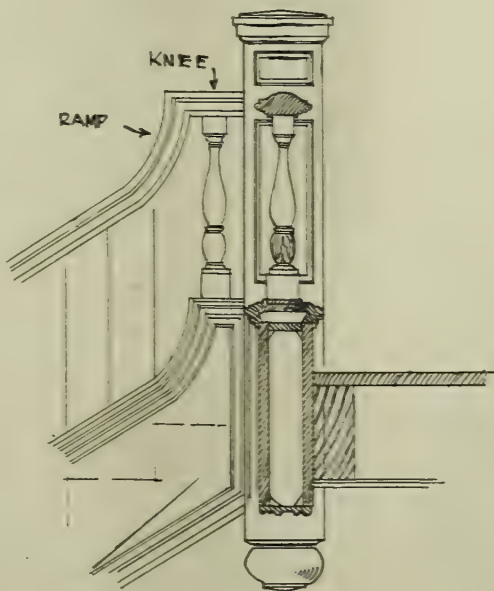
A Wreathed String.—The strings as a rule



NEWEL STRING



LANDING



NEWEL POST



terminate in newel posts, but in a geometrical stair they are frequently bent round into a cylindrical shape at the landings and played out at the last two or three steps on the ground-floor level. It is then termed a *wreathed string*, which should be at least 2 in. thick, and may be close or open. The method of bending has already been described, and the string is sometimes strengthened by a flat iron bar being screwed to its bottom edge.

The *Soffit* is the underside of the flight, which may be plastered, matched boarded, panelled or left plain, in which case the woodwork will need to be wrought and stained, wax-polished or painted.

Capping.—Housed over the outer string is a moulded or chamfered capping into a groove in which the feet of the balusters are tenoned; alternatively the capping may be morticed or dowelled to the feet of the baluster. The wall string has a half-capping of the same design, with a rebate or chase on the back to cover the join with the plaster.

The capping where there is a newel is housed into it on the outer string and on the wall string, though the best finish is to insert a half-newel at a parallel position to that on the landing. This method is often omitted on account of expense, when the capping must be scribed to fit the skirting.

The width of the capping will depend on the design of the outer string and the size of the feet of the balusters.

On landings the string may be continued at a height equal to that of the skirting, in which case the capping will form its top member, or the capping only may be run along over the floor-boards, which are projected out beyond the outer string, which then becomes a fascia, and the ends of the floor boards are cut away, having a rounded or moulded nosing cut in and fixed under the capping.

Where the floor is trimmed at the top of the flight a fascia is fixed to the face of the trimming joists to line with and having the same detail as the outer string, and the capping may be treated in either of the ways described for landings.

As has been stated, a staircase in one flight and in one direction of ascent may be broken by a landing at any height that is found convenient. Such a landing is termed a *quarter space landing*; but where the landing is desired to serve as a turning place and is extended across the whole width of the staircase well, it is termed a *half-space landing*.

For its construction a trimmer is fixed across the width of the staircase and supporting bridging joists, which may be of smaller dimension than the floor joists, according to the span. The bridging joists are tenoned into the trimmer at one end and rest on the wall at the other. The newels are notched over the trimmer and take the ends of the carriages.

Winders are often introduced in the place of landings, and a half-space landing may be divided by one or more steps into two quarter-space landings; but where economy is studied the practice should be avoided and the introduction of one step into a landing should never be permitted unless no alternative is possible, as, apart from the danger arising from the unexpectedness of one step, the additional cutting and corners necessitated are out of proportion to the convenience gained.

In larger houses, hotels, &c., landings are sometimes extended across the width of a hall when they become galleries, and in such positions are often bayed out, as in the musicians' gallery of the medieval hall.

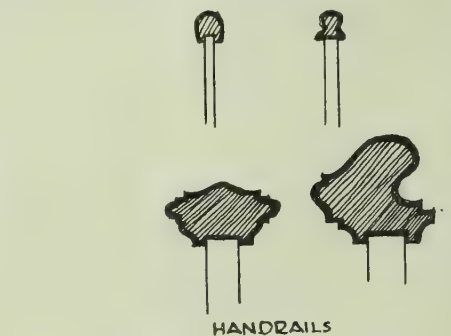
In staircases having the bottom flight divided into two running in opposite directions, a quarter-space landing is introduced at their junction and the flight continued in one.

The *Well* is a term used for either the whole space set apart for the staircase when it is termed either the *stairway* or *staircase-well*; or it applies to the space between the outer strings of two adjacent flights going in opposite directions, when it is termed simply the *well* or *well-hole*.

The *Going* of a tread is the horizontal distance from the face of one riser to that of another, as distinguished from the *going of a flight*, which is

the horizontal distance between the faces of the bottom and top risers of that flight. The *walking line* is an imaginary line on the stairs or an actual line drawn with the newel as centre and 18 in. as radius, on which winders are spaced out on the working plan. A *newel* or *newel post* is a squared or turned upright post at the bottom and top of a flight into which is run the outer string and handrail. It may be of a height sufficient only either to finish flush with the handrail or just to rise above it, or it may be carried up to the flight above, or again, as in a circular stair, it may run from top to bottom of the staircase.

Newels may be framed up, panelled, and carved elaborately, and where a narrow well hole is left between two flights instead of two



HANDRAIL SECTIONS

ordinary newels, one broadened out to take both handrails may be introduced with effect and saving.

The heads to newels may be left square, or moulded, and finished with balls on moulded bases or carved with figures.

A *Mitre cap* is the moulded top of a newel post into which the handrail is mitred in cases where the handrail itself forms the top of the newel.

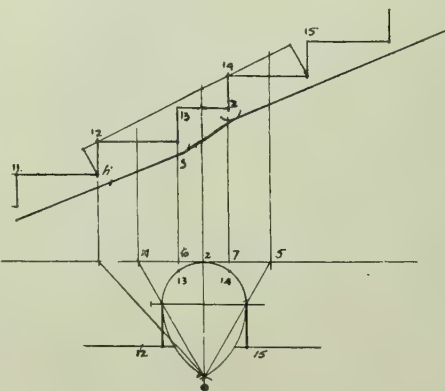
Where a wide handrail is employed, a newel may be composed of four balusters set in a square supporting the handrail embossed out.

The *Handrail* is generally at from 2 ft. 4 in. to 2 ft. 6 in. above the nosing of the tread. It is housed at its ends into the newels, and into a chase cut in its underside are housed the balusters. Handrails on landings should have a height from 2 ft. 8 in. to 3 ft. 3 in.

A *Mop-Stick Handrail* is one circular or horseshoe-shaped in section, and is generally made of oak or other hardwood waxed-polished.

Following is a description of the method of laying out a template of a curved string for treads and risers, referred to on page 400 (top of first column) of our last issue:—

A semi-circle 1, 2, 3 is described, having the same radius as the cylinder, and then with 1 and 3 for centres and 3, 1 for radius, arcs are



described which cut at 0. From 0 draw a line through 1 to 4 and likewise through 3 from 0 to 5. The distance from 4 to 5 indicates the length of the true length of the semi-circle curve 1, 2, 3. The risers 13 and 14 are now dropped vertically to where they cut the line 4, 5, and the points of intersection marked 6 and 7. From *c*, *n* and *d* draw up vertical lines, and upon the line draw from 13 to set off from 6 the height of two risers at 8, 13. From the point 13 draw the line horizontally, and from *Z* measure vertical the height of one riser marking the end of the line 14. Next from *S* draw a line to 12, and set off from 12 to *h* the height of one riser from *h* draw the horizontal *h*, 11 to give the pitch line from 15 to 16. Next draw lines below the pitch lines so formed and parallel thereto. Take the distance from 15 to the line with the compasses and describe arcs with centres at *s* and *z*; join the intersection these two arcs with the bottom of the string with a freehand curve tangential to the arcs. Then draw a line through 14 and 12, and 12 and 14 at right angles to this line drop down to 15 and *h*. The pattern then formed gives the form for cutting treads and risers bent round the concave face of the cylinder.

(To be continued).

WAR MEMORIALS.

St. Bartholomew's.

The Governors of St. Bartholomew's Hospital have granted permission for the erection of a war memorial to St. Bartholomew's men, the utilisation of the archway beneath the North Wing.

Castletown.

Orlrig Parish War Memorial was unveiled in Castletown main street recently. Mr. Portmouth, R.S.A., designed and executed the memorial, which consists of a bronze figure representing "Remembrance" standing on Leggat stone pedestal.

Bailleul.

A war memorial was recently unveiled Bailleul, a Flemish town adopted by the City of Bradford, of which a delegation of Councillors was present. The monument stands on the site of the church of St. Amand, which was destroyed during the war, and is a copy of the ruined belfry and tower of the church of St. Vaast as they stood after the bombing.

Galashiels.

The Galashiels War Memorial is nearly completion, and will be unveiled in October; it is in the form of a 90 ft. tower, in front of which there will be a life-size bronze figure of a mounted Border warrior. The scheme, which was designed by Sir Robert Lorimer, A.R.A., also includes the extension of the Municipal Buildings.

Sheffield.

Sheffield's war memorial, which is to be the form of a tall steel mast, erected in the centre of the city, has arrived from Hull. It has been made by a firm of engineers. It is 108 ft. long, and consists of plates of $\frac{1}{2}$ in. thick; its width tapers down from 10 ft. to 8 in.

House of Lords.

The Select Committee appointed to examine the question of the available sites for a Peers' War Memorial in the House of Lords recommended that the alcove in the Gallery of the House of Lords should be selected.

Wallsend.

The Wallsend War Memorial Committee selected the design of Mr. Newbury Trevelyan, of Chelsea, for the local memorial. The estimated cost is about £1,200, and the monument will be of granite, 30 ft. in height, surmounted by a bronze figure of Victory.

NEW BUILDINGS IN LONDON.

on.—The rolling stock and carriage works on, W. 3, are to be enlarged for the Under Electric Railways Company of London, 55, Broadway, S.W. Plans by the company's engineering staff.

Bishopsgate.—Possession is soon to be obtained of the site at the corner of Bishopsgate and Houndsditch, E.C. 3, known as Devonshire House, for the purpose of building a large office building. Messrs. Richardson & Gill, architects, 1, Russell-square, W.C. 1.

Blackheath.—Steelwork is being put up for a large extension of the factory of Messrs. Wireless, Ltd., at Blackheath, S.E. 1. Messrs. Edwards' Construction Co., contractors, 86a, High-street, Eltham, S.E. 7. Steelwork contractors, Messrs. Red Brown & Co., Ltd., 3, Laurence Pountney-hill, E.C. 4. Messrs. Bishop & Etherington, architects, 30, Duke-street, S.W. 1.

Blomfield-street.—A new office building is erected on a site in Blomfield-street, E.C. 2, bounded by New Broad-street. Messrs. Lawrence & Son, Ltd., builders, 19, Finsbury-square, E.C. 2. Mr. E. Collins, F.R.I.B.A., architect, 115, Old Broad-street, E.C. 4.

Blackwood, N.W.—New works are to be erected on a large site in the North Circular-road, for the acetylene engineering firm of Messrs. Liversidge, Ltd. Plans by the consulting engineers, Messrs. Heron, Rogers & Pettit, Queen Victoria-street, E.C. 4.

London.—The Croydon Gas Company have under consideration the extension of their works, by the erection of new shops for the fitting and repairing of stoves, &c. Messrs. H. Young & Son, architects, 33, High-street, E.C. 4.

Croydon.—The contract for the first section of buildings, comprising new out-patients' departments, laboratories, etc., in connection with the Croydon General Hospital extension, has been placed with Messrs. Higgs & Hill, Crown Works, South Lambeth-road, S.W. 1, at £54,000. Messrs. H. Berney & Son, architects, 33, High-street, Croydon.

East Hill.—A new technical institute, to cost £100,000, is to be erected at East-hill, Islington, S.W., for the L.C.C. Messrs. Higgs & Co., Ltd., builders, Cambridge-road, Grosvenor-road, S.W. 1. Mr. G. Topham, F.R.I.B.A., architect, County Hall, S.W. 1.

Edgware.—A large shopping arcade, with accommodation above, is to be erected on a site in Highlands Park Estate, at Burnt Oak, for British Freehold Investments, Ltd., 9, Old-street, W. 1. Messrs. Perkins & Brocklebank, architects, 32, Theobald's-road, W.C. 1.

Edgware-road.—A block of flats and shops are erected on the site of Nos. 45-49, Edgware-road, W. 2, for Messrs. J. H. Kenyon, Ltd. Messrs. George A. Lansdowne & Brown, architects, 9, Regent-street, W. 1.

Finsbury-square.—A large office building, to be known as Maypole House, is to be erected on a new site in Finsbury-square, E.C., to be planned by Mr. W. A. Lewis, A.R.I.B.A., Finsbury-square, E.C. 2. Messrs. Prestige & Co., Ltd., contractors, 149, Grosvenor-road, S.W. 1. Messrs. Gleed, Sons & Co., quantity surveyors, 8, Martin's-lane, E.C. 4.

Leeds.—A site in Mare-street, E., covering Nos. 372 to 374, has been purchased by Messrs. Hargreave Burton, Ltd., clothiers, of Leeds, for the erection of a branch shop and showrooms. Harry Wilson, architect, Victoria Park-road, Leeds.

Hampton.—A new chapel is to be erected in Hampton district for the Wesleyan Methodist Trustees, to the designs of Mr. E. E. Withers, F.R.I.B.A., 50, Cannon-street, E.C. 4. Messrs. Somerford & Sons, architects, 104, Manor-street, S.W.

Highgate Hill.—A new nurses' home is to be built at the Infirmary at Highgate-hill, N., for the Islington Board of Guardians. Mr. Edmund J. Harrison, Lic.R.I.B.A., architect, 23, Berkeley-street, Crouch End, N. 8. Messrs. Sabey & Son, builders, 100, Great Russell-street, W.C. 1.

Hornsey.—A contract is shortly to be placed for the building of the new school in Rokesby-avenue, at a cost of approximately £40,000, for the Hornsey Education Committee. Mr. H. C. Pegg, F.R.I.B.A., architect, 35, Parliament-street, Westminster, S.W.

Ilford.—The Ilford Emergency Hospital have decided to build new hospital premises, including an administrative block and wards, at a cost of £20,000. Messrs. C. J. Dawson, Son & Allardice, architects, Clock House Chambers, Barking, Essex.

Ilford.—The site at the corner of High-road and Goodmayes-road, Ilford, has been purchased by Messrs. Barclays Bank, Ltd., for new branch premises. Mr. G. Coles, architect, 40, Craven-street, Strand, W.C.

Kensington.—Foundations for the new block of premises in Bull-street, High-street, W. 8, for Messrs. John Barker & Co., Ltd., of Kensington High-street, W. 8, are now being constructed. Mr. H. L. Cabuche, O.B.E., F.R.I.B.A., architect. Constructional work is being carried out by the company's staff.

Morden.—A large rolling-stock depot on the extension of the Clapham Common to Morden "tube" is being built at Morden for the London Underground Railways, Ltd. Plans under the direction of Mr. Z. R. Knapp, director of construction, Electric Railway House, Broadway, S.W. 1.

Moorgate.—New showrooms, &c., are to be erected in Moorgate, E.C. 2, for Messrs. J. B. Cramer & Co., Ltd., piano manufacturers, New Bond-street, W. 1. Messrs. T. P. Bennett & Son, architects, 41, Bedford-row, W.C. 1. Messrs. Leslie & Co., Ltd., contractors, Kensington-square, W. 8.

North Finchley.—The Wright-Kingsford Home at North Finchley is to be enlarged, to the plans of Messrs. Crickmay & Sons, 13, Victoria-street, S.W. 1. Mr. G. W. Scott, builder, 1, The Market, Finchley, N. Steelwork by Messrs. H. Young & Co., Nine Elms Ironworks, S.W. 8.

Oxford-street.—New premises are being built at 19-21, Oxford-street, W. 1, for Messrs. George Doland, Ltd., tailors. Messrs. Lister Mawby, Ltd., contractors, 200, Hornsey-road, N. 7. Messrs. William & Edward Hunt, F.R.I.B.A., architects, 30, Norfolk-street, Strand, W.C. 2.

Oxford-street.—A further section of Messrs. Peter Robinson's rebuilding scheme is to be put in hand. Demolition work is being carried out for the contractors, Messrs. Higgs & Hill, Ltd., Crown Works, South Lambeth-road, S.E., by Messrs. H. J. Greenham, Ltd., Isleworth, Middlesex. Messrs. T. P. & E. S. Clarkson, 17, Burlington-street, W. 1, and H. Austen Hall, 6, New Burlington-street, W. 1, are acting as joint architects.

Peckham.—The wine and spirit stores at 64, Rye-lane, Peckham, S.E., of Messrs. Henekey's, Ltd., wine merchants, are to be rebuilt. Mr. E. R. Barrow, architect (Messrs. Brown & Barrow), Lennox House, Norfolk-street, W.C. 2.

Piccadilly.—The site known as No. 80, Piccadilly, W. 1, and 1, Stratton-street, the residence of Mrs. Burdett-Countess, and now owned by Messrs. Holloway Bros. (London), Ltd., Bridge Wharf, Grosvenor-road, S.W. 1, has been cleared of old buildings, preparatory to rebuilding operations.

Piccadilly.—The premises of Messrs. Fortnum & Mason, Ltd., provision and wine merchants, &c., in Piccadilly, W. 1, bounded by Duke-street and Jermyn-street, are to be pulled down and rebuilt. Messrs. Edmund Wimperis & Simpson, architects, 61, South Molton-street, W. 1.

Regent-street.—The buildings at Nos. 60-62, Regent-street, W. 1, including the Imperial Restaurant, are shortly to be demolished and a modern block of offices, shops and a large new restaurant erected. Mr. T. H. Smith, architect, 17, Basinghall-street, E.C. 2.

Regent-street.—Work is proceeding on the site of the new premises at Nos. 84-88, Regent-street, W. 1, for Messrs. Hope Bros., Ltd., outfitters. Messrs. Bovis, Ltd., contractors, 43, Upper Berkeley-street, W. 1; steelwork by Messrs. Somerville-Barnard Construction Co., Ltd., Archangel Works, S.E. 14. Messrs. Gunton & Gunton, architects, Finsbury House, Blomfield-street, E.C. 2.

Regent-street.—The site at the corner of Regent-street and Glasshouse-street, W. 1, of the new building for the County Fire Office, Ltd., has now been cleared. Messrs. Holloway Bros. (London), Ltd., contractors, Bridge Wharf, Grosvenor-road, S.W. 1. Messrs. Ernest Newton & Son, 4, Raymond Buildings, Gray's Inn, W.C. 1, and William Woodward & Sons, 15, Great James-street, W.C. 1, joint architects.

Richmond.—A site in George-street has been purchased by Messrs. Edwards & James, Ltd., dairymen (branch of the United Dairies, Ltd., 34, Palace Court, W. 2) for the erection of a bottling depot and dairy.

Richmond.—Improvements, including the installation of electric lighting, are to be made to the Grove-road Institution. Mr. T. J. R. Kiernan, B.Sc., M.I.C.E., consulting engineer, 17, Victoria-street, Westminster, S.W.

Roehampton.—To complete the development of the Roehampton Housing Estate the London County Council have placed a contract with Messrs. C. J. Wills & Co., Ltd., 28, Victoria-street, S.W. 1, for the erection of 422 houses, together with roads, sewers, fencing, &c.

Russell-street.—A new telephone exchange is to be erected on a site in Russell-street, W.C., to plans prepared by H.M. Office of Works, Storey's Gate, S.W. 1.

St. Helen's-place.—Messrs. Dove Bros., Ltd., Cloudeley-place, Islington, N., are constructing foundations for a large block of offices on the east side of St. Helen's-place, Bishopsgate, E.C., for the Leathersellers' Company. Mr. Henry A. Saul, F.R.I.B.A., 10, Gray's Inn-square, W.C. 1, architect to the Company.

St. James's-street.—A new building, called "St. James's House," in St. James's-street, S.W. 1, is to be erected to provide new shops, offices and chambers. Messrs. Arthur Vigor, Ltd., builders, Knightsbridge, S.W. Steelwork will be by Messrs. Smith-Walker, Ltd., 33, Tothill-street, S.W. 1. Mr. George Vernon, architect, 22, Conduit-street, W. 1.

St. Martin's-lane.—The large building at the corner of St. Martin's-lane and Chandos-street, W.C., is being entirely reconstructed, the contractors being Messrs. W. A. King & Sons, Melbourne Works, Melbourne-square, S.W. 9.

St. Pancras.—The proposed North-Western Polytechnic is to be erected in St. Pancras, at an estimated cost of £112,000. Mr. W. E. Riley, F.R.I.B.A., M.I.C.E., architect (Riley & Glanfield), 6, Raymond Buildings, Gray's Inn, W.C.

Sanderstead.—Plans have been prepared by Messrs. Greenaway & Newberry, Parliament-mansions, Victoria-street, S.W. 1, for a church at Sanderstead for the Parish of St. Mary. The building will be erected in sections, the first part costing about £9,000.

Shaftesbury-avenue.—A new theatre is to be erected by Mr. Frank Curzon, theatrical manager, 37, Bury-street, S.W. 1, who proposes to build on the site comprising 158-160, Shaftesbury-avenue and 9-13, Little Earl-street, W. 1. Messrs. Frank Matcham & Co., architects, 9, Warwick-court, High Holborn, W.C.

Sloane-street.—A large block of residential flats, with shops on the street level, to be known as Knightsbridge-court, is to be built



in Sloane-street, W.1, containing about 60 suites, in eight stories. Messrs. William Downs, Ltd., builders, Hampton-street, Walworth, S.E.17. Steelwork by Messrs. Banister, Walton & Co., Ltd., Trafford Park, Manchester. Messrs. Dudley, Newman & Elliott, architects, 29, Bedford-row, W.C.1.

Southwark.—A new boiler-house is to be erected at the works in Borough-road, S.E.1, of Messrs. R. Hoe & Co., Ltd., printers' engineers. Messrs. Robinson & Roods, F.S.I., architects, 37, Bedford-row, W.C.1.

Stamford Hill.—A new church, costing about £7,000, is being erected in Ravensdale-road by Messrs. W. H. T. Kelland & Sons, contractors, of Stamford Hill. Messrs. George Baines & Son, F.R.I.B.A., architects, of Westminster.

Streatham.—Over 900 houses are to be built on the estates in Streatham Vale, S.W., which have been purchased by Messrs. R. H. Miller & Son, Ltd., 2, Ravenstone-street, Balham, S.W.12. Five hundred will be of the subsidy type, designed by the firm's staff.

Tooting.—It is proposed to build a new church of St. Augustine on a site in Garratt-lane, Tooting, S.W.17, at a cost of about £20,000. Mr. H. Burke Downing, F.R.I.B.A., architect, 12, Little College-street, Westminster, S.W.

Twickenham.—Messrs. F. & H. F. Higgs, Ltd., Hinton-road, Herne Hill, S.E., have started upon the conversion of York House, Twickenham, into municipal offices for the U.D.C., at a cost of about £30,000. Messrs. Knott & Collins, architects, Adelphi-terrace House, W.C.2. Mr. F. S. Henniker, quantity surveyor, 1-3, Robert-street, W.C.2.

Wallington.—New showrooms and workshops are to be erected on a site at the corner of Woodcote-road and Stanley Park-road, for the Croydon Gas Co., Katherine-street. Messrs. Henry Berry & Son, architects, 33, High-street, Croydon.

Waterloo-road.—It is hoped shortly to make a start upon the extension of the Royal Waterloo Hospital for Children and Women, in Waterloo Bridge-road, S.E.1. The contractors will be Messrs. Holliday & Greenwood, Ltd., Stewarts-road, Battersea, S.W. Messrs. Waring & Nicholson, architects, 38, Parliament-street, S.W.1.

A Correction.

The constructional steelwork and reinforced concrete for the new premises at 74, 76 & 78, Regent-street, and 3, 5 & 7, Air-street, W.1, for Messrs. Callard, Watt & Stewart, and Messrs. Packers, Ltd., is being supplied by Messrs. Young & Co., of 6, Queen Anne's-gate, S.W., and not by the firm mentioned in last week's *Builder*.

The Institution of Structural Engineers.

On the commencement of his term of office as President of the Institution of Structural Engineers, Sir Charles Ruthen has issued a letter to all engineers and architects practising as structural engineers, in which he calls attention to the question of the membership of the Institution. In the past, admission has been either by examination or, in the case of older candidates of practical experience, on production of evidence of works carried out. The membership of the Institution is now two thousand, and it has been decided by the Council that as sufficient time has been given to all those who wish to enter on the grounds of work carried out, from January 1 next, admission will be by examination only, and a new syllabus is being prepared and will be sent out. In the meantime a final opportunity is to be given to those who have some years of practical experience in the profession, and who wish to make application for direct admission. Such intending candidates should obtain from the Secretary of the Institution a form of application, which should be submitted as early as possible. Candidates admitted under the old system during the concluding months of this year will pay one subscription only to December 31, 1926.

RATES OF WAGES IN THE BUILDING TRADES

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	C'pters. Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Air-tricham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Ash-ton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Bedford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Birkenhead	1/9	1/9	1/8	1/9	1/9	1/9	1/8	1/8
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bournemouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Bridgwater	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Brighton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Cambridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Crewes	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
E. Glam.(Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Eastbourne	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Grays	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Hallifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hartlepool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Ipswich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Launceston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Liverpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Llanelli	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
London (12 m. radius)	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/9
London (12-15 m. radius)	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/9
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Maldstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Newport Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Norwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Oakham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Reading	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Southend-on-Sea	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stroud	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Swansea	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Taunton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk advertised in this number. Certain conditions beyond those given in the following information imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any other; that a fair wages clause shall be observed; that no allowance will be made for tenders; and deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom the quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

SEPTEMBER 21.—**Abercynon**.—URINALS.—Two urinals at the Lindsay Conservative Club, Abercynon. Price, Secretary.

SEPTEMBER 21.—**Bethnal Green**.—TENEMENTS.—Erection of 32 tenements at Parmenter-street, Bethnal Green, for the Bethnal Green Borough Council. Mr. P. Monson, Architect, Finsbury-pavement House, Moorgate, E.C.2. Deposit £2.

SEPTEMBER 21.—**Dublin**.—PAINTING.—Painting of works and incidental thereto, at Collins Barracks, Dublin. Felix Cronin, Major-General, Quartermaster-General. Deposit, £1 1s.

SEPTEMBER 21.—**Dublin**.—PAINTING.—At Charles-street Dispensary, and Tuberculosis Hospital, Pigeon-house-road, for the C.B. J. J. Murphy, Town Clerk.

SEPTEMBER 21.—**Fowey**.—HOUSE.—Residence at Fowey, Cornwall. J. Cornelius, F.R.I.B.A., Architect, Fowey.

SEPTEMBER 21.—**Hants**.—REPAIRS AND REPAIRS.—For artificers' work (Maintenance Contracts), from October 6, 1925, at the Blackdown and Mount. Commanding Royal Engineer, Marlborough, Wiltshire, North Aldershot, Hants.

SEPTEMBER 21.—**Shirley**.—CONVENIENCES.—Public conveniences at Stead-street, for the U.D.C. Surveyor, Shirley.

SEPTEMBER 21.—**Blackpool**.—For adaptation work the old Post Office building, Corporation-street, Blackpool, for the Commissioners H.M. Works. The Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

SEPTEMBER 21.—**Brentford**.—WIRING.—Electric wiring and other work at the Institution, Warkworth-street, Twickenham-road, Isleworth, for the B.G. J. Hammar, Clerk to the Guardians, Toolanda-street, Isleworth. Deposit £5 5s.

SEPTEMBER 21.—**Headington**.—HOUSES.—Erection of houses on the Barton-road, for the R.D.C. Mr. Webb, architect and surveyor, 23, High-street, Headington, Oxford. Deposit £2 2s.

SEPTEMBER 21.—**Lisburn**.—COTTAGES.—Ninety labourers' cottages, and for fencing the plots, for the R.D.C. S. J. Crail, Clerk of the Council, Lisburn. Deposit, £5 5s.

SEPTEMBER 21.—**London, S.W.**.—PUBLIC LIBRARY.—Erection of a public library in Magdalen-road, Wandsworth, S.W., for the Wandsworth B.C. Mr. J. E. Elford, Borough Engineer, 215, Balham-road, S.W.17.

SEPTEMBER 21.—**Mexborough**.—HEATING.—Heating the Technical Centre premises, for the West Riding Education Department, County Hall, Wakefield.

SEPTEMBER 21.—**Plymouth**.—REPAIRS.—To police stations at Prince Rock, Laira No. 1, Laira No. 2, Ford Park-road, for the C.B. J. Wiberley, Borough Engineer and Surveyor. Deposit £1 1s.

SEPTEMBER 21.—**Rathmines and Rathgar**.—REPAIRS.—To screening chamber, Ballyboden, for the U.D.C. J. Mason, Clerk of the Council, Town Hall, Rathmines, Dublin.

SEPTEMBER 21.—**Thurnscoe**.—HOUSES.—Fifty houses for the U.D.C. Carby Hall & Sons, architects, Prudens Buildings, Park-row, Leeds. Deposit £2.

SEPTEMBER 21.—**Wharfedale**.—PAINTING.—External painting and decorating of the Guardians' Institution at New Hall, Otley, for the B.G. E. C. Stead, Clerk to the Guardians Union Offices, Otley.

SEPTEMBER 21.—**Dundee**.—DEMOLITION.—Of the existing buildings on the site of the proposed new school at Blackness-road, for the B.C. E. C. Soutar & Salmond, F.R.I.B.A., architects, South Tay-street. Deposit £1 1s.

SEPTEMBER 21.—**East Ellice**.—COTTAGES.—Pair of cottages at Whaploide Washway on land adjoining Council Cottages, for the R.D.C. S. S. Mossop, Clerk to the Council, Holbeach.

SEPTEMBER 21.—**Edinburgh**.—HALL.—Temporary pit hall and store, at the Royal Scottish Museum, I.M. Office of Works. Architect, H.M. Office of Works, 122, George-street. Deposit, £1 1s.

SEPTEMBER 21.—**Giffach**.—HALL.—New hall, for the Vicar and Churchwardens of Giffach. Gibb & Smith, L. & A.R.I.B.A., architects and surveyors, Post Office Chambers, Port Glasgow. Deposit, £1 1s.

SEPTEMBER 21.—**Hammersmith**.—Erection of an overhead water-tight ferro-concrete pump chamber in the Borough of Hammersmith. F. Hill, Borough Engineer, Electricity Works, 85, Fulham-road, W.6.

SEPTEMBER 21.—**Harrogate**.—PAINTING.—Painting of wood and iron work on the outside of the cottages, for the Royal Bath Hospital and Rawson Adolescent Home Committee. E. P. L. Dixon, Harrogate.

SEPTEMBER 21.—**Leeds**.—FLOOR.—Dancing floor at Holbeck Baths, for the T.C. W. T. Lancashire, City Engineer.

SEPTEMBER 21.—**Leeds**.—REPAIRS.—Works at the station, 3, Green Hill-road, Armley: joiners' work, and plasterers' work, electric light installation inside and outside painting, for the B.G. J. H. Clerk to the Guardians, Poor Law Offices, South Leeds.

SEPTEMBER 23.—**Leeds**.—SHED.—For (1) a shed for filtration plant, and (2) school children's dressing-room at Holbeck Baths, for the T.C. W. T. Lancashire, City Engineer.

SEPTEMBER 23.—**London, N. 18**.—MORTUARY, &c.—Erection and finishing fit for use of a mortuary and post mortem room at the North Middlesex Hospital, Silver-street, Upper Edmonton, for the Guardians of the Edmonton Union. J. C. S. Mummery, A.R.I.B.A., 34, Bloomsbury-square, W.C.1.

SEPTEMBER 23.—**London, W.C.**.—Erection of the "Strand" Telephone Exchange. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

SEPTEMBER 23.—**Rochdale**.—PAINTING.—Internal painting work required in houses on the Kilworth-street, Ivor-street, and Deepdish Estates, for the C.B. Borough Surveyor.

SEPTEMBER 23.—**South Shields**.—CONVERSION.—Of 2,000 privy receptacles into water closets, for the C.B. Borough Engineer.

SEPTEMBER 23.—**Wansford**.—SCHOOL.—For the erection of a secondary school, for the Essex County Council. The County Architect, Springfield Old Court, Chelmsford. Deposit £2 2s.

SEPTEMBER 23.—**Warwick**.—HOUSES.—Four houses, parlour type, upon the Embsote site, for the T.C. Francis P. Trespass & Son, architects, 1, Church-street.

SEPTEMBER 24.—**London**.—WIRING.—Electric wiring installation at the White Wing, British Museum, for H.M. Office of Works. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

SEPTEMBER 24.—**London, S.E.**.—ADDITIONS.—Adoption of, and construction of additions to Millburn House, Knight's Hill, West Norwood, S.E., for the purposes of a Maternity Home, for the Lambeth B.C. Mr. Osmond Cattlin, Borough Engineer, Lambeth Town Hall, Brixton Hill, S.W.2. Deposit £2 2s.

SEPTEMBER 24.—**Reading**.—ADDITIONS.—To the Nursery at Battle Infirmary, Oxford-road, for the B.G. W. Roland Howell, F.R.I.B.A., architect, Balgrave-street.

SEPTEMBER 24.—**Richmond (Surrey)**.—ENTRANCE.—New entrance to the men's convenience in the Town Hall Gardens, for the T.C. Borough Surveyor. Deposit £1 1s.

SEPTEMBER 24.—**Richmond (Surrey)**.—LIGHTING.—Installation of electric light, wiring and fittings at the Grove-road Institution, for the B.G. T. J. R. Kieman, consulting engineer, 17, Victoria-street, Westminster, S.W.1. Deposit £2 2s.

SEPTEMBER 24.—**Salford**.—HEATING.—Installation of heating system, for the C.B. J. C. Evans, Town Clerk.

SEPTEMBER 25.—**Belfast**.—REPAIRS, &c.—External and internal painting work to 162 houses in course of erection on the Britton's-lane (Whiterock-road) site, and also electric fittings for 333 houses in course of erection on the Britton's-lane (Whiterock-road) site, for the C.B. R. Meyer, Town Clerk.

SEPTEMBER 25.—**Biggleswade**.—HOUSES.—Erection of 41 houses of two types, for the U.D.C. T. R. Howitt, Council's Surveyor, Biggleswade, Beds. Deposit £2 2s.

SEPTEMBER 25.—**Bridgewater**.—HOUSES.—Thirty-one parlour houses in blocks of two, four and six, for the T.C. Samson & Colthurst, architects, 51, High-street. Deposit £2 2s.

SEPTEMBER 25.—**London**.—For the erection of a telephone exchange at Seven Kings, London, for H.M. Office of Works. The Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

SEPTEMBER 25.—**Ogmore Vale**.—PAINTING.—The non-political Club and Institute, 6, High-street, for the Committee. Secretary.

SEPTEMBER 26.—**Bournemouth**.—BUILDINGS.—Extensive school buildings adjoining the present Stourfield school, for the C.B. F. P. Dolamore, Borough Engineer. Deposit £1 1s.

SEPTEMBER 26.—**Bournemouth**.—EXTENSIONS.—Additional class rooms, &c., to the Malmesbury-park Council School, Shelbourne-road, for the C.B. F. P. Dolamore, Borough Engineer. Deposit £1 1s.

SEPTEMBER 26.—**Dunmore**.—KILN.—Kiln for kiln at Dunmore East, co. Waterford, for the Department of Fisheries. L. C. Moriarty, Secretary (Department of Fisheries), Plas Childlara 3 (Kildare-place), Baile Atha Cliath (Dublin). Deposit £1.

SEPTEMBER 26.—**Midley**.—CONVERSION.—Of the offices at the Council School to the water-carriage system, for the West Riding C.C. A. Beilly, Divisional Clerk, Education Offices, Sowerby Bridge.

SEPTEMBER 26.—**Purgatory**.—CHURCH.—New church at St. Patrick's Purgatory, Lough Derg, co. Donegal, for the Rev. Patrick McKenna, D.D., Lord Bishop of Clogher. T. J. Cullen, F.R.I.A.I., architect, 25, Suffolk-street, Dublin. Deposit £5 5s.

SEPTEMBER 26.—**Stockton-on-Tees**.—SCHOOL.—Erection of open-air school, Norton, for the R.C. T. W. T. Richardson, F.R.I.B.A., 57, High-street Stockton-on-Tees.

SEPTEMBER 26.—**Tickhill**.—HOUSES.—Ten houses at Tickhill, for the U.D.C. J. Haslam, architect, Worksop. Deposit £2 2s.

SEPTEMBER 28.—**Carlisle**.—BUILDING.—Screening and pumping chambers at the new electricity power station, Willow Holme, for the T.C. Henry C. Marks, City Engineer and Surveyor. Deposit 10s.

SEPTEMBER 28.—**Durham**.—ADDITIONS, &c.—To Haverton Hill Council school, for the Durham C.C. Mr. F. Willey, F.R.I.B.A., architect, 34, Old Elvet, Durham.

SEPTEMBER 28.—**East Molesey**.—HOUSES.—Erection of 28 houses at Beauchamp-road, for the East and West Molesey U.D.C. Mr. Gordon Connell, Clerk, Council Offices, St. Mary's-road, East Molesey. Deposit £1 1s.

SEPTEMBER 28.—**London, N.W.**.—Development of new housing estate at Hendon, for the L.C.C. Administrator of Housing Development Schemes, Old County Hall, Spring-gardens, S.W.1. Deposit £10.

SEPTEMBER 28.—**London, W.4**.—SCHOOL.—Erection of a new brick and brick block Central School, to accommodate 640 scholars, at Staveley road, Burlington-lane, Chiswick, for the U.D.C. Edward Willis, F.S.I., Inst. C.E., Town Hall, Chiswick. Deposit £3 3s.

SEPTEMBER 28.—**Rathdown**.—WALL.—Retaining wall at the North Beach-road, Greystones, for the Wicklow County Board of Health. R. M. Butler, F.R.I.B.A., 23, Kildare-street, Dublin.

SEPTEMBER 28.—**Shirley**.—EXTENSIONS.—To the Sir Titus Salt's Hospital, for the Governors. H. Dawson, surveyor and architect, Somerset House.

SEPTEMBER 28.—**South Shields**.—HOUSES.—Erection of the whole or part of 356 houses (which include two types) on the Cleaton Park Estate, East Side, Sunderland-road, for the Corporation. S. G. Stanton, Borough Engineer, Town Hall, South Shields. Deposit £5 5s.

SEPTEMBER 28.—**Stoke-on-Trent**.—CONVERSION.—Conversion into water-closets of about 70 privies and pails, in Hanford, for the T.C. Chief Sanitary Inspector, St. Peter's Chambers, Gleebe-street.

SEPTEMBER 29.—**Durham**.—SCHOOL.—General builders' work required in connection with the erection of Monkton new Council School, for the C.C. F. Willey, F.R.I.B.A., F.S.I., 34, Old Elvet, Durham.

SEPTEMBER 29.—**Kilkenny**.—SCHOOL.—Erection and furnishing of St. Canice's National School, Kilkenny City, for the Commissioners of Public Works. Secretary, Dublin.

SEPTEMBER 29.—**Montrose**.—COTTAGES.—Cottages at H.M. Coastguard Station, for H.M. Office of Works. Architect, H.M. Office of Works, 122, George-street, Edinburgh. Deposit, £1 1s.

SEPTEMBER 29.—**Newton-in-Makerfield**.—HOUSES.—Twenty-four non-parlour houses at the South Mesnes, Earlestown, for the U.D.C. J. Elston, A.R.I.B.A., Market Chambers, Earlestown.

SEPTEMBER 30.—**London**.—CONVENIENCES.—Construction of public conveniences at the south end of Philipot-street, Mile End, E.1, for the Stepney B.C. B. J. Belsher, Borough Engineer and Surveyor. Deposit £2.

SEPTEMBER 30.—**Nantwich**.—HOUSES.—Forty-six houses on the Wallfields housing site, for the U.D.C. P. H. Paton, surveyor. Deposit £2 2s.

SEPTEMBER 30.—**Stockbridge**.—HOUSES.—Thirty houses on the Shay House estate, for the U.D.C. J. N. Singleton, Chartered Surveyor.

SEPTEMBER 30.—**Wandsworth, S.W.**.—POST OFFICE.—Erection and completion of a branch post office at Wandsworth, S.W., for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles-street, London, S.W.1. Deposit, £1 1s. (cheques payable to the Commissioners).

SEPTEMBER.—**Malling**.—CONVERSION.—Of the house known as "Elverdale," the Freehold, East Peckham, into two cottages, for the R.D.C. C. Souter, Sanitary Surveyor, West Malling.

OCTOBER 1.—**Dublin**.—REBUILDING.—Taking down and rebuilding upon portion of the front wall of the premises, No. 2, Kildare-place, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath. Deposit £1.

OCTOBER 1.—**Frome**.—HOUSES.—Twenty-four houses at Vallis-road, for the U.D.C. P. B. Rigg, architect, Cork-street. Deposit £2 2s.

OCTOBER 1.—**Ireland (Free State)**.—RESTORATIONS.—Of Cong. ex R.I.C. Barracks, co. Mayo; Ardahan ex R.I.C. Barracks, Galway; Kilbrittain ex R.I.C. Barracks, co. Cork; Waterville ex R.I.C. Barracks, co. Kerry, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath (Dublin). Deposit £1 each.

OCTOBER 1.—**Litherland**.—HOUSES.—Erection of 50 houses on the housing site belonging to the U.D.C. of Litherland between Sefton-road and Moss-lane. G. Ponsford, Engineer and Surveyor, Council Offices, Litherland.

OCTOBER 1.—**London, S.W.**.—DEMOLITION.—Taking down and clearing away temporary iron buildings complete with fittings, &c., at Tooting Home, Church-lane, Tooting, S.W., for the Guardians of the Wandsworth Union. F. J. Curtis, Clerk, Union Offices, St. John's Hill, S.W.18.

OCTOBER 2.—**Barnsley**.—EXTENSION.—Wards for women and children, connecting corridors, and sundry alterations to the Beckett Hospital, for the Committee. C. F. Moxon, architect, Regent-street South.

OCTOBER 2.—**Didcot**.—ADDITIONS AND ALTERATIONS.—Erection of six new classrooms, new offices, drainage, and other works at Didcot Council School, for the Berkshire E.C. W. C. F. Anderson, Education Secretary, Shire Hall, Reading. Deposit £2 2s.

OCTOBER 3.—**Wayland**.—HOUSES.—Two houses at Banham, near Dam Brigg, and two houses at Rockland All Saints, for the R.D.C. A. A. Gompertz, Clerk to the Council, Watton, Norfolk.

OCTOBER 5.—**Hindley**.—SCHOOL.—School off Leigh-road, Hindley Green, to accommodate 450 scholars, for the U.D.C. H. Wade, 2, Birley-street, Blackpool. Deposit £5 5s.

SEPTEMBER 5.—**Kent**.—SCHOOL.—Extension of the Cranbrook Grammar School for Boys, in the County of Kent, for the E.C. County Education Architect, Room 69, Sessions House, Maidstone, between the hours of 10 a.m. and 4 p.m. (Saturdays and Sundays excepted). Deposit £2 2s.

Y OCTOBER 5.—Newmarket.—HOUSES.—Erection of 12 brick and slated parlour houses, in six pairs, at Laureate Paddock site, for the Newmarket U.D.C. W. H. Eley, Surveyor, Godolphin House, Newmarket.

OCTOBER 5.—Ripon.—HOUSES.—Twenty-six houses, for the T.C. City Engineer. Deposit £5.

*** OCTOBER 6.—Kew Gardens.—POST OFFICE.**—Erection of a branch Post Office at Kew Gardens, for the Commissioners of His Majesty's Office of Works. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

*** OCTOBER 7.—East Stow.—HOUSES.**—For sixteen houses at Combs and fourteen houses at Stowupland, for the R.D.C. Hunt & Coates, architects, 51A, Abbey-gate-street, Bury St. Edmund's.

*** OCTOBER 7.—Chichester.—HOUSES.**—Erection of 44 non-parlour houses (in pairs) in Lewis-road (off Adelaide-road), for the Corporation. Whitehead & Whitehead, architects, 18, South-street, Chichester. Deposit £1 1s.

*** OCTOBER 7.—London, N.W. 8.—STAFF ACCOMMODATION.**—New staff accommodation at the North-Western Fever Hospital, Lawn-road, Hampstead, N.W. 8, for the Metropolitan Asylums Board. Office of the Board, Victoria-embankment, London, E.C. 4. Deposit, £1 in respect of each work.

*** OCTOBER 7.—London, S.W. 18.—TOWN HALL.**—Erection of a new town hall and alterations to the existing town hall, at High-street, Wandsworth. The buildings will be partly constructed of reinforced concrete. For the Wandsworth B.C. Ernest J. Elford, M.Inst. C.E., Borough Engineer, 215, Balham High-road, S.W. 17. Deposit, £2 2s.

*** OCTOBER 7.—Sutton (Surrey).—CLEANING, PAINTING AND REPAIR WORK.**—At Belmont laboratories and stables, at Sutton (Surrey), for the Metropolitan Asylums Board. Office of the Board, Victoria-embankment, E.C. 4. Deposit, £1 in respect of each work.

*** OCTOBER 7.—Various Places.—VARIIOUS WORKS.**—Alterations, additions, tiling chimney stacks, building accommodation, coal store (these various works to hospitals, homes, and wards), for the Metropolitan Asylums Board. Office of the Board, Victoria-embankment, E.C. 4. Deposit, £1 in respect of each work.

*** OCTOBER 12.—East Molesey.—HOUSES.**—Erection of 29 houses at Sprigton-road, West Molesey, for the East and West Molesey U.D.C. Council Offices, St Mary's-road, East Molesey. Deposit £1 1s.

*** OCTOBER 12.—Middlesex.—STORES' DEPOT, STABLES, &c.**—Erection of Stores' Depot, stabling, &c., at Northwood, for the U.D.C. H. R. Metcalfe, A.M.Inst.C.E., Council Offices, Northwood, Middlesex. Deposit £2 2s.

*** OCTOBER 13.—London, E.C. 2.—SUBWAY.**—Construction of a subway 12 ft. in diameter and about 780 ft. in length on the east side of St. Martin's-le-Grand and the south side of Gresham-street, in the City of London, for the Corporation. City Engineer's Office, Guildhall, E.C. 2. between the hours of 10 a.m. to 1 p.m., and 2 p.m. to 5 p.m. Deposit £2 2s.

OCTOBER 13.—West Riding.—BUILDING.—For (1) additional cloakroom accommodation at Ousefeth Council School; (2) installation of a low-pressure heating apparatus at Grindleton-lane Ends Council school, and (3) erection of a new school at Askern Sutton-road, for the C.C. Education Department, County Hall, Wakefield.

*** OCTOBER 14.—Llanelli.—REMODELLING LIBRARY.**—Remodelling of the existing library and such portions of the Llanelli Athenaeum and Llanelli Nevill Memorial as are involved in accordance with 1909 R.I.B.A. Conditions of Contract, &c., for the Borough Council. H. A. Gold, M.C., A.R.I.B.A., 14, Bedford-row, London, W.C.1. Deposit £3 3s.

*** OCTOBER 15.—Bristol.—FLATS.**—Erection of a block of flats at Eugene-street, St. James, Bristol, for the Housing Committee of the City Council. Housing Dept., 51, Prince-street. Deposit £1.

OCTOBER 17.—Barnet.—HOUSES.—Erection and drainage, &c., of 181 houses (126 parlour and 55 non-parlour), on the Wellhouse estate, for the U.D.C. Surveyor, Council Offices, Wood-street, Barnet. Deposit £3 3s.

*** OCTOBER 17.—Herts.—HOUSES AND DRAINAGE.**—Carrying out the several works required in the erection and drainage, &c., of 181 houses (126 parlour and 55 non-parlour), on the Wellhouse Estate and housing scheme, for the Barnet U.D.C. Surveyor, Council Offices, Wood-street, Barnet. Deposit, £3 3s.

OCTOBER 20.—Thurcroft.—EXTENSIONS.—To the Council school, for the West Riding E.C. The Education Department, County Hall, Wakefield.

*** OCTOBER 27.—Ilford.—LIBRARY BUILDING, &c.**—Erection and completion of library building, together with Town Hall basement under, and extension of Town Hall offices over, at Oakfield-road, for the U.D.C. H. Shaw, M.Inst.C.E., Engineer and Surveyor, Town Hall, Ilford. Deposit £5 5s.

No DATE.—Kilmarnock.—HOUSES.—Sixty houses on the Riccarton housing site, for the T.C. W. Dunbar, Borough Surveyor.

No DATE.—Rotherham.—HOUSES.—Twenty houses on Catcliffe-lane and Highfield-lane, Catcliffe, for the R.D.C. J. Totty, architect, Moorgate-street. Deposit £2 2s.

MATERIALS. etc.

SEPTEMBER 21.—Bolton-upon-Dearne.—MATERIALS.—Tarred blast furnace slag, tarred limestone, slag lumps, slag rejections, granite, granite chippings, sanitary pipes, &c., for the U.D.C. Surveyor.

SEPTEMBER 21.—Great Yarmouth.—MATERIALS.—Painters' and plumbers' materials, timber, English timber, guilely grates, manhole covers, and general castings, wrought iron, steel, &c., for the C.B. S. P. Thompson, Borough Engineer.

SEPTEMBER 22.—Barton-upon-Humber.—MATERIALS.—Tarred slag, broken granite, broken slag, broken limestone, for the U.D.C. C. G. Else, Surveyor to the Council.

SEPTEMBER 23.—Manchester.—PIPES.—About 670 tons of cast-iron water pipes, 6 in., 4 in., and 3 in. diameter, and about 10 tons of special castings, manhole covers, valve casings, firecock boxes, collars, &c. (about 100 tons), for the T.C. Secretary, Waterworks Offices.

SEPTEMBER 23.—Norton.—STONE.—Stone for the R.D.C. L. Richmond, Clerk to the Council, Union Offices, Westbar, Sheffield.

SEPTEMBER 24.—Anerley.—MATERIALS.—Building materials, &c., for the North Surrey School District. Managers.

SEPTEMBER 24.—Wortley.—PIPES.—Sanitary pipes, for the R.D.C. F. Thurlby, Engineer and Surveyor, Grenoside, near Sheffield.

SEPTEMBER 25.—Belfast.—MATERIALS.—Second quality Bangor slates, Carrick sand and Carrick gravel, and glazing work to 162 houses in course of erection on the Britton's-lane (Whitlock-road) site, for the C.B. R. Meyer, Town Clerk.

SEPTEMBER 25.—London.—MATERIALS.—For (1) Points and crossings; (2) steelwork for bridges, for the South Indian Railway Co. A. Muirhead, Managing Director, 91, Petty France, Westminster, S.W.1. Charge £1 each.

SEPTEMBER 26.—Loughton.—GRANITE.—For (1) 1,530 tons of Balbaine granite, broken to pass 1½ in. ring; and (2) 330 yds. of good, well-binding hoggins, for the U.D.C. H. White, surveyor.

SEPTEMBER 26.—Rosslynlee.—MATERIALS.—Oils and paints, timber, stoneware and crystal, plumbers' materials, electric fittings, for the Midlothians and Peebles District Asylum Committee. Chilton L. Addison Smith, W.S., Clerk and Treasurer, 19, Heriot-row, Edinburgh.

SEPTEMBER 28.—Tynemouth.—MATERIALS.—Northumberland whinstone, slag, crushed granite, cast-iron work, cement, iron pipes and fittings, iron and steel, for the C.B. J. F. Smilie, Borough Surveyor.

SEPTEMBER 30.—Gellygaer.—MATERIALS.—Paving, kerb and channel concrete fence posts, drain pipes, cement and lime, cast-iron goods, smithwork, ironmongery, for the U.D.C. F. Read, surveyor.

OCTOBER 2.—Durban.—PIPES.—Cast-iron pipes and specials, for the T.C. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

OCTOBER 2.—Durban.—VALVES.—Six reflux valves and 363 sluice valves, for the T.C. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

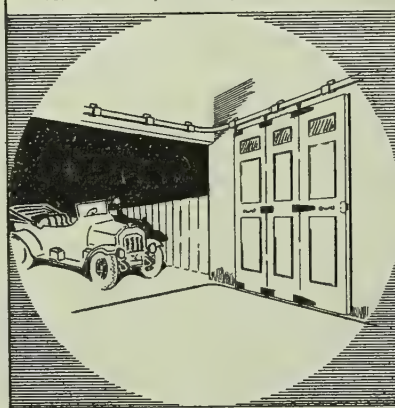
ENGINEERING. IRON AND STEEL.

SEPTEMBER 21.—Buxton.—[CULVERT.]—Reinforced concrete culvert, 100 yds. long, over the River Wye, together with river wall supports, curbing, &c., and other incidental works, for the T.C. F. Langley, Borough Engineer. Deposit £3 3s.

SEPTEMBER 21.—Hong Kong.—HARBOUR CROSSING.—The Crown Agents for the Colonies, acting on behalf of the Government of Hong Kong, invite tenders from experienced and approved firms for the construction of two lines of steel pipe main across Hong Kong Harbour, between Kowloon and the city of Victoria, with all works in connection therewith. The Crown Agents for the Colonies, Z Department, 4, Millbank, Westminster, S.W.1. Deposit £5.

SEPTEMBER 21.—Near Pinhoe.—WIDENING.—Widening and reconstruction of Withy Bridge, near Pinhoe, for the Devon C.C. F. E. Simpson, County Surveyor, 21, Southernhay West, Exeter. Deposit £10 10s.

THE "HENDERSON" SYSTEM SLIDING DOOR GEAR FOR FACTORIES, GARAGES, SCHOOLS, ETC.



"TANGENT JUNIOR" FOR LIGHT DOORS.
"TANGENT SENIOR" FOR HEAVY DOORS.

WRITE FOR BOUND CATALOGUE B.24 TO:-

P.C. HENDERSON, LIMITED,

BARKING, ESSEX. PHONE. EAST HAM 247.

SEPTEMBER 24.—Wolverhampton.—TANKS.—Construction of aeration tanks, settlement tanks, contingent works in concrete and power house brickwork at the Sewage Outfall Works, Barnley, for the C.B.—G. Green, Borough Engineer. Deposit £5 5s.

SEPTEMBER 25.—Leyburn.—BRIDGE.—For (1) forced concrete and masonry road bridge; (2) reinforced concrete pipe culverts, for the R.D.C. Utley, District Surveyor.

SEPTEMBER 26.—Donington.—BRIDGE.—Reinforced concrete bridge and contingent works, over the Forty Foot drain, Donington, for the Holland Wm. A. Rogerson, County Surveyor, Sessions, Boston, Lincs. Deposit £3 3s.

OCTOBER 1.—London.—STEELWORK.—Structural steelwork for wagon shop, Perambur, for the Madras and Southern Mahatras Railway Co. Directors, Buckingham Palace-road, S.W.1. Charge £1 1s.

OCTOBER 1.—Glasgow.—BRIDGE.—Reinforced concrete bridge over Jenny's Burn in Richmond, for the T.C. J. Lindsay, Town Clerk.

OCTOBER 2.—Liverpool.—STEELWORK.—For tram works, Edge-lane, for the T.C. Land Stewards and Surveyor, Municipal Buildings. Deposit £5.

OCTOBER 3.—North Walsham.—TANKS.—Construction and laying of sewers, the construction of tank filter at the Outfall, &c., for the U.D.C. A. E. C. engineer, 10, Cambridge-road, Colchester. Deposit £10.

ROAD, SEWERAGE, AND WATERWORKS

SEPTEMBER 21.—Culdsen and Purley.—SEWER.—Construction of approximately 1,900 yds. of 9 in. sewer and manholes, &c., in Coulson-road, approximately 900 yds. in Hollyme Oak-road, U.D.C. R. Chart, Surveyor to the Council, Brighton-road, Purley. Deposit £2 2s.

SEPTEMBER 21.—Devon.—RECONSTRUCTION.—Construction and widening of the Pinhoe-Haze section of the Exeter-Taunton main road, for the F. E. Simpson, County Surveyor, 21, Southernhay West, Exeter. Deposit £10 10s.

SEPTEMBER 21.—Grangemouth.—PIPES.—Supply and laying of 1,200 lin. yds. of 18 in. glazed stoneware pipes, jointed with Val de Travers' bitumen, and necessary appurtenant works, from the River C. to the Scottish Dye Works, for the T.C. J. C. W. Burgh Engineer.

SEPTEMBER 21.—Ilkeston.—SEWERS.—Construction of roads, sewers and footpaths on the Southern scheme, approximately 600 yds. lineal, for the Borough Engineer. Deposit £2 2s.

SEPTEMBER 21.—Manchester.—SEWER.—Sewer from Barlow Moor-road, Didsbury, to Pine-road, Withington, for the T.C. City Engineer. Deposit £5 5s.

SEPTEMBER 21.—Manchester.—REPAIRS.—Sewer draining, paving (with concrete), flagging (with flags), &c., Cooper-street, Gorton, from Jackson's to a point 71 yards distant in a westerly direction, sewer draining, paving (with concrete), passage behind 34-36, Chester-street, &c., G. passage behind 2-36, Atkinson-street, &c., G. passage behind 16-32, Renshaw-street, &c., shaw; sewer draining, paving (grit sels) passage behind 1-17, Hobart-street, Gorton, &c., T.C. P. M. Heath, Town Clerk. Deposit £1 1s.

SEPTEMBER 21.—Near Barnhill.—DEVILATOR.—Oldhall-road at Giffenmill and Giffen Quarries Barnhill, for the D.C. of the Ayr C.C. Road M.I. Surveyor, District Offices, Kilwinning. Deposit £10 10s.

SEPTEMBER 21.—Plymouth.—MAKING-UP.—W. avenue, for the C.B. J. Wibberley, Borough Engineer and Surveyor.

SEPTEMBER 22.—Devizes.—SEWER.—304 yds. 6 in. sewer, with four manholes, at North Market Lavington, for the R.D.C. T. V. Tr. Sanitary Inspector to the Council.

SEPTEMBER 22.—Folkestone.—PIPES.—Concrete and manholes (approximately 1,050 tons) of High Level Intercepting Sewer, for the T.C. Nichols, Borough Engineer, 11, Church-street. Deposit £5 5s.

SEPTEMBER 22.—Liverpool.—ASPHALTING.—Asphalting the main walk at Grant-gardens; (1) ground, &c., Rupert-lane Recreation ground; interior and exterior painting to Palm house Park; (4) exterior painting to greenhouse, Botanic Gardens, for the T.C. Land Stewards Surveyor.

SEPTEMBER 22.—London.—SEWERS.—For construction of a new 40 ft. road and the surface water sewers in connection therewith, an extension of Willoughby-lane; (b) the reconstruction of parts of Willoughby-lane and Dyso for the Tottenham U.D.C. Engineer of the Charge 10s. 6d.

SEPTEMBER 23.—Birmingham.—SEWERS.—2 of stoneware pipe sewers, together with manholes, and other incidental works on the lane housing estates, for the T.C. H. H. Hu. City Engineer and Surveyor. Deposit £2.

SEPTEMBER 23.—Hemsworth.—SEWER SCHEME.—Laying 2,500 yards of 12 in., and 4 9 in. pipe sewer, manholes, &c., and constructing new sewage disposal works in the parishes of Upton Elmsall, for the Hemsworth R.D.C. Lynem, Engineer to the Council, Market-street Hill, Hemsworth. Deposit £2 2s.

SEPTEMBER 23.—Southport.—REPAIRING.—Paving, metalling and making good Hatfield-Salford-road, Ainsdale, for the C.B. A. K. Borough Engineer. Deposit £2 2s. each.

SEPTEMBER 23.—Westhamnett.—SEWER.—Short lengths of sewer at Selsey and the construction of the necessary manholes, &c., in connection with for the R.D.C. W. D. Rasell, clerk.

SEPTEMBER 25.—**Beddington and Wallington.**—**SEWERS.**—Construction of about 450 lineal yds. of 9 in. diameter stoneware pipe sewers, with the works appurtenant thereto, in Woodmansterne-lane, for the U.D.C. F. R. Carter, Engineer and Surveyor. Deposit 1s.

SEPTEMBER 25.—**Hackbridge.**—**ROAD WORKS.**—For certain road works in Park-road, Hackbridge, for the Beddington and Wallington U.D.C. S. F. R. Carter, Engineer and Surveyor, Council Offices, Wallington. Deposit £1 1s.

SEPTEMBER 25.—**Wath-upon-Deane.**—**ALTERATIONS.**—Construction of (1) detritus tanks at the sewage works, (2) an ejector chamber in Station-road, (3) about 10 yds. of 9 in. sewers, and (4) about 400 yds. of 12 in. sewers, together with manholes, &c., for the D.C. H. Cranage, Surveyor. Deposit £2.

SEPTEMBER 26.—**Glasgow.**—**SEWER.**—Construction of a 2 ft. 6 in. brick sewer in Polmadie-road from end of existing sewer to the south side of the bridge over the L.M. & S. Railway, for the T.C. J. Lindsay, Town Clerk, City Chambers.

SEPTEMBER 26.—**Lynton.**—**REPAIRS.**—Surface drains, kerbing, paving, &c., to certain roads, for the T.C. H. E. Tizard, Town Clerk. Deposit £2 2s.

SEPTEMBER 23.—**Basford.**—**ASPHALTING.**—Asphalt and repping paths and yard pavings, and also for external painting to 88 Council houses situate as follows: 30 houses, Colwick-cave, Colwick; 24 houses, Stedale-lane, Priory-road, and Vernon-avenue, Lilling; 22 houses, Baker-lane and Stamford-street, Wothorpe, Greasley; 12 houses, Church-lane and Rad-lane, Brinsley, for the R.D.C. S. Maylan, Engineer and Surveyor.

SEPTEMBER 23.—**Birmingham.**—**SEWERS.**—Construction of roads and sewers on the Norton Training Estate, Bordesley Green, for the T.C. H. H. Humphries, City Engineer and Surveyor. Deposit £2.

SEPTEMBER 23.—**Rugby.**—**RESERVOIR.**—Construction of impounding reservoir; 15 in. cast-iron main, with sluice valves, air valves, and washouts, about 7 miles in length; cottage, a recorder station, a chlorinating house, and tank, and alterations and additions mains at the Council's Avon Water Works, for the D.C. G. Bertram Kershaw, Consulting Engineer, Victoria-street, Westminster, S.W.1. Deposit £5.

SEPTEMBER 23.—**Rutland.**—**PAVING.**—Supplying and laying asphalt paving, approximately 105,000 sq. ft. in extent, in the Great North-road, commencing the Stamford Borough Boundary and terminating the Rutland and Kesteven County Boundary, for the C.C. Clerk, 7, Catmos-street, Oakham. Deposit 2s.

SEPTEMBER 23.—**Salts.**—**REPAVING.**—Of the footpath in Fore-street and Callington-road, for the T.C. Rough Surveyor.

SEPTEMBER 23.—**Epsom.**—**WIDENING.**—Of Sutton-lane, Banstead, for the R.D.C. T. E. Ware, surveyor, Waterloo-road, Epsom.

OCTOBER 1.—**Chippenham.**—**MAINS.**—Water mains, about 2,355 yds. of 4 in. main from the high level reservoir to Sheldon-road corner; about 823 yds. of 12 in. main along Marshfield-road; about 229 yds. of 12 in. main along Sheldon-road, for the U.D.C. A. E. Adams, Borough Engineer, High-street. Deposit 2s.

OCTOBER 3.—**Haywards Heath.**—**SEWERS.**—670 lineal yds. of 9 in. stoneware pipe sewers in Park-road and Varden-avenue, for the U.D.C. G. Plummer, engineer and surveyor.

OCTOBER 5.—**Anglesey.**—**ROADS.**—Construction of new lengths of roads (diversions) for road widening and improvements on sections of the Coastal main road, for the C.C. W. E. Jones, County Surveyor, Craig, Llanfair P.G., Anglesey. Deposit £3 3s.

OCTOBER 5.—**Gellygaer.**—**ROADS.**—Excavation and filling (about 20,000 cub. yds.), ballasting, road-making, kerbing, channelling, and fencing for the approaches to the ferro-concrete bridge in course of construction (Ystrad Mynach to Gillyach), for the U.D.C. F. Read, Engineer and Surveyor. Deposit 2s.

OCTOBER 5.—**Loce.**—**MAINS.**—Laying of 12 miles of 12 in. iron water mains, 1 mile of 6 in. iron water mains, and the construction of a reinforced concrete service reservoir to contain half a million gallons of water, and other works, for the U.D.C. G. H. Ivory, M.I.C.E. Deposit £3 3s.

OCTOBER 6.—**Spalding.**—**SEWERS.**—Supplying and laying of about 21,230 lineal yds. of 12 in., 9 in., and 6 in. stoneware pipe sewers, together with manholes and appurtenant works, for the U.D.C. C. Franklin Murphy, chartered civil engineer, Lloyds Bank Chambers, Morpeth. Deposit £5.

OCTOBER 10.—**Aberystwyth.**—**MAINS.**—Provision and laying and jointing of water mains at Aberystwyth, together with all necessary special fittings, for the Council. H. B. Ward, Chartered Civil Engineer, Commerce Chambers, 15, Lord-street, Liverpool. Deposit £3 3s.

SEPTEMBER 29.—**London, N.W.**—Ernest Owers, Ltd., will sell: (a) Edgware, a building estate; (b) Child's Hill, Hampstead, two freehold sites; (c) Church End, Finchley main road, freehold site. Auctioneers, Estate Offices, Golders Green, N.W.

*SEPTEMBER 25.—**Sampford, Essex.**—Veryard & Yates, Norwood-road, S.E.27, the following sales (without reserve) will be held as stated below: Sampford Hall, Little Sampford, Essex, timber and building material arising from demolition of the mansion.

*SEPTEMBER 29.—**London, S.W.**—255, Clapham-road, S.W., stock of excellent timber and building materials.

*SEPTEMBER 30.—**Birmingham.**—Solihull House, Solihull, building materials, arising from demolition of the mansion. Auctioneers as above.

*OCTOBER 1.—**Kent.**—Fuller, Horsey, Sons & Cassell will sell in lots, on the premises, late Johnson, Tile Works, Queenborough, Kent, materials of the buildings, all lots taken down and stacked ready for removal. Auctioneers, 11, Billiter-square, E.C.3.

*OCTOBER 1.—**London, E.**—Joseph Hibbard & Sons (in conjunction with W. W. Howard Bros. & Co.) will sell, by order of the Governments of India and Burma, and others, without reserve, upon the premises at Commercial Wharf, Canning Town, stock of hardwoods (the whole catalogue is composed of dry stocks). Auctioneers, Newington Green, Islington, London, N. 16.

OCTOBER 6-10.—**Newmarket.**—Perry & Phillips will sell, on the premises, Cheveley Mansion, near Newmarket, the whole of the interior and exterior fittings. The fabric of the mansion will be sold for demolition. Auctioneers, 59, High-street, Bridgnorth.

*OCTOBER 13.—**London, E.C.3.**—Fuller, Horsey, Sons & Cassell will sell by order of S. Pearson & Son (Contracting Department), Ltd., on completion of the contract for the construction of the Queen Mary Reservoir, at Littleton, near Staines, in lots, at the Merchants' Hall, Baltic Exchange, St. Mary Axe, E.C.3, contractors' plant and machinery. Auctioneers, 11, Billiter-square, E.C.2.

DURING OCTOBER.—**Sussex.**—Knight, Frank & Rutley will sell, by direction of Mr Edward Huth, at The Goldings Hotel, Haywards Heath Station (unless previously disposed of privately as a whole), the freehold residential sporting and building property known as the Wykehurst Park Estate (remaining portions), Bolney, including the Stanley Mansion; also private residence known as "Hazeldean," in all extending to about 380 acres. Auctioneers, 20, Hanover-square, W.1.

Public Appointments.

*SEPTEMBER 21.—**Chorley.**—Clerk of Works required for the proposed Highfield Council School, Chorley, for the Education Committee. R. L. Roby, Secretary of Education, Town Hall, Chorley.

*SEPTEMBER 22.—**Gloucestershire.**—Architectural Assistant required in the Architect's Department, by the Gloucestershire C.C. R. S. Phillips, County Education Architect, Shire Hall, Gloucester.

SEPTEMBER 23.—**Glamorgan.**—Temporary Architectural Assistant in the Architect's Department (Western Division) required by the C.C. W. James Nash, F.R.I.B.A., County Architect, Midland Bank Chambers, Neath.

SEPTEMBER 25.—**Essex.**—QUANTITY SURVEYOR.—Qualified quantity surveyor on the temporary staff of the County Architect's Department, required by the Essex County Council. John Stuart, F.R.I.B.A., County Architect, Old Court, Springfield, Chelmsford.

SEPTEMBER 25.—**Manchester.**—Assistant Lecturer in Building Construction in the College of Technology. The Registrar, College of Technology, Manchester.

*SEPTEMBER 23.—**Lincoln.**—Sanitary Inspector and Building Surveyor required by the Welton R.D.C. W. B. Danby, Clerk to the Council, 2, Bank-street, Lincoln, endorsed "Sanitary Appointments."

SEPTEMBER 28.—**Southampton.**—One Draughtsman (Grade I) required in the County Architect's Department. A. L. Roberts, County Architect, The Castle, Winchester, on receipt of stamped addressed envelope.

SEPTEMBER 30.—**Bengal.**—Architectural Assistant required, under the Bengal Government, by the High Commissioner for India. The Secretary to the High Commissioner for India, 42, Grosvenor-gardens, S.W.1.

SEPTEMBER 30.—**Newcastle-upon-Tyne.**—Clerk of Works required for the proposed secondary schools at Heaton. Director of Education, Education Offices, Northumberland-road, Newcastle-upon-Tyne.

*NO DATE.—**Shanghai.**—Two Assistant Architects required in the Public Works Department by the Shanghai Municipal Council. John Pook & Co., Agents for the Municipal Council of Shanghai, 68, Fenchurch-street, London, E.C.3.

*NO DATE.—**Worcester.**—Temporary Architectural Assistant in the City Surveyor's Department required by the City Council. W. Ransom, M.Inst.C.E., City Surveyor, Guildhall, Worcester.

*NO DATE.—**Yorkshire.**—(a) Quantity Surveyor, (b) Quantity Surveyor's Assistant, first class abstractor and biller required, at the Royal Engineer Offices, Catterick Camp, Yorkshire. Chief Engineer, Headquarters, Northern Command, York.

NEW COMPANIES

THE particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 and 118, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

BODEN (STONE), LTD. (207,090). Registered July 6. Station-road, Darley Dale, Derbyshire. Quarry owner, carried on at Rowsley, Derbyshire. Nominal capital, £3,000.

TRENT MANUFACTURING CO., LTD. (207,044). Registered July 3. Builders' merchants. Nominal capital, £2,800.

LEIGHTON BUZZARD BRICK CO., LTD. (207,082). Registered July 4. Permier House, 150, Southampton-row, W.C.1. Brick makers near Mentmore, Leighton Buzzard. Nominal capital, £2,000.

DANIEL PLATT & SONS, LTD. (206,751). Registered June 20. Brownhills, Tunstall, Stoke-on-Trent. Manufacturers of and dealers in bricks and tiles, &c. Nominal capital, £20,000.

CLIMAX FURNACE (LONDON), LTD. (207,011). Registered July 2. 54, New Broad-street, E.C.2. Engineers and contractors, &c. Nominal capital £1,000.

TOWLE BROS., LTD. (206,999). Registered July 1. Grove Joinery Works, Cartersgate, Grimsby. Builders and contractors, &c. Nominal capital, £2,000.

EDWARD BROWNE & CO., LTD. (207,571). Registered July 29. Five Ways Works, Islington-row, Birmingham. Timber merchants, wood turners, &c. Nominal capital, £2,000.

WOLVERSON MANUFACTURING CO., LTD. (207,590). Registered July 29. 18, Ashted-row, Birmingham. General metal spinners and metal manufacturers, casters, brassfounders, &c. Nominal capital, £1,510.

TIMBER PRODUCTS, LTD. (207,588). Registered July 29. 6, Strand, W.C.2. Timber agent. Nominal capital, £2,000.

SUFFOLK DECORATORS, LTD. (207,612). Registered July 30. 7, Suffolk-street, Pall Mall, S.W. Builders, contractors, &c. Nominal capital, £1,650.

A. W. DRAPER, LTD. (207,615). Registered July 31. 31, Marylebone-lane, Wigmore-street, W. Builders, decorators, upholsterers, house furnishers, electric light contractors. Nominal capital, £5,250.

JAMES MOORE & SONS, LTD. (207,643). Registered July 31. Burnt Hill-lane, Rugeley, Staffs. Builder and contractor. Nominal capital, £3,500.

R. GARNER, SON & WOOD, LTD. (207,692). Registered August 4. 10, Gallowtree Gate, Leicester. Builders and contractors. Nominal capital, £2,000.

RICHARDSON, SHARP & CO., LTD. (207,636). Registered July 31. 33, Sandhill, Newcastle-upon-Tyne. Cement importers, builders' merchants, &c. Nominal capital, £1,500.

D. ROBERTS & CO. (MANCHESTER), LTD. (207,701). Registered August 5. Builders' merchant. Nominal capital, £2,000.

A. W. JULIAN, LTD. (207,712). Registered August 6. Bonvelston Building Yard, Pontypriid. Builders, contractors, painters, &c. Nominal capital, £1,000.

RICHARD KEMP & CO., LTD. (207,723). Registered August 6. 266-268, Evelyn-street, Deptford, S.E.8. Timber merchants, building material merchants, &c. Nominal capital, £2,000.

G. PIERCY & CO., LTD. (207,738). Registered August 7. 49, Maida Vale, W.9. Builders, decorators, sanitary and electrical engineers, &c. Nominal capital, £2,500.

MARMORETTE CO., LTD. (207,794). Registered August 10. 62, New Briggate, Leeds. Manufacturers of bricks, tiles, pipes, &c. Nominal capital, £1,000.

LONDON ART METAL CO., LTD. (207,780). Registered August 10. 32-4, Theobalds-road, W.C.1. Art metal and wood metal workers, &c. Nominal capital, £2,000.

Competitions.

(See Competition News, page 418)

Auction Sales, Tenders, etc.

*SEPTEMBER 23.—**Wallington.**—C. E. Clark will sell, without reserve, at North Woodcote Farm Buildings, near Woodcote Estate, Sandy-lane South, Wallington, timber and builder's effects from the demolition of buildings. Auctioneers, Beddington House, Beddington, near Croydon.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ABERTYSTWYTH.—The R.D.C. has adopted a town-planning scheme by Mr. T. Alwyn Lloyd.

ACCRINGTON.—Applications for subsidies have been received and accepted by the T.C. for 68 houses and bungalows, and the Housing Committee are recommending the Council to make application to the M.H. for sanction to borrow a further sum of £10,000.—The Borough Surveyor has prepared plans for 167 houses on the Spring Hill estate.

AIREDALE.—The Ferry Fryston R.D.C. are to acquire a site at Airedale upon which it is proposed to erect new public offices and assembly hall.

BALBRIGGAN.—The Town Commissioners are to make application for a loan of £5,404 for building twelve cottages.

BIRENHEAD.—The Housing Committee are being asked to consider the erection of dwellings for persons disbursed by closing orders, at cheap rentals. Consideration has again been given to the site for the South End police station, and that at the junction of Old Chester-road and Bedford-avenue is again recommended.—The Borough Engineer has prepared plans for the erection of conveniences in Victoria Park.—A loan of £1,470 is being sought for the erection of a motor ambulance garage and additions to the Infectious Diseases Hospital.—The E.C. has accepted the offer of the Birkenhead Institute War Memorial Committee to erect a pavilion as a school war memorial upon the newly acquired playing field in Tranmere.—The B.E. has approved revised plans for the provision of accommodation for manual instruction at St. Hugh's Roman Catholic School.—The Housing Committee have voted the subsidy in respect of 74 houses to be erected by the Hamilton Estates, Ltd., off Bidston-avenue.—The Maternity Hospital at Grange Mount is to be extended.

BLACKPOOL.—It is proposed to erect a new church, on a site that has just been purchased at a cost of £2,000, at Marton. Funds are being raised for the erection, by the Blackpool and Fylde Society for the Blind, of a home for aged blind.

BLUTH.—The Corporation has decided on a scheme to extend the public promenade at an estimated cost of £17,000.—The T.C. decided to submit a scheme to extend the promenade by 300 yds. The new section is estimated to cost £17,000, and application is to be made to the M.H. to raise £17,000 for the work.

BOLTON.—The Tramways Committee have in hand various works in connection with shelters, and plans have been prepared for them in the Engineer's Department.—The M.H. have sanctioned the expenditure of £63,400 in connection with the sewage scheme of the Corporation.—The T.C. have received sanction from the M.H. to their granting the subsidy on a further 250 houses, and the Council approved plans for 59 subsidy houses.—The Wesleyan Methodist Church are proposing alterations and additions to their church at Tonge Moor, and to erect new schools.

BRADFORD.—The Finance Accounts Sub-Committee recommended that application be made to the M.H. for sanction to borrow £30,000 for the purchase of the Clock House Estate at Manningham, which the Corporation have agreed to acquire as a site for the proposed new Bradford Grammar School.—The Electricity Committee are to invite tenders for two new electricity transformer chambers at Norman-lane and Undercliffe.

BRIGG.—The B.G. has recommended an extension scheme for adoption, comprising additional accommodation for 38 beds, new vagrants' room, &c., at an estimated cost of £5,300.

BRISTOL.—The T.C. has approved plans for 106 new houses.—The T.C. are to make application to the M.H. for sanction to borrow the sum of £29,490 to cover the cost of erecting 62 houses.—Provision of a £16,500 crematorium is now being considered by the T.C.

BURNHAM-ON-SEA.—The U.D.C. instructed the Surveyor to prepare plans for the enlarging of the South shelter, for providing conveniences there for men and women, also plans for the provision of a shelter and conveniences on the triangle opposite Sea View-road.

BURY ST. EDMUNDS.—The M.H. has sanctioned loans of £80 for land, &c., and £7,920 for building, also the subsidy of the sixteen houses proposed to be erected near Hollow-road, by the United Sugar Co., and sanction to the necessary loan for £9,600.

BUXTON.—Messrs. F. W. Woolworth & Co., Ltd., of London, have obtained part of premises known as the Shakespeare Hotel, Buxton, and they propose the erection of a large store. Plans are being prepared by their own architectural staff.

CARLISLE.—The T.C. passed schemes included £18,238 for the erection of buildings at the new electricity works, £11,108 for the extension of the electricity mains.—The bridge over the Mill Race is to be reconstructed at a cost of about £1,000.

CHESTERFIELD.—The Bishop of Southwell's Commission recommend the erection of a new church on a site near St. Augustine's and Rythorpe-road, at Brampton.—A new mission hall is to be erected on the Boythorpe estate.—A new church is to be erected at Chester-street, Lower Brampton, also one at the Whittingham Moor estate.—A site is also being acquired at North Wingfield upon which it is proposed to erect a new church and vicarage.

CLEVEDON.—The U.D.C. has decided to erect a pavilion on the Haven site, and have offered a prize of £20 for the best plan submitted, the stipulation being that the total cost should not exceed £3,000 and that the building should be capable of seating 600 persons.

CLONAKENNY.—A Civic Guards station is being erected by the Board of Works.

DARLINGTON.—The T.C. passed plans: T. Rodgers, new hotel, West Auckland-road; J. E. Chilton, four houses, Geneva-road; six houses, Bates-avenue; eight houses, Westlands-road; two houses, Pierremont-gardens; six bungalows, Barnpton-lane; six houses, Stockton-road, Haughton-le-Skerne.

DERBY.—The T.C. has decided upon a programme of 250 concrete and steel houses to be erected during the next twelve months.

DONCASTER.—The U.D.C. of Adwick-le-Street are inviting tenders for the erection of 46 houses in Princess-street, Woodlands. Plans by Mr. G. Gledhill, Council Offices.—The Council approved of a scheme for the erection of a new mortuary, to be erected near the Guildhall, at a cost of £1,125.

DORKING.—The Bradley estate is being developed for housing purposes. The architect is Mr. Robert F. Bargman, A.R.I.B.A., 76, South-street.

DOUGLAS (I.O.M.).—A site is to be obtained for the erection of a mortuary.—The Borough Surveyor has prepared plans for the erection of a destructor.—The Harbour Commissioners are to surface the North and South Quays with reinforced concrete.—The trustees of St. Matthew's Church are to erect a seamen's shelter and club room.

DUBLIN.—Messrs. Murray & Co., of London, has decided to establish a factory for the manufacture of confectionery in the Irish Free State.—Mr. Horace T. O'Rourke, City Architect, has passed the following plans: Mr. P. Corrigan, for 19 houses at Drumcondra.—The Ministry of Local Government has sanctioned the proposal of the Borough Commissioners to raise £500,000 for the provision of houses for the working classes, including a further £30,000 required in connection with the Fairbrothers' Field, Donnelly's Orchard, Marino and Boyne-street areas, the remainder being in respect of the Croydon Park section of the Marino scheme and the Keogh Barracks area.

EASTBOURNE.—The Housing Committee are considering the acquisition of 30 acres at the Crumbles for a housing site. The Borough Engineer is to get tenders for the extension of the motor bus depot. The Sanitary Committee are to report as to the provision of additional conveniences.

FRINTON.—A new church is to be erected providing accommodation for 500 persons. The architect is Sir Charles Nicholson, Bart., 2, New-square, Lincoln's Inn, W.C.1.

GLASGOW.—The Corporation have obtained land at Hollybrook-street, Govanhill, for the erection of a public washhouse. The City Engineer has prepared plans for the extension of the market slaughter-house, at a cost of about £40,000.

GRANTHAM.—The T.C. have decided to apply to the Public Works Loan Board for a loan of £7,750 towards the cost of erecting the new library and museum.

GRAPPENHALL.—Plans have been prepared and work will shortly start upon the sewage scheme for Grappenhall. The portion of the scheme which it is proposed should now go forward was from Common Side Farm along Knutsford-road and Cross-lane and into Pherwall-lane, and would cost £2,900.

GRIMSBY.—The T.C. propose to replace the present Corporation Swing Bridge, over the Alexandra Dock at Corporation-road, with a new bridge, at an estimated cost of £51,000.

HALIFAX (Near).—Mr. G. H. Wilson, of the firm of Smith, Barker & Wilson, Ltd., The Jumbles, Ilkley, near Halifax, are to erect sixty-four houses. Plans and specifications are being prepared by Mr. M. Hall, architect, Halifax.

HARROGATE.—The Corporation has received tenders for the erection of 30 non-parlour type of house on the Bilton Grange estate, and application is to be made for sanction to the borrowing of £16,750 for the work.

HEMSWORTH.—A tender for £25,875, including roads and sewers, has been accepted by the R.D.C. for the building of fifty houses at Great Houghton.—It is also proposed to build an additional 500 houses in the district during the next year.

HENLEY.—The bridge is to be repaired at a cost of £1,350.

HOUGHTON-LE-SPRING.—The U.D.C. has decided to erect 24 houses by contract, and 13 by direct labour.

HOVE.—The T.C. passed plans for A. W. Presland & Co., for seven pairs semi-detached houses, Hogarth-road.—Application is to be made to the M.H. for sanction to borrow the sum of £46,500 for the erection of 96 houses on the Old Shoreham-road estate.

HOVLAND.—The M.H. have sanctioned the erection of a further 72 houses on the Elsecar Estate.

LANCHESTER.—It is proposed to erect a new church at Lancheater. The cost of the new church will amount to about £5,500.

LEEDS.—The M.H. has sanctioned the purchase of a site in Coburg-street for the erection of a Training College of Housecraft. The City Engineer is to prepare amended plans for tenements to be erected for rehousing persons displaced by street improvement schemes. Land at Hunslet is to be acquired for the erection of a branch library.

LONDON (FINCHLEY).—The M.H. held an inquiry into the application of the Finchley Council for the approval of a preliminary statement for development in connection with the Finchley Town-planning Scheme No. 1.

LONGTON.—Funds are being raised for the extensions to the Wesleyan Church and schools, and plans have been prepared by Mr. F. Howarth, architect, Lime-street, Preston.

LYTHAM ST. ANNES.—The T.C. has decided to proceed with a £250,000 sewerage scheme, and several railway bridges in the district are to be widened.

MACCLESFIELD.—Messrs. J. J. Dunkerley & Sons, of Macclesfield, are proposing the erection of a new mill in Oxford-road, and the plans are being prepared by Mr. S. Hudson, Harryfields, Broadbottom, near Manchester.—Messrs. G. N. Heath & Co., Ltd., are proposing the erection of a new mill, offices and warehouse, and the plans are being prepared by Messrs. the exors. of John Clayton, Sunderland-street.

MANCHESTER.—The Housing Committee has decided that of the 600 houses to be erected on the Moston estate, private enterprise shall be invited to build 300. The other 300 will be built by the Corporation by direct labour.—The Improvement and Buildings Committee has approved the purchase of property of the value of £120,000, on the site which is to be occupied by the city's future reference library and other municipal buildings.—A proposal is on foot for the erection of an artificial silk factory, near Manchester.

MARGATE.—The Corporation propose to construct a new sea wall and undercliff promenade at Westbrook at a cost of £36,000.

MERIONETH.—In connection with the bridge at Bont Newydd, the C.C. propose the erection of a new bridge by the side of the present structure, and plans are now being prepared.

MOORTHORPE (S. YORKS.).—The C.C. are considering a proposed scheme for the erection of a new Technical College upon a site in front of the playing fields of the Middle School.

NELSON (LANCS.).—The T.C. have received notification from the M.H. that they are prepared to consider applications for a proposed loan of £30,000 for the purpose of erecting new abattoirs.

NORTH WALES.—The committee of the North Wales Counties Mental Hospital are purchasing 37 acres for hospital purposes.

OMAGH.—The Ministry of Home Affairs is prepared to sanction a loan of £5,000 for the erection of 10 houses by the U.D.C.

OSSETT.—A start is being made with the construction of a new roadway leading from the Leeds-road to the Market-place in accordance with plans and detail prepared by the Borough Surveyor. The macadam is being supplied by several firms, chief of which is O. L. Stiff & Co., Ltd., of Leeds. The estimated cost is £33,662.

OXFORD.—The T.C. recommend that application be made to the M.H. for sanction to a loan of £87 for the erection of public conveniences at Alexandra Courts.

PENISTONE.—The L.N.E.R. Co. are inviting tenders for the erection of a new steel bridge. Plans and specifications have been prepared by the company's engineers at Kings Cross.

PETERBOROUGH.—The provision of a maternity and child welfare centre at Brook-street is under consideration. The Monolithic Concrete Houses, Ltd., are to be invited to quote for the erection of houses which it is proposed to build at Elm-street and Park-street. Repairs are to be carried out at the Wiltshorpe pumping station at an estimated cost of £375.

PORTLUSH.—Lisnavarna House is to be converted into a technical and secondary school, at an estimated cost of £8,000.

PORTSMOUTH.—The Corporation have asked the Health Committee to consider the provision of a public abattoir. Further consideration is to be given to a proposal for reconstructing Copnor-road, work estimated to involve an outlay of £75,000, exclusive of land which should be acquired for widening purposes. A site in Southampton-road has been obtained for the erection of a library for the Cosham district. A tram way shelter is to be erected in Town Hall-square. A loan of £10,500 is to be sought for the Volker-street improvement scheme, of which sum £7,500 is in respect of four blocks of flats to be erected. It has been decided to subsidise 500 more houses. To relieve congestion in slum areas a site at Stamshaw is recommended for purchase and the erection of 72 houses. The Unemployment Grants Committee have sanctioned the scheme for repairs at the Eastney Esplanade. Tenders are to be invited for repairs to the pier head recently damaged by storm.

PRESTON.—Funds are being raised in connection with the proposed new Sunday school for the Per wortham Wesleyan Church.

RAWTESTALL.—Subject to the approval of the M.H. the T.C. has accepted tenders for 66 houses and bungalows on the Oakley and New Inn estates. The prices are as follows: Bungalow type, £599 19s. 9d.; three bedroom non-parlour type, £662 15s. 9d.; and three bedroom and parlour type, £684 15s. each.

RIFON.—The Committee of the Cottage Hospital is raising funds for the extension of the hospital by the addition of a new block. The estimated cost of the work being £5,600.

SHEFFIELD.—The Libraries Committee are considering the advisability of erecting a library at Woodhouse. The E.C. has acquired land for the enlargement of the Shiregreen elementary school. The Watch Committee urge the Corporation to proceed without delay with the scheme for the erection of a fire station at West Bar.—The T.C. have passed plans for 12 houses, Dobcroft-road for M. J. Gleeson, Ltd.—The Housing and Estates Committee has decided to invite tenders for the erection of 12 houses at Hundsfoot. Plans by the City Architect, Mr. F. E. P. Edwards.

* See also our List of Contracts, Competitions, &c.

ETHEWICK.—The T.C. are about to lay out the
ing fields at a cost of £23,000, and convert the
-logged valley into a fine sports centre.

UTHERN-ON-SLA.—The M.H. have held an inquiry
the application of the T.C. for sanction to a loan
£1,000 for the extension of the public library.

RELEY.—"Ashfields," which comprises 6½ acres
and various buildings, has been acquired by
West Salford Labour Party, which is eventually
convert the buildings into a hall, capable of holding
2,000 people.

OUT, ELSMALL.—The Education Committee have
ted a piece of land near Moorhorpe police station
the building of a new technical school.—The Parish
ells of South Elmsall and South Kirkby have
ased a piece of land adjacent to the Moorhorpe
station for the erection of a joint fire station.

EVENAGE.—The U.D.C. passed plans for a sub-
on in London-road, for the Electric Light and
Co.

OCKSBRIDGE.—The Miners' Welfare Committee
made a grant of £2,500 towards a new swimming
Mr. Wishart, Swansea, is the architect.

OCKTON.—The M.H. held an inquiry into the
osals for development in connection with the
-planning scheme of the North Tees Joint Town
ing Committee, which comprises the Borough
ockton, Billingham Urban District, and part of
Stockton Rural Area.

RETTFORD.—The U.D.C. resolved that the complete
for the provision of an open-air school at Long-
Park be forwarded to the M.E. for approval, and
application be made to the M.H. for sanction to the
esary loan to defray the cost, the estimated cost
£8,470.—Tenders are being invited for exterior
vating of 210 houses.—Plans passed: Eighteen
es, Byron-road and Shirley-avenue, for G. H.
n & Son; 20 houses, Ryebank and Woodstock-
for Mr. Whitelegg; sub-station, off Warwick-
South, for the Council.

NDERLAND.—The Corporation Parks Committee
prepared a scheme for the construction of a retain-
wall against the cliffs at Roker, at an estimated
of approximately £18,000.

TANSEA.—The Finance Committee has approved
a application being made to the M.H. for sanction
orrow £10,000 for the erection of a further 100
houses.

INTON.—The T.C. passed plans: E. W. Beard,
houses, Ipswich-street and Ferndale-road; A. J.
rne, 11 houses and 3 bungalows, Wootton Bassett-
2 houses, Ferndale-road, 4 semi-detached houses,
enhau-road, 3 houses, Westmoreland-road.

VISTOKE.—The R.D.C. are to build 100 houses in
district.

ORTON.—The plans for the proposed new school
St. John's Mission, Little Thornton, have been
by the U.D.C.

NSCOE.—Public swimming baths are proposed
ected on the site of the present Council Offices
the Miners' Welfare Fund.

PPERARY.—Messrs. Foley & O'Sullivan, architects,
n. have submitted to the South Tipperary
d of Health the estimate for contemplated work
constructing Tipperary Workhouse into a County
e, which will cost about £13,263.

QUAY.—Plans have been passed for the erection
houses on the Westhill estate, for the Corporation.
application is to be made to the M.H. for sanction
orrow the sum of £11,100 to cover the cost of the

URO.—The City Surveyor has been instructed to
are plans for 33 houses for erection at the Hendra

KEFIELD.—The Corporation have decided to erect
ouses on the Portobello estate. Inquiries are
made for a site at Lupset for an elementary school.
ations are proceeding for a site for a hospital
ity Engineer is to prepare revised plans for exten-
at the maternity home.

RRINGTON.—The Warrington Golf Club are pro-
g the erection of a new golf house, and the
ect who is preparing the plans is Mr. A. War-
n, of Gold-street.

ST RI ING.—The West Riding E.C. are inviting
s for the heating of the Mexborough Technical
premises. Plans have been prepared at the
ational Department, County Hall, Wakefield.

YMOUTH.—The Ministry of Health have sanc-
a loan of £675 for the construction of conveni-
t Nothe Walk. Further efforts are to be made
ain a grant from the M.T. for the construction of
n bridge across the harbour.—The T.C. have
ed a tender of £23,297 for the erection of
our parlour-type houses on the Westham
estate.

STON.—Plans have been passed by the U.D.C.
houses on proposed new roads off Aylestone-lane,
ans for the new roads to be constructed have
een approved.

LINGTON (CO. DURHAM).—The U.D.C. has
ed plans for the erection of a village hall at
bank, under the Miners' Welfare scheme.

SAL.—The R.D.C. have made application to
£123,776 to promote a scheme for sewerage
wage disposal in the parishes of Frankby,
y, Bidston-cum-Ford, Moreton, Sanghal Massie,
pton.

HAM.—The U.D.C. has instructed the Surveyor
are plans for alterations to the Council offices
tenders be advertised for. The estimated cost

BWELL.—The Jump Miners' Welfare are pro-
the erection of a pavilion, in Cemetery-road.
The architect for the scheme, which is to cost
is Mr. H. Everatt, of 93, Wombwell-lane.

ING.—A serious fire, resulting in the complete
tion of one factory, extensive damage to two
and badly damaging two cottages, occurred at
houses of the National Bituminous Products,
67B, Caversham-road. The damage is esti-
at £10,000.

BIRMINGHAM BUILDING EXHIBITION.

WE published in our last issue a general survey
of the Building Exhibition which is now being
held in Birmingham. We give below some
further notices of exhibits.

MESSRS. GOODMAN & Co., builders' merchants,
New Wharf, Selly Oak, Birmingham, have two
stands devoted to the exhibition of their
materials; an interesting feature is a display
of raw materials as quarried, and the various
stages of their manufacture into the finished
"Blue Circle" Portland Cement supplied by
the Cement Marketing Co. The firm are also
the local agents for the Adamite Co., Ltd., and
show a variety of textural finishes for stucco
work in Atlas White Portland cement. The
pleasing texture and colour of "Battledown"
roofing tiles can be seen to advantage on the
stand; samples of whitening and lime, concrete
floor finishes, waterproofing concrete compounds,
&c., are also on view.

MR. A. COLLIER, 453, Brixton-road, Brixton,
London, S.W. 9, is exhibiting a new invention—
the "Shetack" saw. This possesses advantages
over the ordinary hack saw inasmuch as the
angle at which the blade is held in the frame
enables it to cut through any length or width of
material; with it a hack saw blade can cut
corrugated iron, galvanised iron tanks, asbestos
sheet, &c.

One of the largest stands at the exhibition
is that of the BUDERUS TRADING CO.,
LTD., of 107-109, Upper Thames-street,
E.C.4. This firm specialises in the produc-
tion of high-class fittings, such as baths,
lavatory basins, sinks, central heating
boilers, roofing tiles, flooring blocks, &c., and
at their stand is to be seen a wide range of these
goods, from which the prospective purchaser
can judge the quality for himself. As this con-
cern operates its own ironwork, blast furnaces,
foundries, &c., it will be realised that it is able
to turn out high-class goods at very com-
petitive prices. The white porcelain enamelled
baths and similar goods on show at Birmingham
are particularly noticeable for their excellent
design and workmanship. In our last issue,
we regret that the address of this firm was
given wrongly, and we would take this oppor-
tunity of pointing out that reference to the
cheapness of this firm's products was not
intended to give the impression that they are
not of first-class quality.

TRADE NEWS

Shell-Mex Oil Fuel.

WE have received from Messrs. Shell-Mex,
Ltd., a brochure dealing with modern central
heating, for which they strongly advocate the
use of oil fuel, claiming it to be in every way
more satisfactory than coke. Their technical
staff, in co-operation with oil-burner manu-
facturers and heating engineers, has experi-
mented for three years on a plant which can
be applied to any ordinary type of central-
heating boiler and which is sufficiently simple
and reliable to be left unattended for long
periods without the risk of a breakdown: this
plant they claim to have perfected. An ex-
planation of the working of the plant and its
advantages is given. Owners of central-
heating plants who are contemplating con-
version to oil fuel should apply to Shell-Mex,
Ltd., Shell Corner, Kingsway, W.C.2, for
particulars.

Fosalsil.

WE have received a copy of the latest
brochure dealing with Fosalsil (Moler),
which is claimed by the makers, Messrs. J. H.
Sankey & Son, Ltd., to be a perfect insulating
material. By utilising slabs or bricks of this
material great economies, it is claimed, can
be effected in building. It has been computed
that in some cases as much as 60 to 70 per
cent. heat loss has been prevented by this
means: conversely, for cold storage Fosalsil
keeps heat out and condensation is entirely

absent; which advantages, together with those
of extreme lightness and cheapness, make it
a useful building material.

Parsons' Rubber Stipplers.

WE have received a leaflet from Messrs.
Parsons & Sons, dealing with the patent
rubber stippler for which they have the sole
rights. They claim that the rubber strands
employed in the making of these stipplers
give cleaner and better results than bristles.
They point out that a common defect of the
latter is the breaking off of pieces of the
bristles, which, adhering to the paintwork,
mar the appearance of what might otherwise
be a perfect job. They claim, also, that their
three grades of stippler enable an ordinary
painter to produce a pleasing variety of effects,
examples of which can be seen at the firm's
showrooms at 315-317, Oxford-street, W.1.

Vitaglass.

WE have received from Mr. F. E.
Lamplough, M.A., 47, Bunbury-road, Kings
Norton, Birmingham, copies of leaflets illus-
trating and describing the new Vitaglass, which,
it is claimed, permits, through the inclusion
of certain ingredients not present in ordinary
glass, the passage of the ultra-violet rays to
which the ordinary glass is opaque. Modern
medical research has shown that the health-
giving properties of sunlight are entirely due
to the ultra-violet rays of the sun's spectrum.
Mr. Lamplough, M.A., was formerly a Fellow
of Trinity College, Cambridge, and for some
years Director of Research with Messrs.
Chance Brothers, who manufacture the glass
for him to his formula. It contains a high
proportion of quartz and other extra in-
gredients, and is also somewhat harder than
ordinary glass; the standard make is slightly
diffusing. It is also available with a
special diffusing surface with much greater
indistinctness of vision, for use where strict
privacy is required, such as in the case of
lavatory windows. It is also made as a clear
window glass at a slightly higher price.

Broughton Copper Company.

THE Broughton Copper Company, Ltd.,
have sent us their booklet on special temper
copper tubes for water service. They state
that copper can now be put in at less cost
than lead, and at very little more cost than
iron, besides being superior to both in every
respect. Whilst supplying heavy copper tubes
to customers who prefer to adhere to the old
type of screwed fitting, they have specialised
in light tubes for compression joints. The
majority of their customers prefer the latter
system because it involves a positive metal-to-
metal joint highly resistant to pressure,
eliminates screwing of the tube ends, the use
of solder, red lead, etc., and enables the joint
to be made in less time than a "wiped
joint" in lead or a screwed joint in copper
or iron pipes. The joints can be disconnected
and re-connected quickly and easily, and as
often as required—a big advantage over lead
or iron pipe joints. Broughton Special
Temper Tubes are especially manufactured for
use with compression joints, and their makers
claim that they are as economical and durable
as it is possible to obtain.

The "Wellcome" Photographic Handbook.

WE have received the "Wellcome" 1925
handbook and diary from Messrs. Burroughs,
Wellcome & Co., the world-known suppliers
of photographic apparatus and materials.
This issue contains most complete treatises on
every subject dealing with photography,
together with tables of time, light, etc.: these
latter are supplemented by a patent exposure
calculator. There are also tabulated memo-
randa spaces and a useful diary.

Our readers will be interested to hear that
the firm of Newton & Son, builders and decor-
ators, have been in existence exactly 250 years,
for the whole of which time they have occupied
the same premises at Hitchin.



PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.		£	s.	d.
Best Stocks		4	3	6
Second Hard Stocks		3	18	6
Per 1,000. Delivered at London Goods Stations.		£	s.	d.
Lettons, at King's Cross	2 13 3	Best Blue Pressed Staffs	9	5 0
Do. grooved for plaster	2 15 3	Do. Bullnose	9	15 0
Do. Bullnose	3 8 3	Blue Wire Cuts	7	5 0
Best Stourbridge Fire brick—				
2½ in.	8 11 0	3 in.	10	3 0
GLAZED BRICKS—				
Best White		D'ble Str'th's	30	0 0
Ivory, and Salt Glazed		D'ble Headers	27	0 0
Stretchers	21 10 0	One Side and two Ends	31	0 0
Headers	21 0 0	Two Sides and one End	32	0 0
Quoins, Bull-nose and ½ in.		Splays and Squints	29	10 0
Plats	28 0 0			
Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Harl Glaze, £5 10s. extra over white.				

BREEZE CONCRETE SLABS.

Delivered London		£	s.	d.
5 in. per yd. super	1 11	3 in. per yd. super	2	9
2 ½ in. "	2 4	4 in. "	3	6
Thames Ballast	10 6	per yd.		
Pit Sand	13	9		
Thames Sand	14	6		
Best Washed Sand	14	6		
½ in. Shingle for Ferro-Concrete	12	9		
½ in. "	14	0		
½ in. Broken Brick	11	6		
Pan Breeze	11	6		
Per ton delivered in London area in full van loads.				
Best Portland Cement, British Standard Specification. Test £2 18 0 to £3 3 6				
51s. alongside at Vauxhall in 80-ton lots.				
Ferrocrete per ton extra on above	0	10	0	
Super Cement (Waterproof)	4	8	0	
Roman Cement	8	15	0	
Parian Cement	5	15	0	
Keene's Cement, White	5	15	0	
" Pink	5	10	0	
Plaster, Coarse, Pink	3	0	0	
" White	3	12	6	
" Fine	5	12	0	
Sirapite, Coarse	3	9	0	
" Finish	3	17	0	
Grey Stone Lime	2	11	9	
Chalk Lime	2	11	9	
Best Ground Blue Lias Lime	2	4	6	
Half	32	0	0	
Granite Chippings	1	12	0	
NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.				
Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.				

STONE.

BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube.		s.	d.
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube.		2	9 ½
Do. do. delivered on road wagons at above stations, per ft. cube.		2	11 ½
PORTLAND STONE—			
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube.		4	4
Do. do. delivered on road wagons at above stations, per ft. cube.		4	5
White basebed, 3d. per ft. cube extra.			
NOTE.—1d. per ft. cube extra for every foot over 20 ft. average, and ½ d. beyond 30 ft.			
HORTON-WOOD STONE—			
Delivered at any Goods Station, London.			
Small random blocks, up to 10 ft. cube, P. ft. ch.		7	0
Random blocks from 10 ft. and over		17	0
Sawn two sides		27	0
Sawn three or four sides		32	0
YORK STONE, BLUE—Robin Hood Quality.			
Delivered at any Goods Station, London.			
6 in. sawn two sides landings to sizes (under 30 ft. super.)		5	6
6 in. rubbed two sides, ditto		6	0
3 in. sawn two sides slabs (random sizes)		2	3
2 in. to 2 ½ in. sawn one side slabs (random sizes)		1	6 ½
1 ½ in. to 2 in. ditto, ditto		1	4
HARD YORK—			
Delivered at any Goods Station, London.			
Scrapped random blocks		6	3
6 in. sawn two sides landings to sizes (under 40 ft. super.)		5	1 ½
6 in. rubbed two sides ditto		6	1 ½
4 in. sawn two sides slabs (random sizes)		2	1 ½
3 in. ditto		2	0
2 in. self-faced random flags		9	0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube.—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£32 0	3 × 6	£23 0
4 × 9	26 0	3 × 11	28 0
4 × 8	26 0	2 × 11	28 0
4 × 7	25 0	3 × 9	25 0
3 × 7	24 0	2 ½ × 9	25 0
3 × 6	23 0	3 × 4 ½	23 0
3 × 7	23 0	3 × 4	23 0
2 ½ × 7	22 0	1 × 9	£30 0
1 × 11	£32 0		

PLANED BOARDS.

1 × 11 £32 0 1 × 9 £30 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
½	21/-	1 ½	32/-
¾	23/-	1 ¾	37/-
1	25/-		
MATCHINGS (BEST).			
1	25/-	1 ½	16/6
1 ½	32/6	1 ¾	20/-
1 ¾	37/6	2	23/-
BATTENS.			
1 ½ × 2		2	6 per 100 ft.

SAWN LATHS.

Per bundle		£	s.	d.
1" AND UP THICK.				
Dry Austrian Wainscot, per ft. cube		0	16	0
Dry American and/or Japanese Figured Oak, ft. cube		0	15	0
Dry American and/or Japanese Plain Oak, ft. cube		0	11	0
Dry sq. edged Honduras Mahogany, ft. cube		0	16	0
Dry Log cut Honduras Mahogany, ft. cube		0	18	0
Dry Cuba Mahogany, ft. cube		1	4	0
Dry Teak, ft. cube		0	13	0
Dry American Whitewood, ft. cube		0	11	0
Best Scotch glue, per cwt.		4	10	0
Liquid Glue, per cwt.		4	7	0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£	s.	d.		£	s.	d.
24 by 12	37	12	0	18 by 10	21	2	6
22 by 12	34	0	0	18 by 9	18	12	6
22 by 11	31	5	0	16 by 10	17	12	6
20 by 12	29	15	0	16 by 8	13	15	0
20 by 10	25	12	6				

TILES.

Best machine-made tiles from Broseley or Staffordshire district		£	s.	d.
Ditto hand-made ditto		5	12	6
Ornamental ditto		6	2	6
Hip and valley tiles { Hand-made		0	9	6
(per dozen) { Machin-made		0	9	0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—		£	s.	d.
R.S. Joists, cut and fitted		15	10	0
Plain Compound Girders		15	10	0
Stanchions		17	10	0
In Roof Work		20	10	0

MILD STEEL ROUNDS.

To London Station, per ton.				
Diameter.	£	s.	d.	
1/2 in.	12	10	0	
3/4 in.	11	10	0	

Diameter.	£	s.	d.
1 1/2 in. to 1 7/8 in. . .	11	5	0
2 in. to 2 1/4 in. . .	11	0	0

WROUGHT-IRON TUBES AND FITTINGS.—(Discount off List for lot of not less than £7 net value delivered direct from Works, 2 ½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

Tubes.		Fittings.		Flanges.	
Sizes	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Black Gas 55	47 ½	under 1" to 6"	50 ½	1" to 6"	57 ½
Blue Water 50	42 ½	6" to 12"	45 ½	6" to 12"	52 ½
Red Steam 45	37 ½	12" to 24"	40 ½	12" to 24"	47 ½
Galv'd Gas 40	37 ½	24" to 36"	35 ½	24" to 36"	42 ½
" Water 33 ½	32 ½	36" to 48"	30 ½	36" to 48"	37 ½
" Steam 27 ½	27 ½	48" to 60"	25 ½	48" to 60"	32 ½
C.I. HALF-ROUND GUTTERS—London Prices, ex Works.		Angles and Stop		Joints.	
Per yd. in 6 ft. lengths.		Gutters.		Nozzles.	
3 in.		1 ½		1 ½	
4 in.		2		2	
5 in.		2 ½		2 ½	
O.G. GUTTERS.		1 ½		1 ½	
3 in.		1 ½		1 ½	
4 in.		2		2	
5 in.		2 ½		2 ½	

RAIN-WATER PIPES, &c.

Per yd. in 6 ft.		Bends, stock Branches, angles, stock angles.	
2 in. plain		1 ½	
3 in.		2	
4 in.		2 ½	
5 in.		3	

L.C.C. COATED SOIL PIPES—London Prices, ex Works.

Bends, stock Branches, angles, stock angles.		£	s.	d.
2 in. per yd. in 6 ft. plain		2	11	0
2 ½ in.		3	5	0
3 in.		4	1	0
4 in.		5	5	0
5 in.		6	11	0

L.C.C. COATED DRAIN PIPES—London Prices, ex Works.

Bends, stock Branches, angles, stock angles.		£	s.	d.
3 in. per yd. in 6 ft. lengths		4	3	0
4 in.		6	3	0
5 in.		7	10	0
6 in.		9	6	0
Gasken for jointing		38/6		

Per ton in London.

Iron—		£	s.	d.
Common Bars		13	10	0
Staffordshire Crown Bars—				
good merchant quality		14	5	0

Staffordshire "Markel		£	s.	d.
Bars		16	10	0
Mid Steel Bars		11	0	0
Steel Bars, Ferro-Concrete quality, basis price		11	0	0
Hoop iron, basis price		16	0	0
Galvanised		31	0	0
Soft Steel Sheets, Black—				
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.		13	10	0
" " " 24 g.		14	10	0
" " " 16 g.		16	10	0
Sheets Flat Best Soft Steel, C.R. & C.A. quality—				
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.		19	10	0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g.		21	10	0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.		23	10	0
Flat and Galvanised Corrugated Sheets—				
Ordinary sizes, 6 ft. to 9 ft. to 20 g. and 24 g.		18	10	0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.		19	0	0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.		22	0	0
Sheets Galvanised Flat, Best quality—				
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker		22	10	0
Best Soft Steel Sheets, 22 g. and 24 g.		24	10	0
Best Soft Steel Sheets, 26 g.		26	0	0
Cut Nails, 3 in. to 6 in. (under 3 in. usual trade extras.)		19	10	0
METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting, coats, and delivery to job, average price				
1s. 4d. to 1s. 7d. per foot super.				

LEAD, &c.

(Delivered in London.)		£	s.	d.
LEAD—Sheet, English, 4 lb. and up		51	10	0
Pipe in coils		53	0	0
Soil Pipe		50	0	0
Compo pipe		50	0	0
NOTE.—Country delivery, 30s. per ton extra; lots of 3 cwt., 3s. per cwt. extra, and over 3 cwt. and under 3 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.				
Old lead, ex London area, at Mills. per ton		37	10	0
Do., ex country, carriage forward		38	10	0

COPPER.

Seamless Copper tubes (basis)		per ton
Strong sheet		"
Thin		"
Copper nails		"

the report relating to the swimming pond, and remitted to the Burgh Engineer to prepare a detailed scheme with the cost.

* All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.

The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 48.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.				CARPENTER AND JOINER—continued.			
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep				FRAMES.			
per yard cube	s.	d.		Deal wrot moulded and rebated	per foot cube	s.	d.
Add if in clay	"	"	1 0	Plain deal jamb linings framed	per ft. sup.	1' 1 1/2	1 1/2
Add for every additional depth of 6 ft.	"	"	0 6	Deal shelves and bearers	"	1 1/4	1 1/8
Planking and strutting to trenches	per foot super	0	5	Add if cross tongued	"	2d.	2d.
Do. to sides of excavation, including shoring ..	"	"	1 0	STAIRCASES.			
CONCRETOR.				Deal treads and risers in and including rough brackets	1' 1 1/2	1 1/2	2 1/2
Portland cement concrete in foundation 1 to 6 ..	per yard cube	32	0	Deal strings wrot on both sides and framed	1 1/8	2/	2 1/8
Add if in underpinning in short lengths	"	"	7 0	Housings for steps and risers			each
Add if in floors 6 in. thick	"	"	3 3	Deal balusters, 1 in. x 1 1/2 in.	per ft. run.		0 9
Add if in beams	"	"	3 9	Mahogany handrail; average 3 in. x 3 in.	"	"	6 0
Add if aggregate 1. 2: 4	"	"	10 0	Add if ramped	"	"	11 10
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	"	"	2 6	Add if wreathed	"	"	23 9
BRICKLAYER.				FIXING ONLY IRONMONGERY (INCLUDING SCREWS).			
Reduced brickwork in lime mortar and Fletton bricks	per rod	£	s. d.	6 in. barrel bolts	8 1/2 d.	Rim locks	2/-
Add if in stocks	"	"	7 10 0	Sash fasteners	11 1/2 d.	Mortice locks	4/3
Add if in Staffordshire blues	"	"	22 0 0	Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	19/-
Add if in Portland cement and sand	"	"	1 10 0	Casement stays	1/2		
FACINGS.				Cupboard locks	1/5		
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0 1 1/2	FOUNDER AND SMITH.			
POINTING.				Rolled steel joists	per cwt.	16	3
Neat flat struck or weathered joint	"	"	0 0 3	Plain compound girders	"	19	0
ARCHES.				Do. stanchions	"	21	9
Extra only to the price of ordinary brickwork:—				In roof work	"	27	6
Fair external in half brick rings	"	"	0 0 10	RAIN-WATER GOODS.			
Axed in stocks	"	"	0 1 9	Halt-round plain rebated joints ..	ft. run	3' 1/6	4' 1/9
Rubbed and gauged jointed in putty camber or segmental	"	"	0 6 0	Ogee Do. Do.	"	1/9	2/-
SUNDRIES.				Rain-water pipes with ears	"	1/9	2/7
Damp course in double course of slates breaking joint and bedded in Portland cement	"	"	0 1 0	Extra for shoes and bends	each	4/4	5/11
Setting ordinary register grates and stoves	each	1	0 0	Do. stopped ends	"	1/11	2/4 1/2
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	"	4 15 0	Do. nozzles for inlets	"	2/2	2/7
ASPHALTER.				PLUMBER.			
Half-inch horizontal damp course	per yard sup.	s.	d.	Milled lead and laying in flashings and gutters	per cwt.	67	0
Three-quarter-inch vertical damp course	"	"	8 6	Do. Do. in flats	each	66	0
3/4 inch on flats in two thicknesses	"	"	6 3	Extra labour and solder in coated cesspools	"	6	9
Angle fillet	per foot run	0	3	Weld joint	per ft. run.	0	8
Skirting and fillet 6 in. high	"	"	1 2	Soldered seam	"	1	0
MASON.				Copper nailing	"	0	8
York stone templates fixed	per foot cube	13	0	Drawn lead waste per ft. run ..	1 1/2	1 1/2	2 1/2
York stone sills fixed	"	"	22 0	Do. service ..	1/3	2/2	2/7
Bath stone and all labour fixed	"	"	10 6	Do. soil ..			
Portland stone fixed	"	"	20 0	Bends in lead pipe each ..			3/3
SLATER.				Soldered stop ends ..	1/2	1/8	2/1
Welsh 16 in. x 8 in. 3 in. lap, including nails	per square	72	9	Red lead joints ..	11d.	1/-	1/3
Do. 20 in. x 10 in. Do. Do.	"	80	9	Wiped soldered joints ..	2/10	3/6	4/-
Do. 24 in. x 12 in. Do. Do.	"	90	0	Lead traps and cleaning screws			14/7
CARPENTER AND JOINER.				Bib cocks and joints	6/4	9/7	15/4
Fir framed in plates	per foot cube	5	0	Stop cocks and joints ..	15/4	17/2	25/8
Do. joists	"	"	5 6	PLASTERER.			
Do. roofs, floors and partitions	"	"	6 0	Render, float and set in lime and hair	per yard sup.	s.	d.
Do. trusses	"	"	8 6	Do. Do. Sirapite	"	"	2 2
Deal rough close boarding	per sq.	35/6	40/-	Do. Do. Keen's	"	"	3 8
Flat centering for concrete floor, including struts or hangers ..	"	"	50 0	Add sawn lathing	"	"	1 1
Do. to beams	per ft. sup.	1	0	Add metal lathing	"	"	2 2
Centres for arches	"	"	1 8	Portland cement screed	"	"	3 8
Gutter boards and bearers	"	"	1 0	Do. plain face	"	"	0 0
FLOORING.				Mouldings in plaster	per l. girth	0	6
Deal-edges shot	per sq.	44/6	50/-	One-and-a-half granolithic pavings ..	per yard sup.	s.	d.
Do. tongued and grooved	"	49/-	57/6	21 oz. sheet plain	per foot sup.	0	1
Do. matchings	"	45/-	51/-	26 oz. Do.	"	"	1 1
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	Obscured sheet	"	"	0 0
			2/0	1/2 in. rolled plate	"	"	0 0
			2/6	1/2 in. rough rolled or cast plate ..	"	"	0 1
				1/2 in. wired cast plate	"	"	1 1
SASHES AND FRAMES.				PAINTER.			
One-and-a-half moulded sashes or casements ..	per foot super	s.	d.	Preparing and distempering, 2 coats ..	per yard sup.	0	0
Two Do. Do. Do.	"	"	2 1	Knottling and priming	"	"	0 0
Add for fitting and fixing	"	"	0 3	Plain painting 1 coat	"	"	1 1
Deal-cased frames with 1 in. inner and outer linings, 1 1/2 in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights average size	"	"	3 9	Do. 2 coats	"	"	1 1
				Do. 3 coats	"	"	2 2
				Do. 4 coats	"	"	2 2
				Graining	"	"	0 0
				Varnishing twice	"	"	0 0
				Sizing	"	"	0 0
				Flattening	"	"	0 0
				Enamel	"	"	0 0
				Wax polishing	per foot sup.	0	0
				French polishing	"	"	1 1
				Preparing for and hanging paper ..	per piece 2/- to 4/-		
DOORS.				* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. Percentage of 1% should be added for Employers' Liability and National Health and Unemployment Acts and 1 1/2% per £100 for fire insurance. The value of information given on this page is copyright. Prices include both materials and labour.			
Two-panel square framed	per ft. sup.	1 1/2	1 1/2				
Four-panel Do.	"	2/1	2/4				
Two-panel moulded both sides	"	2/5	2/8				
Four-panel Do. Do.	"	2/8	2/11				
		2/1	3/2				

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. Percentage of 1% should be added for Employers' Liability and National Health and Unemployment Acts and 1 1/2% per £100 for fire insurance. The value of information given on this page is copyright. Prices include both materials and labour.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes accepted. † Denotes provisionally accepted.
 ‡ Denotes recommended for acceptance.
 § Denotes accepted subject to modification.

ASHBORNE.—Twenty-two houses, for the T.C. :—

*P. Birch & Sons, eight type "B" in pairs.
 *G. Gaunt, eight type "A" in two blocks.
 *J. Ainsworth, pair type "B" and four type "A."
 All of Ashborne.

BASFORD.—1,650 yds. of 12 in., 9 in., and 6 in. stoneware and iron pipe sewers, manholes, tanks, filters and other apparatus at Newstead, for the R.D.C. Mr. S. Maylan, engineer. Quantities by Mr. S. Maylan, Engineer and Surveyor, Basford R.D.C. :—

H. Sewell, Ilkeston	£8,999	0	0
E. Somerfield & Sons, West			
Bridgford	8,990	4	8
H. Ashley, Mansfield	8,661	0	0
F. Eyre & Co., Sheffield	8,168	0	0
C. S. Tomlinson, South Nor-			
manton	8,164	18	4
*A. F. Homton & Co., Ltd.,			
Mansfield	7,950	0	0

BASFORD.—Day rooms and small wards at the infirmary, for the B.G. :—

*G. Hopewell & Sons, Basford, £1,794 3
 (Subject to M.H. approval.)

BIGGLESWADE.—Engine house, for the Biggles-
 wade Water Board. Mr. E. J. Wainwright, engineer :—

C. D. Woodward, Biggleswade, £1,160
 *Wrights (Langford), Ltd., Langford,
 Beds. 965

BIRKENHEAD.—Structural alterations to "Manor
 Grange," Egerton-road, for the C.B. Messrs. E. Kirby
 & Sons, architects, 5, Cook-street, Liverpool :—

*W. Griffiths' Sons & Cromwell, Liver-
 pool £2,483

BIRKENHEAD.—Electricity transformer station
 in School-lane, New Ferry, for the T.C. :—

*Selwood Lloyd & Co., Ltd.,
 Birkenhead £671 19 8

BIRKENHEAD.—Adaptation of 7 and 9, Grange-
 road West, for the T.C. :—

*W. E. Hughes, Birkenhead £640

BRIGHOUSE.—Fifty-four houses on the Smith
 house-lane estate, for the T.C. Borough Surveyor :—

*Lister Brook & Co. (three blocks).
 *Crowther Bros. (three blocks).
 *H. Bottomley Exors. (three blocks).
 *Fearley Bros. (three blocks).
 *J. Briggs & Son (one block).

BURNLEY.—Thirteen blocks.

*C. Candelatt (two blocks).
 *J. Lawson & Son (three blocks).
 *J. Kilburn (three blocks).
 *A. L. Waddington & Son (three blocks).
 *McNulty & Walker (two blocks).

BURNLEY.—Thirteen blocks.
 *J. H. Barracough (three blocks).
 *C. Heptonstall (three blocks).
 *H. Castle & Co. (two blocks).

BURNLEY.—Thirteen blocks.

*Roebuck & Culpin (thirteen blocks).

BURLEY.—Alterations and extensions to the
 average disposal works, for the Burley & Menston
 average Board :—

*F. Whitaker & Co., Ltd., Leeds, £15,300

CARLISLE.—Buildings at generating station, for
 the T.C. :—

*Durham & Veeners, East Baldon, £18,238 5

CHIPPENHAM.—Eight parlour-type houses in
 London-road, for the T.C. :—

*Syms & Sons, Calne, £510 each

COLEBAINE.—Repairs to cottages, for the
 D.C. :—

*S. Ferguson £157

CREWE.—Twenty-two houses on the Municipal
 housing site, West End Garden, for the T.C. :—

*Fletcher & Sons, Hightown, Crewe.

DEVIZES.—Pair of bungalows, for Mr. A. W.
 Tren. Mr. Chas. H. Goater, architect, Trowbridge :—

*Loxley & Co., Trowbridge, £1,140

DEWSBURY.—Re-wiring the Town Hall buildings,
 the C.B. :—

*Ward & Co. (Dewsbury), Ltd., £969

DOUGLAS (I.O.M.).—Eighteen houses in West-
 land-road, for the T.C. :—

*J. Cowie & Son, £9,486

DUBLIN.—218 houses on the 13 acre field of the
 J. Barracks Area, for the C.B. :—

*J. Kenny, Dublin, £105,592 18 6

ENNISKILLEN.—Repairs to the workhouse, for
 B.G. Mr. J. Donnelly, Borough Surveyor and
 architect :—

*J. Curran & Sons, Enniskillen, £359 10

ENNISTYMON.—New wing at the Convent, for
 the Committee :—

*M. Dundon, Ennistymon, £2,089

EXETER.—Tower of the Church of the Sacred
 Heart, for the congregation. Messrs. Stokes & Drys-
 dale, architects :—

*Steven & Co., Exeter.

GLASGOW.—Plaster work at the Hamilton Hill
 housing scheme, for the T.C. :—

*Wm. Walker & Sons, £3,552 11 10

GODMANCHESTER.—Ten pairs of houses, for the
 T.C. Mr. G. Stevens, Borough Surveyor :—

Thackray & Co., Ltd., Huntingdon	£9,640	0
Wm. Canham, Somersham, Hunts.	9,350	0
Page & Son, Buckdon, Hunts.	9,250	0
Bellamy & Brittain, St. Neots	8,755	0
Allen & Son, Bampton, Hunts.	8,750	0
*Petitts, Ltd., Godmanchester	8,654	10

GREAT HOUGHTON (S. YORKS.).—Fifty houses,
 for the Hensworth R.D.C. :—

Housing Corporation of Great Britain
 Ltd., £26,463
 *John Stothard, Cudworth, 25,875

HALESOWEN.—Thirty-seven non-parlour type
 houses on the Hawne-lane site, for the U.D.C. :—

*J. Harper & Son, Blackheath, each £412

HALESOWEN.—Twenty parlour-type houses at
 Hawne-lane site, for the U.D.C. :—

*J. Harper & Son, Blackheath, each £504

HENSTEAD.—Houses, in Swardeston, for the
 R.D.C. :—

*G. Barrett.

HERTFORD.—110 houses on the housing estate,
 Stanstead-road, for the Corporation. Borough
 Surveyor, The Castle, Hertford :—

*C. Miskin & Sons, Ltd., St. Albans, £56,471

HOVE.—Ninety-six houses on the Old Shoreham,
 road estate, for the T.C. Mr. H. H. Scott, Borough
 Surveyor :—

*W. Jones & Sons, Ltd., London, £46,500

HURLEY.—Widening and repairing one mile of
 road at Allbrook and reconstruction of the canal bridge,
 and widening the bridge and culvert at Highbridge-
 for the R.D.C. Mr. J. P. Game, surveyor :—

H. Osman & Co., Southampton.
 Tomlins, Dunlop & Flett, London.
 *J. Douglas, Southampton.

LANCHESTER.—Roman Catholic Church. Mr.
 Thos. Korner, architect, Sunderland :—

*Lough Bros., Consett, £5,500

LEAMINGTON.—Subway, for the L. & N.E. Rly.
 Co. :—

*J. Hunt, Newcastle, £3,381 2 9

LEEDS.—Rebuilding of the "Couburg Tavern," in
 Claypit-lane, for Messrs. Joshua Tetley & Sons, Ltd.
 Messrs. Kitson, Parish & Ledgeard, architects, Bank
 Chambers, Vicar-lane :—

*Wm. Irwin & Co., Ltd., Leeds.

LEEDS.—Extensions to the clothing factory for
 Messrs. Heaton (Leeds), Ltd., at New York-street.
 Messrs. G. Fredk. Bowman & Son, architects, Park-
 row :—

*J. H. Wood & Co., Leeds.

LEEDS.—Rebuilding of the "Cemetery Tavern,"
 at Woodhouse Hill, for Messrs. Ind Coope & Co., Ltd.
 Messrs. A. & F. Mosley, architects :—

*Brickwork—A. Lambert & Son.
 *Joiner—Pearson Bros., Sheepscar.

LONDON.—Alteration to the ground floor and the
 conversion of the late hall-keeper's apartments on the
 first floor of the Town Hall, in order to provide addi-
 tional office accommodation, for the Hackney B.C. :—

W. M. Brand	£475
G. Plumley	450
*E. Setchell	375

(All of London.)

MANCHESTER.—Various works, for the E.C. :—

Chorlton High School for Boys: Heating manual
 rooms, &c. :—

*J. Turton & Sons.
 Queen-street Municipal School: Alterations and
 additions to Girls' offices :—

*J. Turton & Sons.
 Grange-street Municipal School: Alterations and
 additions :—

*Wm. Thorpe & Son, Ltd.
 Upper Lloyd-street Municipal School: Alterations and
 additions :—

*Wm. Thorpe & Son, Ltd.
 Smedley-road Municipal School: Heating installa-
 tion :—

*Saunders & Taylor, Ltd.
 Wheler-street Municipal School: Heating installa-
 tion :—

*J. B. Crawford, Ltd.
 Queen-street Municipal School: Alterations and
 additions :—

*G. Macfarlane & Son, Ltd.
 Hague-street Municipal School: Outside urinals :—

*H. Green & Son.
 Ducie-avenue Municipal School: Alterations and
 additions :—

*Tinker & Young, Ltd.

MANCHESTER.—Additions to the library for the
 Senate of the Manchester University. Professor A. C.
 Dickie, A.R.I.B.A., of the School of Architecture :—

*G. Macfarlane & Son, Ltd., Chorlton-
 on-Medlock, £6,000

MIDDLETON.—Fifty-two houses, for the T.C.
 Borough Engineer and Surveyor :—

*R. Taylor, Middleton, £28,910

NEW WINDSOR.—58 houses, for the T.C. Mr.
 E. A. Stickland, Borough Surveyor, 16, Alma-road :—

Ringmer Building Works, Ringmer	(block of eight)	£4,320
W. G. Tarrant, Ltd., Byfleet		34,388
A. Cole, Ltd., Luton		31,320
*H. Lacey & Sons, Luton		26,100

NEAR BRISTOL.—School at Staple Hill, for the
 Gloucestershire E.C. Mr. R. S. Phillips, F.R.I.B.A.,
 County Architect, Shire Hall, Gloucester :—

*Long, Jacob & Sons, Ltd., Bath, £9,113

NORTHWICH.—Restoration of the tower to the
 Parish Church, for the Rev. Francis Long :—

*F. P. Oakley, Northwich.

OMAGH.—Ten houses on the Fair Green site, for
 the U.D.C. :—

*J. Boyd & Son, Belfast, £4,505

OXFORD.—Convenience on a portion of the
 Alexandra Recreation Ground, for the T.C. :—

*W. Rose £537

PONTARDAWE.—Ten houses at the Alltwn site,
 for the R.D.C. Mr. E. D. Jones, A.R.I.B.A., architect.
 Quantities by Mr. E. D. Jones, A.R.I.B.A. :—

Thomas Bros., Pontardawe	£5,420	8	0
Lewis & Thomas, Ynismudwr	5,382	1	4
*David Davies, and Mathias			
& Davies, Alltwn, Pontar- dawe	5,233	0	0

PORTSMOUTH.—Alteration at lodge at Highland-
 road Cemetery, for T.C. :—

Wedge & Foley	£320
Leonard Head	297
Tanner Bros.	271
Charles E. Brown	247
*Mullins & Sons	245

PRESTON.—For (1) additions to the Headmaster's
 house, and (2) extensions to the school premises, for
 the Governors of the Hutton Grammar School. Mr. H.
 Littler, County Architect, 16, Ribblesdale-place :—

(1) *T. B. Garnett & Sons, Preston.
 (2) *T. Cottam, Preston.

PRESTWICK.—Fire "A" type houses in Hamp-
 den-road, for the T.C. :—

Moston Brick & Building Co., Ltd., Moston, Manchester	—
James Berry, Ltd., Heywood	—
*Titterton Bros., Prestwick	£2,300

ROMFORD.—Alterations to the auction mart,
 Red Triangle Club, and the Labour Exchange premises
 in North-street, for the U.D.C. Mr. F. G. Beaumont,
 engineer and surveyor :—

*Dowsing & Davis, Romford, £743

ROTHERHAM.—Twenty houses on the site adjoining
 Firebrick-lane, Laughton-en-le-Morthen, for the
 R.D.C. Mr. J. E. Knight, architect, Regent House,
 Moorgate :—

*Bramwell, Lighthall & Co., Ltd., Woodhouse.

SHEFFIELD.—Public conveniences in Heavygate-
 road, Crookes, for the T.C. Mr. F. E. P. Edwards,
 F.R.I.B.A., City Architect :—

*T. Wilkinson & Sons (Builders),
 Ltd., £413 10 6

SHEFFIELD.—Transformer sub-station on the site
 of the University, Applied Science Department, St.
 George's-square, for the T.C. :—

*T. Roper & Sons, £186 5

SHEFFIELD.—Installation of heating apparatus
 at the Bernard-road depot garage, for the T.C. Mr.
 F. E. P. Edwards, F.R.I.B.A., City Architect :—

*Brightside Foundry & Engineering Co., £745

SHEFFIELD.—Timber store in Queen-road, for
 the T.C. Mr. F. E. P. Edwards, F.R.I.B.A., City
 Architect :—

*Wellerman Bros., Ltd., Sheffield.

SHEFFIELD.—Banking premises at the junction of
 Rockingham-street and The Moor, for Messrs. W.
 Deacons, Ltd. Mr. W. Cecil Jackson, architect,
 Chesterfield :—

*J. Eshelby & Son, Sheffield.

SHEFFIELD.—Memorial Hall, for the Rev. H.
 Holden, Owlerton Vicarage, Forbes-road. Mr. H.
 Webster, architect, St. Marys Chambers, Norfolk-row :—

*G. Longden & Sons, Sheffield.

SHEFFIELD.—New Diphtheria Block at the
 Swallownest Hospital. Mr. J. Haslam, architect,
 Ryton Chambers, Worksop :—

*W. Memmory.

STRETFORD.—Repairs to the stores roof, for the
 U.D.C. :—

*F. E. Gill £257

SWINDON.—For (1) rebuilding portion of chemical
 laboratory at the Victoria-road secondary school and
 technical institution; and (2) extensions and altera-
 tions to cloak-room accommodation at Euclid-street
 School, for the E.C. :—

(1) *Pope Bros.	£653	7	0
(2) *H. & C. Spackman	2,787	8	11

SWINDON.—Repairs and decorations to 112
 houses on the Hurst housing estate, for the T.C. :—

*S. H. Rushen, Swindon, £489 0 10

TAUNTON.—Forty-two houses, for the T.C. :—

*F. & E. Small, Taunton, £18,223
 (Messrs. Tearle & Deacon's tender withdrawn.)

TILBURY.—Erection of further houses, for the
 U.D.C. :—

153 houses in the South Ward—	
*W. E. Walsham, Ltd.	£70,830
110 houses in the South Ward—	
*Brown Bros. (Grays) Ltd.	50,780
68 houses in the North Ward—	
*Henry Boot & Sons (London), Ltd.	35,360

TORQUAY.—Twenty-one houses on the Westhill estate, for the T.C. :—

*R. E. Narracott £10,500
(Subject to M.H. approval.)

UPTON SCUDAMORE.—Alterations to chapel, for Mr. A. T. Willoughby. Mr. Chas. H. Goater, architect. Trowbridge :—

*S. J. Wood.

UXBRIDGE.—Ward block and connecting corridors, and reconstruction of existing nurses' home and addition thereto, containing 36 rooms, at the Union Institution at Hillingdon, for the B.G. Messrs. A. Saxon Snell & Phillips, architects :—

Perry Bros, Ealing £40,444
Y. J. Lovell & Son, Gerrard's Cross .. 36,124
Patman & Fotheringham, London... 35,611
R. Ginn & Son, Hertford 35,497
F. R. Hipperson, London 35,280
H. J. & A. Wright, Ltd., Great
Missenden 35,123
Webster & Cannon, Aylesbury 34,788
Holloway Bros., Ltd., London 34,290
A. & B. Hanson, Ltd., London 33,880
Prestige & Co., London 33,379
*D. G. Somerville & Co., London 32,250

WALTON.—Sixteen houses, for the U.D.C. :—

*W. A. Annett.

WARSOP.—Alterations and additions to the "Vale" Hotel, for the Staveley and District Public House Trust, Ltd. Messrs. Vallance & Westwick, architects, Whitehart Chambers, Mansfield :—

*A. Eastwood & Sons, Warsop.

WEALDSTONE.—126 houses, for the U.D.C. Mr. Herbert Walker, engineer; quantities by Mr. Herbert Walker :—

R. Myerscough, Harrow £71,400
Arthur Cole, Ltd., Luton 70,018
S. E. Moss, Southend-on-Sea 69,934
Walter Jones & Sons, Ltd., London .. 67,888
†H. Brown, Harrow Weald 59,950

WEYMOUTH.—Forty-four parlour houses at Westham, for the T.C. :—

†Theo. Conway, Ltd. £23,297

WIDNES.—Roof covering the open market at Alford-street, for the T.C. Mr. J. S. Sinclair, Borough Surveyor :—

Jenkins Bros. (Birkenhead),
Ltd., Birkenhead £9,094 16 0
Walter Macfarlane & Co.,
Glasgow 6,650 0 0
Ransome Machinery Co., Tip-
ton 6,490 0 0
Whitnall & Gregory, Ellesmere
Port 6,083 14 0
R. White & Sons, Widnes 5,995 0 0
Edward Wood & Co., Man-
chester 5,510 0 0
Tees Side Bridge Co., Middles-
brough 6,299 16 0
Lambourn & Co., Ltd., Man-
chester 5,520 0 0
J. Parks & Co., Northwich... 6,100 0 0
Brownlie & Murray, Glasgow.. 6,600 0 0
Heenan & Froude, Manchester 5,958 3 0
Maxwell & Fage, Liverpool .. 6,429 3 0
Olive & Co., Manchester ... 6,770 0 0
F. Morton & Co., Liverpool .. 6,351 15 0
Horseley Bridge & Engineering
Co., Tipton 7,155 12 11
John Butler & Co., Leeds 6,700 0 0
Frederick Smith, Widnes 5,350 0 0
Geo. Hudson, Widnes 5,300 13 1
Lambhill Ironworks, Glasgow—
Incomplete tender 4,329 11 8
*Widnes Foundry Co. (1925),
Ltd., Widnes 5,183 19 8

WITHAM.—Ten houses on the Cocks Farm site, for the U.D.C. Mr. W. P. Perkins, surveyor, Collingwood-road :—

*M. Richards & Son, Witham .. (per pair) £958

YORK.—For road-making on the Tang Hall estate, for the T.C. :—

†Squires & Sons, Selby £20,995 8 10

J. J. ETRIDGE, J^r. Ltd

SLATING AND TILING

SLATE MERCHANTS

CONTRACTORS.

Inspections and Reports made on
OLD OR FAULTY ROOFS
in any part of the country.

Telephone: Bishopsgate 1944/5, or write,
Bethnal Green Slate Works,
BETHNAL GREEN, LONDON, E

BEST SEASONED

OAK FLOORING

AUSTRIAN
RUSSIAN
JAPANESE

PREPARATION TO ANY SECTION
CAN BE UNDERTAKEN AT ONCE

SYDNEY PRIDAY & SONS

WAINSCOT OAK MERCHANTS (EST. 1880)

Phone
CLISSOLD
6254
(2 lines)

OAK WHARF
RAVENSDALE ROAD
LONDON, N.16.

FITZPATRICK & SON

Masons and Paviors,

455, OLD FORD ROAD, BOW, E.3

Phone: EAST 4908.

Granite Setts and Kerb (redressed and second-hand), York Paving Spur Stones, Granite Chippings, and Granolithic and Sett Paving.

School & Hospital Stoves

MAKERS OF

WRIGHT'S IMPROVED and also SHORLAND PATENT
WARM AIR VENTILATING PATTERNS.

GEO. WRIGHT (LONDON) LIMITED
19, Newman St., Oxford St., London, W.1
Burton Weir Works, Rotherham.

HIGH-CLASS

FLOORINGS

of every description in

WOOD BLOCKS. PARQUETRY
SEASONED T. & G. WAINSCOT OAK
TEAK AND MAPLE.
FACTORY AND ROADWAY PAVING

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASANT
WANDSWORTH, S.W.18.
(Phones: Putney 1700 & 245)



PARQUET & WOOD-BLOCK FLOORING
supplied & fixed complete.
Post or Phone (Park 1885)
details of requirements to
TURPIN'S PARQUET FLOORING CO.,
25, NOTTING HILL GATE
LONDON, W.11.

J. GLIKSTEN & SON

LIMITED

Specialities in

**SEASONED
HARDWOODS**

MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.

REGISTERED OFFICE AND WHARF

**CARPENTERS RD.
STRATFORD
LONDON E.15**

Telephone :
EAST 3771
(5 lines)

Telegrams
GLIKSTEN 'PHONE
LONDON

COPPER ROOFING WITH CONICAL ROLLS

ABSOLUTELY WATERTIGHT. VERY DURABLE

ESTIMATES FREE

F. BRABY & CO. LTD 352-364 EUSTON RD. N.W.1.

AND AT DEPTFORD, LIVERPOOL, BRISTOL, GLASGOW, FALKIRK & BELFAST.

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VOL. CXXIX.—No. 4,312

SEPTEMBER 25, 1925.

A PROPAGANDA COMMITTEE?

THE urgent necessity of architectural propaganda is by now so fully recognised in the profession that there is no need to advance further arguments in its favour. At present we all realise that something ought to be done to bring the art into closer relationship with modern life, but we have only hazy ideas of what form action ought to take. In the first place we know that infinitely more attention is drawn to a new play that may run a few weeks or months than to a new cathedral, and that a novel will always take precedence of a building. This is obviously undesirable, but can we do anything to remedy it? Then, again, public architectural functions are always inadequately reported in the lay Press, if, indeed, they are mentioned at all; an instance in point being Mr. Ramsay MacDonald's recent speech at Liverpool which was condensed to nearly nothing in the lay Press.

The lack of books dealing in a popular way with modern architecture is gradually being made good and these are certain to bear fruit in time, but it is astonishing how little effect they have as yet produced upon that section of the public that in other respects we should call educated. Then, again, there is the education problem. Is a man always to be considered completely educated because he has spent three years at a private school, five at a public school, and three or perhaps four at an ancient university, and at the end of these twelve years has never been given one half-hour's instruction in architecture?

Then there exist the local engineer and surveyor, and the speculative builder. When these have a slight acquaintance with architectural principles they can avoid the pitfalls and blatant errors that otherwise are certain to catch them. Their knowledge of design may be insufficient to turn them into architects, but at least they know when and where to go for advice and guidance. Local authorities' surveyors have had no grounding in the principles of lay-out and cottage design through the Government scheme, but surveyors are constantly learning, and we should be deluding ourselves if we supposed that the Addison scheme had produced the permanent effect we should desire among them. The town-planning schemes may effect more.

As regards the speculative builder, his output has noticeably improved in some places, but in others no improvement is visible. Instead of advancing as an organised body, which they are, speculative builders seem to be hardly influenced at all by any general endeavour to improve their architecture. Architects themselves have undoubtedly improved as a body, but those that are properly qualified can as a rule be relied on to produce work of a reasonable standard; this is all to the good, but it is less inspiring when we remember that they have completed considerably less than half the buildings that are erected every year.

There is a general improvement, but it is far too slow, and every bad building that is put up represents a permanent black mark. In order to minimise the number of these black marks architectural propaganda must itself be organised, since nothing can be accomplished without some directing control. We need to fear that organisation is in any way contradictory to the

interests of true art. Richard Wagner's great venture at Bayreuth demanded a great deal of organisation, and in our own day Miss Lilian Bayliss has worked miracles of art propaganda through the organisation of the Old Vic. There are so many ways in which architectural propaganda might be put on an efficient footing that we take the following points almost at random, as ideals that should be aimed at:—

1. That architectural correspondents should occupy a position on the great daily papers such as that at present reserved for the other arts.
2. That architecture should take its place in general education in schools and universities.
3. That a knowledge of architectural elements should form one of the qualifications for surveyors to local authorities.
4. That the speculative builder should be urged to study the architecture of housing—preferably through his own organisation.

We may readily admit that some of the above points may be difficult to put into effect, but they certainly are all desirable, and there exists no authority responsible for taking steps to bring about reforms of this kind. The only criticism that could come from within the ranks of the profession would arise through a confusion between architectural propaganda and architects' propaganda, which is quite a different thing. The difference might be illustrated by considering the speculative builder. There are two ways in which his work might be improved: (a) By self-education through a study of cottage and house design, so that he would know enough to avoid bad mistakes and to build tolerable houses; (b) he might consult or employ an architect. The first alternative might in the long run be the best for architecture, while the second would clearly be the best for architects. Neither of them may be feasible *in toto*, but between them these expedients might bring some relief to our suburbs of to-morrow. If we place architecture first and architects second it may well be necessary to call for some sacrifices on the part of architects, and any confusion between architectural propaganda and personal advertisement would be as harmful to architecture as would be a public impression that architects were forming themselves into a trade union and tying up their art in red tape.

There is at present no one whose business it is to see to reforms of the kind suggested here concerned with the advancement of architecture as a cog in the life of the community, and something in the nature of an official architectural propaganda committee would seem to be necessary. It would act as a kind of "Press Bureau," and see that the daily papers were supplied with information of interest, copies of speeches, papers, &c., from which they could extract what they wanted. It could arrange for courses of lectures, articles, and provide slides and photographs with a view to bringing architecture before the public; it could, in fact, see generally that architecture was not left so completely unrepresented in ordinary life as it is at the present moment. The profession is at last under one supreme control, and this should be the ideal moment for architecture to put herself right with the public, and if architects do not do it no one else can undertake the task.

NOTES.

**Industrial
Agree-
ments.**

UNANIMITY between employers and employed must necessarily be the basis of any industrial agreement affecting a trade throughout the whole of the country. This has been the outstanding lesson of the history of trade unionism, the whole object of which is, in fact, to get improved conditions for the workers by collective bargaining. Sectional agreements have not only invariably failed to be effective, but have generally resulted in embroiling larger areas in disputes brought about by their failure. Facts such as these are patent to all. And yet we find the National Federation of Building Trades Operatives, who do not now represent anything like the whole of the building trade workers, expecting the building trade employers to ratify a national agreement with them alone. It is difficult to understand the attitude of the Federation in expecting the employers to conclude a national wages agreement which does not include such important sections of the operatives as the bricklayers, plasterers, and masons, who seceded from the national body some months ago. Surely the Federation must know that no satisfactory and lasting agreement can be reached before they overcome their own internal dissensions and all branches are again represented by one body? One cannot help wondering whether the present position is being created with a view to forcing the secessionists back into the National Federation; and, if so, whether a policy which may involve the whole building industry in another serious dispute is a justifiable

method of settling what, after all, are the domestic troubles of the operatives.

**Heating
and
Cooling.**

DURING the spell of hot weather last July we came across an interesting experiment in a large London office building. The building in question was fitted with a heating installation on the panel system, which gave all the warmth necessary in the winter, but during the hot spell open windows and fans were not sufficient to keep the occupants cool. In spite of the sweltering weather, one of the staff had enough energy to think over the problem, and conceived the idea of running cold water through the heating installation. This was done, the temperature of the water from the mains being still further lowered by passing it through an ice chamber before it entered the circulation system. The result was quite satisfactory, and on commenting on the comfortable atmosphere we were told that it was entirely due to making use of the heating installation for cooling purposes.

**Words
of
Wisdom.**

It would be well if the wise words of counsel which do occasionally drop from the mouths of speakers could meet with a sympathetic response. For instance, in the address by Mr. Thomas Barron, at the annual Conference of the National Federation of Building Trades Operatives, there were many appearances of reasonable argument, and it is worth noting that he said "if the workers in the building industry believed what they said when they declared that they could run the industry without the employers, they should seek to equip themselves for the task."

**The
Sculptured
Frieze of
East India
House.**

WE illustrate this week some details of the remarkable sculptured frieze of East India House, Regent-street, designed by the late Edwin T. Hall, F.R.I.B.A., and Mr. E. Stanley Hall, F.R.I.B.A., and carried out by Mr. Charles L. J. Doman, A.R.B.S. and Mr. Thomas J. Clapperton, A.R.B.S. Measuring as it does 115 ft. long by 8 ft. in height, it is the largest sculptured work in London, and it was considered too big a task for one sculptor, if the work was to be ready for the completed building. Mr. Doman, therefore, took on the central bay, with two bays to the north and on to the south of the centre, and Mr. Clapperton was responsible for the two outer northern and the three southern bays. The subject of the frieze is the transport of merchandise from the East and West to the Mother Country, typified by the central figure of Britannia with shield and trident. At either ends are ships signifying the distant seas; Western ship at the north end, and Chinese junk at the south. A Chinaman squats on his haunches at the dock side while coolies load the junk with silks and cases of ivories. A dock policeman superintends. In the next panel to the junk two camels are seen taking up their load of carpets from the Orient. Behind them a potter works at his wheel, and a woman with her baby on her hip, walks off with a finished pot on her head. The third panel shows a proud lady of Georgia scorning the working girl at her feet, her own head protected from the sun by a feather fan. An Egyptian woman directs the packing of bales of goods. In the fourth panel an elephant kneels to receive his load of merchandise, while a Mocha



Detail of Sculptured Frieze on East India House, Regent-street, London. (See also p. 453.)



Detail of Sculptured Frieze on East India House.

Indian woman swings by, trousered, and a basket on hip. In the panel next to the Western ship at the north end of the frieze is depicted the making of porcelain. The venerable master examines the finished piece, and the apprentice stands by. The remaining two panels on the north side show a laden cart drawn by two horses; fresh bales of goods are being made ready in the group behind. From over the top of the frieze three spectators in stone watch the procession pass—a girl by herself on the left, and a man and his lass on the right. This was the wish, following a suggestion in a picture of Raphael's; and it is extraordinary what life and animation the fact of these three spectators seems to give to the whole conception of the frieze. Messrs. Doman and Clapperton started their models in April, 1923. By August, 1923, the quarter full-size models were completed. The half full-size models were finished in November, 1923, and all the full-size models in March, 1924. The work was then entrusted to Mr. G. Dalie and his sons at their yard in Shepherd's Bush, and here the whole frieze was chiselled and built up to completion. The finished sculpture was moved to East India House in August, 1924, and the whole frieze was completely erected in 14 days. It contains nearly 100 tons of the best bed of Portland stone.

It will not be without significance that, in the conditions issued for the new College Collegiate Buildings for Mossley-hill, Liverpool, there is no mention of style. The assessor, Mr. Gilbert Scott, evidently thinks best to leave intending competitors to choose their own point, and we feel this is the right view.

A VERY large number of students' drawings are on view at the Institute Galleries this week, indicating the work which has secured exemption for their authors in the Institute Intermediate and Final Examinations. There is a large amount of creditable work, but the Gothic designs are much below the quality we used to see thirty years ago. The following may be mentioned:—London University: Jutland Memorial, by Ph. Pattrey; Dairy Farm, by Guy Morgan; design for First-class lounge on steamship *Franconia*, by T. R. Alabaster, Glasgow; a good classic design for a School of Architecture, by L. C. Farquhar. Architectural Association: Open-air theatre, by Doris H. Lewis; Municipal Market, by L. Sivotkin;

an Hotel in Mayfair, by — Walker; Headland Hotel, Miss Sleight. Liverpool School: Memorial Buildings on an Island, by A. G. Phillips; University School of the Theatre, by H. L. Barton; Faculty of Architecture Building, by Miss Thelma Silcock; Bank and Office Building, by H. Thearle. There are some clever drawings from the Bombay School of Art.

The Leverhulme Sale. THERE seems no reason to doubt that Lord Leverhulme's trustees will find a better result from the sale of his treasures in New York than in London, but it is perhaps a little unfortunate that the change of the sale from London to New York could not have been foreseen earlier; any possible buyers coming over for the sale might even now be crossing the seas, and the sale of catalogues must have been largely influenced by the belief that they described things to be bought in London. The inflation of prices by the competition of wealthy buyers will in few cases survive the test of time.

Rent Strikes. WE notice that certain Labour representatives on the West Ham Board of Guardians are advocating the stoppage of rent allowance from the relief paid by them to the unemployed. The Ministry of Health demurs at the huge total paid in this way, so the landlord is told he must suffer so that other forms of relief may not be curtailed. Why is the landlord always looked upon as the first person to be defrauded, and not the baker or the grocer? Presumably because the houses are already in the possession of the tenants, and to refuse payment for what you are enjoying does not appear to some minds such an unlawful act as to take goods by force.



Detail of Sculptured Frieze on East India House.

GENERAL NEWS

Change of Address.

Mr. W. J. Fitt, L.R.I.B.A., has transferred his office from No. 11, Bolton-street, Piccadilly, to 126, Bishopsgate, E.C.2.

Mr. H. C. Hughes has moved his office to No. 1, Tunwell's-court, Trumpington-street, Cambridge. Telephone as before—Cambridge: 184.

Dissolution of Partnership

The partnership subsisting between Mr. G. A. Boswell, F.R.I.B.A., and Mr. L. R. Guthrie, F.R.I.B.A., at 37, Bruton-street, London, W., has been dissolved by mutual consent as from August 31, 1925.

Manchester Housing Scheme.

The Manchester Town Council are thinking of throwing out a "satellite town" in the direction of Cheshire, instead of building the usual endless suburbs.

Proposed Horticultural Hall.

Lord Lambourne states that a larger hall will be built for the Royal Horticultural Society on the present premises; it will contain 20,000 ft. of exhibition space, and is to be designed by Messrs. Easton & Robertson.

St. Mary Abbot's Hospital.

The Kensington Guardians have received a letter from the Minister of Health sanctioning a scheme (at first turned down owing to the difficulty of finding labour) for the erection of a new nurses' home at St. Mary Abbot's Hospital.

York House, Twickenham.

York House, in Richmond-road, Twickenham, a famous Queen Anne mansion, is being converted into a town hall, three public halls and a swimming bath being provided; the grounds will become a public park.

Ashted Forest Excavations.

Interesting discoveries continue to be made during the work of excavating on the Roman site in Ashted Forest. Articles recently found include tiles showing deer and hounds in relief; pots with stags in relief; and Samian pottery with egg and dart moulding.

New London Cinema.

Mr. F. G. M. Chancellor is collaborating with Mr. Thomas W. Lamb in designing the picture house to be erected on the site of the Empire Theatre in Leicester-square. It is planned on American lines similar to the Capitol Theatre of New York, and will seat 3,500.

Limerick Dock Extensions.

A sum of £150,000 has been guaranteed under the Free State New Trade Loan Act for the extension of the docks at Limerick and the construction of a western entrance. The work is likely to be undertaken by Messrs. Siemens Schuckert.

Proposed Beet Sugar Factories.

Lord Weir, at the first annual meeting of the Anglo-Scottish Beet Sugar Corporation, announced the constitution of a second Anglo-Scottish Beet Sugar Corporation, which will build three new factories—one of them at Cupar, Scotland—within the next twelve months. An expenditure of a million pounds is involved.

Factory and Workshop Act.

We have received a revised draft of the regulations made by the Secretary of State under Section 79 of the Factory and Workshop Act, 1901, in respect of certain building operations, embodying a number of substantial modifications of the original proposals. Copies may be obtained on application to the Factory Dept., Home Office, London, S.W.1.

New Nottingham Power Station.

The first section of the new electric power station of the Nottingham Corporation, which has an installed capacity of 30,000 kilowatts and cost £685,000, was opened recently. The demand for current is so great, however, that

extensions are already in progress which will increase the output to 50,000 kilowatts and the cost to over £1,000,000.

Architects' Estates.

Mr. Alexander Brown, architect, of Aberdeen, who died last April, left personal estate in Great Britain valued at £8,561.

Mr. Charles Wardman Rollinson, of Chesterfield, late of Messrs. Rollinson & Son, architects and surveyors, Chesterfield, left estate of the gross value of £14,016, with net personalty £11,487.

Proposed Nottingham Schemes.

No opposition was forthcoming at the Nottingham Guildhall when the Ministry of Health inquired into the Corporation's application for sanction to the borrowing of £504,000 for the new Exchange. Mr. T. C. Howitt is the architect for the proposed Exchange, which is to be a Portland-stone-concrete-steel building. A £750,000 sewage scheme is soon to be put before the Ministry.

Harrogate's New Pavilion.

The plans for a new pavilion, seating 800 people, to be erected in the Valley Gardens at Harrogate, have been prepared by the Deputy Borough Engineer, Mr. F. H. Clarke, A.R.I.B.A., and provide for a central domed hall, a rostrum, refreshment rooms, &c.; the architecture of the pavilion will be Roman Doric. The building will be carried out in white stone at an estimated cost of £21,000.

Manchester Art Gallery Committee.

The Manchester City Council has handed over Platt Hall, which was threatened with demolition, to the Art Galleries Committee, who will adapt it as a gallery and museum at a cost of £4,500.

The Manchester Art Gallery Committee has accepted, subject to the consent of the City Council, a collection of *objets d'art* from Mr. C. L. Rutherson, of Bradford, consisting of 50 oil paintings, including the work of Augustus John and others of the modern school; 400 water-colours and drawings by Max Beerbohm, Muirhead Bone, and others; 40 woodcuts by such modern masters as John Nash, Eric Gill, and Gordon Craig; and bronzes and stone carvings by Epstein, Mestrovic and others.

EXHIBITION.

An exhibition which touches the world of artistic effort at various points is that being arranged in the galleries of the Royal Institute of British Architects to open next Thursday. It will include the world of Mr. Reginald Hallward in pictures, glass design, pottery, needlework, and decorative and pictorial work generally, even to a nursery corner. Mr. Hallward is a refined and sensitive artist of a catholic temperament, which enables him to cover a wide field of artistic production. He is an able craftsman, happily endowed with poetic ideals, and his work appeals to varied sympathies. Mr. Hallward's work is seldom seen in exhibitions because so much work has been done directly for its place in churches and other buildings, and therefore the wide extent of it is little known to the public, who will have the opportunity in this exhibition of studying this work on a representative scale, and of demonstrating the value of craftsmanship where the artist is executant as well as designer. Several owners are lending pictures for the exhibition. The exhibition can be made of much interest and value if an effort were made to get visits of students from the architectural and L.C.C. schools to visit the exhibition. It does seem a pity after so much effort has been expended in getting together exhibitions which involve so much thought and labour, that they should fall short of their most valuable mission. We fear that too many go to exhibitions largely for the pleasure of criticising and discounting their merits; the young amongst us are more generous and more ready to be influenced by work which reveals the right methods of production.

COMPETITION NEWS

New Hospital, South Moor-lane, Hemsworth.

Designs by Messrs. Garside & Pennington, F.R.I.B.A., of Ropergate, Pontefract, have been accepted by the Hemsworth and South Kirk Miners' Welfare Committee for the erection of new hospital on a site adjoining South Moor-lane, Hemsworth. The scheme is to cost £30,000, and is to be proceeded with forthwith.

Portstewart Club Houses.

The Council of the Portstewart Golf Club invite architects to submit plans for two new club houses to be erected at the old and new links respectively. Full particulars may be had on application to the Secretary, Mr. P. Blaikie, Portstewart. No remuneration will be paid except for such designs as the Council may decide to use.

[This competition will doubtless receive the attention of the R.I.B.A.]

Competitions Open.

	Particulars published in "Builder."	Send in designs by
Drammen Bridge (Drammenselven). Premiums: 10,000 Norwegian crms., 8,000, 6,000. Apply Gov. Eng., Drammen.		May 29 .. Oct.
Newcastle Fire and Police Station. Premiums: £500, £300, £100. Mr. P. S. Worthington, F.R.I.B.A., Assessor.		June 12 .. Nov.
Town Hall, &c., Pretoria. Open to architects residing in South Africa or Registered under Architects' Act, of 1909, Transvaal. Assessor to be appointed by R.I.B.A. Premiums: £250, £150, £100.		— .. Nov.
Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply parties, 35, Old Queen-street, S.W.1		April 24 .. Dec.
New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool.		Aug 7 .. Jan.
Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London.		Aug. 14 .. Ma.
Plan for construction of Conference Hall, for League of Nations, Geneva. International Competition, Sir John Burnet being British representative on Jury of Assessors. 100,000 Swiss francs to be divided among architects submitting best plans. Programmes will be deposited in due course with R.I.B.A., 9, Conduit-street, where intending competitors should apply. Single copies from Secretary-General, League of Nations, Geneva, on payment of 20 Swiss francs.		Jan. 2 ..

* Competitions when "warned" or voted by R.I.B.A. are started.

Bramber Castle.

Bramber Castle, built in the eleventh century, and now a ruin, was sold recently to Duke of Norfolk for £3,000.

Roman Pottery at Bermondsey.

Specimens of Roman pottery have been found during the excavation of the site of the baths and washhouses at Grange-road, Bermondsey. The chief specimen is a cinerary urn in perfect condition, dating from the later of the Roman occupation.

Obituary.

Mr. Paul Bartlett, the American sculptor, died, after a short illness, at his studio in New York at the age of 59. Mr. Bartlett was the author of the fine equestrian statue of Lafayette which adorns the space between the three main entrances of the Louvre at the end of the Jardins des Tuileries. His equestrian statue of Washington is in the Place d'Jena. Another of his works, a statue of Lafayette, has been unveiled at Metz. His other notable works include a statue of Blackstone in the great Hall of the Law Courts in the Strand.



Details of the Sculptured Frieze of East India House, Regent-street, London. (*See p. 450.*)

The Late EDWIN T. HALL and Mr. E. STANLEY HALL, F.R.I.B.A., Architects.

MR. CHARLES L. J. DOMAN, A.R.B.S., and MR. THOMAS J. CLAPPERTON, A.R.B.S., Sculptors.

THE PRESERVATION OF ST. PAUL'S CATHEDRAL AND OTHER FAMOUS BUILDINGS

By W. A. FORSYTH, F.R.I.B.A.

POPULAR interest in the value of ancient buildings will receive stimulus from Mr. W. Harvey's recent publication, "The Preservation of St. Paul's Cathedral and Other Famous Buildings" * and at the same time it will take a useful place in the scanty literature of English architecture dealing with methods of repair of historic structures. The subject is approached in a bold manner, however, being in effect a treatise upon "The new science of conservation," and appears at an opportune moment when so much preservation of buildings is in the air. The theme is centred upon the one building of St. Paul's Cathedral, with occasional reference to certain others, mainly in a ruinous state. Sound criticism is directed to the doubtful methods now in course of application, and there are valuable chapters on diagnosis, by no means complete, however, followed by an attractive series of suggestions for "scientific" repair.

The "science" consists mainly of the methods adopted in recent years by H.M. Office of Works in determining the causes of failures in certain ancient structures and in the application of repairs, mainly of an engineering kind. The efforts of this Government Department have been largely directed to ruined works, not merely to their superficial condition, but more especially to their state of structural weakness. Much experience has been gained from "progressive experiments," and having unlimited means and an unfettered course, great thoroughness, amounting frequently, as some people think, to extravagance, has resulted; indeed, it is the persistent habit of this authority to reinforce whole structures as well as portions only. Mr. Harvey is well versed in these actual operations, which not only receive approval, but merit, in his view, the title of "science of conservation." Herein lies a great risk.

The first principles laid down by the author are: the conservation of original work; the avoidance of new material disturbing to artistic amenities; and to remedy the structural condition of defective parts "in such a manner as will best serve to unite the whole." These principles are old; the "science" is new, and, unfortunately, untried. The greatest principle of all, however, is not fully expressed in this work—that no two buildings are alike in design or construction, or yet in the nature of their defects. This principle is applicable to repairs, and is fundamental in historic buildings. Conservation is incomplete without this important consideration; indeed, great harm would be wrought if any accepted system of calculated repair became general. Continental efforts give an indication of the results of such procedure, and our own official attempts are now tending in the same direction of unsympathetic uniformity, combined with doubtful durability of modern building practice, mainly of an engineering nature.

Mr. Harvey's treatise is perhaps disproportionate, although its outlook is largely directed to the maintenance by reinforcement of one building. Comparatively little is said of the actual construction or materials at St. Paul's, matters in which the popular reader should be informed. Reference made to certain failures in the conception of the design is unconvincing, being qualified by the fact that the author's conclusions are subject to further investigation. It is not difficult, therefore, to make the reader's flesh creep, but it would have been comforting to all interested in St. Paul's if some reassuring statement had been submitted concerning essential preliminary repair before

any colossal and theoretical scheme of doubtful value were attempted.

All practical builders will agree with Mr. Harvey's dislike of the grouting operations now being carried on; method and material are doubtful. The internal walls and piers of St. Paul's are faced with stone ashlar of varying kinds and sizes, masking a core of very weak and irregular lime-built stone rubble. Unequal settlement in the two materials has resulted, producing immense cumulative weakness in the main supports and arches of the great central feature, and it is in this direction that the first repair is needed without loss of time. The core has little weight-carrying value; its shrinkage from the ashlar facing transfers dangerous stresses to this outer masonry, and no grouting can possibly restore the necessary strength or means of solidifying the whole. Nothing but a replacement of the weak core by a reliable substitute will suffice, and it must be done before any fantastic remedy in reinforcement is considered, and must be carried out with materials the power and permanence of which are both tried and traditional.

"Two of the greatest assets of scientific repair are metallic reinforcement and Portland cement," and they are recommended for use in gigantic efforts at St. Paul's even as the Office of Works has employed them in endeavouring scientifically to maintain many of the finest ruins in this country on a lavish scale.

The author's design for the insertion of a large reinforced concrete cone to pick up the double drum carrying the dome and to distribute the gathered weights over walls, bastions, and vaults, is an exceptionally ingenious idea. It is open to several practical objections, and especially one not touched upon by Mr. Harvey—its durability. This new structural feature, being spherical in plan, requires continuity in its manufacture and subsequent functioning. It is doubtful if homogeneous continuity can be secured in the insertion of so large a feature in so impeded a position and so comparatively unknown a material. If it be attempted, then a risk of acute disturbance to the Cathedral is set up at the most complicated point in its construction, and if this condition of continuity is not secured the feature is valueless.

But why introduce an untried method of building in a monument of this importance? Reinforced concrete is a modern use of steel and cement, an ideal combination in theory, but one which has not stood any reasonable test of time. The common reinforcement, mild steel, is admitted to possess greater tendency to rust than any other metal in ordinary building use. It is claimed that the protective cover of concrete will exclude the varied atmospheric influences which promote corrosion. This cannot be so in any long period of years in circumstances of persistent alternations. In course of time these concrete insertions will require repair.

In the first place, how, it may be asked, is a fractured or contracted concrete beam to be reconstructed in position to retain its strength, and how is the rusted reinforcement to be removed and replaced with new? Again, to what extent will an ancient building, like St. Paul's, or a ruin like Tintern Abbey, be wrecked, first in locating and then in approaching and removing the buried ferro-concrete reinforcement? Architects familiar with the repair of old buildings will know how powerful and destructive is the action of rust expansion upon surrounding masonry. The tendency to rust varies, strangely enough, inversely with the age of the metal. Early Mediæval wrought iron was of great purity, and remains sound in many instances to this

day; but gradually in later times as it deteriorated in quality so the rusting power increased, until to-day the ordinary wrought iron, and much more so the mild steel, whose base properties conducive to rapid corrosion.

It is not necessary to refer to the behaviour of the two main substances constituting ferro-concrete during expansion, contraction, and condensation, or to the lack of flexibility, adaptability, and the like, it be said that this material, which forms the basis of the application of scientific repair, is altogether undesirable in ancient buildings of which, being lime-built, are in various degrees flexible and yielding to climatic other influences.

The question of corrosion of reinforcement does not enter largely into Mr. Harvey's calculations. He recognises it, however, in commending that it be "out of contact with the air." Again, he says that certain masonry "should be reinforced with non-corroding metal" owing to the slight substance of stonework. Thus is this profound conclusion slurred over. It would be a misfortune if the theoretical method of repair should be adopted in St. Paul's Cathedral. It should be remembered in this connection that the Survey of the Fabric has for years been engaged in moving rusted wrought iron and repairing damage thus caused to masonry.

In frequent references to the Office of Works to the ruins of Tintern, Jedburgh, and Abbeys, Mr. Harvey unfolds the "scientific measures." Is it not a misfortune that so untried ferro-concrete should have been inserted in these remains at such great expense? At Tintern Abbey a whole network of immense ferro-concrete beams has been inserted in the tops of the walls. The beams have a protective cover of masonry of comparatively little substance, mainly to hide from view, and they are situated in the thickness of the walls subject to greatest climatic exposure. The alternations of temperature of moisture cannot allow these "scientific agents to remain quiescent in such a situation. Sooner or later, when rust sets in, the shrinking or expanding beams, further repair will be required. Where, then, is the "homogeneity"? The greatest trouble begins in the new repairs, and will bring comparable havoc to the structures.

The walls of Jedburgh Abbey have stood 800 years, badly built as they were, and centuries have remained unroofed and unprotected. Will the rustable reinforcement and other mild steel details of the official endure for half that time? This is a less artificial way of repairing ancient buildings, for we are dealing with monumental maisonnettes. It is surely the safest course to adopt to repair old buildings as far as possible with the same materials of which they were built.

Westminster Hall roof could have been paired in oak, and whereas much original might be lost, both the design and the wonderful conception in carpentry would have been retained. Much of the latter has been placed to accommodate a heavy and costly reinforcement, the durability of which is certain, owing to its inaccessibility for painting and for other protective measures.

Upon other processes of preservation where the "scientific" method is inapplicable Mr. Harvey's treatise is unhappily brief. Repair of jointing in masonry by point methods of replacement of decayed masonry, the removal of buried wrought iron, the natural choice of materials, the repair of masonry, the effect of vibrations and of heat upon old buildings, climatic influences, other matters, have little place in the plan of St. Paul's Cathedral or to the buildings dealt with by the author.

The burden of this book, therefore, is the sale reinforcement; and because the selection of its four materials has a calculated application of this process, untried, yet doubted by experience, is without reservation as the "scientific" of restoring decaying structures.

* By William Harvey. Price 10/6. London: 9, Queen Anne's Gate, Westminster, S.W.1. 1925.

MODERN TOWNPLANNING IN PALESTINE

THE progress of the Jewish re-settlement of Palestine is well illustrated by the application of the most up-to-date methods of town planning. Richard Kaufmann (the town-planning expert employed by the Zionist Organisation, Palestine Land Development Co., and other organisations) was in England recently to confer with Prof. Abercrombie and other authorities here, and while in London gave an account of his work.

Mr. Kaufmann said that the rapidity with which new Jewish settlements were being founded, both in urban and agricultural districts of Palestine, made the question of town planning a matter of urgent necessity, both from the aesthetic and economic points of view. The nature of the country made the work technically of some difficulty, but considerable success had been achieved in adapting the layout of roads and avenues to local contours. He illustrated this by examples of new suburbs constructed in the environs of Jerusalem and other places, where advantage was taken of every feature of the surroundings to combine beauty and utility.

Palestine is the first country in the world where the principles of townplanning have been successfully applied to agricultural settlements. Mr. Kaufmann showed two examples of work in this direction. The co-operative colony of Nahalal in the valley of Jezreel is situated on an oval hill, the summit of which has been used for the communal buildings which dominate the settlement. The hill is encircled by a road, from which the approach roads branch off. In the centre space of the circle are the houses and gardens of the non-resident members of the colony, the schoolmaster's house, shoemaker, &c. In the outer circle are the homesteads and holdings of the farming families, all equidistant from the communal utility buildings. The cereal lands radiate from the flatter areas at the foot of the hill.

A different arrangement has been adopted in the case of the other settlement, known as Tiberias, a colony of orthodox Jews, on a similar site near the lake of Tiberias. Here, for religious and æsthetic reasons, the synagogue and the people's hall are placed at one end of the hill overlooking the lake, while the utility buildings (such as the granary), are again placed in the rear. Careful planning has been applied to

the courtyard of each farm, regard having been paid to the prevailing winds, &c.

Mr. Kaufmann's most ambitious design relates to a projected town at the junction of the main roads and railways between Jerusalem and Syria and Haifa and Damascus. Special attention has been paid to the location of the industrial, commercial, and residential districts, clever use having been made of park belts, while the sunken railway will cause the minimum interference with traffic. Mr. Kaufmann stated that there was a real appreciation in Palestine of the benefits of town-planning and every new scheme showed improvements.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

The Raffles Davison Volume.

SIR,—I was pleased to read the suggestion that a volume recording the drawings of Mr. Raffles Davison should be published. As a reader of your journal for many years, and as an ardent admirer of the work of Raffles Davison for 25 years, I trust the scheme will be supported to the extent of publication. Should this take place, please be good enough to record my name as a subscriber.

Sydney.

B. J. WATERHOUSE.

The Mock-Auctioneer.

SIR,—May I request the hospitality of your columns to warn the public against the wiles of the mock-auctioneer? During the past few months the numbers of these pests have increased out of all reckoning. At the same time, only a very few have been the subject of criminal prosecution.

On Saturday, during the course of a walk eastwards from Piccadilly-circus, I came across no less than seven "mock-auction" rooms in full swing. Their methods did not differ to any extent. First, a few flashy-looking "gold," "silver," or china-ware articles were pressed upon the curious ones who had drifted in. Then, actively assisted by friends in the audience, the bidding for other junk was forced up, concluding with the sale to half-willing, more than half-muddled, purchasers of similar trash at extortionate prices.

As has been already intimated, my Society are sparing no pains to obtain the co-operation

of all bodies interested—property owners, tenants' protection associations, goldsmiths, silversmiths, furniture makers—in order that a Bill may be presented to Parliament, and an effectual stopper placed upon a nuisance that has been suffered to continue far too long. We have already met with a considerable measure of success, and trust to be in a position to go forward with such a measure next session.

JOHN STEVENSON,
General Secretary,
The Incorporated Society of Auctioneers
and Landed Property Agents.

The Freemasons' Million Memorial Scheme.

SIR,—Surely the imagination of all Masons must be deeply stirred by the projected memorial, the scale of its conception, and, not least, the warmth of response. Whilst the appeal is still maturing, and before the project is too far advanced for the incorporation of this thought, I suggest to those responsible for its further development that it would be well to provide for a Masonic Memorial of a treatment firmly rooted in the spirit, symbolism and craft of Masonry, and that a mode of construction should be adopted which employs the materials and methods of the old master builders. Let us for this purpose rely upon masonry—rough hewn, if need be—built to endure, of granite, and above all, do not let us compromise with substitutes and imitations.

ARTHUR E. COLLINS,
Past President,
Institution Municipal and County Engineers.

Lowest Tender Not Accepted.

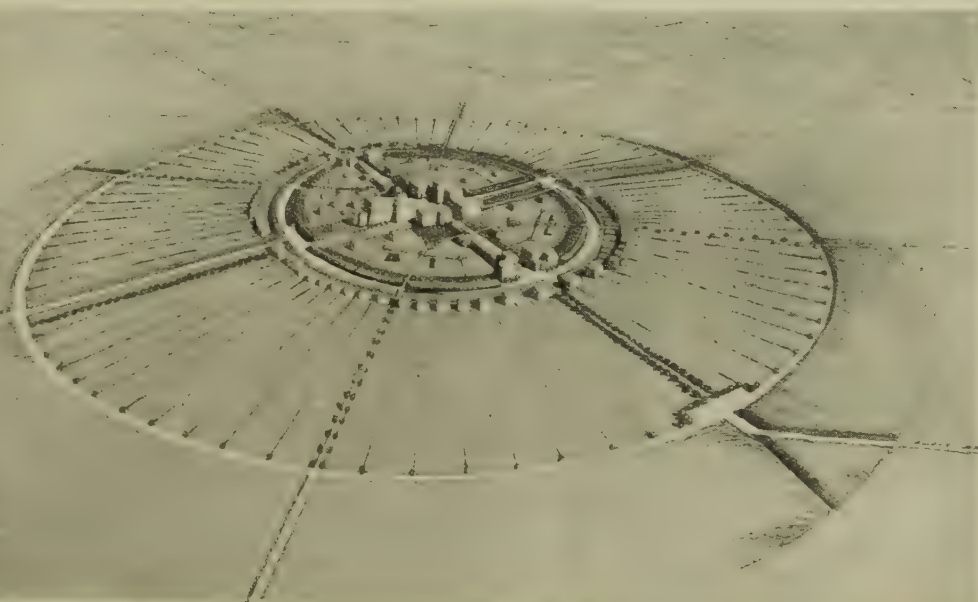
SIR—We regret to find a growing tendency among church councils, &c., not to accept the lowest tender in private competitions, but to choose their own man. Is there any way of checking this manœuvre, which cuts at the root of bona-fide tendering? We should be glad to know if any brother builders are suffering from this practice.

"A LONDON FIRM."

Heal's Building.

SIR,—I was very pleased to notice in the article by Mr. William W. Wood, A.R.I.B.A. (September 11th), that Heal's shop in Tottenham Court-road is praised as a beautiful building. There are few other buildings of this standard in London's streets.

TERENCE LANE.



Bird's-eye view of the Lay-out of the village of Nahalal, Palestine.

MR. RICHARD KAUFMANN, Architect.

THE BIRMINGHAM CIVIC SOCIETY'S REPORT

We have received the annual report for 1924-25 of the Birmingham Civic Society, a society of citizens of that town "who see the necessity for stimulating a wider concern for the beauty of their city." The importance of the work of this body, from an æsthetic point of view, cannot be over-estimated; its general aims are as follows:—(1) To stimulate historical interest in the city, and to this end to preserve all buildings and monuments of historical worth; (2) to preserve all objects of beauty, and to maintain a vigilant opposition to all acts of vandalism; (3) to promote a sense of beauty, and to stimulate civic pride in the domestic and civic life of the citizens, by urging the adoption of the highest standards of architecture for domestic buildings, offices, warehouses, factories, etc.; (4) to work for a more beautiful city, by assisting with advice any scheme or works controlled by public bodies, ranging from town planning to designs for parks, bridges, fountains, memorials, etc.; (5) in addition to influencing the work of others, to select suitable projects to be carried out by the Society itself.

A general meeting of the members of the Society was held in the City Council Chambers on June 29 to receive the annual report. The Right Hon. the Lord Mayor (Alderman

Percival Bower, J.P.) presided, and the Earl of Crawford (Chairman of the Royal Advisory Art Commission) gave an address. The Gold Medal of the Society, awarded annually for exceptional services towards the increase of amenity in Birmingham, was presented to Alderman G. Cadbury, junr.

The development of the Park plans referred to in the previous year's report has proceeded during the current year. The entrance to the new park at Yardley is an example of this branch of the Society's activities; one can see by a glance at the illustration how eminently suitable is the general arrangement.



The New Terrace Wall and Steps, Aston Hall.

Another similar work being executed by the Society, in co-operation with the City Park Department, is the developing of the grounds at Aston Hall, in order to bring them into closer relation with the mansion itself, and by doing so, to provide it with a setting worthy of its historical and architectural importance. Heretofore this has been done can be seen by looking at the illustrations reproduced from the Report.

The first portion of the new gardens to be constructed was that in the east forecourt at the central avenue extending to the east boundary. The avenue has been converted from gravel to grass; and when the accompanying view was taken, the focal point at its eastern extremity was about to be developed, with the great Warwick vase from the south port of the Hall as a central feature. At the point where the avenue reaches the forecourt, the new stone terrace and steps designed and given by the Civic Society have been completed.

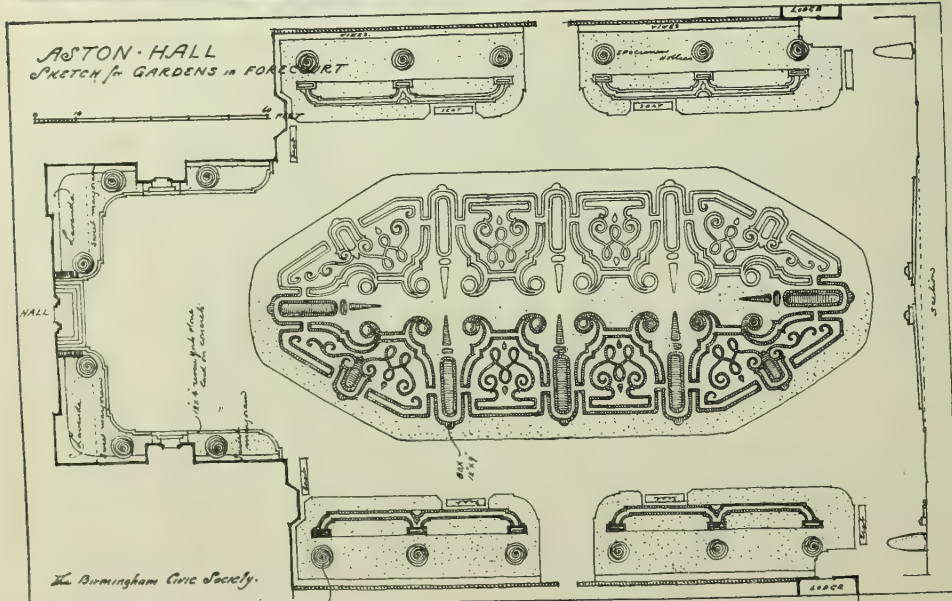
The box garden in the forecourt is remarkably successful in its first effect, but it is readily be understood that the precise cutting and shaping of the fully established plants essential to perfection in topiary work of this character. Several important accessories yet in place will add sensibly to the general effect. Attention is drawn to the unusual dimensions of the centre bed, and to the fact that only flowers known in the seventeenth century are to be planted there.

The plan of the bowling green is part of the working drawings prepared for the garden west of the Hall; the work itself is still in its initial stages. Much of the levelling has been done; the bowling green and Italian Garden have been grassed, and the shaped holly hedges about the latter has been planted. It is hoped to complete the greater part of this section of the work during the present year.

This for the garden planning. The President goes on to say that "as the new garden develops, the need for a change in the present arrangement and use of the Hall itself become apparent." A letter to the Chairman of the Art Gallery Committee, indicating the views of the Society, is reproduced; the suggestions put forward include the removal of some modern out-buildings which back the north wall of the forecourt, and the replacement by less crudely coloured glass that in the end bay of the galleries. The Director of the Art Gallery intends to put these ideas into effect.

Other activities of the Society include the preservation of old houses. The old Inn at Deritend, for example, a fine timbered house, probably the oldest in the town, was recently threatened with demolition after sale. The Society proposed to save it from this fate, but compromised by obtaining a written assurance from the purchaser that it was in no danger.

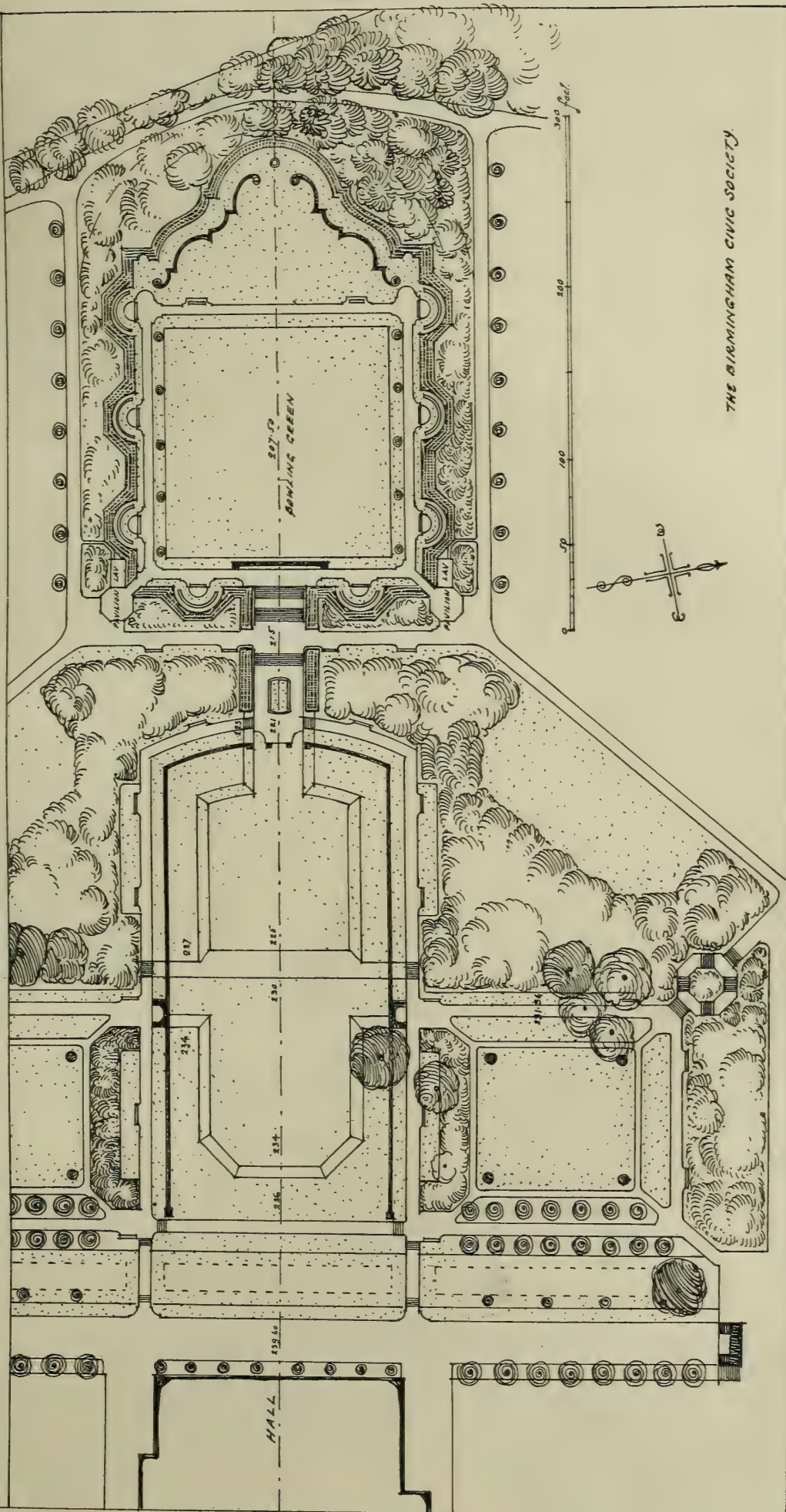
The membership is now 330, and is steadily growing. The Society is confident that the work were more widely known it would still further support; the annual subscription is purely nominal. Those interested should write to the Secretary, at 37, Bennett Street, for particulars, and enclose 1s. 6d. for the year's report.



View and Plan of the New Gardens and Terrace in the Forecourt of Aston Hall.

ASTON-HALL: GARDENS on WEST-FRONT

SECTION on CENTRE-LINE



Picture Map of the Complete Scheme for Aston Park, Birmingham. [From the Report of the Birmingham Civic Society, 1924-25.]

LEADING CONTENTS.

A PROPAGANDA COMMITTEE ?	449
NOTES	450
GENERAL NEWS	452
COMPETITION NEWS	452
THE PRESERVATION OF ST. PAUL'S CATHEDRAL	454
MODERN TOWNPLANNING IN PALESTINE	455
CORRESPONDENCE	455
THE BIRMINGHAM CIVIC SOCIETY'S REPORT	456
LEGAL SECTION	464
HEATING AND VENTILATION	466
THE BUILDING TRADE	474
TOWNPLANNING INSTITUTE	475
CONTRACTS, COMPETITIONS, &C.	476
NEW BUILDINGS IN LONDON	478
PROPOSED NEW BUILDINGS AND OTHER WORKS	479
NEW COMPANIES	483
TENDERS	483

ILLUSTRATIONS

Southampton Harbour Board's New Offices.

The new offices of the Southampton Harbour Board, which were recently opened by Earl Jellicoe, take the place of a previous structure erected in 1885. Numerous schemes for a new building had been prepared during the last few years aiming at the better housing of the Board, but for one reason or another they never materialised, and remained in abeyance till November, 1922. It was then resolved to re-open the matter, and the Board's engineer and architect (Mr. E. Cooper Poole) prepared plans which were finally approved.

The new offices are built partly upon the site of the old premises, a large portion of which they incorporate. The external dominating feature is a Doric central colonnade pediment and tower. The entrance hall is carried out in oak and is square in shape, one side being devoted to a counter, over which the business with the general staff is conducted. A corridor which leads off from the left hand of the entrance hall gives access to the wharfinger's office, and the engineer's quarters, which include a private office, drawing office, plan rooms, &c. These have all been carried out in oak. A similar corridor on the right hand side of the entrance hall leads to a grand staircase of oak, elaborately carved.

The clerk's room, which is also entered from this corridor, is panelled in oak. Adjoining this are the accountants' office, and the Harbour Master's office. The clerks' apartments are light and roomy, and the accountants' quarters are furnished in mahogany.

The largest room on the ground floor is the general office, which is designed especially for the accommodation of the staff.

On the first floor the principal offices are found. These comprise the board room, committee room, chairman's room, lobby and cloak room. The committee room, which is noteworthy for its five massive windows and panelled walls, has been furnished throughout in oak, the accommodation being sufficient to meet the needs of any of the Board's many committees. The room overlooks the huge sixty-thousand-ton floating dock and the Town Quay, the latter of which is the Board's property. Adjoining it is the chairman's private room, furnished and panelled in mahogany.

A circular columned and domed lobby leads from the committee room to the board room. Here is also a balcony over the entrance. A light well for the entrance hall below is another notable feature, the inside of the circular aperture being noteworthy for some carved panels of nautical interest. The dome and columns of this lobby are of the Ionic order. On the other side of the lobby access is provided to the board room, which has mahogany panelling and twelve mahogany columns of the Ionic order, with copper bases and caps. They are formed in groups of three in each of the four corners of the room.

The contractors were Messrs. Playfair & Toole, Southampton, for the foundations; Mr. H. Cawte, Southampton, for the superstructure. The following were sub-contractors: Artificial stonework, Messrs. Stuarts Granolithic Stone Co., London; hardwood joinery, Messrs. Elliott & Sons, Reading; heating and ventilating, Messrs. G. N. Haden & Sons, Trowbridge; fibrous plaster work, Messrs. H. E. Gaze, Ltd., London; metal work, Messrs. Crittall, Braintree; steelwork, Messrs. E. C. & J. Keay, Ltd., Dalston; "Tilas" floor covering, Messrs. Scott, Somerville & Co., Southampton; electric lighting, Messrs. F. W. Cook & Co., Southampton; clocks by the Synchronone Electric Clock Co., London; complete furnishings by Messrs. Shepherd & Hedger, Southampton; carving by Mr. L. F. Rosslyn, R.B.S., South Kensington.

Tetton House, Kingston, Somerset.

This house, which stands on the beautiful southerly slope of the Quantock Hills, appears originally to have been built about 130 years ago. Since its building, various straggling additions have been made to it and several of the internal walls on the ground floor have been removed in order to enlarge the principal rooms. The present alterations comprise the addition of a smoking room and completely new accommodation for the owner and his family, consisting of two private sitting rooms, bedroom suite and nurseries. All the offices, except the kitchen block, had also to be rebuilt, and the opportunity was taken, therefore, of making these works a complete remodelling of the whole scheme. The convenience of service and the desirability of being able on occasion to use the new private rooms without opening the rest of the house dictated that the plan should be formed round an enclosed court. The west front is entirely new, and the south front owes to the existing building nothing but the general ordonnance and proportions of the openings. The irregular levels of the ground have caused considerable difficulty in planning.

The walls are covered with cement discoloured to a bright apricot colour to match what old work remains. The dressings are of artificial stone painted white. The domical roofs to the bay windows are of copper, and the roof slopes where visible are covered with mottled purple and green slates from the West Country. Mr. H. P. Goodhart-Rendel, F.R.I.B.A., is the architect.

Memorial Hall, London University.

This perspective view shows the reconstruction of the Memorial Hall, formerly a church building in Gordon-square, which was designed by Professor Donaldson. It is proposed to install an organ and build a gallery, and to embellish the interior as part of the War Memorial to

those Fellows and Members of the College fell during the Great War. The architects Messrs. Richardson & Gill, F.R.I.B.A.

New House, Wolsey-road, Moor Park, Herts.

This house, which is now being erected in Wolsey-road, Moor Park, is situated on a falling rapidly from the road and advantage has been taken of this fact and an endeavour to produce a house of a long, low, farm-type. Externally, the house is treated roughly-trowelled "smooth cast," the main feature to the front being in Dutch bricks oak half-timbering over, adzed and left in natural state. The roofs are covered with sand-faced tiles. The windows are star iron casements throughout. The accommodation comprises drawing-room, dining-room, kitchen, garage and offices on the ground and five bedrooms, bathroom, &c., on the floor. Messrs. D. G. Somerville & Co., Ltd. the contractors, and Mr. Gerald W. F.R.I.B.A., is the architect.

Southway House, Southway, Hampstead.

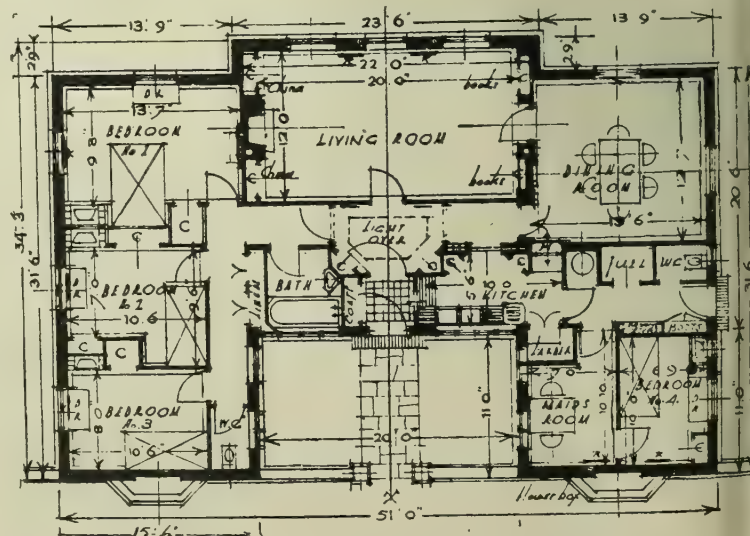
The principal materials used in this are hand-made red facing bricks, hand-laid red tiles to roof, a delf faience surround the doorway, wrought-iron and stone to balcony, and stone and brick pavings. The general contractors were Messrs. Lister & Co. (Builders), Ltd., and the sub-contractors as follows: Hot and cold water and heating installation, Messrs. The Air Vent Heating Co.; facing bricks, Messrs. Thomas Law & Co.; roof tiling, Messrs. Roberts, Adair & Co.; marble to fireplaces, Mr. H. C. T. faience surround to front door and tile fireplaces, Messrs. A. Bell & Co., Ltd.; p.g. flooring to hall and drawing room, Mr. J. Ebner; garden, Messrs. The Horticultural Supply. The architects are Messrs. William Edward Hunt, F.R.I.B.A.

A Bungalow near Halstead, Essex.

Planned as a roadside house in a lane, the house has all windows save offices to the east and west. The accommodation comprises living rooms, four bedrooms and offices. The house is planned as three self-contained groups of small hall. Mr. P. D. Hepworth, F.R.I.B.A., is the architect.

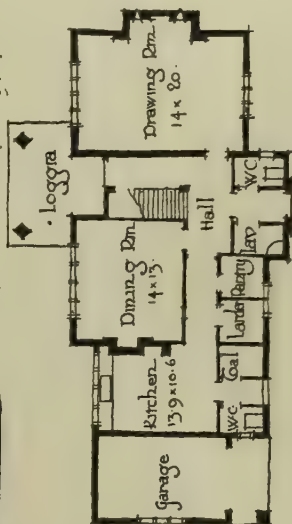
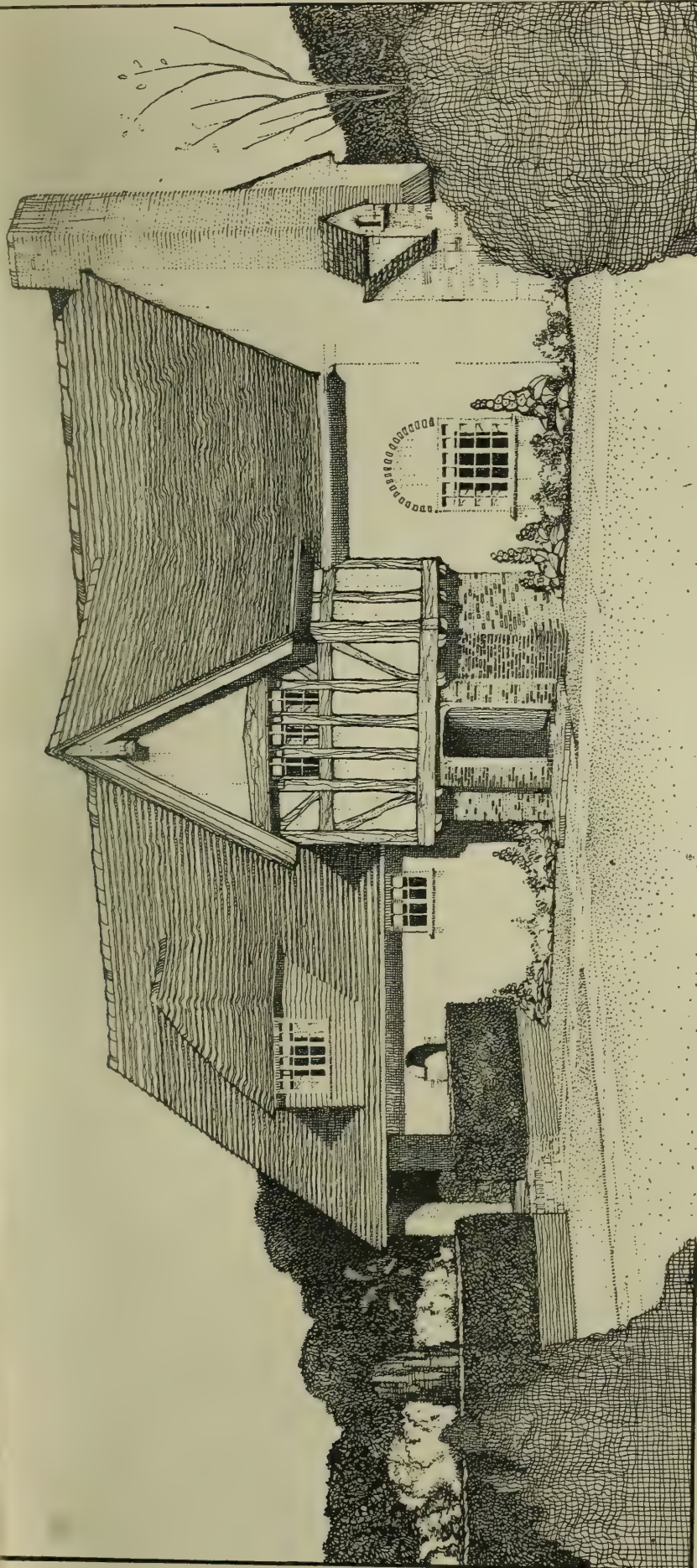
Little Paddocks, Sunninghill.

This illustration shows some exterior of a country house built in the late eighteenth century. The additions have been carried out to harmonise with the existing features. The contractors were Messrs. W. H. Lordon & Co., Upper Tooting, S.W., and the architect Messrs. Richardson & Gill, F.R.I.B.A.

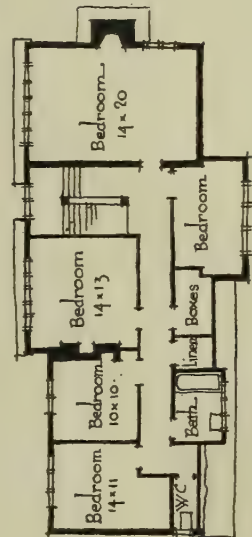


Plan of Bungalow, near Halstead, Essex.

MR. P. D. HEPWORTH, F.R.I.B.A., Architect.

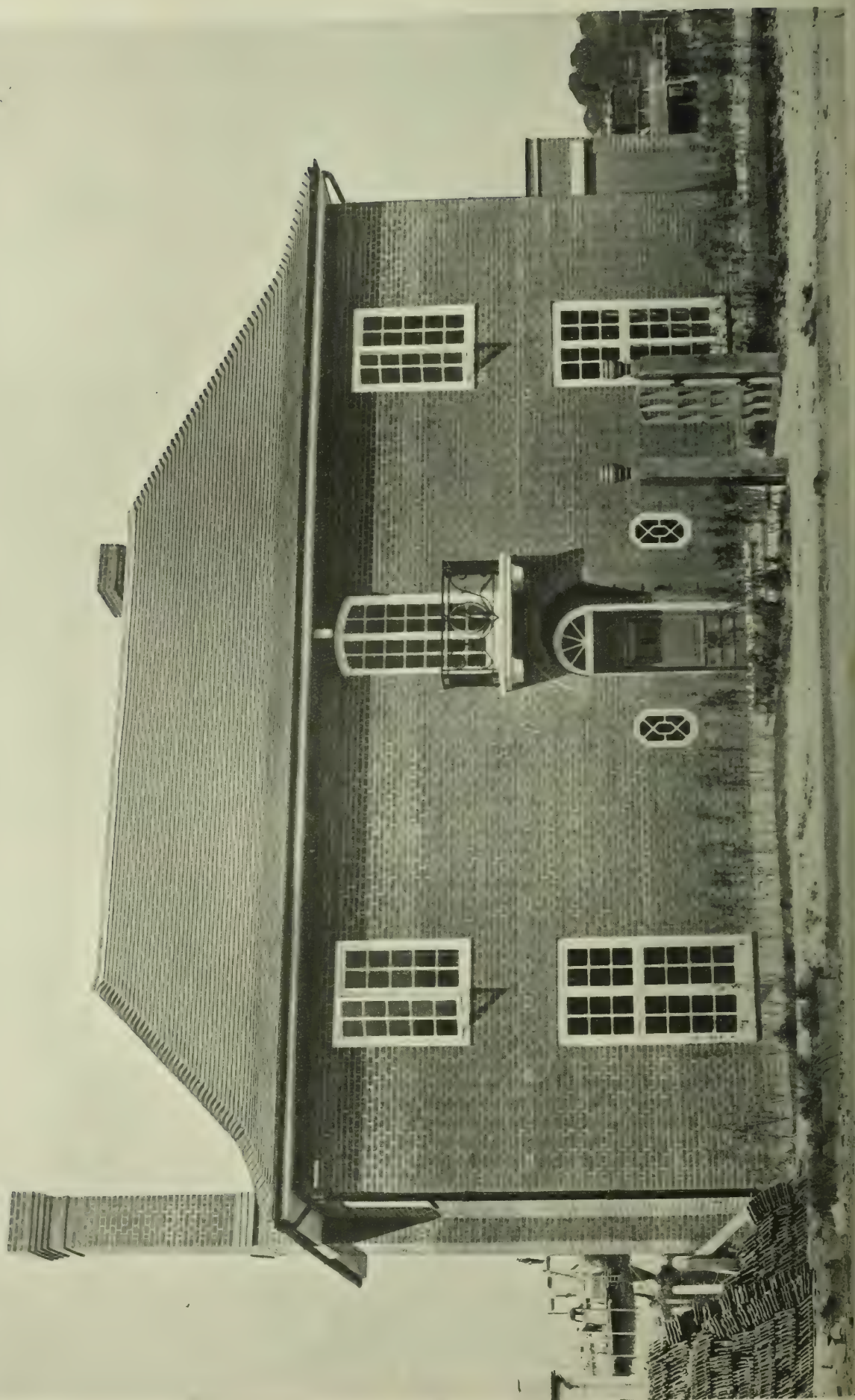


Ground Floor plan.

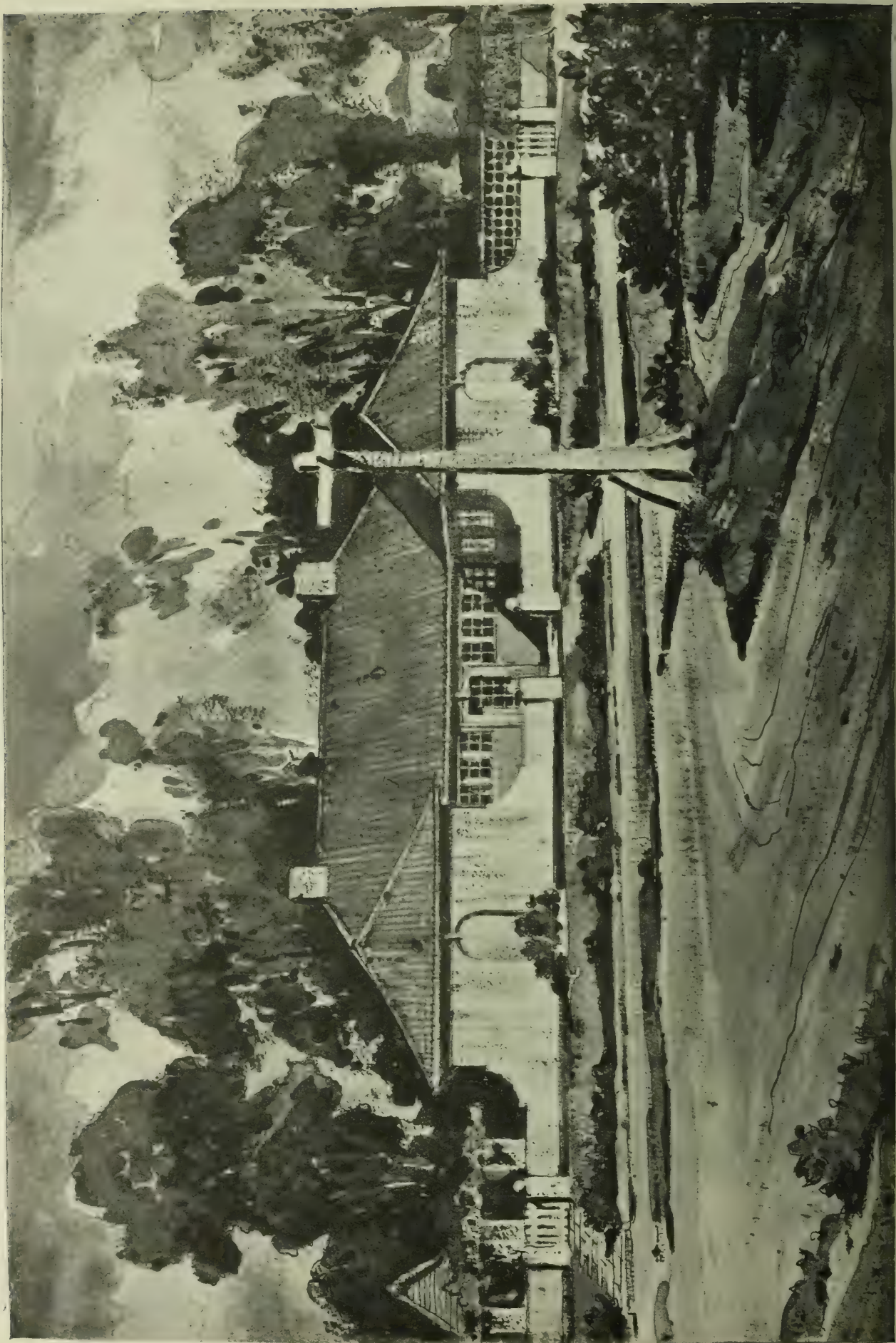


First Floor plan.

A House in Wolsey-road, Moor Park, Herts. MR. GERALD WARREN, F.R.I.B.A., Architect.









ROYAL ACADEMY EXHIBITION, 1925.

Interior of Mo

Messrs. RICHAR



University.

Architects.



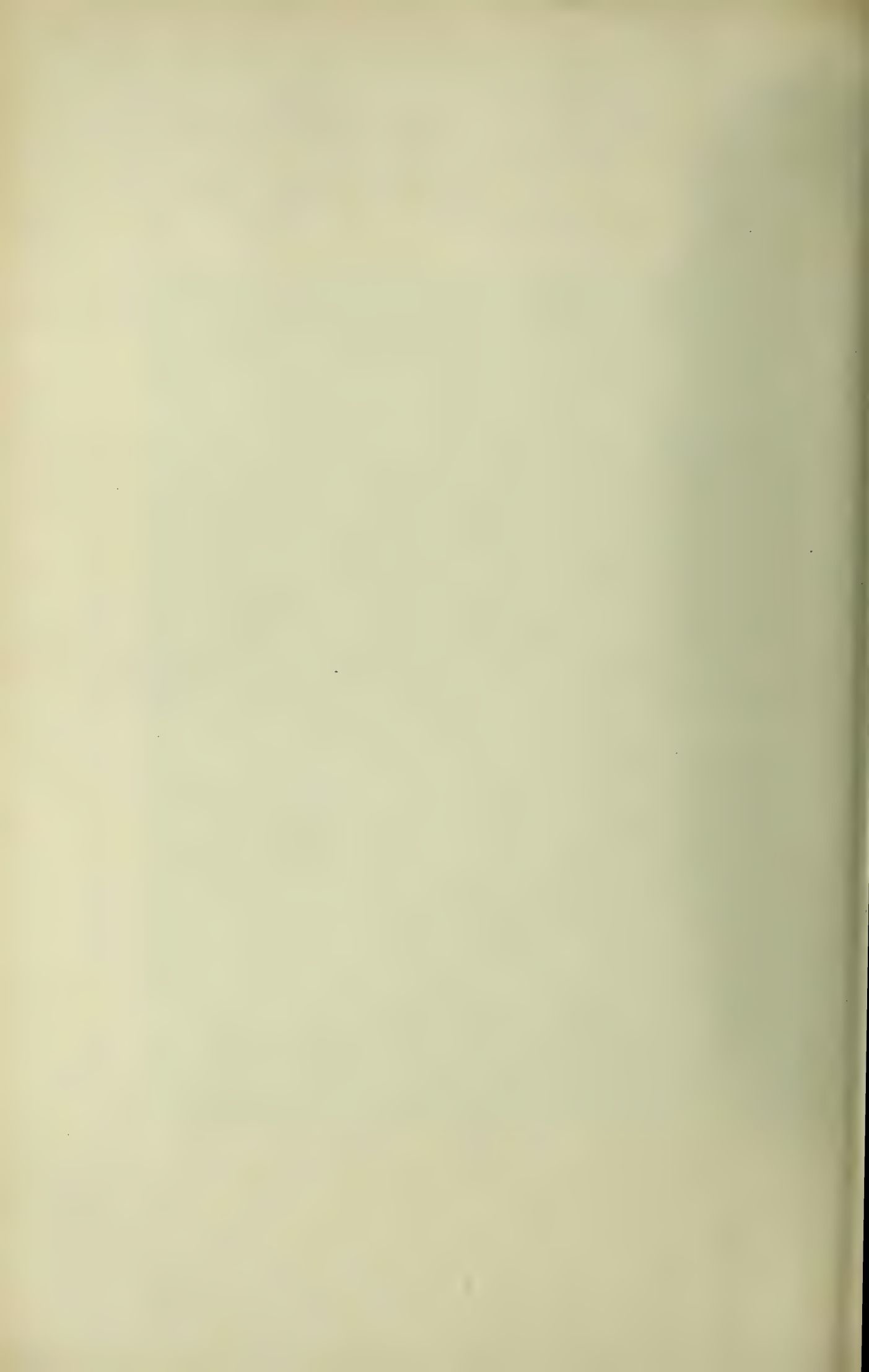
Tett

Mr. H. S.



erset.

, Architect.





"Little Paddocks," Sunninghill. MESSRS. RICHARDSON & GILL, F.F.R.I.B.A., Architects.



New Harbour Board Offices, Southampton. Mr. E. Cooper Poole, Board's Engineer and Architect.

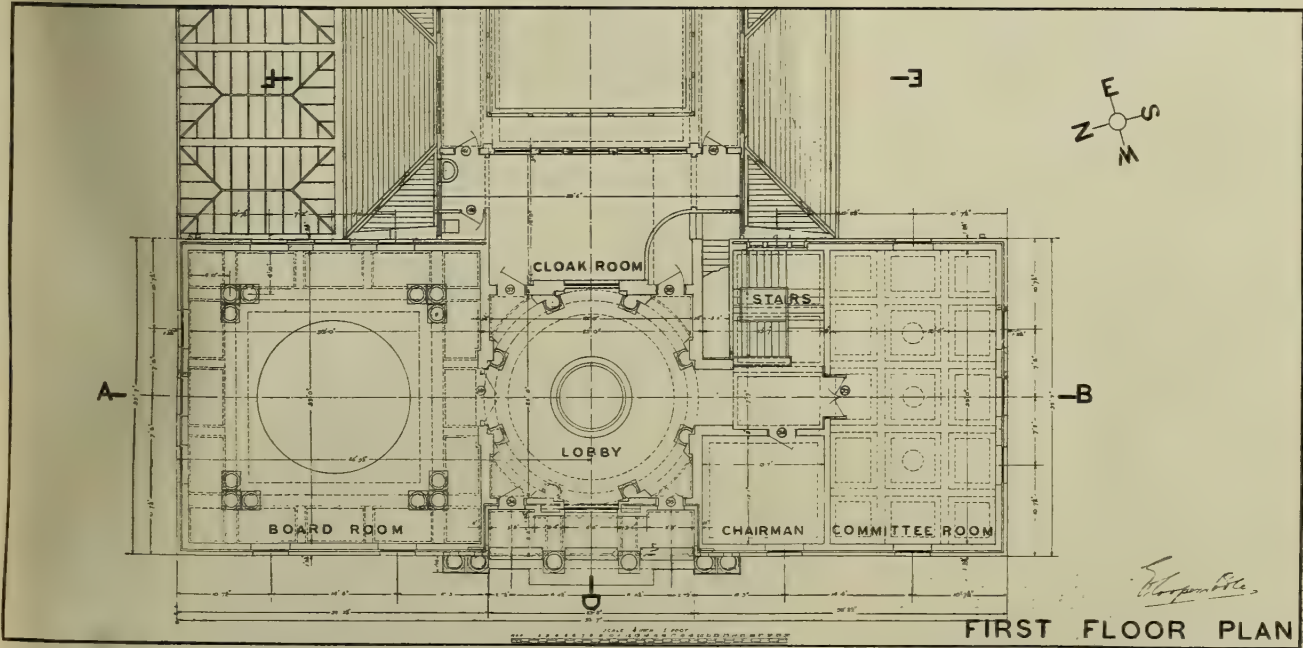
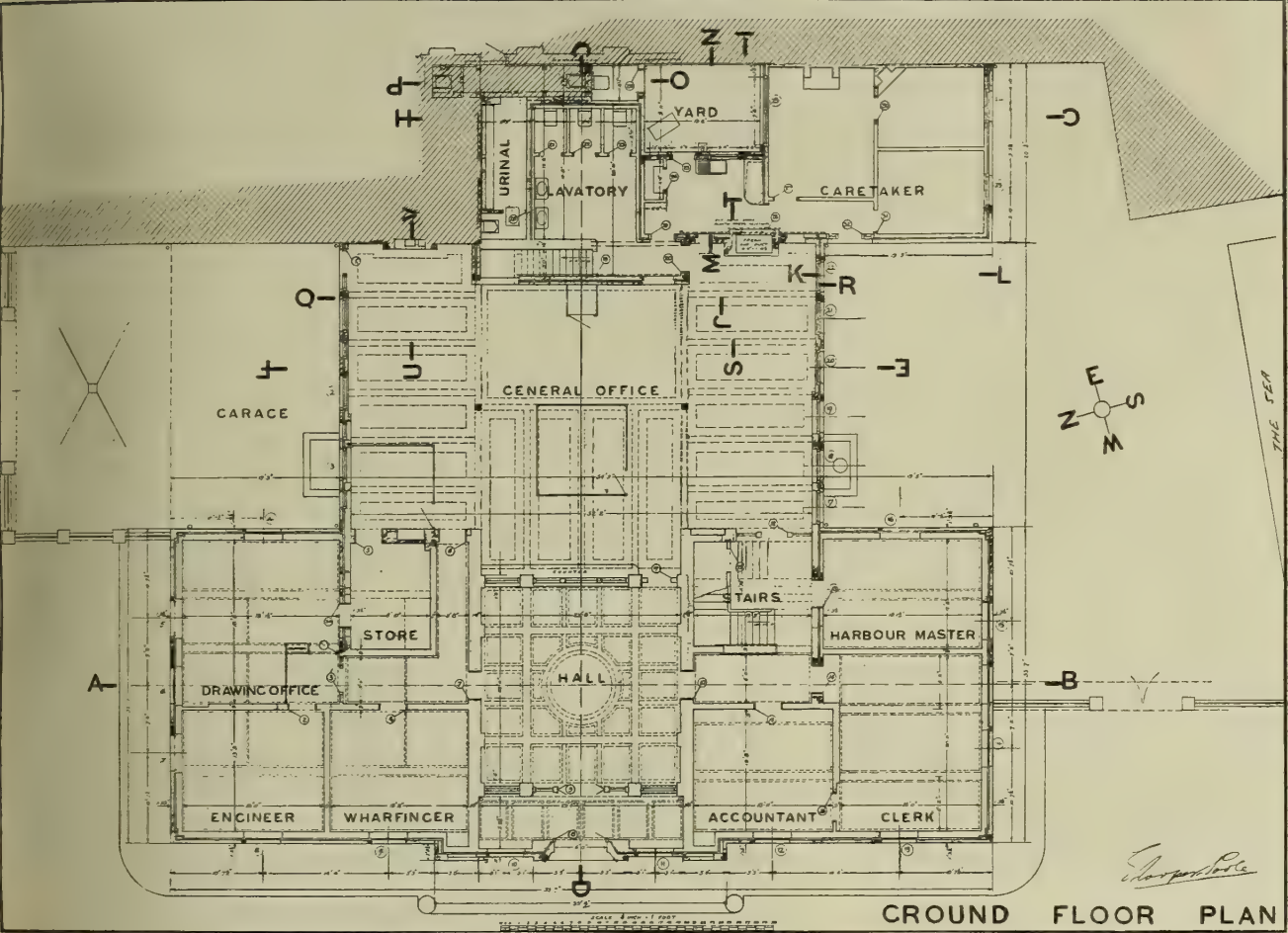


THE HALL.



THE BOARD ROOM.

New Harbour Board Offices, Southampton. MR. E. COOPER POOLE, Board's Engineer and Architect.



New Harbour Board Offices, Southampton: Plans.

MR. E. COOPER POOLE, Board's Engineer and Architect.

LEGAL SECTION

NOTES ON CURRENT CASES

Buildings in "Streets."

IN our issue August 21 we considered a case which turned upon section 3 of the Public Health (Building in Streets) Act, 1888, *Attorney-General v. Laird*, and in the current Law Reports another case is reported which raised a different point under that Act, (*Attorney-General v. Denby*, 1925, 1 Ch. 596). The section is as follows: "That it shall not be lawful in any urban district, without the written consent of the urban authority, to erect or bring forward any house or building in any street or any part of such house or building beyond the front main wall of the house on either side thereof in the same street. . . ."

In *Laird's* case the two points raised were (1) whether the two buildings in question were in the "same street," which incidentally involved finding whether the part of the roadway in which the building had been advanced was a "street" within the meaning of the Act; and (2) whether, if the two buildings were in the same street, their relative positions were such that the words "the front main wall of the house on either side" could apply.

In *Attorney-General v. Denby*, the action was brought by the Attorney-General at the relation of two ratepayers, owners of adjoining properties, for an injunction and mandatory order based on two grounds: (1) on the ground that there had been a breach of section 3, the building in question having been advanced beyond the front main walls of the two buildings on one side of it without due consent of the urban authority; and (2) that this building contravened a by-law as to ventilation and air-space.

The facts, shortly stated, were as follows: On the sea-front at Lyme Regis there is a parade facing the sea, and at the portion of this parade in question there are houses which form a row.

The house of one of the relators was at the west end of the houses forming this row, facing the sea, but set back 10 ft. from the parade. The house of the other relator adjoined this house to the east. Immediately to the west of the house of the first relator was a vacant site which had been purchased by the defendant in September, 1923, with the view of erecting a hotel upon it. The site ran back from the parade to a depth of 50 ft., but the land in its natural state rises abruptly at a slope of about 40 degrees. The site next to the first relator's house had been excavated to the level of the parade some 40 ft. back, and the higher land to the north was supported by two curved retaining walls with their concavities to the south. A public park bounded the site to the north on the higher ground and also was the boundary to the west, but to the west of the site and between the site and the public park was a piece of hilly ground which the defendant had undertaken to use as a private garden.

The plans for the hotel prepared by the Borough Surveyor showed the hotel with about 60 ft. frontage set back 2 ft. from the parade, and therefore about 8 ft. in advance of the front main wall of the house adjoining. The hotel, as shown, went back to a depth of about 28 ft., but behind this was an annexe up to the second floor, containing a heating chamber, bathrooms and water closets. This annexe was 13 ft. wide and went back 10 ft. close to the retaining wall. The height of the hotel to the roof from the bottom of the excavation was 34 ft., and the bottom of the roof was about level with the top of the above-mentioned retaining walls, beyond which the ground sloped upwards to the public park.

The plans did not show the position of the buildings immediately adjoining the proposed hotel, as required by by-law 45, so as to indi-

cate any infraction of section 3 would be involved, but in other respects they were complete, showing clearly (*inter alia*) the air-space proposed to be left, and the building committee, who were well acquainted with the site, had passed the plans on December 10, 1923, and stamped them as approved.

On this approval the building was commenced December 16, 1923.

On March 29, 1924, the first relator, who on March 11 had objected that the hotel would interfere with the light and air to his house, raised the question as to the infringements of section 3 and by-law 7, but offered to withdraw his objections if the corner of the hotel were cut off so as to prevent interference with his view from the house, but the building had proceeded so far that this course was considered impracticable.

It was only on May 12, 1924, and after these points had been raised, that the Corporation gave written consent to the building being erected beyond the front main wall of the first relator's house, and they added to the consent a statement that this had nothing whatever to do with any action of the Building Committee. On May 14 the fiat of the Attorney-General was applied for, and it was granted May 24, and the action commenced June 2.

Before proceeding to the consideration of the case it is necessary to say a few words about the by-laws. The Corporation had on March 12, 1923, in pursuance of section 157 of the Public Health Act, 1875, adopted certain by-laws which were allowed by the Minister of Health on May 9

By-law 7, the one in question, provided that "every person who shall erect a new domestic building intended to be used wholly or partly for human habitation shall provide in the rear of such building an open space exclusively belonging to such building and of an aggregate extent of not less than 150 sq. ft. Such open space to extend throughout the entire width of the building, and the distance across such open space from the line of the rearmost wall of the building to the boundary immediately in the rear of the site to be not less than 15 ft. This distance was to vary, however, according to the height of the building, increasing as the height increased. It was also provided that such open space, for the said distance at least, should be free from any erection thereon above the level of the ground, except a water-closet, earth-closet, and an ashpit constructed in accordance with the by-laws. It was also provided: "In any case where by reason of the exceptional shape of the site of such building the minimum distance across the open space required by this by-law cannot be obtained throughout the entire width of such building, it shall suffice if the mean distance across such open space be not less than the minimum distance so required." We will take the point as to section 3 of the Public Health (Building in Streets) Act first. It was argued for the relators that the Building Committee had no power to consent to a breach of the Statute, even had the plans shown the breach; but the plans did not show it, and there was therefore no consent, and the Corporation's consent came too late. The statutory offence was committed by the erection of the building without their previous consent.



Southampton Harbour Board Offices: The Lobby, First Floor.

MR. E. COOPER POOLE, Engineer and Architect to the Board.



Southampton Harbour Board Offices: The Staircase.

MR. E. COOPER POOLE, Engineer and Architect to the Board.

For the defendants it was contended that there was no power to remove the building after written notice from the urban authority is a necessary condition of the offence, for section (3) provides: "any person offending against this enactment shall be liable to a penalty not exceeding 40s. on every day during which the offence is continued after written notice in this behalf from the urban authority."

The Court, during the argument on this point, intimated it was prepared to hold that there was an inchoate offence which might have become an actual offence had the Corporation not consented; and in the course of the judgment we find the learned Judge saying: "Of course, I assent to the proposition that in a proper case an injunction might be granted, but it is to be observed that a person is not to be held liable to any penalty unless and until written notice objecting to the building is given to the Corporation."

The main point, however, in the case was whether under the section a person shall not commence "the erection of the building" without the written consent of the urban authority. The cases, *London County Council v. Dross* (1892, W.N. 80), *Regina v. London County Council* (61 J.P. 439), and *Kerr v. St. Leonards-on-Sea Corporation* (6 Ch. Div. 463) were cited in support of this contention; the two latter, however, distinguished by the Court in the present case because there no consent had ever been given, and therefore an offence had been committed, and the third held not relevant to the point at issue. In the second of these two cases, which turned on section 13 of the London Building Act, there is a dictum *ex post facto* consent would not suffice, the Court pointed out that that was but a dictum, as there never was consent, and,

moreover, in that case the building, being erected at less than the prescribed distance from the centre of the roadway of a street, was illegal throughout. The Court held that although the Building Committee had in fact no power to give a written consent and had approved the plans without knowledge of the difference in the main front wall, as the Corporation, as soon as their attention had been called to the dispute, had given a written consent to the house remaining as erected and being completed, there was no breach of the section. As there had been no breach of the section the Court held there was no ground, of course, for granting a mandatory injunction, such an injunction being only granted where there had been a clear and deliberate breach (*Attorney-General v. Wimbledon House Estate Co.* (1904, 2 Ch. 34)).

Before leaving this part of the case we may point out that this esplanade facing the sea and with houses only on one side of it was treated as a "street" within the Act, which would be in accordance with some of the decisions we cited in our article of August 21 last.

The question of the by-laws was a complicated one, and we regret that space compels us in the present article to refer to it only shortly.

The first point dealt with in the judgment was as follows: Section 25 of the Housing Town-Planning Act, 1919, provides that notwithstanding the provisions of any building by-laws (and the Court held by-law 7 to be a "building by-law") a local authority may during a period of three years (afterwards extended to December 31, 1923) consent to the erection of any buildings erected in accordance with regulations made by the Local Government Board, now the Ministry of Health. The Minister of Health did make

such regulations, but they are only concerned with the structure of buildings, not with the question of air-space. The present building complied with those regulations. Subsection (2) enables the local authority to attach to their consent any conditions which they may deem proper as to the situation and sanitary arrangements and protection against fire. Section 40 provides that the expression "building by-laws" includes by-laws made under section 157 of the Public Health Act as amended by any subsequent enactment, and these by-laws were made under that section, which includes amongst other matters the sufficiency of air-space. The Court held that the question of air-space around a building is a matter connected with the building of premises, and that under the above provisions the Corporation had power, so far as the by-laws were concerned, to consent to the erection of this hotel, a power properly delegated to a committee under section 200 of the Public Health Act, 1875.

The Court, however, decided one further point, as it had been contended that the by-law was uncertain and unreasonable, and therefore invalid; and applying the principle laid down in *Kruse v. Johnson* (1898, 2 Q.B. 108), and especially in *Repton School Governors v. Repton Rural Council* (1918, 2 K.B. 133; *The Builder*, November 23, 1917), the Court considered whether the by-law, having regard to the particular circumstances, contained "requirements framed for other purposes and inapplicable to these circumstances," adopting the words of Lord Justice Pickford in the *Repton School* case. The hotel was being erected on the side of a hill with an open park behind on a higher level and the sea in front, and, as the Court intimated, had ample air and ventilation, and there was evidence both of this and the fact that in hilly places such as this it was quite impossible to determine the level of the ground within the by-law, and the Court held the by-law was inapplicable to the circumstances of this case, and clause 4 relating to the height of the building in relation to the open space was so uncertain that no construction could be put upon it in its application to this case, or, as the headnote to the case states, it was unreasonable.

Lack of space compels us to treat very briefly this point as to the by-law, but we may revert to it on another occasion, as well as to one or two other points. Apart, however from the particular facts of this case and the findings thereon, it suggests one or two general observations. It is obvious that the relations in this case resorted to action through the Attorney-General as for the breach of some statute or by-law because the projection complained of was not such as to enable them to bring a private action, that is to say, there was no such interference with light and air coming to their houses as would amount to an actionable nuisance. But the projection of a new building 8 ft. beyond the front main wall of an existing house closely contiguous to it, if not actually adjoining, must seriously affect the amenities of the latter, curtailing its view, and, where the new house is either east or west of it, cutting off the sunshine. In such circumstances the maintenance of a building line appears the only protection adjoining owners can look for, and if a building line were fixed there would be no discretionary power in the local authority to vary it; but under the Public Health (Building in Streets) Act there is a discretionary power in the local authority to consent to a house being brought forward, and thus it appears not to provide adequate protection.

It is often not the site that occasions the difficulty, but the nature of the building it is proposed to erect on that site. For instance, in a confined site, buildings of a like character to existing buildings could be placed in line with them, but a larger building such as an hotel can only be placed upon the site if brought forward. A fixed building line would render this impossible.

HEATING AND VENTILATION

THE OPEN FIRE

WHATEVER may be said, fairly or unfairly, against the open fire, it is doubtful whether we as a nation shall ever lose our affection for it. From mediæval times the English have been commonly accustomed to the sight of burning logs or coal on the open hearth, and this inherited tradition is so firmly rooted that it would be a difficult thing to get rid of, even if that were desired. It is doubtful, however, whether the most ardent advocate of modern, highly scientific "closed-in" apparatus for warming our buildings would willingly agree to the complete extinction of the open fire—he probably has more than a sneaking regard for it himself! It is an institution pleasantly reminiscent of the past, stimulating sentimental thoughts of predecessors who also sat before blazing open fires, watching the flames leap and the smoke curl. To the historically minded it probably provokes intriguing mental pictures of mediæval halls, with burning logs piled against andirons in the middle of the floor; this, of course, only until the smoke and smother forced our castle-inhabiting ancestors (about the twelfth century) to find a better place for the fire, which was naturally the wall, where a direct outlet could be contrived for the smoke. And when this simple change took place the principle of the firegrate as we know it now was definitely established, making possible all the interesting developments that have since occurred, utilitarian and decorative. From that time onwards the fireplace became the chief point of interest of the domestic interior, and succeeding generations of designers and craftsmen vied with each other in lavishing their skill upon its design and decoration.

Up to Tudor and Elizabethan times the fireplace in this country was customarily little more than a wide and deep recess in the wall, containing iron dogs or a movable dog-grate for burning logs of wood; but with the introduction of coal fuel, during the reign of Charles I,

the opening naturally became very much smaller, incidentally providing the architect with more scope for the display of his ability in decorative design, which found expression in magnificent surrounds and overmantels.

The movable dog-grate remained the accepted fuel-container until the eighteenth century, when, however, it was largely superseded by the hob-grate, some extremely fine examples of which were designed by the Brothers Adam. About this time the questions of scientific design and economic fuel consumption began to engage attention, and towards the end of the eighteenth century, after much research, it was discovered that a firegrate, to fulfil its function efficiently, should be small in size, be built of brick or fire-clay, and have splayed sides and a sloping back. Not until late in the nineteenth century, however, were these principles generally adopted in firegrate design. Generally speaking, they prevail to-day, though of recent years much progress has been made in such aspects of the problem as economy in fuel consumption, cleanliness of apparatus in use, smoke abatement, and so forth. An important development is the principle of the ventilating air channel, by means of which the cold air is brought up to the temperature of the fire itself, the super-heated air uniting with the smoke and causing it to burst into flame, the fire thus consuming its own smoke.

Fire-grates are obtainable to-day to conform with almost every style or manner of architectural design, and in a variety of sizes and finishes. In a picturesque setting the wood fire is always appropriate, but to look really well the logs should burn upon dogs on the hearth. For wood block fires, basket grates (best suited to large interiors), are the correct form of container. These grates look well not only in picturesque interiors, but in settings of a more formal kind. For small rooms the ordinary fire-grate, with its tile, glazed briquette, or wood surround, cannot

be improved upon if the fire is to be an open fire. Here, again, a wide variety of styles and finishes is available. One old-established firm produces some excellent "period" fire-grates based upon good models—Elizabethan, Jacobean, Queen Anne, Georgian, Chippendale, Adam, Louis XV and XVI, Empire, &c. This firm specialises in rustless steel fire-grates, which are a veritable boon to the housewife who wishes to conserve her muscular energy.

The barless type of firegrate has firmly established itself in popular favour by reason of its all-round efficiency and cleanliness of use. Several excellent types are obtainable, each having some special point of interest, such being the formation of the bottom, which is "swept up" to the front to facilitate removal of ashes.

In stringent times such as the present it is only natural that the designers of heating apparatus should devote a good deal of attention to the all-important question of economy, not only of fuel consumption, but of fuel employment. Hence, during the past few years we have seen the production of many "plus purpose" firegrates. One such warms a room with its open fire, and by means of a boiler at the back supplies hot water to radiators in different parts of the house. Another, in conjunction with a suitable hot-water radiator installation, will heat an entire house without continuously burning anthracite open fire. Yet another type of double-duty apparatus acts as an open fire and also cooks food and heats water while another, interposed between adjoining rooms, acts as a living-room grate on one side and a scullery cooker on the other.

To describe all the types of firegrates available to the modern architect and builder would occupy more space than we can afford, but enough has been said to show that the open fire is a flourishing institution and is likely to remain so for many years to come.

VENTILATION AND WARMTH

By F. BROADHURST CRAIG.

MUCH has been written and said about central heating and ventilation in this country, and still it is usually referred to as central heating and ventilation. The basic factor of comfort and health would appear to have been—as yet—unrealised. The ideal, surely, is to reproduce inside our buildings atmospheric conditions similar to those which appertain outside when one says, "What a wonderful day!" That, substantially, is the goal. After all, what is desired inside any building (unfortunately one cannot control outside circumstances) is the maximum amount of atmospheric comfort compatible with initial and running cost. The installation of a system of heating by such of the present-day methods which do not properly take into account the importance of ventilation and relative atmospheric conditions, cannot be considered to approach the ideal. If it is all the owner can afford, good enough. A system of open coal or gas-fires; an anthracite stove or two; a few radiators, served from the boiler which supplies hot water for baths and dish-washing, will do; or, if the particular building is of larger size, an independent heating boiler will suffice. This is certainly beyond what has hitherto been achieved in most of our buildings, and one must recognise that considerable progress has been made, though we must also realise that we are still a long way short of perfection. Broadly speak-

ing, ventilation and warmth are inseparable, and if we add a knowledge of the third factor of humidification, we have all that it is humanly possible to produce in this respect.

In dealing with the subject in relation to a private dwelling, one does not need to be unduly concerned about the question of air-conditioning proper. The design of most modern houses is such as to allow of quite adequate ventilation by the natural means of windows and fireplaces. The main objective of central heating in such a building is to ensure the absence of disagreeable draughts from the hall-door and corridors, and to provide warmth in the bedrooms—gas-fires serve the latter purpose well—with two or three hot-water radiators in the hall and passages. English folk generally do not like the close, stuffy atmosphere of American and Continental *confères*; they prefer the natural air movement set up by the opening of windows and doors, and in this connection they appear to conform with the most recent medical thought on the healthy effect of accustoming oneself to draughts of not too cool air currents.

A different condition of affairs arises in regard to larger buildings—offices, theatres, picture houses, assembly halls, and so on. In these cases, particularly, ventilation should be the first consideration, plus warmth. Temperature as indicated by the ordinary dry bulb thermometer is neither here nor there as far as

comfort is concerned, without the other equally important factors of humidity and movement.

It is only within the last few years that attention has been paid to this consideration. In America, where the climatic conditions for more consideration than in this country, very exhaustive investigations have been made in order to ascertain the degree of temperature, relative humidity, and velocity of air movement necessary to produce the maximum of comfort. The results of these tests, conducted under the direction of the leading medical and scientific universities, have been carefully tabulated in the form of a "Comfort Chart," which has made it possible to determine the relative values of the three fundamental factors. The chart has been to revise the previously recognised standards of heating and ventilation.

There is no reason why it should not be possible to reproduce inside our buildings conditions very closely approaching the pleasant natural atmosphere. Actually what happens with badly designed methods is that a room is heated without the addition of moist or fresh air, beyond that which can find its way through the cracks and crevices around doors and windows. In consequence, the relative humidity of the air is appreciably decreased, and a sensation of dryness is produced, due to the more rapid evaporation of moisture from

the skin and respiratory channels. Attempts are sometimes made to restore the relative humidity by "evaporating" trays, or pots of water, around the radiators and gas fires; but when it is remembered that raising the temperature of air from 40 deg. F. to 60 deg. F. reduces its relative humidity by about 50 per cent. it is obvious that these cannot be adequate. Air at 60 deg. F. (dry bulb) will contain 5.8 grains of moisture per cubic foot when fully saturated; whereas at 30 deg. F., 1.9 grains per cubic foot are sufficient to produce 100 per cent. relative humidity. Air on being heated continues to absorb moisture until it becomes saturated, and unless this moisture is supplied artificially it will be abstracted from the occupants and furniture contained in the room. The absence of air movement is another contributing cause of the feeling of unpleasantness in a badly heated room. Apart from the open fire, which acts as a natural ventilating shaft by means of the chimney (so drawing air into and through the room), nearly all other heating apparatus produces little or no air movement, except the very slowly-moving convection

currents. Air motion is essential to comfort. One's feelings of oppression on a still, muggy, or thundery day are due to the film of moisture arising from the skin emanations not being freely removed from the body. This retards the natural function of the skin and throws more work upon the other excretory organs, with resultant inertia and consequent feelings of fatigue from the lessened cleansing of the blood stream. These physiological considerations have a decided bearing upon the question of heating and ventilation, and when their importance is properly appreciated this commonly used expression will no doubt be changed to that heading the present article.

The main object is to provide for the comfort of the occupants of a building. The first consideration should, accordingly, be to provide a supply of suitably "conditioned" air to each occupant, and the calculations should, therefore, be based upon the number of people likely to occupy any particular room, with allowance for a definite and constant volume of air supply per person. During the periods when the building is unoccupied a system of direct heating

may be employed to keep the building warm and avoid too long in "heating-up." This would be needed in the case of large single-room buildings, like churches and assembly halls. The volume of air per occupant having been determined, the relative humidity and temperature calculations will then follow according to the exposure factors of the particular room.

A properly designed installation of this kind will call for a dual system of distributing ducts, one to convey the heated air and one for the cold humidified air. The hot and cold air distributing ducts would be interconnected at their point of entry to the various rooms, in the form of a mixing chamber with regulating dampers, to admit of the supplies of hot and cold air being regulated at the will of the occupants according to their requirements and the outside atmospheric conditions. The usual extract air duct should be led back to the main chamber to enable the exhaust air to be purified and re-heated. The main chamber would contain the air-washers and humidifiers, heater batteries, fans and boilers, and these should be fitted with a system of automatic temperature and humidity control.

HOUSE HEATING

Under this title* Miss Fishenden has produced a book which is an extremely valuable contribution to the question of fuels. A very large amount of the information has been collected and annotated for the first time, and appears in a readily understandable form, and contains many facts which, while being of the highest importance, are not by any means universally known. Comparisons are made between the use of wood, peat, coal, anthracite, coke, gas, and other materials as means of obtaining heat.

In connection with the manufacture of gas it will come as a surprise to many to find that the efficiency of the present systems of manufacture is far less than might have been expected. Quotations are given, showing that 18 per cent. of the original heat units is sold in the form of coke, 11.4 per cent. is absorbed in the coke for producing gas, 21.3 per cent. is the proportion of gas, 6.1 per cent. of tar, and the remaining 13.4 per cent. liquor, sulphur and loss. Even in the most efficient of modern gas plants the number of heat units gas is not greater than 25 per cent. to 35 per cent. of the total heat units in the original coal. Another authority states that of 100 heat units in the original coal, 50 are returned in the solid fuel market as coke, 5 are recovered as tar, 22.5 are lost in manufacture

and distribution, and 22.5 reach the consumer as gas. These figures are sufficient to explain to the architect the reason for the high cost of gas heating, which he finds to be typical of all cases in which he is able to compare gas with coke or coal heating apparatus.

Following these figures, Miss Fishenden devotes a number of pages to the discussion of revised or improved processes for increasing the yield of gas or increasing its efficiency when used in gas-heating apparatus. The author points out that the use of low-grade gas has become possible by recent improvements in gas burners. As a result of this development, the decision to charge for gas by the therm arose, which decision Miss Fishenden defends in a very logical manner. The use of low temperature carbonisation of coal yielding a certain amount of gas and leaving a brighter burning material than coke seems to possess possibilities which have not yet been completely investigated.

Proceeding further to examine the generation of electricity, it is found that an even higher proportion of heat units is lost, and it is stated that the average thermal efficiency of the generation of electricity is only 12 per cent. of the value of the original number of British thermal units in the coal used. For the best station in the country, the efficiency is only 18 per cent. The contention of some electrical enthusiasts that huge power stations

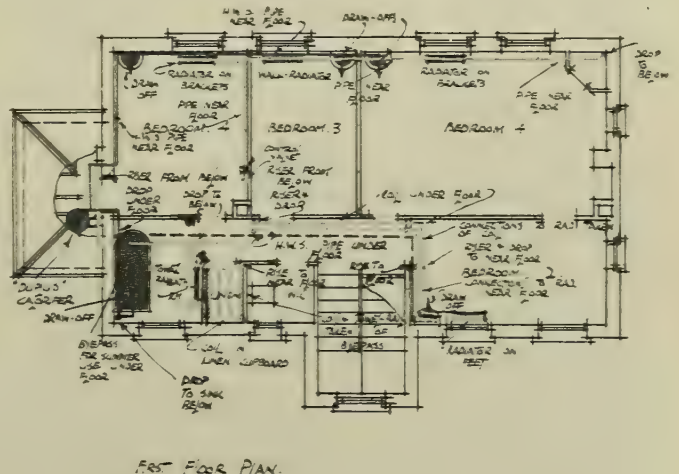
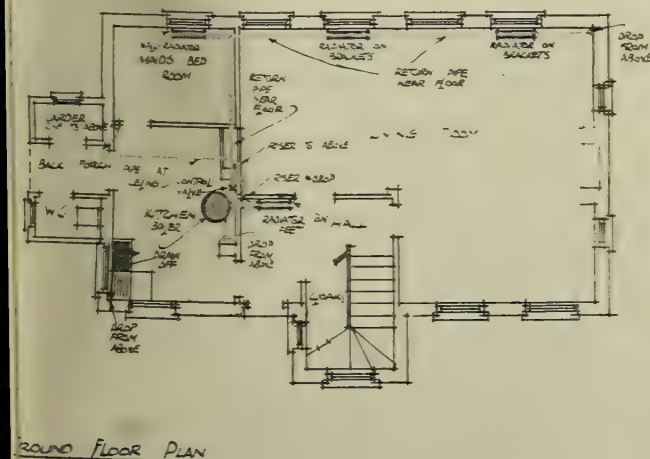
at a few points would involve an enormous increase in the efficiency of the current produced is not, apparently, borne out by existing figures. Recent improvements in the efficiency of generating stations have, however, resulted in a very large total saving of fuel.

The second section of the book is devoted to a study of the development of the modern grate and of the application of coal to the heating of rooms. Some interesting information is given in connection with Teale's rules for fire-grate construction, most, if not all, of which have passed into general practice in the construction of modern fire-grates. Harcourt's rules do not entirely agree with those of Teale, but are sufficiently consistent and logical to make their differences easily reconcilable.

There is some interesting information upon the quantity of air which passes through a normal room heated by an open fire, and also upon the effect of radiation upon the human body. The cooling effects of draughts are insisted upon, as is also the incomplete combustion which takes place in coal burning in an ordinary grate.

The effects of patent preparations on the efficiency of coal fires is shown to be negligible, and chemical analyses of two patent preparations are given showing that they consist almost entirely of common salt. The exhaustive way in which various aspects of the coal fire are treated, and the very concise statements that

* "House Heating," by Margaret Fishenden, D.Sc., Inst. P. Witherby, 25/- net.



are made, provide most valuable data for the architect, as well as a basis for further investigation, the importance of which it is impossible to exaggerate.

Chapter III is devoted to the history, design and present uses of kitchen ranges. The result of heating in ordinary brick-set kitchen ranges, quoted from Barker's "Tests on Ranges and Cooking Appliances," is very illuminating. According to this statement 3 per cent. of the heat is communicated to food, 7 per cent. to the hot-water supply, and the remainder is lost in the air of the kitchen, absorbed in the brickwork, or disappears up the flue. Miss Fishenden points out, however, that the kitchener is asked to perform several diverse operations, and cannot be expected to show a high efficiency in each. Its "general utility" accounts for its continued popularity.

The book contains excellent statements upon the comparative merits and uses of the average kitchener, either "portable" or otherwise, and various types of combined sitting-room fires and ovens, and the use of independent boilers, with or without the addition of cooking ovens. Miss Fishenden's comments in these matters are extremely sound.

Chapter IV deals with gas for heating purposes, and points out the immense impetus which was given to the use of gas fires by the invention of Bunsen burners. It explodes many of the objections to gas fires based upon their presumed lack of ventilation, the supposed emission of unpleasant smells, &c. It shows that many of these criticisms are due to

prejudice surviving from the early days of the gas-fire, when such defects existed to a serious degree. Sections of this chapter which are very interesting refer to the effect of carbon dioxide and carbon monoxide, and the effects of oxides of nitrogen upon health. At the end of the chapter extracts are given from reports upon the death-rate due to accidental deaths from gas-poisoning, which prove that it is almost negligible.

The use of gas for cooking is discussed at considerable length, and it is shown that whilst the production of gas has a relatively low efficiency, gas apparatus has a very high efficiency, and to a large extent balances the cost of the production. If it were possible substantially to improve the efficiency of production and only slightly improve the efficiency of gas apparatus, the use of gas for all heating purposes would be advanced tremendously. One of the most valuable contributions of this portion of the subject is found in the form of a definite comparison between the cost of cooking by gas and by coal, and a further comparison of the cost of gas used for heating water. The total quantity of gas sold by authorised undertakings was 74,000,000,000 cubic feet in 1884 and 241,000,000,000 cubic feet in 1920, an increase of rather more than three times.

Short as has been the history of electricity for heating, modern electrical heaters give an efficiency of 100 per cent. As has been before stated, the production of electricity shows an efficiency of 12 per cent. to 18 per cent., and

it follows that electric heat is from six to ten times dearer than heating by coal. Coal-heating apparatus, however, has an efficiency approximately 50 per cent., and this difference, therefore, is reduced to 3 to 5½ times.

Miss Fishenden's work will undoubtedly come to be regarded as a standard volume. It covers a wide ground, but is perhaps unfairly restricted so far as its title is concerned. Much of the information is applicable to all schemes of all descriptions, and much of the experimental work which has necessarily preceded its production appears to have almost a world-wide importance.

† Mr. Edwin Gunn's book in the *Coun-try Life* series, "How to Heat Your House," suffers somewhat by comparison with a comprehensive work like that of Miss Fishenden. Nevertheless, it contains in a concise manner a great deal of very valuable information upon various kinds of fuel and the methods by which they can be applied to modern house heating. Illustrations of various types of heaters convey an idea of their use and value very rapidly, and altogether this is an admirable little book for those who require a short survey of the subject. It is a defect in a book of this character that advertisements are added of individual examples of the types of apparatus referred to.

† "How to Heat your House," by Edwin Gunn. *Coun-try Life*, 2/6.

THE PROGRESS OF GAS HEATING

As year succeeds year, it might be thought that the speed of the increase in the use of gas for heating in its various forms would slow up, but this, at present, is far from being the case. On the contrary, its progress continues unchecked; indeed, it is constantly gaining impetus. As some proof of this may be quoted the fact that one large gas undertaking alone had an increased output of nearly 30,000 gas fires in the year 1923 and nearly 40,000 in 1924.

The causes of this increase are many, but the most outstanding are the ever-present servant problem, which remains—and, apparently, will always remain—insoluble; and the fact that the present generation have really begun thoroughly to appreciate the value of having heat in any room instantly and economically available and controllable on tap. Whether domestics who would be willing to light and clean up after solid fuel fires are—or become—available or not, this latter aspect of the case will always remain unaltered, and will, indeed, become an increasingly potent factor.

It would appear that the application of gas for firing steam and hot water boilers for the provision of heat to batteries of radiators used in conjunction with ventilating systems is beginning to increase, the likelihood of which has been indicated in *The Builder* from time to time. In spite of the increased fuel cost, arising out of the use of gas instead of coke, its convenience and complete and automatic adaptability and the saving of space and other advantages accompanying its use are causing it to be adopted for a number of installations, some of which are of a magnitude which would have been undreamed of a few years ago with gas as the heating agent.

As some confirmation of this, it need only be mentioned that we hear of one such contemplated installation for which gas has been chosen, where no less than six million B.Th.U's. per hour will be needed to warm the air for the ventilation of the premises. For this purpose, gas boilers with a total maximum consumption of 15,000 cubic feet (75 therms) per hour are to be fixed on the roof of a large building. Architects will readily realise the potentialities

attached to such an installation when the value of space in the basements of modern offices, shops, or stores buildings, is considered. There are, of course, numerous cases where coke as the heating agent for central heating systems is supreme—for instance, when low fuel cost is the prime factor to be considered and/or where labour and space are readily available.

A further modern feature is a combined coke and gas-fired system, in which gas is used for domestic hot water for sinks, baths and so on during the summer; and in the winter, coke is used for all these, and, in addition, one or more radiators. Another system more frequently met with involves the use of a coke boiler for central heating purposes, while gas fires are also installed as auxiliaries in each room. The latter are appreciated for their cheery effect, and they are available for use between seasons when the coke boiler is not in operation.

The fitting of gas fires against existing coal grates and to specially prepared economy flues, however, still accounts for by far the greater proportion of the growth of gas heating. Details of several installations, combining both utility and beauty of appearance, and which are likely to be of special interest to architects and builders, follow. Reference is also made to an instance of the use of gas as the sole heating agent for a small central heating installation.

The Overseas League.

Some very interesting gas installations have recently been put into the several buildings now occupied by the Overseas League. This League has become increasingly important since it was founded by Mr. John Evelyn Wrench in 1910. Owing to his untiring efforts this non-party, non-sectarian society of men and women, (British citizens) in and from all parts of the British Commonwealth of Nations, has progressed from the occupation of one small room to the possession and occupation of several large modern buildings in the heart of London's Clubland. Its headquarters are at, Vernon House, Park-place, St. James's-street, where a system of central heating by hot water radiators

heated from a coke-fired boiler was installed as the main source of heat.

The radiators, where they are fitted in the beautiful rooms contained in this fine old house which was originally owned by Lord Hillingdon are masked or hidden behind ornamental gratings, suitably constructed to tone with the decorations of the rooms in which they are fitted. In addition to the central heating system, however, gas fires have been fitted all the fireplaces ready for use at a moment's notice as auxiliaries. Besides supplementing the heat from the hot water radiators, gas fires afford a bright and cheery appearance. Their brightness naturally appeals to Englishmen who have spent years away from home and they remind our kinsmen from the dominions of the old open fires of the past. There are twenty-five gas fires all carefully chosen and fitted to conform to the grates and their surroundings. The success which has been achieved in this direction will readily be realised on a glance at the photographs which illustrate several of these fires.

Fig. 1 is a photograph of the "Adam" grate in the Council Chamber and Reception Room where not only is there an "Adam" marble but the grate itself is of steel in "Adam" design. It will be seen that the gas fire is of "Adam" design. In order that nothing shall clash, it is made in "armour bright" steel, and the small opening, which would have been left above the bars of the coal grate, has been covered in by a steel plate backing, finished to match. The illustration also shows photographs of H.R.H. The Duke of York, President of the League, and the Duchess of York.

Fig. 2 shows the drawing-room fireplace which is of the Georgian period. It was decided in this case to retain the old dog grate, a modern type of gas burner fire was accordingly fixed therein, which, it will be agreed, has detracted from the appearance of the fireplace grate in any way.

Fig. 3 is a photograph of the very beautiful fireplace in the dining-room. This also is of Georgian period, with Ionic columns capitals, and above the grate opening will

Lord Hillington's Coat of Arms. In this case, again, it was considered undesirable to alter the character of the original dog grate, so a gas fire was successfully fitted to its interior. At Vernon House there are also several gas team radiators fixed in those corridors where there are no hot-water radiators, and gas cooking apparatus has been installed to provide meals for no less than 150 persons.

At "Club House," adjoining, there is also a central heating system, supplemented by seven gas fires, and gas cooking apparatus is installed capable of cooking for 80 persons. Overseas House, also adjoining, is chiefly used for sleeping accommodation, and here there is central heating and six gas fires, with gas cooking apparatus for the provision of breakfasts.

The Institute of Hygiene.

If further proof were necessary that gas fires and other gas appliances are perfectly hygienic, it has again been afforded by gas being installed for heating, water heating and cooking at the new premises of the Institute of Hygiene. This institute was founded in 1903, and from that date till recently it has occupied premises at 33 and 34, Devonshire-street in the Harley-street area of London. Some time ago it was decided to transfer the activities of the Institute (which include research work and a permanent exhibit of hygienic products and appliances) to more commodious premises in Portland-place, the formal opening of which was carried out on June 5, 1925, by H.R.H. Princess Mary, Countess of Lascelles. The gas installation includes gas fires (13 in all) in the various rooms, and here again these appliances had to be carefully chosen and fitted to conform to the very fine series of fireplaces which were in existence on the premises.

In addition to the gas fires for the general heating of the building, there is a hot-water and central-heating installation of rather unusual character. A Potterton combined coke and gas boiler is connected to radiators, with a heating surface of 75 square feet, installed in the hall and basement, and the same apparatus also supplies domestic hot water for scullery, cleaning and lavatory purposes.

In the summer when the radiators are not required, the gas boiler is used to furnish the domestic hot water, as a result of which an intermittent demand is economically met, while the kitchen is not unduly heated. During this period the coke boiler is merely used as an incinerator, but in the winter when the supply to the radiators is brought into play by the operation of valves, the coke boiler is used as the heating agent, because it is more economical than gas for the heavier and more constant load.

The domestic hot water supply is installed on the cylinder system, with the storage in the kitchen quite close to the apparatus, and the cylinder is fitted with a Potterton cut-out valve, so that the whole or only a portion of its contents may be heated as desired, thus further economising in the consumption of gas when this is in use during the summer months.

Some interesting work was carried out in connection with the conversion to gas equipment of the fireplace in the toilet section which is situated on the ground floor of the building. The mantelpiece and jambs of this fireplace are of Verde-antique marble, and the hearth and curb of Statuary marble. As the fireplace called for special treatment it was decided to cover the whole of the space between the jambs with a sheet of scagliola marble, which was specially made by Messrs. Bellman, Ivy & Carter, of Marylebone. A suitable opening was left in this sheet through which the flue outlet of the gas fire was carried to convey the products of combustion to the chimney. The marble backing having been made of the correct size, it was carefully fitted into the opening, its surrounding

edges being plastered to ensure a firm setting. The gas fire is a Davis "Louis Seize" pattern, which was chosen to harmonise with the character and decoration of the room, including the ceiling. The fire is finished in electro-silver with gold mountings, and an added artistic touch is given to the whole by the gas fire supply pipe being lacquered steel bronze to tone with the finish of the fire. The flooring of this room is of a patent rubber supplied by Spencer Moulton & Co., Ltd.

Fig. 4 illustrates the Lecture Room on the first floor of the Institute of Hygiene. Here, again, a very fine fireplace had suitably to be treated for the installation of a gas fire in front of the coal grate which had previously been in use. The mantelshef, jambs and hearth are of Statuary marble, as are the statuettes and lamp-holders seen on either side of the fireplace. The gas fire chosen and fitted is a John Wright's "Kenilworth," in electro-silver finish, and again a backing of scagliola marble was fitted and the gas supply pipe was lacquered to tone with the fire. These backings may be obtained in any shade, either in plain, or any pattern of marble, and in any size needed to fit a particular opening.

Other items of gas apparatus play a large part in the equipment of a model kitchen, which is one of the special features of the Institute; and gas cooking stoves are also installed in a demonstration room, in which, from time to time, hygienic and practical cookery is carried out in conjunction with suitable lectures, which are given by skilled operators. Full descriptions of such apparatus, however, are not called for in a number which is specially devoted to the subject of heating and ventilating.

The Reconstructed Westminster Hospital.

Westminster Hospital was recently reconstructed and modernised under the direction of Messrs. Adams & Holden, F.F.R.I.B.A. Among the many improvements was the re-organization of the heating and cooking arrangements. As a result, the whole of the building is warmed by steam-heated radiators [supplemented by gas fires; while gas and steam are



1.—Gas Fire in Council Chamber, Overseas League.



Fig. 2.—Gas Fire in Drawing Room, Overseas League.

used for cooking in the main kitchen. A gas cooking stove is also fitted in each ward kitchen, and gas appliances of various kinds are used for sterilizing and in the laboratories. The heating installation is of the greatest interest at the moment, however, and it is worthy of note that there are no less than 181 gas fires now fitted in the hospital, one or more being installed in every general and private ward in the building.

The steam radiators which are also installed throughout the building are heated from two large coke-fired boilers, but as such heating (by high temperature convection), has a tendency to overheat the air, it was arranged that the radiators should not be large enough to provide sufficient heat satisfactorily to warm the wards and other rooms in which they were to be placed, and it was therefore decided to instal gas fires to supplement their heat to the desired degree. The gas fires also serve another purpose, inasmuch as their cheerful radiance has a beneficial psychological effect on the patients. The rooms of the resident medical staff, the matron's rooms, and every one of the nurses' bedrooms (sixty in number) are equipped with gas fires.

Space will not permit the inclusion in this article of illustrations of the fireplaces and gas fires in the various wards and rooms, but reference may be made to one of the adult wards, where the gas fire is a Davis "Pandora," a design which was chosen on account of its simple though artistic lines. The coal fire opening has been entirely filled in behind the gas fire with a backing of "Astestone," which is screwed (with wood screws) to a framing of wood battens. A suitably

prepared opening is left in the backing through which the flue from the gas fire passes to the chimney.

The description which has been given of the very comprehensive gas installation at the hospital is necessarily lacking in detail but, brief as it is, it will serve to give an insight into the careful attention which is paid by the governing bodies of great hospitals to the

comfort and well-being of their patients and staff.

University College of London, Gower-street.

An interesting installation of the central heating type was recently carried out at the above premises to the instructions of the architect, Mr. F. M. Simpson, F.R.I.B.A. It is a practical illustration of the accuracy of the statement which has from time to time been put forward that, while up to the present it is by no means the usual practice to use gas as the heating agent for central heating installations of magnitude, there are cases of somewhat minor character where a convenient and readily controllable fuel as gas is indicated.

In this case there were nine animal houses (in which such animals as dogs, rats and mice are kept under scientific observation) to be heated to a regular and constant temperature of rather more than 70 deg. F. These requirements were fulfilled in the following manner: Two gas-fired boilers of suitable capacity were installed, and from these were run the hot water supplies to twelve National Radiator Company's "Classic" radiators which were distributed in suitable sizes and capacities in the various houses.

When the boilers are lighted the desired temperature is very quickly reached, and it is maintained steadily and constantly for an indefinite period, the gas supply to the boilers being automatically controlled and the consumption thus kept to the amount necessary to maintain the heat. It is worthy of note that the apparatus needs practically no attention. The regulation is achieved by the action of a Potterton Air Thermostat which has been previously described in *The Builder*. If when the air temperature increases beyond the desired degree, the air thermostat which is fitted on the gas supply pipe passes through the houses on its way to the boiler, once comes into operation, and actuates a valve which temporarily shuts down the gas.

When, owing to this reduction in gas consumption, the temperature begins to fall, a reverse action takes place, and the gas supply is automatically again increased, the balance always being maintained by this simple device which not only keeps the temperature at the desired degree, but at the same time ensures the strictest economy in gas consumption.

The contract for a new church to be erected at the corner of Beswick-avenue and Coleridge-road, Ensby Park, Bournemouth, has been awarded to Messrs. Marshall & Bower. The architect is Messrs. George Baines & Son, F.R.I.B.A.

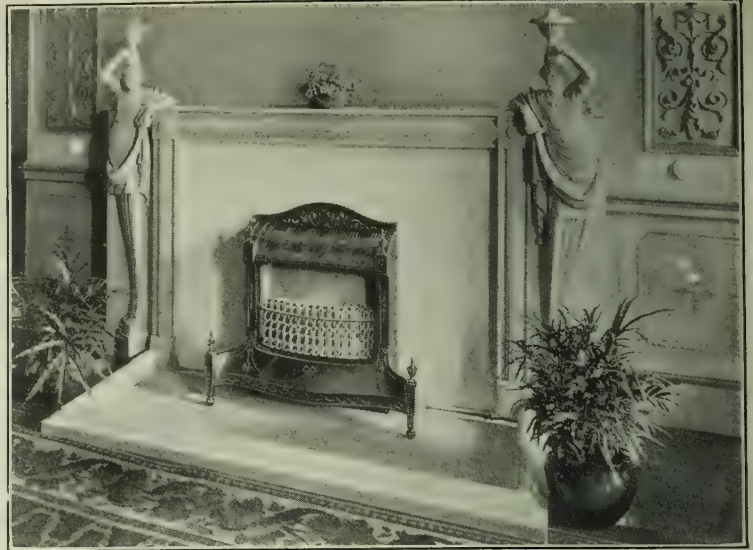


Fig. 4.—Marble Fireplace adapted for Gas Fire, Lecture Room, Institute of Hygiene.



Fig. 3.—Fireplace and Gas Fire, Dining Room, Overseas League.

THE PANEL SYSTEM OF WARMING

A SYSTEM of warming which depends for its efficacy on the complete concealment of the warming agent is known as the Panel system, and although it has been used and developed in important buildings for the past fifteen years, the fact that it has been adopted in four of the largest buildings now being erected in the United Kingdom renders a description of the principle upon which it operates and the method adopted in its installation of special interest at the moment.

With this system the occupants of the building to which it is applied receive the warmth necessary for their comfort directly from the source in the form of radiant heat. Now, in the minds of most people the term "radiant heat" connotes a source of warmth which is luminous, but it is a mistake to suppose that heat can be radiated only at such temperatures as produce visible radiation. Heat is radiated from all bodies whose temperatures are above absolute zero, and of three bodies at different temperatures radiation is absorbed by the body at the middle from the body at the higher temperature and radiated to the body at the lower temperature. Thus a human being standing in a room three of the walls of which are at, say, 55 deg. Fahr., while the fourth is at 90 deg. Fahr., will be conscious of a sensation of warmth from the warm wall even although it is actually at a temperature lower than blood temperature, and this warmth will reach him even though the intervening air be at a still lower temperature of, say, 45 deg. Fahr., because radiant heat, being an etheric phenomenon, passes through air without appreciably warming it. Such an effect is common experience on a sunny day in winter, when, even with an air temperature below freezing point, the warmth of the sun, which is radiant warmth, is plainly felt through the clothes.

In the Panel system of warming, the warmth is distributed by extended surfaces in the form of portions of the ceilings, walls and sometimes of the floors, which are maintained at a suitable temperature, generally about 120 deg. Fahr., by warm water circulating through pipes embedded in the concrete, plaster or similar plastic constituent of the structure or finish.

The warmth is radiated in straight lines in all directions exactly as in the case of luminous radiation, and is reflected or absorbed more or less by the surfaces upon which it impinges. Such of the radiation, therefore, as is not absorbed by the occupants of a panel-warmed room is reflected back and forth by the walls, floor and ceiling and furniture, all of which in due course reach a temperature at which they no longer cause loss of warmth on the part of the occupants, who thus experience a quality and degree of comfort comparable to that provided by mild sunshine.

It is important to observe that this degree of comfort is obtained without appreciably warming the air; there is, therefore, with this system no sensation of stuffiness, dryness of the throat, and lassitude, nor is there the consequent dissemination of dust and deleterious germs. And since there is no stratum of heated air at ceiling level, there is no loss of heat due to the escape of this hot air from windows, doors and other openings, and the avoidance of this loss results, in conjunction with the moderate temperature at which the water is maintained, in a considerable economy in fuel.

As stated above, the panels consist of jointless coils or grids of small bore pipe embedded in the lower surfaces of the ceilings or the inner surfaces of the walls; the warm water is caused to circulate in these coils in exactly the same manner as in an ordinary low-pressure hot-water heating system; accelerating pumps are used when necessary, but gravity circulation is frequently adopted where the lay-out permits.

Where the floors are of concrete, either solid or in one of the many forms involving the use of hollow tiles or beams, the pipes are cast in the concrete, being laid in the shuttering before the concrete is poured; in many cases, it is possible also to embed the mains, risers and circulating branches in the concrete casing of the steel structural members, thus completely concealing the whole of the pipework. This method is being adopted at the two large buildings now in course of construction on the Devonshire House site, at the new Carmelite House, and in the new India building at Liverpool. In such

installations, of course, all joints are welded and the work is subjected to stringent tests before the concrete is cast. Moreover, great care and experience are required to ensure that the arrangement of panel coils and circulating pipe-work is such as will enable the system to vent itself automatically.

When the construction does not permit of casting the pipes in concrete, the panel coils may be applied to the surfaces of the ceilings or walls and encased in the plaster; or, if marble, slate, tiles or similar wall finishes are to be used, the panel coils are rendered with cement, which forms a bed for the surface material.

Panels cast in concrete require no more than the normal thickness of plaster to cover them; but when the pipes are applied to a hollow tile or wood joist ceiling or to brick walls, plaster to a thickness of about 1½ in. is necessary. In both cases, precautions have to be taken by the plasterer in accordance with instructions prepared by the patentees, as a result of their experience, in order to ensure that the plaster shall not crack.

The use of the ceiling as the source of warmth, while it may appear somewhat revolutionary, has been marked by conspicuous success. Not only does it emphasise the similarity between this system of warming and sunshine, but it has several practical advantages. Not the least of these is the fact that it enables maximum use to be made of the walls and floor, a feature of considerable importance in department stores and similar establishments. It renders possible the erection and dismantling of partitions in large apartments without disturbance of the heating system, and without the necessity for rearrangement, which is of great utility in office buildings, workrooms and warehouses.

To hospitals, the system is peculiarly applicable owing to the absence of all exposed pipes, radiators, and similar lodgments for dirt and dust, and to the hygienic value of the quality of warmth which it provides. The new Obstetric Block at University College Hospital, and the extensions of the Bolingbroke Hospital, Wandsworth, are instances of hospitals in which it is being used. The patentees are Messrs. Richard Crittall & Co., Ltd.

OIL FUEL FOR CENTRAL HEATING

Oil fuel is being increasingly used for boiler installations with completely satisfactory results. In North America, the efforts made to evolve an efficient apparatus have met with a large degree of success, and there are now thousands of oil-fired central heating installations in daily operation in Canada and the United States. The technical staff of Messrs. Shell-Mex, Ltd., in co-operation with oil burner manufacturers and heating engineers, and after three years of experiment, have designed a British plant which can be applied to any ordinary central heating boiler and which is sufficiently simple and reliable to be left unattended for long periods without the risk of a breakdown.

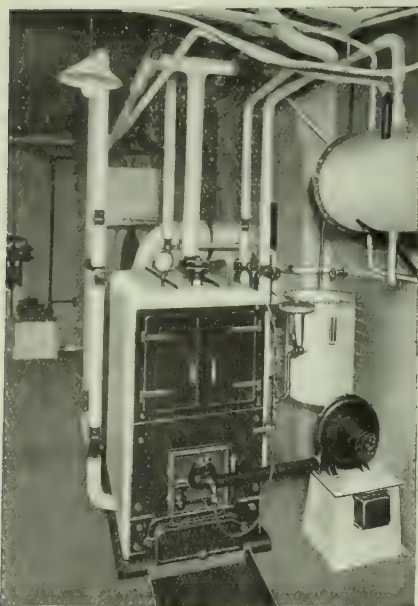
The plant, which is automatically controlled, can be used either with the ordinary cast iron section boiler fired with coal or coke or with the new types of central heating boiler, specially designed for oil fuel, which are now produced by the leading heating plant manufacturers.

The accompanying illustration shows a hot water central heating plant installed in the basement of an old house of the Georgian period, now used as the London offices of a life assurance company. The system of working, summarised, is as follows:—

(1) An air blast at low pressure is provided by a small electrically driven fan, the operating cost of which only amounts to a fraction of a penny an hour. This current of air operates a rotary oil atomiser (or Rotamiser) which



Interior of Messrs. Harvey & Nichols' Premises, Knightsbridge, fitted with the Panel System of Warming.



An Oil-Burning Hot-Water Central Heating Plant.

converts the liquid fuel into an oil mist. The oil mist is intermingled with the correct proportion of air and passes forward into the furnace of the boiler. Perfectly smokeless combustion is obtained although the consumption of oil may be varied from a quarter of a gallon to four gallons an hour. Thus the system admits of extreme flexibility and is capable of dealing with any fluctuations in demand likely to be experienced in this country.

(2) An automatic valve, by means of which the oil feed is regulated according to the temperature of the outgoing water, is fitted to the oil supply pipes.

(3) If the electricity or the air supply should fail, a simple automatic device immediately cuts off the oil supply to the furnace and it is not renewed until the fault has been remedied. This eliminates all danger of oil running into a furnace in which the flame has been extinguished.

(4) After the burner is lit in the morning the temperature of the water rapidly rises until a pre-determined point is reached, say 180 deg. F. This figure can be varied by setting a pointer against the desired temperature as indicated on a graduated scale. On reaching the set temperature, the automatic valve comes into operation and the oil supply is cut down until the burner is passing just sufficient oil to maintain the water temperature at the determined degree. Should the temperature of the water rise owing to radiators being shut off or changes in atmospheric conditions, the valve automatically reduces the oil supply and, conversely, should the temperature of the water fall below the critical point, the valve immediately increases the oil supply until the point of balance is again reached. It is thus possible to meet the widest variations in the demands on the plant without the necessity for an attendant.

In the installation illustrated the boiler is heating water for 56 radiators, the pre-determined temperature being usually 180 deg. F. To maintain this temperature the burner consumes an average of two gallons of Mex fuel oil an hour. Deliveries of oil are made by connecting a hose pipe from the tank wagon to a pipe connection in a manhole in the pavement.

Messrs. Shell-Mex, Ltd., do not manufacture oil burning plant, but maintain a special department for the purpose of advising on the selection of the most suitable oil burning apparatus for each individual requirement.

SOME NOTES ON HEATING EQUIPMENT

The "Ideal" School Radiator.

The National Radiator Co., Ltd., have issued a leaflet dealing with a radiator which has been specially designed to meet the requirements of schools and other public buildings where efficiency and cleanliness are of first importance. The smooth surfaces of their "Ideal" school radiator and the wide space (1½ in.) between the sections, as well as that below the bottom hub, enable all parts, including the floor beneath, to be easily cleaned. (If desired, the radiators can be supplied without feet, for fixing on brackets to the wall, leaving the floor entirely clear.) The "Ideal" concealed valve gives the advantage of a top feed to radiators having supply and return connections at bottom, this being secured by assembling the first and second sections at bottom with a solid malleable iron nipple, so that the water upon entering rises up the first section before passing through the radiator under control of the valve. The top radiator nipple is faced and forms a seating for the valve, which is fitted in the top radiator hub, and projects only a short distance: the body thus being concealed, a neat appearance is obtained.

Rustless Firegrates.

The average Englishman does not always pay sufficient attention to his firegrate which, after all, is or should be the most arresting feature and, therefore, the centre of interest of his room. The Carron Co. has "brightened things up" (if the term may be allowed) by the introduction of the rustless steel firegrate, which, on account of its metallic lustre, invests the fireplace with a new charm and brightness. It imparts a distinctiveness to the room, and is specially in sympathy with period decoration. The housewife too, will, welcome its adoption as it minimises labour involved in cleaning, for instead of the troublesome and dirty blackleading imperative to the cleanliness of the old-fashioned grate a cursory dusting will restore it to its original brightness—brightness moreover which it will never lose owing to the rustless steel being solid. The booklet illustrates a score of these handsome fireplaces, one of which we reproduce, which can be supplied to specification, but the Com-

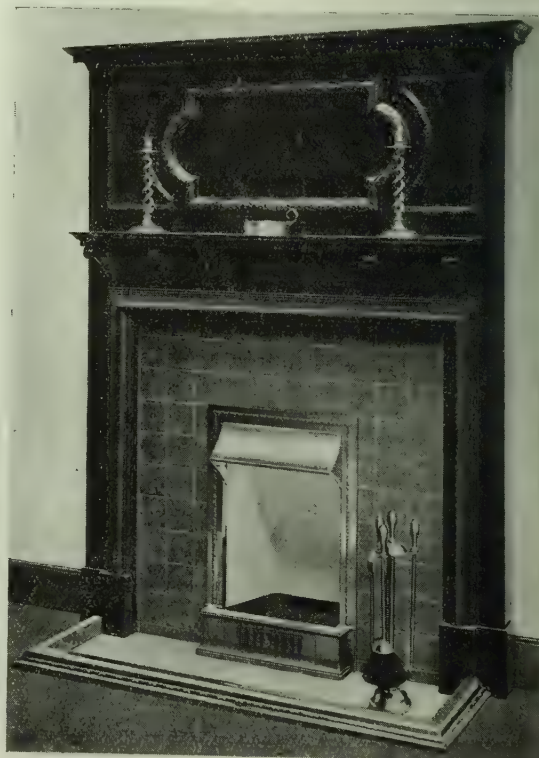
pany are in a position to submit many other designs in this new material, to harmonise with any style of furnishing. Those interested in the new development of firegrate should call at the showrooms at 50, Berners-street, London, W.

Thermostoves.

We have received a booklet from Messrs. Hartley & Sugden, Ltd., dealing with their patent Thermostoves, of which they have produced a "Cottage" model. Statistics prepared prove that only 15 per cent. of the heat engendered by a kitchen range is used, i.e., that it has an efficiency of 15 per cent. The Thermostove, it is claimed, has an efficiency of nearly 75 per cent., a big increase on the old method of heating. This means, therefore, a 10 per cent. decrease in the amount of fuel required; and it is claimed that the initial outlay is so regained by the cut in running expenses. Besides the question of expense, the advantages this stove possesses should be taken into consideration. It ensures a continuous and abundant supply of hot water day and night; cooks, bakes or roasts any food and boils pans, all from one fire which burns coke, anthracite or any solid fuel, while Models 1, 2 and 5 will, in addition, heat three small radiators and a towel rail. Nos. 5 and 6 have patent sliding oven doors fitted with no heating handles, and a patent lifting firegrate which enables the whole fire to be lifted near the oven and hot plates if desired. The new "Cottage" model is smaller and more compact and claimed to solve the problem of economy in space, fuel and labour in the small house. Those interested should call at the company's showrooms at 215, Tottenham Court-road, W.

Domestic Hot-Water Supply.

The illustration on page 467 shows the hot water supply for a house at Cholesbury, Bucks, designed by Messrs. T. P. Bennett & Son, architects. The scheme included the installation of a boiler to supply heating to the whole of the house by means of radiators, raising the temperature of the rooms on the ground floor to 60 deg. F., and on the first floor to 55 deg. F., when the outside temperature is 32 deg. F. The radiators are heated on a low-pressure hot-water circulation and are each provided with two nickel-plated gun-metal shut-off valves, so that each radiator can be completely disconnected from the



A Carron Fireplace Suite.

ulator without destroying the heat to the
er units. The hot-water supply is obtained
n a "Duplus" copper calorifier filled with
copper coil. There are eight radiators in
completed installation of "Classic" design,
le hot-water is supplied in seven points in
ious parts of the house. The cost of the
tem was £125. A water supply was unobtain-
e on this site, and rainwater storage tanks
e laid down, water being pumped into a
ter storage tank above the linen cupboard
supply the heating system.

Well Fires.

We have received two very artistic brochures
on the Well Fire and Foundry Co., Ltd.,
5, Berners-street, W.1, illustrating the
tent fireplaces which they are now pro-
cing in a glazed ceramic material and
wide range of delightful colourings.
e Well Fire is composed of a well and back
ck, both made of the finest selected Stour-
age freclay, which possesses a high radiating
ciency. The "Well" bottombrick is con-
ected with ventilating air-channels con-
lled by means of ventilators. Air is
ducted through these channels, which,
ng immediately beneath the fire, are usually
the same temperature as the fire; conse-
ntly the air, in its passage through these
nnels, is raised to that of the fire itself;
result is that the superheated air, uniting
h the smoke, causes it to burst into flame,
s consuming smoke which would otherwise
lost in the chimney. (This explains why
Fire has cured a large number of smoky
nneys.) The accompanying illustration
s one of the firm's latest designs.
proof of the thoroughness of the fire's
umption lies in the fact that only a hand-
of fine ashes is left after a day's burning
r need the fire be attended to after it
t.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting?—Ed.

Penalty Clause in Contract.

[REPLY TO W. L. CARTER, SEPTEMBER 18.]

SIR,—It should always be borne in mind that the sum appearing in the clause stated is not by way of being a penalty, but the agreed and ascertained amount of damages which the employer shall be held to suffer by the delay in completing the work, and as such must be commensurable with the probable or actual loss; the operation does not depend upon the granting of a bonus for early completion. On the other hand, I am of the personal opinion that a properly drawn clause securing a bonus to the builder in the circumstances named should be more efficacious, provided the employer is covered against the inducement which this naturally gives to the builder to rush the work. I know of no case where the legality of the clause in question has been successfully challenged.

S. R. M.

SIR,—A contract is an agreement enforceable at law between two definite parties directly creating an obligation. If the contract provides for bonuses to be paid to the contractor for earlier or punctual completion, coupled with the penalties or liquidated damages for delay, the contractor, in order to claim such bonuses, must complete at the time they became due under the contract, or he must show hindrance on the part of the employer or the architect. In *Leslie & Co. v. Metropolitan Asylums Board* (1901), 68 J.P. 86, it was held where sub-contractors had contracted direct with the employers and

had caused delay to the general contractors for the whole work, that the latter were nevertheless entitled to the bonus for punctual completion.

The fact that no provision has been made for a bonus should the contractor finish before the time agreed upon, does not affect his liability for delay in completion, provided the essential elements of a contract are present in the agreement. In this case, the R.I.B.A. form of contract was used, and Clause 24 (which is, of course, subject to other clauses of the contract), is clearly enforceable if there has been nothing on the employer's part to cause the contractor delay.

In general, it may be taken that any party who undertakes expressly or impliedly to do something for a consideration, and does not do it, is liable for any damages which may accrue to the other party to the contract by reason of his neglect or dilatoriness; and this, even if performance of his contract is rendered impracticable by unforeseen circumstances, against which he might have protected himself, by additional terms or conditions in his contract. Nevertheless, since our Courts are now Courts of Equity, relief against legal consequences, in spite of delay, is given on equitable terms. Therefore, to succeed against a contractor where time is not of the essence of the contract, the employer must be prepared to prove lack of skill and dilatoriness on the part of the contractor in completing the contract. For cases bearing on these points, see chapter VI, "Creswell on Building Contracts." "LEGAL."

Obstruction of Light to a Window.

[REPLY TO "MONTAGUE," SEPTEMBER 11.]

SIR,—I should advise "A" to approach "B" with an offer to enter into an agreement under which, in return for a nominal yearly payment, his window may remain unobstructed until the agreement be terminated at will by either party. "A" is then protected, even after removal of the hoarding; and "B's" window cannot become an ancient light while its light is so "rented." The two are neighbours, and a little neighbourly accommodation, under full protection, is all that is needed.

"LIVE AND LET LIVE."

Partnership.

[REPLY TO "ZENITH," SEPTEMBER 11.]

SIR,—For a stable practice, offer one year's income based on the proportion to come to the intending purchaser from the average of the last three years' income of the practice. For instance, if the last three years' incomes of the practice have, say, been £1,200, £1,700 and £1,500 respectively, average £1,500, and if it is proposed to purchase a third share, a fair offer would be £500. In the case of a rising practice it might be worth offering anything up to two years' income according to the prospects. The great thing in these cases is to make thorough investigation as to whether the practice may be considered stable, rising or waning, and the certificate book is not always a good barometer.

"BITTEN."

Porcelain-enamelled Taps.

SIR,—A client has asked me to specify porcelain-enamelled taps to bath and scullery sinks and though I have been told frequently that they are very liable to be damaged by chipping I have never been able to meet anyone who has direct first-hand information upon the subject. I should be obliged if any of your readers would favour me with their experiences.

"CAUTION."

Preservation of Bath Stone.

[REPLY TO "VOX," SEPTEMBER 18.]

SIR,—Apply two coats of a colourless petrifying liquid. Allow a few days to pass between each application. This will preserve the appearance and durability of the stone.

JOHN M. FIFE.



The "Well" Fire.

THE BUILDING TRADE.

SETTING OUT A STAIRCASE.—IV.

(Concluded from page 430, September 13.)

A *Ramp* is the name given to the concave curve in a handrail necessary to raise its height more rapidly than would be achieved by following its general line of rise, as when it comes against and forms part of a newel cap on a staircase landing in which situation a



RAMP.

handrail is run at a higher level than on a stair. For ornamental purposes handrails are sometimes ramped so as to enter the newel post at a level equal to that of the handrail across a level landing. They are likewise ramped at the bottom of the length to enter the bottom newel on the level.

A *Knee* is the reverse of a ramp, being a convex curve in a handrail.

When a knee follows upon a ramp the resultant curve is termed a *Swan's neck*.

A *Scroll Wreath* is the term given to a termination of a handrail in a spiral supported by one or by several clustered balusters. It is struck from a variety of centres, and is frequently found over the curtail step of a geometrical stair. A vertical scroll at the end of a handrail is known as a *Monkey-Tail*.

Square Cut is the term used in description of the modern method of forming a handrail wreath as in distinction from the older method known as the *Bevel Cut System*. In the first, the wreath is cut square from the surface, whilst in the *bevel cut system* the edges of the wreath are cut to a bevel.

The *Tangent System* is a geometrical method of obtaining the true section of a cylinder or other symmetrical solid when cut by an inclined plane, as in a handrail wreath, by enclosing the solid with tangent planes, upon the surfaces of which the inclination of the plane is drawn.

The *springing* is the term applied to that portion of a handrail where a curve commences, and the term is also applied to a similar portion of a string.

A *Core* is the name given to a thin bar sunk and screwed into the underside of a slender handrail to stiffen it.

Balusters, the intermediate supports to a handrail between the newels, are tenoned into the capping of the outer string at their lower end, and housed into a groove in the underside of the handrail at their tops.

The *Pitch of a stairs* is the term signifying the angle with the horizontal of the line drawn tangentially to the nosings of the treads.

Timbering is the name given to the underframing of rough supports of a stair.

A *Pitching Piece* is the name given to a piece of quartering fixed between the wall and newel on the underside of winders, and into which the carriages are framed.

A *Trimmer* is the joint carrying intermediate joists, forming a landing or carrying the ends of the joists cut to form the staircase well.

A *Fascia* is the vertical wrought board affixed to a trimmer round a staircase well.

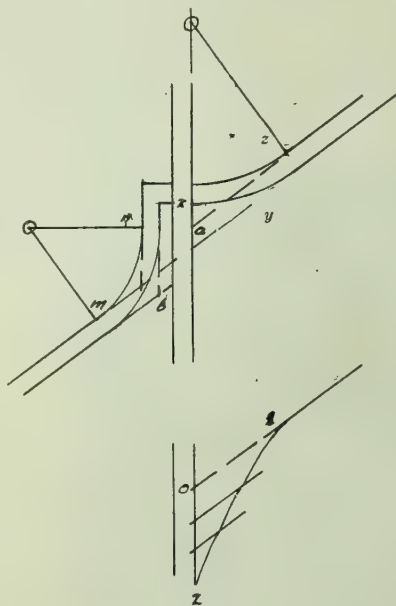
How to Lay Out Easements.

Where, owing to there being landings and newels on stairs, the line of the handrail, if continued, would cut the newel at different levels, curves, known as goose-necks, and easements are introduced to effect the entrance of the handrail to the newel at the same horizontal height.

The diagram below shows how to lay these out. The line of the handrail of the top flight would, if continued, strike the newel at *a*, and the rail of the handrail of the lower flight at *b*.

To describe the curve of the upper section, take a point *x* at any distance desired above the intersection of the handrail line and the newel and draw a horizontal line *xy*, calling the point where it cuts the lower line of the handrail *y*. From *y* as centre with radius *yx* describe an arc, calling the point at which it cuts the upper line of the handrail *z*. Next produce the line of the face of the newel, cut by the handrail line, and from *z* draw a line at right angles to the line of the handrail until it cuts the vertical line of the newel produced, calling the point of intersection *o*. Then from *o* as centre, and *oz* as radius, describe an arc, which gives the top of the handrail as desired. A parallel curve of the same width will give the bottom line of the curved handrail.

Next from a point horizontal to the points at which the new curve strikes the newel, draw horizontal lines the top one of which has a length



of from 5 in. to 6 in., according to the depth of the handrail, so as to leave a clearance between the underside of the handrail and the newel post. This forms the portion known as the knee. From the ends of these, drop vertical lines to cut the line of the handrail at *c* and *b*. With centre *c* and radius of any convenient length, calling the point *n*, describe an arc *cnm*, calling the point where it cuts the line of the handrail *m*. From *m* draw a horizontal line, and from *m* draw a line at right angles to the line of the handrail, calling the point where these two intersect *M*. Then with centre *O* and radius *on*, describe the arc joining *nm*. This will give the line of the curve of the upper side of the handrail. Extend the radius to the depth of the handrail to obtain the line of the curve of the underside of the handrail.

The newel post may be finished with the detail which has been decided upon at a height suitable to give satisfactory proportions.

Together with this form of handrail usually goes a curved outer string as follows. The bottoms of the two strings, if produced, would cut the newel at different heights, which would look unsightly; consequently, an easement is effected as follows. With centre *O* be the point at which the line of the upper string would cut the newel if produced and radius describe an arc, calling the point at which it cuts the newel *2*. Divide these two distances *O1* and *O2* into equal divisions. Interconnect from one to the other and their points of intersection will give the curve of the easement.

Handrailing.

Handrails are of various types and designs in section, from mop-stick to heavily moulded composite members.

They may be bracketed out on w.i. brackets 3 ft. apart, with fanged ends built into the wall as in an enclosed staircase, or supported by balusters rising from the outer string, or at landings, from a capping mould run along the floor boards.

The handrail should be fixed vertically to the nosing of the tread at a height convenient for grasping with the hand. The height of the upper surface of the handrail from the tread should be from 2 ft. 7½ in. to 2 ft. 8 in., and this there should be added at the landings a height of half a riser; the theory being that in ascending a person is in a less erect attitude than when walking along the level. However, in actual practice, a height of 2 ft. 6 in. for the nosing and of from 3 ft. to 3 ft. 3 in. for the handrail will give greater satisfaction.

The handrail may be fixed to the wall by means of w.i. brackets screwed on, or by a continuous wrought-iron bar, ½ in. thick and as wide as the top of the balusters, the bar being screwed to both handrail and balusters.

The more customary method is that shown below, where it is grooved on its underside to receive the balusters which rise from the



string into which they are housed or mortised and tenoned. The groove on the underside of the handrail is continuous, in order the balusters may be slid into position, where the handrail is fixed, and the groove may be filled in between the balusters if desired where the balusters are in position.

Handrails should, if possible, be run in continuous lengths where straight, but where jointed may either be butted and fastened together with a w.i. plate screwed on under or dowelled and splay-cut.

Balusters are of varying designs, but the principles are the same in that there should be no space greater than 4 in. between them, and also that the face of a riser should line the lower edge of a baluster, the intermediate span being filled with one or more balusters according to design. Where balusters rise from a cut-and-mitred string, the ends of the balusters are mitred against the vertical string bracket, if a bracket is fixed, and the balusters morticed to receive their feet. The top of the nosing is also mitred to receive a baluster planted on over the feet of the balusters and cut bracket.

The method of fixing the handrail to the newel consists of a shoulder cut in the handrail, pinned through the newel with oak pins.

TOWN PLANNING INSTITUTE

The seventh annual Country Meeting of the Town Planning Institute will be held at Canterbury, and by invitation of the Mayor and Corporation and of the Dean, meetings will be at the Guildhall and the Chapter House. The programme is as follows:—

FRIDAY, OCTOBER 2.

10 a.m.—Meeting at Guildhall. Welcome by His Worship the Mayor, Alderman George P. Crombie, M.A. Mr. P. H. Warwick, M.A. and (Y.E. (A.M.)), City Engineer, will read an address entitled "Canterbury—Some Planning Problems."

5 p.m.—Meeting at the Chapter House. Regional Planning in East Kent." Professor Abercrombie, M.A., President. There will be a small exhibition at the Chapter House, of the East Kent Region, arranged by Mr. Archibald (A.M.) and Mr. P. H. Warwick (A.M.).

8 p.m.—Public meeting at the Chapter House. Progressive Programme for Towns and Country," by Mr. G. L. Pepler, F.S.I., Past-President.

SATURDAY, OCTOBER 3.

10 a.m.—The Dean has kindly consented to receive delegates round the Cathedral.

11 a.m.—Tour of the East Kent Region, starting from Palace-street, near the Mint Yard, by School, in single-deck omnibus. Cost, 1s. per head. Visits will be made to some proposed sites for new towns, to the Bettess Farm, Pit, to Richborough, Sandwich, &c., and at Masonic Hall, Deal (3s. 9d.). At 1 p.m., Colonel F. G. Hayward has arranged for the Harbour Board for delegates to be taken to the harbour. There will be an interval for lunch. Return to Canterbury about 6 p.m. 7 p.m.—Dinner at the County Hotel (evening dress).

SUNDAY, OCTOBER 4.

In the morning Mr. P. H. Warwick will take delegates to view one or two of the famous old churches of the city.

11 a.m.—Special Service at the Cathedral, by the Dean.

Arrangements have now been made to take delegates to the County Hotel for the week-end. Bed and breakfast, 9s. 6d. each. It will be convenient for those who have not already done so, to write to the Secretary, Mr. A. R. Potter, 11, Fleet-street, Strand, London, W.C.2, at once, for application forms for hotel accommodation.

Works of Works and Building Foremen's Association Visit.

Over 120 members of the Birmingham and London Branches of the Clerks of Works and Building Foremen's Association were recently guests of the Leckhampton Quarries Co., Leckhampton, Glos. The visitors were accompanied by Mr. C. H. Trevelyan (President of the National Federation), Mr. F. J. Knight (Secretary), Mr. E. T. Howell (President of the Leckhampton Association), and Mr. W. H. Bond (President of the Bristol Association). The party first visited the lime kilns, which are of considerable interest, the plant being a new one with an output of 1,000 tons per week. The quarries, which are remarkable for the size and depth of faces, were next inspected, and on this visit was paid to the yard of the quarry, where a hydrating plant is in course of erection, together with a large masonry building. The visitors were struck by the unusual quality of the polished stone. After a meal was taken, Mr. T. F. Coke (general manager of the quarry company) welcomed the two branches of the Association, mentioning especially the fact that they had the honour of having with them the National President as well as the two Presidents.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	C'p'ters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers.
Aberdare.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Accrington.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Aldershot.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Ashton-under-Lyne.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Barnsley.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Barrow-in-Furness.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Barry.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Bath.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Bedford.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Birkenhead.....	1/9	1/9	1/8	1/9	1/9	1/9	1/9	1/4
Birmingham.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Bishop Auckland.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Blackburn.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Blackpool.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Bolton.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Bournemouth.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Bradford.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Brentwood.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Bridgwater.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Brighton.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Bristol.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Burnley.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Burton-on-Trent.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Bury.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Cambridge.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Cardiff.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Chatham.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Chelmsford.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Cheltenham.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Chester.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Chesterfield.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Colchester.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Coventry.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Crewe.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Darlington.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Derby.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Doncaster.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Dudley.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Durham.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
E. Glam. (Mon. Val.).....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Eastbourne.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Exeter.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Folkestone.....	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/1
Gloucester.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Grantham.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Grays.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Grimsbury.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Great Yarmouth.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Guildford.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Hallifax.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Harrogate.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Hartlepool.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Hastings.....	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/1
Hereford.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Huddersfield.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Hull.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Ipswich.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Leicester.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Leamington Spa.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Leeds.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Leicester.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Lichfield.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Lincoln.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Liverpool.....	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
Llanelli.....	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/1
London (12 m. radius).....	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
London (12-15 m. radius).....	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
Loughborough.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Luton.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Maidstone.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Manchester.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Marlborough.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Merthyr Tydfil.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Middlesbrough.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Newcastle-on-Tyne.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Newport, Mon.	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Northampton.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Norwich.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Nottingham.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Oakham.....	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/1
Oldham.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Oxford.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Plymouth.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Pontypridd.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Portsmouth.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Preston.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Reading.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Rochdale.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Rochester.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Rugby.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
St. Albans.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
St. Helens.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Scarborough.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Sheffield.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Silkeby.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Southampton.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Southend-on-Sea.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Southport.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
South Shields.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Stockport.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Stockton-on-Tees.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Stoke-on-Trent.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Stroud.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Sunderland.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Swansea.....	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/1
Swindon.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Taunton.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Torquay.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Tunbridge Wells.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Wakefield.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Walsall.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Warrington.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
West Bromwich.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Wigan.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Windsor.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Wolverhampton.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3
Worcester.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
York.....	1/8	1/8	1/8	1/3	1/3	1/8	1/8	1/3

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, &c.

SEPTEMBER 28.—**Carlisle**.—BUILDING.—Screening and pumping chambers at the new electricity power station, Willow Holme, for the T.C. Henry C. Marks, City Engineer and Surveyor. Deposit 10s.

SEPTEMBER 28.—**Durham**.—ADDITIONS, &c.—To Haverton Hill Council school, for the Durham C.C. Mr. F. Willey, F.R.I.B.A., architect, 34, Old Elvet, Durham.

SEPTEMBER 28.—**East Molesey**.—HOUSES.—Erection of 25 houses at Beauchamp-road, for the East and West Molesey U.D.C. Mr. Gordon Condell, Clerk, Council Offices, St. Mary's-road, East Molesey. Deposit £1 1s.

SEPTEMBER 28.—**Huddersfield**.—HOMES.—Four detached children's homes, at the Leas Scholes, for the B.G. J. Berry & Sons, architects and surveyors, 3, Market-place.

SEPTEMBER 28.—**Hull**.—ALTERATIONS.—Alterations and additions to the car shed, Holderness-road, for the T.C. City Architect. Deposit £2 2s.

SEPTEMBER 28.—**London, N.W.**.—Development of new housing estate at Hendon, for the L.C.C. Administrator of Housing Development Schemes, Old County Hall, Spring-gardens, S.W.1. Deposit £10.

SEPTEMBER 28.—**London, W.4**.—SCHOOL.—Erection of a new brick and brick block Central School, to accommodate 640 scholars, at Staveley-road, Burlington-lane, Chiswick, for the U.D.C. Edward Willis, F.S.I., Inst.C.E., Town Hall, Chiswick. Deposit £3 3s.

SEPTEMBER 28.—**Rathdown**.—WALL.—Retaining wall at the North Beach-road, Greystones, for the Wicklow County Board of Health. R. M. Butler, F.R.I.B.A., 23, Kildare-street, Dublin.

SEPTEMBER 28.—**Rowley Regis**.—HOUSES.—For (a) 30 parlour-type houses and incidental works, including sewerage, kerbing, coating with tarred macadam and forming footpath and roadway, in Mackmillan-road, on the Rowley Regis and Black Heath housing site; and (b) erecting 22 non-parlour-type houses and incidental works, including forming, making-up and kerbing an occupation road, coating same with tarred macadam and forming footpath, on the Dudley-road (Tippity Green) housing site, Rowley Regis, for the U.D.C. D. Wright, Clerk to the Council.

SEPTEMBER 28.—**Shipley**.—EXTENSIONS.—To the Sir Titus Salt's Hospital, for the Governors. H. Dawson, surveyor and architect, Somerset House.

*SEPTEMBER 28.—**South Shields**.—HOUSES.—Erection of the whole or part of 356 houses (which include two types) on the Cleadon Park Estate, East Side, Sunderland-road, for the Corporation. S. G. Stanton, Borough Engineer, Town Hall, South Shields. Deposit £5 5s.

SEPTEMBER 28.—**Stoke-on-Trent**.—CONVERSION.—Conversion into water-closets of about 70 privies and pails, in Hanford, for the T.C. Chief Sanitary Inspector, St. Peter's Chambers, Gleebe-street.

SEPTEMBER 29.—**Durham**.—SCHOOL.—General builders' work required in connection with the erection of Monkton new Council School, for the C.C. F. Willey, F.R.I.B.A., F.S.I., 34, Old Elvet, Durham.

SEPTEMBER 29.—**Greenock**.—HOUSES.—104 Houses at South Craigieknowes, for the T.C. A. Nimmo, Town Clerk.

SEPTEMBER 29.—**Huyton-with-Roby**.—FENCING, &c.—Taking down stone walling and rebuilding, building brickwalling, and erecting fencing in connection with road improvement works, Wood-lane, Huyton Quarry, for the U.D.C. H. Finister, P.A.S.I., Surveyor. Deposit £1 1s.

SEPTEMBER 29.—**Kilkenny**.—SCHOOL.—Erection and furnishing of St. Canice's National School, Kilkenny City, for the Commissioners of Public Works. Secretary, Dublin.

SEPTEMBER 29.—**Montrose**.—COTTAGES.—Cottages at H.M. Coastguard Station, for H.M. Office of Works. Architect, H.M. Office of Works, 122, George-street, Edinburgh. Deposit £1 1s.

SEPTEMBER 29.—**Newton-in-Makerfield**.—HOUSES.—Twenty-four non-parlour houses at the South Mesnes, Earlestown, for the U.D.C. J. Elston, A.R.I.B.A., Market Chambers, Earlestown.

SEPTEMBER 29.—**Oldmeldrum**.—HOUSES.—Three blocks of houses on Urquhart-road site, for the T.C. W. L. Duncan, architect, Turf.

SEPTEMBER 30.—**Ashton-under-Lyne**.—HOUSES.—Forty-four houses in blocks of four in Pelham-street, for the T.C. J. Rowbottom, Borough Engineer and Surveyor. Deposit £2 2s.

SEPTEMBER 30.—**Boston**.—ADDITIONS.—Addition to the Grammar School, for the Holland E.C. Scorer & Gamble, architects, Bank-street Chambers, Lincoln. Deposit £2 2s.

SEPTEMBER 30.—**Glamorgan-shire**.—BUILDING.—For (1) new intermediate school for 340 boys, caretaker's house, boundary walls, cycle house, &c., at Neath; (2) new council school for 160 mixed and infant pupils at Laleston, near Bridgend; (3) retaining wall and levelling of playground at Clyne Council School; (4) new kitchen and extension of dining-rooms at Ystalyfera Intermediate School; and (5) improvements to playgrounds at Wern (Ystalyfera) Council School, for the E.C. T. Mansel Franklyn, Secretary of E.C., Glamorgan County Hall, Cardiff.

SEPTEMBER 30.—**London**.—CONVENIENCES.—Construction of public conveniences at the south end of

Philpot-street, Mile End, E.1, for the Stepney B.C. B. J. Belsher, Borough Engineer and Surveyor. Deposit £2.

*SEPTEMBER 30.—**Mansfield**.—HOUSES.—Erection and completion of 58 houses in pairs, and blocks of six and four, for the T.C. Waude Thompson, Assoc. M.Inst.C.E., Borough Engineer and Surveyor, Market-street, Mansfield. Deposit £2 2s.

SEPTEMBER 30.—**Nantwich**.—HOUSES.—Forty-six houses on the Wallfields housing site, for the U.D.C. P. H. Eaton, surveyor. Deposit £2 2s.

SEPTEMBER 30.—**Penygarth**.—BUNGALOW.—At Penygarth, for Mr. T. Davies. J. Lewis-Evans, architect and surveyor, 21, Great Darkgate-street, Aberystwyth.

SEPTEMBER 30.—**Ruislip-Northwood**.—PAINTING.—At the Council Offices, Northwood, for the U.D.C. H. R. Metcalfe, Engineer and Surveyor.

SEPTEMBER 30.—**Stockbridge**.—HOUSES.—Thirty houses on the Shay House estate, for the U.D.C. J. N. Singleton, Chartered Surveyor.

SEPTEMBER 30.—**Thornton**.—SCHOOL.—To accommodate 40 scholars at Thornton, near Pocklington, for the East Riding C.C. County Architect, County Hall, Beverley. Deposit £1 1s.

SEPTEMBER 30.—**Wandsworth, S.W.**.—POST OFFICE.—Erection and completion of a branch post office at Wandsworth, S.W., for the Commissioners of H.M. Office of Works. Contracts Branch, King Charles street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

SEPTEMBER 30.—**Malling**.—CONVERSION.—Of the house known as "Elverdale," the Freehold, East Peckham, into two cottages, for the R.D.C. C. Souter, Sanitary Surveyor, West Malling.

OCTOBER 1.—**Dublin**.—REBUILDING.—Taking down and rebuilding upper portion of the front wall of the premises, No. 2, Kildare-place, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath. Deposit £1.

OCTOBER 1.—**Frome**.—HOUSES.—Twenty-four houses at Vallis-road, for the U.D.C. P. B. Rigg, architect, Cork-street. Deposit £2 2s.

OCTOBER 1.—**Golear**.—ROOM.—Masons', plumbers', carpenters' and joiners' work required in the erection of a club room in Scar-lane, Golear, for the Golear Branch of the British Legion. A. Shaw, architect, Golear.

OCTOBER 1.—**Ireland (Free State)**.—RESTORATIONS.—Of Cong. ex R.I.C. Barracks, co. Mayo; Ardahan ex R.I.C. Barracks, Galway; Kilbrittain ex R.I.C. Barracks, co. Cork; Waterville ex R.I.C. Barracks, co. Kerry, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath (Dublin). Deposit £1 each.

OCTOBER 1.—**Kilkenny**.—PAINTING.—Certain painting works, and works incidental thereto, at Kilkenny Barracks, Kilkenny. Officer-in-Charge of Contracts, Portobello Barracks, Dublin. Deposit £1 1s.

OCTOBER 1.—**Litherland**.—HOUSES.—Erection of 50 houses on the housing site belonging to the U.D.C. of Litherland between Sefton-road and Moss-lane. G. Ponsford, Engineer and Surveyor, Council Offices, Litherland.

OCTOBER 1.—**London, S.W.**.—DEMOLITION.—Taking down and clearing away temporary iron buildings complete with fittings, &c., at Tooting Home, Church-lane, Tooting, S.W., for the Guardians of the Wandsworth Union. F. J. Curtis, Clerk, Union Offices, St. John's Hill, S.W.18.

OCTOBER 2.—**Barnsley**.—EXTENSION.—Wards for women and children, connecting corridors, and sundry alterations to the Beckett Hospital, for the Committee. C. F. Moxon, architect, Regent-street South.

OCTOBER 2.—**Didcot**.—ADDITIONS AND ALTERATIONS.—Erection of six new classrooms, new offices, drainage, and other works at Didcot Council School, for the Berkshire E.C. W. C. F. Anderson, Education Secretary, Shire Hall, Reading. Deposit £2 2s.

OCTOBER 2.—**East Grinstead**.—ADDITIONS.—Alterations and additions to the sewage pumping station at Sunnyside, for the U.D.C. Dodd & Watson, engineers, County Chambers, Corporation-street, Birmingham. Deposit £2.

OCTOBER 3.—**Earsdon**.—HOUSES.—100 "A" type houses on the Park House estate, for the U.D.C. J. R. MacMillen, Surveyor, Council Offices, Shiremoor.

OCTOBER 3.—**Featherstone**.—PAINTING.—Outside painting of 75 houses, situate at Moor-road, Vicarage-lane and Farm-road, near Station-lane, for the U.D.C. S. Chesney, A.R.I.B.A.

OCTOBER 3.—**Hazelbury**.—REPAIRS.—Repairs and redecoration at Hazelbury Bryan Council School, for the Dorsetshire C.C. County Architect, County Offices, Dorchester.

OCTOBER 3.—**Wayland**.—HOUSES.—Two houses at Banham, near Dam Brigg, and two houses at Rockland All Saints, for the R.D.C. A. A. Gompertz, Clerk to the Council, Watton, Norfolk.

OCTOBER 5.—**Carterton**.—INSTITUTE.—Women's Institute at Carterton. Mrs. Clarke, Belmont, Carterton.

OCTOBER 5.—**Halifax**.—PAINTING.—Redecoration of the Victoria Hall, Town Hall, for the C.B. Borough Engineer, Crossley street. Deposit £1 1s.

OCTOBER 5.—**Hindley**.—SCHOOL.—School off Leigh-road, Hindley Green, to accommodate 450 scholars, for the U.D.C. H. Wade, 2, Birley-street, Blackpool. Deposit £5 5s.

OCTOBER 5.—**Kent**.—SCHOOL.—Extension of Cranbrook Grammar School for Boys, in the County of Kent, for the E.C. County Education Architect, Room 69, Sessions House, Maidstone, between hours of 10 a.m. and 4 p.m. (Saturdays and Sundays excepted). Deposit £2 2s.

OCTOBER 5.—**Loxley**.—PLUMBING.—Fitting up the proposed special subjects centre at the L. Council School, for the West Riding E.C. W. W. Divisional Clerk, Education Offices, Penistone.

OCTOBER 5.—**Newmarket**.—HOUSES.—Erection of 12 brick and slated parlour houses, in six pairs, Laureate Paddocks site, for the Newmarket W. H. Eley, Surveyor, Godolphin House, Newmarket.

OCTOBER 5.—**Ripon**.—HOUSES.—Twenty-six houses for the T.C. City Engineer. Deposit £5.

OCTOBER 6.—**Kew Gardens**.—POST OFFICE.—Erection of a branch Post Office at Kew Gardens, the Commissioners of His Majesty's Office of Works, Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

OCTOBER 7.—**East Stow**.—HOUSES.—For six houses at Combs and fourteen houses at Stowbury, for the R.D.C. Hunt & Coates, architects, 51A, A-gate-street, Bury St. Edmund's.

OCTOBER 7.—**Chichester**.—HOUSES.—Erection of 44 non-parlour houses (in pairs) in Lewis-road, Adelaide-road, for the Corporation. Whitehead, architects, 18, South-street, Chichester. Deposit £1 1s.

*OCTOBER 7.—**Gravesend, Kent**.—FLATS.—Erection of 48 flats in twelve blocks of four flats each, King's Farm estate, for the Corporation. Thon Dunch, architect, 27, Clement's-lane, London, or the Clerk, 4, Woodville-terrace, Gravesend. Deposit £2 2s.

OCTOBER 7.—**London, N.W.8**.—STAFF ACCOMMODATION.—New staff accommodation at the Western Fever Hospital, Lawn-road, Hampstead, N.W.8, for the Metropolitan Asylums Board, of the Board, Victoria-embankment, London. Deposit £1 in respect of each work.

OCTOBER 7.—**London, S.W.18**.—TOWN HALL.—Erection of a new town hall and alterations, existing town hall, at High-street, Wandsworth, buildings will be partly constructed of reinforced concrete. For the Wandsworth B.C. Ernest J. M.Inst.C.E., Borough Engineer, 215, Balham-road, S.W.17. Deposit, £2 2s.

OCTOBER 7.—**Rochdale**.—CONVENIENCES.—Men's convenience at Wet Rake Gardens, for the Borough Surveyor.

OCTOBER 7.—**Sutton (Surrey)**.—CLEANING, PAINTING AND REPAIR WORK.—At Belmont labour and stables, at Sutton (Surrey), for the Metropolitan Asylums Board. Office of the Board, Victoria-embankment, E.C.4. Deposit £1 in respect of each work.

OCTOBER 7.—**Various Places**.—VARIOUS WORKS.—Alterations, additions, tiling, chimney building accommodation, coal store (these works to hospitals, homes, and wards), for the Metropolitan Asylums Board. Office of the Board, Victoria-embankment, E.C.4. Deposit £1 in respect of each work.

*OCTOBER 8.—**Earlsfield**.—HALL.—Erection new concert hall, &c., at the Deerpark Institute premises, 2-4, Steerforth-street, Earlsfield. S.W.18.

*OCTOBER 8.—**Middlesex**.—HOUSES.—Erection completion of houses on the Priory-road site, Hampton U.D.C. Sidney H. Chambers, 8, Public Offices, Hampton, Middlesex.

OCTOBER 9.—**Leeds**.—HEATING.—Installation of low-pressure hot-water heating apparatus, Female Infirmary Block of the Bramley Institution, B.G. James H. Ford, Clerk to the Guardians, Law Offices, South Parade, Leeds.

OCTOBER 10.—**Liskeard**.—HOUSES.—Fourteen five blocks, for the T.C. H. R. Venning, Lic. Architect, Midland Bank Chambers.

*OCTOBER 10.—**Nottingham**.—HOUSES.—Erection of 24 and 40 non-parlour houses in blocks of six and six, on the Hallcroft housing estate, Retford, for the East Retford Corporation. Robt. E. Borough Engineer and Surveyor, Market-place, Retford. Deposit £1 1s.

OCTOBER 12.—**East Molesey**.—HOUSES.—Erection of 29 houses at Spreighton-road, West Molesey, East and West Molesey U.D.C. Council Office, Mary's-road, East Molesey. Deposit £1 1s.

OCTOBER 12.—**Middlesex**.—STORES.—STABLES, &c.—Erection of Stores Depot, stable block, at Northwood, for the U.D.C. H. R. A.M.Inst.C.E., Council Offices, Northwood. Deposit £2 2s.

OCTOBER 12.—**Reading**.—CONVENIENCES.—Sanitary convenience on the Fairground, Great street, for the C.B. Borough Surveyor.

OCTOBER 13.—**Liverpool**.—ALTERATIONS.—Erection of Pumping Station, for the Corporation Engineer, Alexandra-buildings, 55, Dale-street. Deposit £1 1s.

OCTOBER 13.—**London, E.C.2**.—STUNTING.—Construction of a subway 12 ft. in diameter x 750 ft. in length on the east side of St. Martin's-lane, and the south side of Gresham-street, in the City of London, for the Corporation. City Engineer, Guildhall, E.C.2, between the hours of 10 a.m. and 2 p.m. to 5 p.m. Deposit £2 2s.

*OCTOBER 13.—**London, S.E.13**.—ALTERATIONS.—Alterations and additions at Arsenal and Town Social Club. The on personal application between the hours of 2.30 p.m., Mount Pleasant, Plumstead.

OCTOBER 13.—**West Riding**.—BUILDING.—Additional cloakroom accommodation at Council School; (2) installation of a low-pressure apparatus at Grindleton-lane Ends C.O. and (3) erection of a new school at Askern for the C.C. Education Department, Wakefield.

OCTOBER 14.—**Llanelli**.—REMODELLING LIBRARY.—Remodelling of the existing library and such portions of the Llanelli Athenaeum and Llanelli Nevill Memorial as are involved in accordance with 1909 Municipal Conditions of Contract, &c., for the Borough Council. H. A. Gold, M.C., A.R.I.B.A., 14, Bedford-square, London, W.C.1. Deposit £3 3s.

OCTOBER 14.—**London, S.W.6**.—FLATS.—Erection of three blocks of flats comprising 36 dwellings in Wyld-road, Fulham, for the Fulham B.C. Borough Engineer, Town Hall, Fulham. Deposit £2 2s.

OCTOBER 14.—**Port Talbot**.—PAINTING.—Painting of exterior of the following schools: (a) Eastern Infants' School, Taibach, Port Talbot; (b) Cwmavon Infants' School, for the T.C. Moses Thomas, Education Officer, Port Talbot.

OCTOBER 15.—**Bristol**.—FLATS.—Erection of a block of flats at Eugene-street, St. James, Bristol, for the Housing Committee of the City Council. Housing Dept., 51, Prince-street. Deposit £1.

OCTOBER 15.—**Gloucester**.—POLICE STATION.—Erection of a police station at Pucklechurch, near Bristol, for the Standing Joint Committee of the Gloucestershire County Council. E. S. Sinnott, County Surveyor, Shire Hall, Gloucester. Deposit £2 2s.

OCTOBER 15.—**Waltham**.—SCHOOL.—School at Waltham, near Grimsby, for the Holland C.C. Scorer & Gamble, architects, Bank-street, Waltham, Lincoln. Deposit £2 2s.

OCTOBER 17.—**Barnet**.—HOUSES.—Erection and drainage, &c., of 181 houses (126 parlour and 55 non-parlour), on the Wellhouse estate, for the U.D.C. Surveyor, Council Offices, Wood-street, Barnet, Herts. Deposit £3 3s.

OCTOBER 20.—**Thurcroft**.—EXTENSIONS.—To the Council school, for the West Riding E.C. The Education Department, County Hall, Wakefield.

OCTOBER 21.—**York**.—ADDITIONS.—Alterations and additions to the existing engine house and offices at the electricity generating station, for the T.C. F. W. Carr, City Engineer. Deposit £2 2s.

OCTOBER 27.—**Ilford**.—LIBRARY BUILDING, &c.—Erection and completion of library building, together with Town Hall basement under, and extension of Town Hall offices over, at Oakfield-road, for the U.D.C. Shaw, M.Inst.C.E., Engineer and Surveyor, Town Hall, Ilford. Deposit £5 5s.

OCTOBER 28.—**London, E.8**.—BUILDING WORKS.—Laying works, being the erection and completion of electricity sub-stations, one at Gainsborough-road, Hackney, and one at Holly-street, Hackney, for the Hackney Metropolitan B.C. Borough Electrical Engineer, 306, Mare-street, Hackney, E.8. Deposit £2 2s.

NO DATE.—**Bucks**.—SCHOOL.—Erection of a new infant school to accommodate 280 children at Aylesbury, for the County E.C. County Architect, Education Sub-Office, Aylesbury. Deposit £15s.

MATERIALS. etc.

SEPTEMBER 28.—**Tynemouth**.—MATERIALS.—North-berland whinstone, slag, crushed granite, cast-iron k, cement, iron pipes and fittings, iron and steel, the C.B. J. F. Snillie, Borough Surveyor.

SEPTEMBER 30.—**Gellygaer**.—MATERIALS.—Paving, k and channel concrete fence posts, drain pipes, vent and lime, cast-iron goods, smithwork, ironngery, for the U.D.C. F. Read, surveyor.

SEPTEMBER 30.—**London**.—MATERIALS.—For (a) kngs and other ironwork; (b) stoneware pipes, lies and Portland cement; (c) 650 tons of granite slag tarmacadam, for the Islington B.C. Borough Engineer.

OCTOBER 1.—**Belfast**.—PIPES.—1,000 3 in. cast iron es; 4,000 4 in. cast iron pipes; 1,000 6 in. cast iron es; 20 tons tinned compo gas pipe, and 20 tons 2 in pig lead, for the C.B. Engineer and Manager.

OCTOBER 2.—**Durban**.—PIPES.—Cast-iron pipes and gals, for the T.C. Department of Overseas Trade, 5 Old Queen-street, S.W.1.

OCTOBER 2.—**Durban**.—VALVES.—Six reflux valves 1 363 sluice valves, for the T.C. Department of Overseas Trade, 35, Old Queen-street, S.W.1.

OCTOBER 5.—**Belfast**.—PIPES.—320 tons of 18 in., 12 in., and 9 in. cast iron pipes, together with gals, tapers, &c., for the C.B. City Surveyor. Deposit £2 2s.

OCTOBER 14.—**Edmonton**.—FENCING.—1,000 yds. of eight iron fencing and gates, for the U.D.C. Mr. Brown, engineer and surveyor.

OCTOBER 16.—**Lydenburg (South Africa)**.—PIPES.—Cast pipes, specials, valves, &c., for the T.C. Department of Overseas Trade, 35, Old Queen-street, London, W.1.

NO DATE.—**Newton Abbot**.—PIPES.—Ten tons of 18 in. and about 10 tons of 9 in. new or second-hand iron pipes, for the R.D.C. S. Oliver, Highway Surveyor, 9, Marlborough-terrace, Bovey Tracey.

ENGINEERING. IRON AND STEEL.

SEPTEMBER 30.—**Guiseley**.—RECONSTRUCTION.—Reconstruction and extension of the existing settling tanks, filters, for the U.D.C. H. A. Johnson, engineer, The Exchange, Bradford. Deposit £2 2s.

OCTOBER 1.—**London**.—STEELWORK.—Structural work for wagon shop, Perambur, for the Madras Southern Mahatras Railway Co. Directors, 25, Buckingham Palace-road, S.W.1. Charge £1 1s.

OCTOBER 1.—**Glasgow**.—BRIDGE.—Reinforced concrete bridge over Jenny's Burn in Richmond Park, for the T.C. J. Lindsay, Town Clerk.

OCTOBER 2.—**Liverpool**.—STEELWORK.—For the new works, Edge-lane, for the T.C. Land Steward and Surveyor, Municipal Buildings. Deposit £5 5s.

OCTOBER 3.—**North Walsham**.—TANKS.—Provision and laying of sewers, the construction of tanks and filter at the Outfall, &c., for the U.D.C. A. E. Collins, engineer, 10, Cambridge-road, Colchester. Deposit £10.

OCTOBER 3.—**Sibsey**.—BRIDGE.—Reinforced concrete bridge and contingent works, over the Hobhole Drain, for the Holland C.C. Wm. A. Rogerson, County Surveyor, Sessions House, Boston, Lincs. Deposit £2 2s.

OCTOBER 10.—**Bolton-le-Sands**.—BRIDGES.—Road-works and two bridges (reinforced and concrete bridge over Lancaster and Kendal Canal and masonry bridge over an occupation road) in connection with the construction of the new road, for the Lancashire C.C. W. H. Schofield, County Surveyor, County Offices, Preston.

OCTOBER 10.—**Gunthorpe**.—BRIDGE.—Ferro-concrete bridge over the River Trent, for the Notts C.C. J. Cracroft Haller, County Surveyor, Shire Hall, Nottingham. Deposit £5.

OCTOBER 10.—**Notts**.—EXTENSIONS.—Extension of bridge at Thurgarton, and extension and strengthening of bridge at Gamston, for the C.C. J. Cracroft Haller, County Surveyor, Shire Hall, Nottingham. Deposit £3 3s.

OCTOBER 15.—**Cape Province**.—STEELWORK.—Structural steelwork for Palmiet River Bridge, Cape Province, for the South African Railways Committee. Department of Overseas Trade, 35, Old Queen-street, London, S.W.1.

ROAD, SEWERAGE, AND WATER WORKS

SEPTEMBER 28.—**Basford**.—ASPHALTING.—Asphalt-ing and relaying paths and yard pavings, and also for external painting to 88 Council houses situate as follows: 30 houses, Colwick-vale, Colwick; 24 houses, Westdale-lane, Priory-road, and Vernon-avenue, Gedling; 22 houses, Baker-lane and Stamford-street, Newthorpe, Greasley; 12 houses, Church-lane and Broad-lane, Brinsley, for the R.D.C. S. Maylan, engineer and surveyor.

SEPTEMBER 28.—**Birmingham**.—SEWERS.—Construction of roads and sewers on the Norton Training School estate, Bordesley Green, for the T.C. H. H. Humphries, City Engineer and Surveyor. Deposit £2.

SEPTEMBER 28.—**Romford**.—SEWER.—Construction of about 900 yards of 9 in. stoneware pipe surface water sewer, with 10 manholes, 29 gullies, and other incidental works, in Wingley-lane, Hornchurch, for the R.D.C. W. J. Grant, Surveyor, 16A, South-street.

SEPTEMBER 28.—**Rugby**.—RESERVOIR.—Construction of impounding reservoir; 15 in. cast-iron main, with sluice valves, air valves, and washouts, about 7 miles in length; cottage, a recorder station, a chlorinating house, and tank, and alterations and additions to mains at the Council's Avon Water Works, for the U.D.C. G. Bertram Kershaw, Consulting Engineer, 9, Victoria-street, Westminster, S.W.1. Deposit £5.

SEPTEMBER 28.—**Rutland**.—PAVING.—Supplying and laying asphalt paving, approximately 105,000 sq. yds. in extent, in the Great North-road, commencing at the Stamford Borough Boundary and terminating at the Rutland and Kesteven County Boundary, for the C.C. Clerk, 7, Catmos-street, Oakham. Deposit £5.

SEPTEMBER 28.—**Salford**.—RAILINGS.—Supply and fixing of iron railings at the Nurses' Home, Stott-lane, Pendleton, for the B.G. E. H. Inchley, Clerk, Poor Law Offices, Eccles New-road.

SEPTEMBER 28.—**Saltash**.—REPAVING.—Of the footpath in Fore-street and Callington-road, for the T.C. Borough Surveyor.

SEPTEMBER 28.—**South Stoneham**.—SEWERAGE.—Construction of main sewerage and sewage disposal works in the village of Netley, for the R.D.C. W. J. Green, engineer, 39A, Portsmouth-road, Woolston, Southampton. Deposit £3 3s.

SEPTEMBER 29.—**West Hartlepool**.—ROAD.—Challoner-road, Jesmond-gardens, Elmwood-grove, Ryehill-gardens, Potterdale-street, and back Wensleydale and Patterdale-street; also for the construction of footpaths in Wharton-terrace and South-drive, for the C.B. Francis Durkin, A.M.I.C.E., Borough Engineer.

SEPTEMBER 30.—**Wood Green**.—IMPROVEMENTS.—In Douglas-road, River Park-road and Alexandra-terrace, for the U.D.C. Engineer and Surveyor. Deposit £1 1s.

SEPTEMBER.—**Epsom**.—WIDENING.—Of Sutton-lane, Banstead, for the R.D.C. T. E. Ware, surveyor, Waterloo-road, Epsom.

OCTOBER 1.—**Chippenham**.—MAINS.—Water mains, about 2,355 yds. of 4 in. main from the high level reservoir to Sheldon-road corner; about 823 yds. of 4 in. main along Marshfield-road; about 229 yds. of 3 in. main along Sheldon-road, for the U.D.C. A. E. Adams, Borough Engineer, High-street. Deposit £2 2s.

OCTOBER 1.—**East Riding**.—ROAD.—Reconstruction of approximately 1,760 lineal yards of the Elthoughton-road, near Brough, and also for the reconstruction of approximately 3,217 lineal yards of the road from Walkington to Bishop Burton, via School-lane and Pot and Ladle Pit, for the Beverley R.D.C. E. Picker, Surveyor, 12, Newbegin.

OCTOBER 1.—**Glamorgan**.—ROAD.—Construction of a new road approximately 54 miles in length, commencing at a point near Fernhill Colliery, Treherbert, and terminating at its junction with the Neath and Aberdare main road below Rhigos, for the C.C. T. Mansel Franklin, Clerk of the County Council, Glamorgan County Hall, Cardiff.

OCTOBER 1.—**Honiton**.—SEWER.—Construction of about 480 yards of 7 in. and 9 in. stoneware pipe sewer, mostly 9 in., together with manholes and all appurtenant works, at Honiton, for the T.C. W. H. Radford & Son, engineers, Albion Chambers, King-street, Nottingham. Deposit £2 2s.

OCTOBER 2.—**East Kerrier**.—SEWERS.—Sewers and sewage dispersal works for the Parish of Budock, for the R.D.C. R. Hansford Worth, engineer, 42, George-street, Plymouth.

OCTOBER 2.—**Gloucestershire**.—ROADS.—Works on the London-South Wales Trunk road;—5, Carrying out the following works on the main road A.40, between

Gloucester and Cheltenham—approximate distance four and a quarter miles—(a) making-up and improvements of existing paths; (b) improvement of road junctions with the main road. Carrying out the following works on the main road A.40 in the Charlton Kings Urban area from Hearne-road to the boundary of the Urban area—approximate distance 2,143 yards—(a) making-up and improvement of existing paths; (b) improvement of road junctions with the main road, for the C.C. County Surveyor, Shire Hall, Gloucester. Deposit £1 1s.

OCTOBER 3.—**Gunthorpe**.—ROADS.—4,500 lineal yards of new approach roads to the proposed bridge at Gunthorpe, for the Notts C.C. J. Cracroft Haller, County Surveyor, Shire Hall, Nottingham. Deposit £5.

OCTOBER 3.—**Haywards Heath**.—SEWERS.—670 lin. yds. of 9 in. stoneware pipe sewers in Park-road and Warden-avenue, for the U.D.C. G. Plummer, engineer and surveyor.

OCTOBER 5.—**Anglesey**.—ROADS.—Construction of new lengths of roads (diversions) for road widening and improvements on sections of the Coastal main road, for the C.C. W. E. Jones, County Surveyor, Graig, Llanfair P.G., Anglesey. Deposit £3 3s.

OCTOBER 5.—**East Riding**.—RECONSTRUCTION.—Widening, strengthening and resurfacing the trunk road, Hull-Selby road, and for carrying out certain improvements and diversions in connection therewith, and all works incidental thereto, from a point south of the road to Barby Landing (near Selby) on the Selby-York road, to Booth Ferry-road Junction, near Barnhill-lane (Howden), approximately 6½ miles, for the C.C. County Surveyor, County Hall, Beverley. Deposit £5 5s.

OCTOBER 5.—**Gellygaer**.—ROADS.—Excavation and filling (about 20,000 cub. yds.), ballasting, road-making, kerbing, channelling, and fencing for the approaches to the ferro-concrete bridge in course of construction (Ystrad Mynach to Gllifach), for the U.D.C. F. Read, Engineer and Surveyor. Deposit £2 2s.

OCTOBER 5.—**Leicester**.—MAINS.—Laying of rising mains, 44 in. diameter, 33 in. diameter, 27 in. diameter, 24 in. diameter, 20 in. diameter, 10 in. diameter, and 6 in. diameter, together with all special bends, tees, angle branches, &c., the assembling and fixing of sluice valves, opening and closing gearing and electric motors where required, the construction and completion of valve chambers, &c., and all other works in connection therewith, for the T.C. E. G. Mawbey, City Engineer and Surveyor. Deposit £5.

OCTOBER 5.—**Loce**.—MAINS.—Laying of 12 miles of 8 in. iron water mains, 1 mile of 6 in. iron water mains, and the construction of a reinforced concrete service reservoir to contain half a million gallons of water, and other works, for the U.D.C. G. H. Ivory, A.M.I.C.E. Deposit £3 3s.

OCTOBER 6.—**Malden and Coombe**.—MAKING-UP.—For (1) making-up the carriageway with reinforced concrete and maintaining St. John's-road, New Malden; (2) paving with artificial stone slabs the footways in St. Johns-road, New Malden, for the U.D.C. R. H. Jeffes, Engineer and Surveyor. Deposit £1 1s. each.

OCTOBER 6.—**Spalding**.—SEWERS.—Supplying and laying of about 21,230 lineal yds. of 12 in., 9 in., and 6 in. stoneware pipe sewers, together with manholes and appurtenant works, for the U.D.C. C. Franklin Murphy, chartered civil engineer, Lloyds Bank Chambers, Morpeth. Deposit £5.

OCTOBER 7.—**Birmingham**.—SEWERS.—Construction of about 395 yds. brick and concrete culvert, and 398 yds. stoneware pipe sewers, together with incidental works in Long Acre and adjacent lands, for the T.C. Herbert H. Humphries, City Engineer and Surveyor. Deposit £2.

OCTOBER 9.—**Wemyss**.—PIPES.—Supplying and laying about three miles of cast-iron pipes of diameter 15 in., together with sluice valves, &c., and including the construction of incidental and relative works, for the Wemyss and District Waterworks Board. Crouch & Hogg, Chartered Civil Engineers, 17, Lyndoch-street, Glasgow. Deposit £2 2s.

OCTOBER 10.—**Aberystwyth**.—MAINS.—Aberystwyth, together with all necessary special fittings, for the Council. H. B. Ward, Chartered Civil Engineer, Commerce Chambers, 15, Lord-street, Liverpool. Deposit £3 3s.

OCTOBER 12.—**Lechworth**.—EXTENSIONS.—To the main drainage system, for the U.D.C. H. Humphreys & Sons, Consulting Engineers, 28, Victoria-street, Westminster. Deposit £2 2s.

OCTOBER 12.—**Skegby**.—SEWERS.—Construction of about 4,765 yards of stoneware and iron pipe sewers varying in size from 7 in. to 12 in. diameter, with manholes and all appurtenant works, and the erection of detritus pits, Dortmund tanks, mud drying beds, and other sundry works, for the R.D.C. W. H. Radford & Son, Chartered Civil Engineers, Albion Chambers, King-street, Nottingham. Deposit £3 3s.

OCTOBER 15.—**Great Ouseburn**.—SEWERS.—Construction of about 6,000 lin. yds. of pipe sewers, varying in size from 9 in. to 18 in. diameter, together with manholes and other works, in the parish of Acomb, for the R.D.C. E. J. Silcock, engineer, 25, Victoria-street, Westminster, S.W.1. Deposit £5.

OCTOBER 16.—**Aushcliffe**.—SEWER.—533 yds. of 9 in. and 6 in. sewer and manholes from Watnall-road to the Hospital site, Hucknall, for the Hospital Committee. E. W. Bostock, Architect to the Committee, Council Offices, Watnall-road, Hucknall.

OCTOBER 20.—**Nesscliffe**.—WIDENING.—Road widening for a length of approximately 2,000 yards, including drainage, setting back of farm buildings and contingent works, at Nesscliffe, about 8 miles from Shrewsbury, for the Salop C.C. W. H. Butler, County Surveyor, County Buildings, Shrewsbury. Deposit £5 5s.

NO DATE.—**Howth**.—ROAD.—Section of concrete road, for the U.D.C. F. Higginbotham, surveyor, 24, Nassau-street.

NO DATE.—**Wakefield**.—KERBING.—Kerbing in natural stone, soiling to verges and open spaces, the formation of the carriageways and footpaths in tarred

slag, and the incidental works required to be done to complete the roads on the Portobello estate, for the T.C. P. Morris, Housing Architect and Town Planning Surveyor. Deposit £2.

Competitions.

(See Competition News, page 452.)

Auction Sales, Tenders, etc.

SEPTEMBER 29.—London, N.W.—Ernest Owers, Ltd., will sell: (a) Edgware, a building estate; (b) Child's Hill, Hampstead, two freehold sites; (c) Church End, Finchley main road, freehold site. Auctioneers, Estate Offices, Golders Green, N.W.

SEPTEMBER 25.—Sampford, Essex.—Veryard & Yates, Norwood-road, S.E.27, the following sales (without reserve) will be held as stated below: Sampford Hall, Little Sampford, Essex, timber and building material arising from demolition of the mansion.

SEPTEMBER 29.—London, S.W.—255, Clapham-road, S.W., stock of excellent timber and building materials.

SEPTEMBER 29.—London, S.E.—Joseph Hibbard & Sons will sell, without reserve, by order of the owners to clear the premises, upon the premises, Vauxhall, S.E. (close to Vauxhall Station, Southern Railway), the remaining plant and stock of sawmills and box makers, including 13 A.C. electric motors. Auctioneers, 15, Newington Green, Islington, N.16.

SEPTEMBER 30.—Birmingham.—Solihull House, Solihull, building materials, arising from demolition of the mansion. Auctioneers as above.

OCTOBER 1.—Kent.—Fuller, Horsey, Sons & Cassell will sell, on the premises, late Johnson Tile Works, Queenborough, Kent, materials of the buildings, all lots taken down and stacked ready for removal. Auctioneers, 11, Billiter-square, E.C.3.

OCTOBER 1.—London, E.—Joseph Hibbard & Sons in conjunction with W. W. Howard Bros. & Co. will sell, by order of the Governments of India and Burma, and others, without reserve, upon the premises at Commercial Wharf, Canning Town, stock of hardwoods (the whole catalogue is composed of dry stocks). Auctioneers, Newington Green, Islington, London, N.16.

OCTOBER 6-10.—Newmarket.—Perry & Phillips will sell, on the premises, Cheveley Mansion, near Newmarket, the whole of the interior and exterior fittings. The fabric of the mansion will be sold for demolition. Auctioneers, 59, High-street, Bridgworth.

OCTOBER 13.—London, E.C.3.—Fuller, Horsey, Sons & Cassell will sell by order of S. Pearson & Son (Contracting Department), Ltd., on completion of the contract for the construction of the Queen Mary Reservoir, at Littleton, near Staines, in lots, at the Merchants' Hall, Baltic Exchange, St. Mary Axe, E.C.3, contractors' plant and machinery. Auctioneers, 11, Billiter-square, E.C.2.

OCTOBER 20.—Middlesex.—Hampton & Son will sell, by order of the mortgagees, at the St. James's Estate Rooms, St. James's-square, S.W.1, building estates within a 12 mile radius of Marble Arch, Mill Hill, Middlesex, the Mylesdown Estate of nearly 483 acres. Auctioneers, 20, St. James's-square, S.W.1.

DEERING OCTOBER.—Sussex.—Knight, Frank & Rutley will sell, by direction of Mr Edward Huth, at The Goldings Hotel, Hayward's Heath Station (unless previously disposed of privately as a whole), the freehold residential sporting and building property known as the Wykehurst Park Estate (remaining portions), Bolney, including the Stanley Mansion; also private residence known as "Hazeldean," in all extending to about 380 acres. Auctioneers, 20, Hanover-square, W.1.

Public Appointments.

SEPTEMBER 25.—Wood Green, London, N.—Clerk of Works on the erection of houses in connection with the Council's housing scheme (the appointment will be of a temporary nature) by the U.D.C. The Clerk, Town Hall, Wood Green, N.22.

SEPTEMBER 28.—Lincoln.—Sanitary Inspector and Building Surveyor required by the Welton R.D.C. W. B. Danby, Clerk to the Council, 2, Bank-street, Lincoln, endorsed "Sanitary Appointments."

SEPTEMBER 28.—Southampton.—One Draughtsman (Grade I) required in the County Architect's Department. A. L. Roberts, County Architect, The Castle, Winchester, on receipt of stamped addressed envelope.

SEPTEMBER 30.—Bengal.—Architectural Assistant required, under the Bengal Government, by the High Commissioner for India. The Secretary to the High Commissioner for India, 42, Grosvenor-gardens, S.W.1.

SEPTEMBER 30.—Newcastle-upon-Tyne.—Clerk of Works required for the proposed secondary schools at Heaton. Director of Education, Education Offices, Northumberland-road, Newcastle-upon-Tyne.

OCTOBER 2.—Lancashire.—Architectural Draughtsman with experience of modern Secondary School design required by the C.C. County Architect, 16, Ribblesdale-place, Preston.

OCTOBER 8.—Liverpool.—Surveying Assistant in the Land Steward and Surveyor's Department required by the Finance Committee of the City of Liverpool. Walter Moon, Town Clerk, Municipal Buildings, Liverpool, endorsed "Application for Surveying Assistant."

OCTOBER 12.—London, S.E.6.—Technical Assistant required in the Borough Surveyors' Department by the Metropolitan Borough Council of Lewisham. John W. Shuter, Town Clerk, Town Hall, Catford, S.E.6.

*NO DATE.—Nigeria.—Inspector of Works (Reinforced Concrete) required by the Government of Nigeria for the Lagos Harbour Works, for one tour of 12 to 18 months' service. Apply at once, Crown Agents for the Colonies, 4, Millbank, Westminster, S.W.1., quoting M/13969.

NEW BUILDINGS IN LONDON.

Acton.—A large motor garage and body-building works is to be erected for Messrs. Stewart & Ardern, Ltd., 103, New Bond-street, W.1. Messrs. H. & J. Taylor, builders, 177, Lewisham-road, S.E.17. Mr. H. W. Langdon, quantity surveyor, 57-58, Chancery-lane, W.C.1. Messrs. H. H. Davis & Partners, architects, 19, Hanover-square, W.1.

Baker-street.—A new block of offices with a bank on the ground floor are to be erected at Nos. 101-103, Baker-street, W.1. Messrs. Bywaters & Son, Ltd., contractors, 10, Kingley-street, Regent-street, W.1. Mr. J. Stanley Beard, architect, Bank House, 52, Baker-street, W.1.

Bromley.—A site for a new school for 1,000 children has been acquired on the Downham housing estate. Mr. Herbert O. Ellis, F.R.I.B.A. (Messrs. Herbert O. Ellis & Clarke), 3, Old Queer-street, S.W.1, architect.

Camberwell.—Upon the large site at rear of Nos. 559-61, Old Kent-road, S.E., a factory will shortly be erected for Messrs. Glover & Webb, Ltd., to the design of Mr. Reginald W. Lone, A.R.I.B.A., 63, Lincoln's Inn Fields, W.C.2. Messrs. Troy & Co., Ltd., of Finchley-road, N.W.3, contractors. Reinforced concrete and structural steelwork by Messrs. Young & Co., 6, Queen Anne's Gate, S.W.1.

Clerkenwell.—The building programme of the Mount Pleasant Post Office on the site of the old Coldbath Fields Prison, includes the erection of a second large structure, in addition to the one now being built, and the construction of a staff block. The contractors for the first building are Messrs. Galbraith Bros., 63, Waterloo-street, S.E.5. Plans by H.M. Office of Works, Storey's Gate, S.W.1.

Croydon.—1,000 houses are to be built on the Coudson Court estate. Messrs. Trehearne & Norman, architects, Windsor House, Kingsway, W.C.2.

Deptford.—A laundry is to be erected in conjunction with the new baths and hall in Evelyn-street, North Deptford. Messrs. A. W. S. & K. M. B. Cross, architects, 45-46, New Bond-street, W.1. Messrs. Rualt & Young, quantity surveyors, 17, Southampton-street, W.C.1. Messrs. Wylie & Lochhead, Ltd., contractors, 45, Buchanan-street, Glasgow.

Edgware.—A large hospital-infirmiry is to be erected for the Hendon Board of Guardians, to accommodate 500 beds. Messrs. Paine & Hobday, architects, 45, Bedford-row, W.C.1. Messrs. John Leaming & Sons, quantity surveyors, 28, John-street, Bedford-row, W.C.1. Messrs. Dolby & Williamson, consulting engineers, 8, Princes-street, Westminster, S.W.

Euston-road.—£100,000 is being raised for new wards and operating theatres at the Elizabeth Garrett Anderson Hospital for Women, on which building is to commence this winter under the hon. architect, Sir Brumwell Thomas, F.3, The Albany, Piccadilly, W.1.

Fetter-lane.—New offices are to be erected to plans by Messrs. Herbert O. Ellis & Clarke, 3, Old Queen-street, S.W.1. Messrs. Kilby & Gayford, Ltd., builders, 87, Worship-street, E.C.2.

Gray's Inn-road.—It is proposed to build a new outpatients' department and a ward block of 30 beds at a cost of £35,000, at the Central London Throat, Nose and Ear Hospital. Messrs. Young & Hall, architects, 17, Southampton-street, W.C.

Greenwich.—Plans for a new school on the Charlton Housing Estate, to accommodate 264 scholars, and costing £13,000, have been prepared by Mr. G. Topham Forrest, F.R.I.B.A., County Hall, S.E.1.

Hammersmith.—A large group of tenement buildings are to be erected on an estate at Hammersmith, W., acquired by the Trustees of the Peabody Donation Fund. There will be 33 blocks of five stories each, together with 58 cottages of five rooms each. Messrs. Walter Lawrence & Son, Ltd., contractors, 19, Finsbury-

square, E.C.2. Mr. Victor Wilkins, F.R.I.B.A. Trustees' architect, 12, York Buildings, Adelphi, W.C.

Hampstead.—It is proposed to extend the Hampstead Garden Suburb Institute at Central square, N.W.11, at a cost of £30,000. Elevations by Sir Edwin Lutyens, R.A., 17, Queen Anne's Gate, Westminster, S.W.1. Interiors, planning by Mr. C. E. Hanscomb, F.R.I.B.A. Station-approach, Sanderstead.

Hanwell.—The Great Western Land Co., Ltd. are to carry out an estate developing proposals involving about 100 houses. Mr. R. H. Churchward, architect, 92, Victoria-street, S.W.1.

Isleworth.—Messrs. Watney, Combe, Reid Co., Ltd., have made an application to erect public house in Syon-lane. Messrs. F. Fisher & Son, architects, 38, Bloomington-square, W.C.1.

Islington.—Plans have been approved for the erection of a new elementary school on the Drayton Park site, to accommodate 504 children. The cost is estimated by the architect, Mr. Topham Forrest, F.R.I.B.A., at £21,750, including furniture.

Kensington.—Funds are rapidly accumulating towards the £80,000 total required to build the proposed Princess Louise Kensington Hospital for Children, at St. Quinton-avenue, W. Messrs. George A. Lansdowne, F.R.I.B.A., 9, Regent-street, W.1, and J. T. Saunders, F.R.I.B.A., 1A, Linden-gardens, W.2, architects.

Ludgate Circus.—Nos. 22-24, Bride-lane, E.C.4, are to be pulled down to make room for an extension of the brasserie restaurant in Ludgate Circus, E.C., of Messrs. Joseph Lyons & Co., Ltd., caterers. Plans by the Company's architect.

Mortimer-street.—Plans are being complete for the carrying out of the first section rebuilding of the Middlesex Hospital in Mortimer-street, W.1, the total cost of which is estimated at £500,000. Mr. A. W. H. F.R.I.B.A., architect (Messrs. Young & H), 17, Southampton-street, W.C.1.

Oxford-street.—Messrs. Horne Bros., 1, outfitters, are to erect a new branch showroom with four floors of offices above, at the junction of Oxford-street and Duke-street, W.1. Messrs. Higgs & Hill, Ltd., contractors, Crown Works, South Lambeth-road, S.W.8. Messrs. Edn Wimperis & Simpson, architects, 61, Southampton-street, W.1.

Rotherhithe.—A steel frame building with 5-ton electric traveller is about to be erected by Messrs. Young & Co., 6, Queen Anne's Gate, S.W.1, for Messrs. H. J. Enthoven & Son, Upper Ordnance Wharf, Rotherhithe, S.E.

St. Paul's Churchyard.—New premises for Dolcis Shoe Co., of Great Dover-street, S.E. are being erected in St. Paul's Church E.C.4. Messrs. F. D. Huntington, Ltd., contractors, 11, Hanover-square, W.1. Mr. Henry White, F.R.I.B.A., architect, Cavendish-street, W.1.

Tokenhouse-yard.—Steelwork is being erected for the building to be erected in Tokenhouse-yard, E.C.2, for the Bank of England, for the rebuilding of their main premises. Messrs. F. G. Minter, Ltd., builders, Works, Putney, S.W. Mr. F. W. T. architect, 14, Gray's Inn-square, W.C.1.

Victoria-street.—The projected project of rebuilding and improvements proposed by the directors of the Army & Navy Co-operative Society, Ltd., to their premises in Victoria-street, S.W.1, Artillery-row, S.W.1, H. place and Francis-street, S.W.1, is reported to involve considerably over £250,000. Aston Webb & Son, architects, 19, Queen's Gate, S.W.1.

Westminster.—Plans are being prepared by Messrs. Ashley & Newman, F.R.I.B.A., Gray's Inn-square, W.C., for the erection of tenement buildings, for the Westminster C.C., on a site of 17,444 sq. ft. in street, Page-street, and Vincent-street,

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work, plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

BRIDGEON.—The R.D.C. are to erect 40 houses.
BARKING.—The E.C. has been informed by the B.E. that they are prepared to approve the plans for the erection of "The Park" central school at an estimated cost of £40,000. The school will accommodate 320 boys and 320 girls.

BARNESLEY.—The M.H. has given formal sanction to the C.B. for borrowing £14,157, for the erection of public elementary school at Wilthorpe.—The Housing Committee recommended that application be made to the M.H. for sanction to subsidise a further 100 houses.

BIGGLESWADE.—The U.D.C. has decided to build more houses on the Townfield estate.

BLACKPOOL.—The M.T. has held an inquiry into an application by the Corporation for sanction to borrow £4,482 for the widening and improvement of Newton-terrace and St. Walburg's-road, Abingdon-street, Church-street, and Clifton-street; for the purchase of land for the construction of West Park-road; for the purchase of property in Cullifield-road, for the construction of a new road; for the reconstruction of Bloomfield-road, and for the purchase of land in Bispham-road for the provision of a highway depot.

BATHON.—The U.D.C. has decided upon a scheme for the erection of 100 houses by direct labour at Patch Green, near Winton.

BRENTFORD.—The M.H. held an inquiry into the application of the D.C. for approval of proposals for development in connection with the Brentford town-planting scheme.

BRIGHTON.—The B.G. has decided to adopt a scheme for the accommodation of 19 vagrants, at a cost of £12,000.

BURTON.—Sanction has been received from the T.C. to the loan for £900 for the erection of a caretaker's house for Balfour-road School.—Proposals by the Surveyor for the fencing of the Girls' Secondary School and playing field have been approved by the Committee. The work is estimated to cost £484.

CAMBRIDGE.—The T.C. passed plans for six houses in Ambroth-way, 42 houses in Coleridge-road, eight in Milton-road at corner of Hawthorn-way, one of semi-detached houses in Newmarket-road, for the Corporation.

CHESHAM.—The E.C. has received sanction from the B.E. for a new girls' school at Highfield-lane, and the M.H. forwarded sanction to the borrowing of £900 for the purchase of the site. The new school will accommodate 300 girl scholars displaced by the termination of Whittington Moor Girls' School.—The M.H. were also provisionally approved for new boys' schools at Boythorpe, to be erected on land originally purchased by the Corporation for housing.—The approval was also received to the erection of an additional classrooms at Hasland (Eyre-street) school.

CHESTER.—The R.D.C. passed plans for a sub-station for Messrs. Edwards & Armstrong, at Corsham.

CHESHAM.—The M.H. has sanctioned the proposal of the Corporation Housing Committee to provide 250 houses in the Osaston Park-road district.

CLOUWICK.—The Market Hall and the dungeons are to be renovated.

COLEBURY.—The County Council has considered plans for the building of 52 four-roomed labourers' cottages for the Brothery Union, and approved of certain types.

ENFORD.—The R.D.C. has decided to purchase sites for housing purposes.

ESOM.—The Epsom Grand Stand Association has plans prepared showing an entirely new grand stand, capable of accommodating over 20,000 persons.

GLYDE.—The U.D.C. has recommended the Surveyor to prepare plans for the new bridge at Tirth.

HERFORD.—The T.C. has decided to apply for sanction to borrow £21,000 for the provision of a new pavilion in Valley Gardens, and £2,140 for extensions and alterations at the Bogs Field entrance to Gardens, including a children's pool.

HILLY.—The B.E. has approved the purchase of a site for a secondary school for girls. The site is near the present boys' grammar school, between Bolling and Cowpasture-road.

KUTSFORD.—The R.D.C. has decided to apply to the M.H. for sanction to borrow £61,500 for new sewage works and sewage outfall in the Moberley street.

LIVERPOOL.—A sum of £150,000 has been guaranteed under the Trades Loan Act for carrying out the extension of Limerick docks and the construction of a new entrance.

LITWATTE.—The D.C. are to apply to the Public Loan Board for a loan of £7,657 for erection of houses.

LONDON (BOW).—The L.C.C. are to erect another building in Back-alley.

LONDON (CAMBERWELL).—The B.C. has agreed to a scheme for the improvement of housing conditions in the Wyndham-road area.

LONDON (DEPTFORD).—The B.C. has received from the M.H. formal sanction to the borrowing of £3,992 for provision of an underground convenience at the Hill.—Plans approved: A. W. S. & K. M. B. S. 46, New Bond-street, W.1, laundry premises in connection with the new public baths and wash-

See also our List of Contracts, Competitions, etc.

houses, Evelyn-street, on the north side of Clyde-street.

LONDON (FINCHLEY).—A proposal is on foot for the erection of a maternity centre at a cost of £7,542.

LONDON (FULHAM).—The B.C. recommend that premises 2 and 3, Munster-mews, be purchased at a cost of £1,250 for electricity sub-station purposes.—The B.G. has asked the M.H. to sanction £800 for extensions to the Infirmary.—The B.C. are to apply for a £23,000 loan for new paving works.

LONDON (HAMMERSMITH).—The B.C. recommend that the Council approve the demolition of the present iron urinal at the north-west corner of Shepherd's Bush Green, and the erection of a brick building for the joint purpose of an electricity sub-station and urinal, at an estimated cost of £948.

LONDON (HENDON).—The M.H. has held an inquiry into the application of the L.C.C. for sanction for an order enabling them to acquire compulsorily an additional area of over 100 acres at Burnt Oak, Hendon, for housing purposes.

LOWESTOFT.—The T.C. recommend that application be made to the M.H. for sanction to a loan of £13,175 for the erection of 31 houses on the Beccles-road housing site.

LYTHAM ST. ANNES.—The M.H. has sanctioned the application of the Corporation for permission to borrow £26,500 for the reconstruction of the Lytham public baths.

NEWPORT.—Although the contract for the building of the Tredegar Arms Hotel, Newport, and premises connected therewith, has not been actually signed, Messrs. John Jenkins (Ltd.), of Newport, have been instructed to proceed with the work.

NORWICH.—The T.C. adopted the recommendations from the E.C. for the erection on the Clare House estate of the proposed new secondary school for girls, prepared by Mr. C. J. Brown, architect. The Council also decided to provide new public elementary schools at (1) the Drayton-road estate; (2) the northern portion of the Earham housing estate; (3) Colman-road.

NOTTINGHAM.—The M.H. has held an inquiry into the Corporation's application for sanction to borrow £504,000 to erect new municipal buildings, offices, and shops upon the site in the market, in place of the Exchange Hall.—It was stated that new sewerage works are also being planned for the city estimated to cost £750,000.

OLDHAM.—The C.B. resolved that tenders be obtained for the installation of electric light in the Central Hall and end-classroom of the Mixed Department, with provision for the extension of the system to other classrooms.—The Council also resolved that the plan and estimate be approved of and instructions given for the work to be carried out of fencing in of the

land around the public convenience at the junction of West-street and Fletcher-street.—The Council further resolved that the offer of Messrs. L. G. Mouchel & Partners, Ltd., for the preparation of particulars and details of reinforcement required in connection with the piled foundation raft for the new generating station be accepted.—Plans passed: J. Greenhalgh, new assembly hall, Boy Scouts' Headquarters, Albert-street and Victoria-street.

OSWESTRY.—The M.H. held an inquiry into the application of the R.D.C. for sanction to borrow £19,721 for the purpose of carrying out a sewerage and sewage disposal scheme for the village of Gobowen.

OXFORD.—The Finance Committee of the City Council recommend that application be made to the M.H. for sanction to borrow a further sum of £10,000 for small dwellings.

PLYMOUTH.—The C.B. has resolved that the Borough Surveyor be authorised to advertise for tenders for carrying out alterations to the Central Police Station.—The M.H. has sanctioned the borrowing of £30,425 for widening and improvement of Embankment-road.

RAMSGATE.—The T.C. are considering a proposal to acquire an extensive building, formerly known as Fegan's Homes, for the purpose of providing facilities for increased tuition for school children in manual instruction and cooking.

RUGBY.—The M.H. has approved the U.D.C. application for sanction to erect 100 houses on the Eastlands estate.

SELBY.—Plans for the new extensions, estimated to cost £14,000, to the Selby Abbey National Schools have been approved by the U.D.C.

SHREWSBURY.—The Corporation are making plans for the development of the racecourse estate, which they have purchased for a new school, the erection of houses, and for playing fields. A provisional lay-out allots space for over 200 houses.

SOUTHEAST-ON-SEA.—The M.H. has sanctioned the loan of £1,693 for the erection of public conveniences in Chalkwell Park for the C.B.

SOUTHSEA.—The Council has passed plans for 114 new houses. The Corporation is considering the question of the development of a new building area at Stanshaw, and it is proposed to erect about 70 working-class dwellings there.

STANLEY.—The U.D.C. has received sanctions from the M.H. for the borrowing of £56,150, £5,250, and £1,250, for the erection of a further 120 houses, with necessary street works and sewers.

SUTTON COLDFIELD.—A proposal is on foot for the erection of a new church near Sutton Coldfield.

TENDRING.—The R.D.C. are to erect 12 houses, 6 at Beaumont, and 6 at Little Holland.

TIVERTON.—The M.H. has approved the R.D.C.'s scheme of 104 houses.

THORNE.—The R.D.C. propose spending £2,000 upon the purchase of Thorne Hall, and its conversion into offices, for which the M.H. have held an inquiry into an application to borrow the money.

WARMLEY.—The Plans and Building Committee recommended the erection of 20 Council houses as follows: Siston and Hanham Abbot's, four each; Oldland and Bitton, six each.

WEALDSTONE.—Plans approved by the U.D.C. included the development of the Bonnersfield estate on extensive lines. No fewer than 214 houses were approved for erection by Mr. J. F. Langer.

WESTCLIFFE.—A proposal for the construction of a pier on Chalkwell-esplanade, has been submitted to the Southend Corporation. The plans provide for a palm court, refreshment room, ball room, pavilion and concert hall, band pavilion, and Badminton courts, together with a floating landing-stage for the use of yachtsmen and bathers. The concert hall and band pavilion will each provide accommodation for 1,500 people.

WESTHAMPTON.—The R.D.C. has approved the erection of 24 more houses on sites at Yarbrook and East Lavant.

WEST HYDE.—The Watford R.D.C. are to build 16 houses near Maple Cross.

WIGAN.—The Council are negotiating for a site for a school at Pemberton.—The Mining and Technical College are proposing extensions to their premises. No architect has yet been appointed to prepare the necessary plans.—The parishioners of St. Andrews are proposing the erection of a Sunday school and mission church on a site in Netherby-road.

WILLESDEN.—A new ward is to be built at the General Hospital, Harlesden-road.

WOLVERHAMPTON.—The Staffordshire Local E.C. intends to provide a new public elementary school for about 900 children on the new Low Hill housing estate.—Bushbury-lane Council School is to be enlarged to provide accommodation for 300 children.

WREXHAM.—The R.D.C. are to apply to the M.H. for sanction to the borrowing of £87,306 for various schemes of road widening, drainage, and the erection of six houses.

YORK.—The Housing Committee propose to invite tenders for the erection of a further 300 houses of the steel frame type.—The Committee are investigating the possibility of converting Nunthorpe Hall and other houses for letting as flats.—A scheme has been prepared for culverting a portion of Tang Hall Beck at a cost of £5,100.—The Estates Committee are to convert premises in Parliament-street lately occupied by the Post Office as a telephone exchange, into offices, at a cost of £1,080.—The Estates Committee are considering a suggestion from the British Music Society as to the necessity for the provision of a concert hall.—The City Council has decided to apply to the M.H. for approval for tenders for the erection of upwards of 300 houses of the steel frame type. The Housing Committee has also decided to build four "all electric" houses.

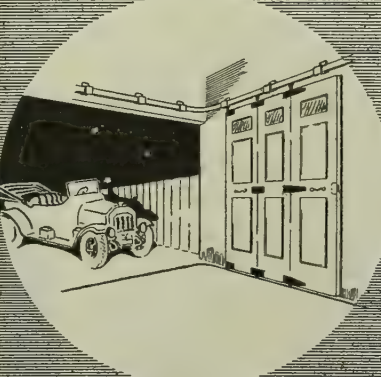
FIRE.

BISHOP'S STORTFORD.—Damage estimated at over £30,000 was caused by a fire at a large timber yard and sawmills.

THE "HENDERSON" SYSTEM

SLIDING DOOR GEAR

FOR FACTORIES, GARAGES, SCHOOLS, ETC..



"TANGENT JUNIOR" FOR LIGHT DOORS.
"TANGENT SENIOR" FOR HEAVY DOORS.

WRITE FOR BOUND CATALOGUE B.24 TO:-
P.C. HENDERSON, LIMITED.
BARKING, ESSEX. PHONE: EAST HAM 297.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.	£	s.	d.
Best Stocks	4	3	6
Second Hand Stocks	3	18	6
Per 1,000. Delivered at London Goods Stations.	£	s.	d.
Flettons, at	2	13	3
King's Cross	2	15	3
Do. grooved for plaster	3	8	3
Do. Bullnose	3	8	3
Best Stourbridge Fire Brick—	2 1/2 in.	8	11 0
3 in.	10	3	0
GLAZED BRICKS—			
Best White	D'ble Str'ch's	30	0 0
Ivory and Salt Glazed	D'ble Headers	27	0 0
Stretchers	One Side and Two Ends	31	0 0
Headers	Two Sides and One End	32	0 0
Quoins, Bull-nose and 4 in Flats	Splays and Squints	29	10 0
Second Quality, 21 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, 25 10s. extra over white.			

BREEZE CONCRETE SLABS.

Delivered London	s.	d.
2 in. per yd. super	1	11
2 1/2 in.	2	4
3 in. per yd. super	3	11
4 in.	4	11
Thames Ballast	10	6
Fit Sand	13	9
Thames Sand	14	6
Best Washed Sand	14	6
3 in. Shingle for Ferro-Concrete	12	9
3 in. Broken Brick	14	0
Pan Breeze	7	6

Per ton delivered in London area in full van loads.		
Best Portland Cement, British Standard Specification. Test £2 18 0 to £3 3 6		
51s. alongside at Vauxhall in 80-ton lots.	0	10 0
Ferrocete per ton extra on above.	4	8 0
Super Cement (Waterproof)	8	15 0
Roman Cement	5	15 0
Parian Cement	5	15 0
Keene's Cement, White	5	10 0
" Pink	3	0 0
Plaster, Coarse, Pink	3	12 6
" White	5	12 0
" Fine	3	9 0
Sirapite, Coarse	3	17 0
" Finish	2	11 9
Grey Stone Lime	2	11 9
Chalk Lime	2	4 6
Best Ground Blue Lias Lime	32	0 0
Hair	1	12 0
Granite Chippings		
NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.		
Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.		

STONE.

BATH STONE—delivered in railway trucks at	s.	d.
Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube.	2	9 1/2
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube.	2	11 1/2
PORTLAND STONE—		
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., or South Lambeth Station, G.W.R., per ft. cube.	4	
Do. do. delivered on road wagons at above stations, per ft. cube.	4	5
White based, 3d. per ft. cube extra.		
NOTE.—1d. per ft. cube extra for every foot over 20 ft. average, and 1d. beyond 30 ft.		

HORTON-WOOD STONE—		
Delivered at any Goods Station, London.		
Small random blocks, up to 10 ft. cube. P. ft. cb.	7	0
Random blocks from 10 ft. and over	17	0
Sawn two sides	27	0
Sawn three or four sides	32	0
YORK STONE, BLUE—Robin Hood Quality.		
Delivered at any Goods Station, London.		
6 in. sawn two sides landings to sizes (under 30 ft. super.)	5	6
6 in. rubbed two sides, ditto	6	0
3 in. sawn two sides slabs (random sizes)	2	3 1/2
2 in. to 2 1/2 in. sawn one side slabs (random sizes)	1	6 1/2
1 1/2 in. to 2 in. ditto, ditto	1	4
HARD YORK—		
Delivered at any Goods Station, London.		
Scrapped random blocks	6	3
6 in. sawn two sides landing to sizes (under 40 ft. super.)	5	1 1/2
6 in. rubbed two sides ditto	6	1 1/2
4 in. sawn two sides slabs (random sizes)	2	10
3 in. ditto	2	1 1/2
2 in. self-faced random flags	9	0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.		
--	--	--

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 x 11	£32 0	3 x 6	£23 0
4 x 9	28 0	3 x 11	28 0
4 x 8	26 0	2 x 11	28 0
4 x 7	25 0	3 x 9	25 0
3 x 8	24 0	2 1/2 x 9	25 0
3 x 7	23 0	3 x 4 1/2	23 0
2 1/2 x 7	22 0	3 x 4	23 0
1 x 11	£30 0	1 x 9	£30 0

PLANED BOARDS.

1 x 11	£30 0	1 x 9	£30 0
--------	-------	-------	-------

PLAIN EDGE FLOORING.

Inches.	per sq. ft.	Inches.	per sq. ft.
3/4	21/-	1 1/4	32/-
1	23/-	1 1/2	37/6

TONGUED AND GROOVED FLOORING.

Inches.	per sq. ft.	Inches.	per sq. ft.
1	25/-	1 1/4	16/6
1 1/4	32/6	1 1/2	20/-
1 1/2	37/6	1 3/4	25/-

BATTENS.

3 x 2	s. d.
2	6 per 100 ft.

SAWN LATHES.

Per bundle	0	2	4
------------	---	---	---

1" AND UP THICK.

Dry Austrian Wainscot, per ft. cube	0	16	0
Dry American and/or Japanese Figured Oak, ft. cube	0	15	0
Dry American and/or Japanese Plain Oak, ft. cube	0	11	0
Dry sq. edged Honduras Mahogany, ft. cube	0	16	0
Dry Log cut Honduras Mahogany, ft. cube	0	18	0
Dry Cuba Mahogany, ft. cube	0	1	0
Dry Teak, ft. cube	0	13	0
Dry American Whitewood, ft. cube	0	11	0
Best Softwood glue, per cwt.	4	10	0
Liquid Glue, per cwt.	4	7	0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

24 by 12	£	s.	d.	18 by 10	£	s.	d.
22 by 12	37	12	6	18 by 9	21	2	6
22 by 11	34	0	0	16 by 10	18	12	6
22 by 10	31	5	0	16 by 8	17	12	6
20 by 12	29	15	0		13	15	0
20 by 10	25	12	6				

TILES.

Best machine-made tiles from Broseley or Staffordshire district	£	s.	d.
Ditto hand-made ditto	5	12	6
Ornamental ditto	6	2	6
Hip and valley tiles (per dozen)	0	9	6
Machine-made	0	9	0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—	£	s.	d.
R.S. Joists, cut and fitted	13	10	0
Plain Compound Girders	15	10	0
Stanchions	17	10	0
In Roof Work	20	10	0

MILD STEEL ROUNDS.

To London Station, per ton.	£	s.	d.
Diameter.			
1/2 in.	12	10	0
3/4 in.	11	10	0

WROUGHT-IRON TUBES AND FITTINGS.—(Discount off List for lot of not less than £7 net value delivered direct from Works, 2 1/2 per cent. less above gross discounts, carriage forward if sent from London Stocks.)

Tubes.	Fittings.	Flanges.
Sizes.	1/2" to 6"	1/2" to 6"
Black Gas	55	55
Blue Water	50	50
Red Steam	45	45
Galv'd Gas	40	40
" Water	33 1/2	33 1/2
" Steam	27 1/2	27 1/2

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Nozzles.	Stop Ends.
3 in.	1 1/2	1 1/2	3 1/2
3 1/2 in.	1 1/4	1 1/4	3 1/4
4 in.	1 1/2	1 1/2	3 1/2
4 1/2 in.	1 1/2	1 1/2	3 1/2
5 in.	1 1/2	1 1/2	3 1/2

O.G. GUTTERS.

Per yd. in 6 ft. lengths.	Gutters.	Nozzles.	Stop Ends.
3 in.	1 1/2	1 1/2	3 1/2
3 1/2 in.	1 1/4	1 1/4	3 1/4
4 in.	1 1/2	1 1/2	3 1/2
4 1/2 in.	1 1/2	1 1/2	3 1/2
5 in.	1 1/2	1 1/2	3 1/2

RAIN-WATER PIPES, &c.

Per yd. in 6 ft. lengths.	Pipe.	Bends, stock Branches, angles, stock angles.
2 in. plain	1 1/4	1 1/4
2 1/2 in.	1 1/2	1 1/2
3 in.	2 1/4	2 1/4
3 1/2 in.	2 1/2	2 1/2
4 in.	3 1/2	3 1/2

L.C.C. COATED SOIL PIPES—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Pipe.	Bends, stock Branches, angles, stock angles.
2 in. plain	1 1/4	1 1/4
2 1/2 in.	1 1/2	1 1/2
3 in.	2 1/4	2 1/4
3 1/2 in.	2 1/2	2 1/2
4 in.	3 1/2	3 1/2

L.C.C. COATED DRAIN PIPES—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Pipe.	Bends, stock Branches, angles, stock angles.
2 in. plain	1 1/4	1 1/4
2 1/2 in.	1 1/2	1 1/2
3 in.	2 1/4	2 1/4
3 1/2 in.	2 1/2	2 1/2
4 in.	3 1/2	3 1/2

IRON—

Common Bars	£	s.	d.
Staffordshire Crown Bars—good merchant quality	14	5	0

Staffordshire "Marked Bars"	£	s.	d.
Mild Steel Bars	16	10	0
Steel Bars, Ferro-Concrete quality, basis price	11	0	0
Hoop iron, basis price	16	0	0
Galvanised	31	0	0
Soft Steel Sheets, Black—			
Ordinary sizes to 20 g.	13	10	0
" " " 24 g.	14	10	0
" " " 26 g.	16	10	0
Sheets Flat Best Soft Steel, C.I. & C.A. quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	19	10	0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g.	21	10	0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	23	10	0
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	18	10	0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	19	0	0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	22	0	0
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	22	10	0
Best Soft Steel Sheets, 22 g. and 24 g.	24	10	0
Best Soft Steel Sheets, 26 g.	26	0	0
Cut Nails, 3 in. to 6 in. (under 3 in. usual trade extras.)	19	10	0
METAL WINDOWS—Standard sizes, suitable for complete houses, including all fittings, painting, coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.			

LEAD, &c.

(Delivered in London.)	£	s.	d.
LEAD—Sheet, English, 4 lb. and up	52	10	0
Pipe in coils	56	0	0
Soil Pipe	57	0	0
Compo pipe	57	0	0
NOTE—Country delivery, 30s. per ton extra; lots under 3 cwt., 3s. per cwt. extra, and over 3 cwt. and under 1 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.			
Old lead, ex London area, at Mills. per ton	37	10	0
Do., ex country, carriage forward	38	10	0

COPPER.

Seamless Copper tubes (basis)	per lb.
Strong sheet	"
Thin	"
Copper nails	"
Copper wire	"

PLUMBERS' BRASS WORK.

Delivered in London.	£	s.	d.
NEW RIVER PATTERN SCREW DOWN BID COCKS & IRON.			
1/2 in. 1 in. 1 1/2 in. 2 in.	29/-	45/-	76/-
NEW RIVER PATTERN SCREW DOWN STOP COCKS & UNIONS.			
1/2 in. 1 in. 1 1/2 in. 2 in.	41/6	62/-	92/-
NEW RIVER PATTERN SCREW DOWN MAIN FEEDERS.			
1/2 in. 1 in. 1 1/2 in. 2 in.	39/6	60/-	116/6

CAPS AND SCREWS.

1 1/2 in. 1 in. 2 in. 3 in. 4 in.	£	s.	d.
7/6 10/- 14/- 23/- 30/-			

DOUBLE NUT BOILER SCREWS.

1/2 in. 1 in. 1 1/2 in. 2 in.	£	s.	d.
7/6 11/- 17/- 29/-			

BRASS SLEEVES.

1 1/2 in. 2 in. 3 in. 4 in.	£	s.	d.
10/- 12/- 20/- 24/-			

NEW RIVER PATTERN CROYDON BALL VALVES.

1/2 in. 1 in. 1 1/2 in. 2 in.	£	s.	d.
35/- 56/- 98/- 162/-			

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEAN SCREW.

8 lbs. P. traps	£	s.	d.
8 lbs. S traps	33/-	41/-	56/-

TIN—English Ingots, 2/6 per lb. SOLDER—Plum.

1/2, Tinmen's 1/4, Blowpipe 1/5 per lb.	£	s.	d.
---	---	----	----

PAINTS, &c.

Raw Linseed Oil, in pipes	per gallon
" " " in barrels	"
Bolled " " in drums	"
Turpentine in barrels	"
Genuine Ground English White Lead, per ton (not less than 5 cwt. casks.)	60
Genuine White Lead Paint—	
" Father Thames," " Nine Elms," " Park," " Supremus," " St. Paul's," " Syedol," " Polacno," and other best brands in 14 lb. tins) not less than 5 cwt. lots	81
Red Lead, Dry (packages extra)	55
Best Linseed Oil Putty	0 1
Size. XD Quality	0

Continued on next page.

The information given on this page has been compiled for THE BUILDER and is copyright. Our list is to give, as far as possible, the average of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

CURRENT OF MATERIALS (contd.)

GLASS.

GLASS SHEET IN CRATES OF STOCK SIZES.

Per Ft.	Per Ft.
32 oz. fourths .. 8½d.	32 oz. fourths 8½d.
" thirds 4½d.	" thirds 10½d.
" fourths 4½d.	Obscured Sheet, 15 oz. 4½d.
" thirds 5½d.	" 21 " 5½d.
" fourths 5½d.	Fluted 15oz. 6½d., 21oz. 9½d.
" thirds 7½d.	En'led 15oz. 5½d., 21oz. 7½d.

Price according to size and substance for squares cut from stock.

GLASS ROLLED PLATE IN CRATES OF STOCK SIZES.

Per Ft.	Per Ft.
Roll plate 4½d.	
ough rolled 5½d.	
ough rolled 5½d.	
Figure Rolled, Baltic, Oceanic, Arctic, Stain-polyte, and small and large Flemish white .. 6½d.	
" Ditto, tinted 6d.	
olled Sheet 6d.	
White Rolled Cathedral 5½d.	
inted do. 7½d.	

Cast Plate is same price as rough rolled.

VARNISHES, &c.

Per Gallon.	Per Gallon.
Varnish £ 8. 0.	Outside 0 14 0
ditto 0 16 0	ditto 0 16 0
Copal 0 18 0	ditto 0 18 0
Copal 0 10 0	ditto 0 10 0
Copal Carriage 0 14 0	ditto 0 14 0
Ditto 0 12 0	ditto 0 12 0
Varnish 0 18 0	Inside 0 18 0
Pale Paper 0 18 0	ditto 0 18 0
Copal Cabinet 0 12 6	ditto 0 12 6
Copal Flating 0 10 6	ditto 0 10 6
Drying Oak 0 18 0	ditto 0 18 0
Hard Drying Oak 0 19 0	ditto 0 19 0
Copal Varnish 0 10 0	ditto 0 10 0
" ditto 0 12 0	ditto 0 12 0
" ditto 0 12 0	ditto 0 12 0
Japan Gold Size 0 10 6	Black Japan 0 10 6
Black Japan 0 12 0	and Mahogany Stain (water) 0 12 0
Black 0 7 6	Black 0 7 6
Black 0 14 6	Black 0 14 6
Black 0 15 0	Black 0 15 0
Black 0 17 0	Black 0 17 0
Black 0 9 0	Black 0 9 0
Black Enamel 0 7 0	Black Enamel 0 7 0

TRADE NEWS

Paint Post.

Have received the August number of "Paint Post," published by the National Association for the Preservation of Property (by hand and varnish). The N.S.P.P. has three objectives, viz., to spread the painting trade more equally over the whole year and to eliminate the depression in the winter months, to influence councils to pay greater attention to the protection of property, and to direct the attention of many classes of manufacturers to the importance of paint and as distinct selling assets for manufactured products.

Morris Hoist-blocks.

Have received from Messrs. H. Morris, Loughborough, a copy of their latest catalogue, illustrating the electrical hoist-blocks in which they specialise. They claim that their latest machine handles thirty times an electrical cost of one penny: at the rate of saving, we should imagine, the initial cost is soon repaid, while, in addition, the user has the satisfaction of knowing that he has a reliable, lasting and easily handled lifting service. Those interested should refer to Book 81 for full particulars.

Messrs. The Windsor Brick and Tile Co., who are in the manufacture of concrete products, announce that they have secured the right for all the red facing bricks and a large quantity of grey bricks for use in the 58 new houses which are to be built for the Windsor Corporation.

Mr. I. G. Blakemore has taken temporary residence at 180, Piccadilly, W.1 (Telephone No. : AR 8263), where he is organising an agency in connection with machinery, plant and materials of interest to contractors, builders, civil engineers and quarry owners.

THE SCOTTISH BUILDER

NEW BUILDINGS IN SCOTLAND

Dunbar.—EXTENSIONS.—The Town Council has adopted the scheme by Mr. J. Jamieson, engineer to the Edinburgh Corporation Gas Department, for the development and extension of the gasworks.

Buckie.—HOUSES.—Forty-eight houses are to be erected by the Town Council under the Wheatley Act. Each house is estimated to cost £300, which is claimed to be the cheapest in Scotland.

Rothsay.—IMPROVEMENTS.—The Town Council has agreed upon a scheme of esplanade improvement at the east side of the town between Albert Pier and the point of the shore opposite Glenburn Hydro. The pavement on the seaward side is to be widened and a dwarf retaining wall to be built.

Renfrew.—HOUSES.—The Dean of Guild Court has passed plans for 60 houses in the Moorpark district of Renfrew.

Forres.—BATHS.—The T.C. has decided to instal public baths in Forres House.

Cupar.—ADDITIONS.—The Dean of Guild Court has passed plans for the addition of two cloakrooms to the Sunday School Hall of Cupar St. James's Episcopal Church in Castle-street. Mr. C. Storrar is the architect.

Thornliebank.—HOUSES.—The Calico Printers' Association has just leased three acres of their land in the village to the Upper District Committee of Renfrewshire, who have prepared a scheme for 44 houses.

Dunfermline.—FACTORY.—The Dean of Guild Court has passed plans presented by Messrs. Gessner & Co., Zurich, Switzerland, for the conversion of a store at Castleblair Works, Dunfermline, into a hostel for their employees.

Edinburgh.—VARIOUS.—The Dean of Guild Court passed plans: Edinburgh Association for Women Students' Hostels, for two large hostels in East Craigmillar Park, Suffolk-road; mission church and class-rooms, in Fountainbridge, in connection with St. Cuthbert's

Church; James Moncrieff, seven houses at Granton-road; bungalow at Traquair Park, Corstorphine; St. Cuthbert's Episcopal Church Trustees, church hall.

Cupar.—FACTORY.—The Town Council has adopted the proposal of the Anglo-Scottish Beet Sugar Corporation, Ltd., to erect a sugar factory, and resolved to assure the Corporation that they will do everything in their power, by way of providing housing.

Coatbridge.—DAIRY.—The Dean of Guild Court has passed plans for a dairy factory at Dunbeth-road, for the Coatbridge Co-operative Society. The estimated cost of the building is £9,000.

Obituary.

The death occurred at Cambuslea, Ayr, recently, of Mr. J. Bryce, public works contractor, at the age of sixty.

Glasgow Slum Clearances.

Councillor Welsh has given notice to the Housing Committee of the Glasgow Corporation that he will move a motion for the suspension of slum clearance operations, and for proceeding with the building of more houses.

Director of Housing Retires.

Sir J. Walker Smith, the Director of Housing at the Ministry of Health, is to retire at the end of this month, and with his departure the office of Director, which was created in 1919 in order to deal with the acute problems which housing conditions then presented, is to be abolished. His valuable services to the State in this appointment were recognised in the recent birthday honours. Amongst other posts Sir J. Walker Smith has occupied those of City Engineer of Edinburgh, Controller of Housing with the Scottish Board of Health, Government representative on the Board of the Scottish National Housing Company, and consulting engineer to the Scottish Road Board.

It is stated that he has accepted an administrative post in connection with the National Federation of Building Trade Employers.

BUILDING TRADE WAGES IN SCOTLAND.*

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Brick-Masons' Ladders Labourers.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/7	1/0½
Airdrie	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3
Blairstown	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Coatbridge	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3 to 1/3½
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dumfries	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Gairloch	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Greenock	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/2½ to 1/3½
Hamilton	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½
Hawick	1/7	1/7	1/7	1/7½	1/7	1/7	1/7	1/2½
Helensburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3½
Inverness	1/5	—	1/5	1/4	1/5	1/5	1/4	1/- to 1/2
Kilmarnock	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Kirkwall	1/5	1/5	1/4	1/5	1/6	1/4	1/4	1/-
Leamington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/- to 1/3
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Motherwell	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/2½
Perth	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/3
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stirlingshire (Eastern District)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Wishaw	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3½

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 475.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	s. d.
Add if in clay	" "	1 0
Add for every additional depth of 6 ft.	" "	0 6
Planking and strutting to trenches	per foot super	0 5
Do. to sides of excavation, including shoring ..	" "	1 0

CONCRETOR.

Portland cement concrete in foundation 1 to 6 ..	per yard cube	32 0
Add if in underpinning in short lengths	" "	7 0
Add if in floors 6 in. thick	" "	3 3
Add if in beams	" "	3 9
Add if aggregate 1; 2; 4	" "	10 0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2 6

BRICKLAYER.

Reduced brickwork in lime mortar and Fletton bricks	per rod	£ s. d.
Add if in stocks	" "	7 10 0
Add if in Staffordshire blues	" "	22 0 0
Add if in Portland cement and sand	" "	1 10 0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0 0 1½
--	---------------	--------

POINTING.

Neat flat struck or weathered joint	" "	0 0 3
---	-----	-------

ARCHES.

Extra only to the price of ordinary brickwork:—		
Fair external in half brick rings	" "	0 0 10
Axed in stocks	" "	0 1 9
Rubbed and gauged jointed in putty camber or segmental	" "	0 6 0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0 1 0
Setting ordinary register grates and stoves	each	1 0 0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	" "	4 15 0

ASPHALTER.

Half-inch horizontal damp course	per yard sup.	4 3
Three-quarter-inch vertical damp course	" "	8 6
¾ inch on flats in two thicknesses	" "	6 3
Angle fillet	per foot run	0 3
Skirting and fillet 6 in. high	" "	1 2

MASON.

York stone templates fixed	per foot cube	13 0
York stone sills fixed	" "	22 0
Bath stone and all labour fixed	" "	10 6
Portland stone fixed	" "	20 0

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails....	per square	72 9
Do. 20 in. × 10 in. Do. Do.	" "	80 9
Do. 24 in. × 12 in. Do. Do.	" "	90 0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5 0
Do. joists	" "	5 6
Do. roofs, floors and partitions	" "	6 0
Do. trusses	" "	8 6

Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-
Flat centering for concrete floor, including struts or hangers	" "				50 0
Do. to beams	per ft. sup.				1 0
Centres for arches	" "				1 6
Gutter boards and bearers	" "				1 0

FLOORING.

		FLOORING.	1	1 1/2	1 3/4
Deal-edges shot	per sq.		44/6	50/-	60/6
Do. tongued and grooved	"		49/-	57/6	65/-
Do. matchings	"	45/-	51/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

One-and-a-half moulded sashes or casements	per foot super	s. d.
Two Do. Do. Do.	" "	1 10
Add for fitting and fixing	" "	2 1
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; averagesize	" "	0 3

DOORS.

Two-panel square framed	per ft. sup.	1½	1½	2"
Four-panel Do.	" "	2/1	2/4	2/6
Two-panel moulded both sides	" "	2/5	2/8	2/11
Four-panel Do.	" "	2/8	2/11	3/2
	" "	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

FRAMES.				
Deal wrot moulded and rebated	per foot cube	14	0	
		1'	1½'	1½'
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	"	1/4	1/6	1/8
Add if cross tongued	"	2d.	2d.	2d.

STAIRCASES.

Deal treads and risers in and including rough brackets	1'	1½'	1½'	2'	2½'
Deal strings wrot on both sides and framed	2/1	2/4	2/9	—	—
	1/8	2/	2/2	2/8	—

Housings for steps and risers	each	0 11
Deal balusters, 1 in. × 1½ in.	per ft. run	0 9
Mahogany handrail; average 3 in. × 3 in.	" "	6 0
Add if ramped	" "	11 10
Add if wreathed	" "	23 9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting in to floor and	
Casement stays	1/2	Cupboard locks	1/5
	1/5	making good	19/-

FOUNDER AND SMITH.

Rolled steel joists	per cwt.	18 3
Plain compound girders	" "	19 0
Do. stanchions	" "	21 9
In roof work	" "	27 6

RAIN-WATER GOODS.

Half-round plain rebated joints .. ft. run	3"	4"	5"	6"
Ogee Do. Do.	1/6	1/9	2/-	2/6
Rain-water pipes with ears	1/9	2/-	2/6	3/6
Extra for shoes and bends	each	4/4	5/11	
Do. stopped ends	" "	1/11	2/4½	3/7
Do. nozzles for inlets	" "	2/2	2/7	3/10

PLUMBER.

Milled lead and laying in flashings and gutters	per cwt.	67 0
Do. Do. in flats	" "	66 6
Extra labour and solder in coated cesspools	each	6 9
Weit joint	per ft. run	0 6
Soldered seam	" "	1 6
Copper nailing	" "	0 6

Drawn lead waste per ft. run	1/2	1/9	2/0	3/4	4/0
Do. service	1/8	2/2	2/7	3/10	
Do. soil	" "				6/9
Bends in lead pipe	each			3/3	8/2
Soldered stop ends	1/2	1/8	2/1	2/10	3/6
Red lead joints	11d.	1/-	1/3	1/11	2/4
Wiped soldered joints	2/10	3/6	4/-	4/11	6/6
Lead traps and cleaning screws	" "			14/7	19/8
Bib cocks and joints	6/4	9/7	15/4	41/-	
Stop cocks and joints	15/4	17/2	25/8	61/-	

PLASTERER.

Render, float and set in lime and hair	per yard sup.	s. d.
Do. Do. Sirapite	" "	2 4
Do. Do. Keen's	" "	2 7
Add sawn lathing	" "	3 7
Add metal lathing	" "	1 7
Portland cement screed	" "	2 6
Do. plain face	" "	2 2
Mouldings in plaster	per l girth	3 3
One-and-a-half granolithic pavings	per yard sup.	0 1

GLAZIER.

21 oz. sheet plain	per foot sup.	0 8
26 oz. Do.	" "	1 0
Obscured sheet	" "	1 1
½ in. rolled plate	" "	0 9
½ in. rough rolled or cast plate	" "	0 10
½ in. wired cast plate	" "	1 4

PAINTER.

Preparing and distempering, 2 coats	per yard sup.	0 9
Knocking and priming	" "	0 7
Plain painting 1 coat	" "	0 4
Do. 2 coats	" "	1 1
Do. 3 coats	" "	1 4
Do. 4 coats	" "	2 4
Graining	" "	2 4
Varnishing twice	" "	1 1
Sizing	" "	0 7
Plating	" "	0 7
Enamel	" "	1 1
Wax polishing	per foot sup.	0 1
French polishing	" "	1 1
Preparing for and hanging paper	per piece 2/- to 4/-	

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1% should be added for employers' Liability and National Health and Unemployment Acts and 1% to £100 for fire insurance. The value of the information given on this page is copyright. Prices include both materials and labour.

NEW COMPANIES

The particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 and 118, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

BRENNHAM CONSTRUCTION CO., LTD. (207,501). Registered August 10. Builders, contractors, &c. Nominal capital, £10,200.

STERFIELDS, LTD. (207,808). Registered August 11. Glass decorative Artists, &c. Nominal capital, £1,500.

PERSONS (CHESTERFIELD), LTD. (207,415). Registered July 22. 199, Piccadilly, London. Builders, contractors, builders' agents, &c. Nominal capital, £21,000.

ESTINGS ESTATE DEVELOPMENT CORPORATION, LTD. (207,356). Registered July 18. Laremont, Hastings, Sussex. Builders, contractors, &c. Nominal capital, £1,000.

LEITHHEAD BRICK & TILE WORKS, LTD. (207,377). Registered July 22. Brick and Tile Works, Bristol-road, Portishead, Somerset. Nominal capital, £3,750.

NORTHFIELD SAND & GRAVEL QUARRY, LTD. (207,515). Registered July 25. Dealers in sand, gravel, lime, cement, mortar, &c. Nominal capital, £2,000.

THORNTON (BUILDERS), LTD. (207,510). Registered July 25. 112a, West End-lane, Hampstead, N.W. Builders, contractors, &c. Nominal capital, £500.

CHARLES W. SQUIRE & SON, LTD. (207,529). Registered July 27. Builder and contractor. Nominal capital, £1,000.

WOOD PAINT & VARNISH CO., LTD. (207,561). Registered August 13. 162, Tonge Road, Bolton. Manufacturers of and dealers in paints, varnishes, oils, colours, &c. Nominal capital, £1,000.

LAQUERING, LTD. (207,924). Registered August 17. 95A, Chancery-lane, W.C.2. Painters and decorators, &c. Nominal capital, £1,000.

WATTS, LTD. (207,832). Registered August 12. 53, Doughty-street, John-street, C. Builders, bricklayers, masons and painters, &c. Nominal capital, £250.

WENSELL & SONS, LTD. (207,504). Registered July 24.—2A, Woodberry Down, Finsbury Park, N.4. Building contractor, carried on by E. Wensell as "E. S. Wensell & Sons." Nominal capital, £1,500.

MCINION MALLEABLE, LTD. (207,482). Registered July 24. Etna Works, Rolfe, Smethwick. Constructional, consulting and mechanical engineers, iron and steel melters, founders, &c. Nominal capital, £5,000.

WILKINSON & SONS (ILFORD), LTD. (207,452). Registered July 23. 51, High-road, Ilford. Builders, contractors, &c. Nominal capital, £1,000.

OF MIDDLETON, LTD. (207,456). Registered July 23. 38, Bridge-street, Sheffield. Builders and contractor. Nominal capital, £1,000.

W. OAKES & SONS, LTD. (208,054). Registered August 25. "Tyn Rhos," Dialstone-lane, Chert. Builders, land and estate agents, &c. Nominal capital, £3,000.

RODER & LAPISH, LTD. (208,066). Registered August 26. Joiners, builders and contractors, &c. Nominal capital, £500.

W. ABSALOM, LTD. (208,040). Registered August 24. Redlands-lane, Penarth, Glam. Builders, contractors, &c. Nominal capital, £1,000.

WILLIAM WILMOT, LTD. (208,123). Registered August 28. Builders, building contractors, &c. Nominal capital, £5,000.

LAGYNOG SLATE & SLAB QUARRIES, LTD. (208,021). Registered August 27. To acquire any and all slate or other quarries. Nominal capital, £1,000.

SAN-LIME & ARTIFICIAL STONE INDUSTRIES, LTD. (207,983). Parliament Mansions Victoria-street, W.1 (Registered August 20). Specialists in the development of the sand-lime brick and artificial stone industries, &c. Nominal capital, £1,000.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes accepted. † Denotes provisionally accepted. ‡ Denotes recommended for acceptance. § Denotes accepted subject to modification.

ASHWELLTHORPE.—Police cottage at Ashwellthorpe, for the Norfolk C.C. Messrs. A. F. Scott & Sons, architects, 24, Castle Meadow, Norwich:—
R. G. Carter, Drayton £628 11 6
E. J. Smith, Bunwell 580 0 0
—, Barrett, Swardeston 576 16 0
H. C. Tofts, Hingham 566 17 6
Pearson Bros., Diss 550 9 5
*H. Bidewell, Wymondham 520 0 0

BARNSELEY.—Stonework in connection with the new entrance gates to Locke Park, for the C.B.:—
*Greetland Quarries £278

BARNSELEY.—Sub-stations in Sheffield-road and Dodworth-road, for the C.B.:—
*G. Haigh & Sons £418 and £305

BLACKPOOL.—Adaptation and equipment of rooms in the Town Hall and Municipal Buildings, for administrative purposes, for the T.C.:—
*H. H. Vickers & Son.

BRIGHTON.—Installing electric lighting in the Corporation Depot, Hollingdean-road, for the C.B.:—
C. B. Penniford £257
J. Taylor 250
R. Garrett 236
Page & Miles, Ltd. 222
*Bostel Bros., Ltd. 184
(All of Brighton.)

BRIGHTON.—Caretaker's house at the new Secondary School, for the C.B.:—
Limpus & Son, Kingston-on-Thames .. £1,250
Saunders, Brighton 1,167
Field & Cox, Brighton 1,157
Barnes & Sons, Brighton 1,152
H. J. Penfold, Brighton 1,137
A. Monk, Lower Edmonton 1,098
Braybon & Son, Brighton 1,065
*W. R. Andrews & Co., Peacehaven .. 1,032

CLAYGATE.—Ten houses, for the Esher and Dittons U.D.C.:—
*Durnfords, Ltd. £3,537 2 7

COALVILLE.—Seventy-six non-parlour type houses, for the U.D.C.:—
*J. E. Jervis, Ltd., Long Eaton.... £35,954

DERBY.—200 iron houses, for the T.C.:—
*Newton, Chambers & Co., Ltd., Thorncliffe—
£425 per house

EDINBURGH.—288 houses at Gorgie, for the T.C.:—
*J. Hardie & Son £114,000

ESHER.—Six houses, for the Esher and Dittons U.D.C.:—
*Milham Bros. £2,126 19 2

GELLYGAER.—Underground convenience at Bargoed, for the U.D.C. Mr. F. Reed, engineer and surveyor, Hengoed, near Cardiff:—
*W. Blackburn, Treharris £1,796 11 2

GREAT BOOKHAM.—Residence for Miss B. R. Cooper, at Lower-road:—
*Pearce Annetts & Sons, Great Bookham.

HASSOCKS.—Villa for Mr. W. McLean, Clayton-avenue. Mr. A. J. McLean, A.R.I.B.A., architect, Molesworth House, 3, Palace-place, Castle-square, Brighton:—
F. W. Honour £1,325 0 0
Fowler Bros. 1,273 0 0
T. & H. Bartlett 1,190 0 0
T. White 1,163 0 0
F. T. Wilson & Sons 1,144 0 0
Gates & Sons 1,118 0 0
*W. Pooley & Son 946 12 11
Architect's estimate 925 0 0

HASSOCKS.—Villa for Mrs. A. M. Jenner, Clayton-avenue. Mr. A. J. McLean, A.R.I.B.A., architect and surveyor, Molesworth House, 3, Palace-place, Castle-square, Brighton:—
F. W. Honour £1,525 0
Fowler Bros. 1,358 0
F. T. Wilson & Sons 1,352 0
T. White 1,289 0
T. & H. Bartlett 1,270 0
Gates & Sons 1,182 10
*W. Pooley & Son, Burgess Hill 1,067 0
Architect's estimate 1,075 0

HULL.—Y.D. Clinic in Mill-street, for the Corporation. Mr. J. H. Hirst, City Architect, architect. Quantities by Messrs. John Watson Carter, Bowalley-lane:—
*A. E. Jones (Hull), Ltd., Hull £5,675
Subject to sanction of the M.H.

INVERNESS-SHIRE.—Reconstruction of Findhorn and Spey bridges, for the C.C. Chief engineer, 98, Academy-street, Inverness; consulting engineer, Sir E. Owen Williams, 5, St. George's-road, S.W.1; consulting architects, Sir J. W. Simpson and Mr. Maxwell Ayrton, 3, Verulam-buildings, Gray's Inn, W.C.1:—
*Sir Robert McAlpine & Sons, Glasgow.

LONDON.—Repairing and redecorating walls of main staircase at Municipal Offices, for the Islington B.C.:—

Martyn & Co., Ltd. £548 15 0
F. de Jong & Co., Ltd. 157 16 5
*J. C. Mather 148 0 0
(All of London.)

LONDON.—Decorating certain offices and corridors at the Municipal Offices, for the Islington B.C.:—

G. S. Stevens £256 0
J. C. Mather 199 0
F. de Jong & Co. 168 5
Randall & Sons 156 17
J. Johnson 155 0
*A. Cheetham 115 0
(All of London.)

LONDON.—Shelter for motors, cycles, perambulators, &c., in the yard of the Municipal Offices, for the Islington B.C.:—

A. Cheetham £531 4 6
A. C. Mackinlay 512 2 0
J. C. Mather 402 10 0
*J. Johnson 398 0 0

LONDON.—Demolition of part of the wharf-keeper's cottage at Chancellor's Wharf to allow of the construction of a new pump house, and also the erection of a new cottage together with various other incidental works, for the Hammersmith B.C.:—

A. H. Inns, Ltd. £1,887
W. Cooper & Son 1,844
(All of London.)

LONDON.—Repairs to the stonework at the Passmore Edwards Library, for the Hammersmith B.C.:—

W. Whiteley, Ltd. £634 0
Taylor Bros. 586 0
Stone & Marble Co. 497 0
*W. Tomes 385 0
A. Dreyfus, Ltd. 374 0
W. J. Bourne 297 16
Marvello Co., Ltd. 160 11
(All of London.)

LONDON.—Re-building 15-17, Praed-street, W., for Messrs. Curtis's Furnishing Stores, Ltd. Mr. A. Spiers, architect; Mr. Horace W. Langdon, F.S.I., quantity surveyor:—

Godson & Sons, Ltd. £16,323
J. Myring & Co. 16,013
H. & E. Lea, Ltd. 14,876
F. G. Minter, Ltd. 14,444
Holliday & Greenwood, Ltd. 13,989
J. W. Woolnough & Co. 13,955
Bywaters & Sons, Ltd. 13,897
Wm. Harbrow, Ltd. 13,709
Perry Bros. 12,677
H. & J. Taylor 12,667

LONDON.—Pavilion on the Joseph Hood Recreation Ground, Cannon Hill-lane, Merton, for the U.D.C. Mr. G. Jerram, surveyor:—

J. R. George, Merton £2,235 15 3
Geo. Wood & Sons, Merton 2,197 8 3
J. Burgess & Sons, Ltd., Wimbledon 1,981 0 0
Burnard & Pickett, Wallington (Survey) 1,887 0 0

LONG DITTON.—Eighteen houses, for the Esher and Dittons U.D.C.:—

*Rutherford & Woolford £6,310

LOWESTOFT.—Thirty-one houses of the non-parlour type, on the Beccles-road housing site, for the T.C.:—

R. A. Evans & Co., Ltd. £13,500
D. Leighton & Son 13,346
*W. Church 13,175

MILTON.—Two experimental houses at Murston, for the R.D.C.:—

T. Monk & Sons £998
*C. J. Robertson 850

MONMOUTHSHIRE.—Widening, diverting and straightening the Cardiff-Newport road at the Newport Borough Boundary to Duffryn Corner, a length of 2½ miles, for the C.C. and the M.T.:—
First portion—

*G. F. Leadbetter, Newport £38,720

NORFOLK.—(1) School at Walpole St. Andrew Cross Keys; (2) alterations and additions to St. Andrew's Girls' P. school, for the E.C. Mr. C. W. Bullen, architect. Quantities by architect:—

*E. J. Smith, Bunwell (1) £2,500
..... (2) 1,230

OBAN.—Twenty-four houses at Mossfield-drive, for the T.C. Mr. D. Galloway, Burgh Surveyor:—

Roads, drains, fencing—
*Kenneth MacRae & Sons, Taynult £925 2 9

Excavator and brickwork—
*J. J. & P. McLachlan, Larbert .. 4,875 15 0

Carpenter and joiner work—
*D. MacTavish, Connel 2,484 7 6

Painter work—
*H. Walker & Sons, Oban 168 18 0

Plumber work—
*D. MacDonald, Oban 997 4 3

Slater and roughcast work—
*A. J. MacDonald, Oban 944 3 0

Plaster and cement work—
*M. MacDonald, Oban 1,070 6 3

Electric lighting work—
*J. Campbell, Oban 120 12 0

OLDHAM.—Reinforcement of foundation raft for the new generating station, for the C.B. :—
*L. G. Mouchel & Partners, Ltd., London.

OLDHAM.—Reinforcement for concrete arch and by-channel "cut and cover" at Blackstone Edge, for the C.B. :—

*British Reinforced Concrete Engineering Co., Ltd.

OLDHAM.—Excavation and concrete work required in connection with the installation of a petrol pump at the Central Fire Station, for the C.B. :—
*H. Hoggins.

PORTSMOUTH.—New hall and offices for L. P. & H. Lodge of Oddfellows. Messrs. A. E. Cogswell & Sons, architects, Portsmouth :—

Franko, Corke & Co.	£7,210
G. J. Davis & Sons	7,144
A. E. Porter & Son	7,009
Jno. Croad	6,982
E. & A. Spriggins	6,778
John Lay & Co.	6,763
Sam'l. Salter	6,697
Tanner Bros.	6,595
*Frank J. Privett.	6,477

PRESTON.—Re-roofing of the large barn at Freckleton Farm, for the T.C. :—

*L. Titterton. £1,333 10

PORTABLE PARQUET DANCE FLOORS

In OAK, or OAK and WALNUT.
For PUBLIC or PRIVATE DANCE ROOMS
As supplied to the leading Hotels, etc.

Write or Phone (Park 1885) for particulars to
TURPIN'S PARQUET FLOORING CO.
25 Notting Hill Gate, London. W.11

J. GLIKSTEN & SON

LIMITED

Specialities in

**SEASONED
HARDWOODS**

**MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.**

REGISTERED OFFICE AND WHARF

**CARPENTERS RD.
STRATFORD
LONDON E.15**

Telephone : Telegrams
EAST 3771 GLIKSTEN 'PHONE
(5 lines) LONDON

POULTON-LE-FYLDE.—Four houses on the Big Field housing site, Lower Green, for the U.D.C. Mr. E. Prescott, surveyor :—

Leach & Unsworth, Blackpool ..	£2,229 18 0
H. Priestly, Blackpool	2,201 17 4
H. B. Byram, Poulton-le-Fylde ..	2,167 10 0
Nutter, Seddon & Co., Blackpool ..	2,020 9 1
Emery Bros., Poulton-le-Fylde ..	1,940 3 0
Bentley Bros., Poulton-le-Fylde ..	1,918 10 0
E. Ellison, Poulton-le-Fylde ..	1,915 10 9
Atherton Bros., Blackpool	1,906 9 2
†E. Armitage, Poulton-le-Fylde ..	1,872 0 0

ROTHERHAM.—For (1) Thurstcroft sewage disposal works; (2) Leabrook sewage disposal works; and (3) Wentworth sewage works, for the R.D.C. Mr. C. O. Rawstron, engineer and surveyor, Grove-road, Moorgate :—

*A. Swift, Wombwell—

(1) £12,134 5 8
(2) 1,413 9 6
(3) 177 6 5

ST. ANDREWS.—Fifty houses at St. Mary's-street site, for the T.C. Mr. W. Watson, Burgh Surveyor. Quantities by Mr. O. R. Douglas :—

Builder— McDonald & Ross, Methil.	£7,937
Joiner— Munro & Junior, Uddingston	5,419
Slater— Wm. Greig, St. Andrews	1,405
Plumber— Wm. Nicol & Sons, Buckhaven	2,580
Plasterer— J. McIntosh & Sons, Cupar.	2,017
Painter— Thos. Lumsden, St. Andrews	596
Glazier— Wm. Stephens, St. Andrews.	101
Gas Fittings— St. Andrews Gas Co., St. Andrews..	747
Fencing— Wm. Gilchrist, Ladybank.	259
Grates— A. & W. Ingram, Dundee	505

SELBY.—New Abbey Church Junior School to accommodate 300 children :—

*J. H. Carr & Sons, Selby.

SWANSEA.—New girls' school and improvements to the existing boy's school, for the C.B. :—

†Griffith Davies & Co., Swansea £70,966 9 7

WAKEFIELD.—For erection of church at Portobello. Mr. W. H. Herbert Marten, Lic.R.I.B.A., architect. Quantities by the Architect :—

*T. Jenkinson & Sons, Ltd.,
Doncaster

WIGAN.—School at Whalley, for the C.B. Mr. R. B. Donald, Borough and Water Engineer :—
*Massey Bros., Wigan.

YIEWSLEY.—Fifty-two houses, for the U.D.C. :—

*A. C. Dean, High Wycombe

J. J. ETRIDGE, J^r. Ltd
SLATING AND TILING
SLATE MERCHANTS
CONTRACTORS.

**Inspections and Reports made on
OLD or FAULTY ROOFS**
in any part of the country.

Telephone: Bishopsgate 1944/5, or write,

Bethnal Green Slate Works,
BETHNAL GREEN, LONDON, E

FLOORING

HIGH-CLASS

of every description in

**WOOD BLOCKS. PARQUET
SEASONED T. & G. WAINSCOT
TEAK AND MAPLE.**

FACTORY AND ROADWAY PAVERS

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASANT

WANDSWORTH, S.W.18.

(Phones: Putney 1700 & 1701)

FITZPATRICK & SONS

Masons and Paviors,

455, OLD FORD ROAD, BOW,

Phone: EAST 4808.

Granite Setts and Kerb (redressed and new hand), York Paving Spur Stones, G. Chippings, and Granolithic and Sett Pavings.

School & Hospital Stonemasonry

MAKERS OF

**WRIGHT'S IMPROVED and also SHORLAND PATENT
WARM AIR VENTILATING PATTERNS.**

GEO. WRIGHT (LONDON)
10, Newman St., Oxford St., London, W.1.
Burton Weir Works, Rotherham.

OGILVIE & CO.,

Mildmay Works, Mildmay Avenue, Islington
**EXPERTS IN HIGH-CLASS JOINERY
ALTERATIONS AND DECORATIONS.**

Telegrams: 'Frolic, Liverpool.' Phone 224

E. B. BURGESS & SONS
6, CASTLE ST., LIVERPOOL
**WOOD BLOCK FLOORING
AND PARQUETRY.**

Wheatly & Co.,

SPRINGFIELD TILERIES, NEWCASTLE, STAFFS.

'Phone: Newcastle, Staffs, 101. Estd. Over 50 Years.
'Grams: "Wheatly, Trent Vale." Brand: TRITON.

SPECIALITIES.

Rustic, Sand Faced and Hand Pressed Tiles in Blue, Blue Brindled, Red, Light Brindled and Dark Brindled Colours. Extensive stocks held of many varieties of Flooring Quarries, Ridge Tiles, Garden Edging Tiles, Air Bricks, Blue Bricks, Copings, etc., etc.

Price List and Catalogue, or Illustrated Brochure of Roofing Tiles free on demand.

N.B.—ALL our products are Hand-made by the Plastic Process.

HOWELL J. WILLIAMS Builders Ltd.

*High-Class Building
and
Joinery Work*

11/17, BERMONDSEY STREET,

Telephone: LONDON BRIDGE, S.E.1
HOP 202

Builders of very many well-known Banks, Office and Business premises. Our works especially convenient for City Building and fittings.

THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

L. CXXXII—No. 4,313

OCTOBER 2, 1925.

THE EAST KENT SURVEY

FROM time to time we have urged the importance of handling the East Kent area with foresight and vision from the outset, so that the muddle and squalor that we usually associate with coalfields might be avoided. This Regional Survey* is an est that the authorities are alive to their responsibilities, one can only hope that the coalowners, the landowners, the miners will co-operate in a constructive spirit to it effect.

This preliminary survey is unusually exhaustive and the ors have been fortunate in securing advice and opinions many among the foremost experts in the technical ques- that arise. The Report is divided into two parts, the roughly speaking, dealing with the area as it exists, the and sketching out future possibilities. The problem pre- must be among the most interesting ever handled by wn-planner, and is unique, certainly in this country, in this does not demand the usual disentanglement of a tic system of services, but represents a complete change an area of agriculture and seaside resorts to one in which ain factor will be the coal mine, while it demands, at the time, the most careful protection for a group of ancient iments and mediæval villages that are unrivalled in and. In the words of the Report: "If coal is to be ed and its attendant industries to be encouraged, they not domineer over the countryside or the sea-board; the h resorts, the villages and even the general aspect of the ry must not be damaged." It is comforting to note that onsidered opinion expressed in this Report is that, given and unrelenting vigilance, there is no reason why commerce d not be harmonised with the existing amenities of the ct, and Kent is apparently capable of supplying four the amount of power at present used in London and still enough for local industries as well.

he area concerned is contained, roughly speaking, in the gle formed by Dover, Canterbury, and Ramsgate; Canter- fortunately, falling just outside the actual coal area. ountour plan shows a high ridge running from just north ver towards Canterbury and falling gradually towards the t-east—the low-lying land that skirts the island of Thanet. ainfall follows the contours, and ranges from 35 in. on ver hilltops to under 25 on the low land, while the island eppey, towards the north-west, has the astonishingly low e of less than 20 in. The great bulk of the area falls within isdiction of the Rural District Council of Eastry, with eadquarters at Sandwich.

hen compared with the rest of England, this district has e been free from any acute shortage of houses, but, natur- the existing provision of houses would be quite inadequate uch the increase in population that will immediately result e the arrival of the miner and his family, and it is in the estions put forward for the future that the interest of the rt chiefly centres.

he first recommendation is that housing schemes should be ed, whenever possible, above the 50 ft. contour—statistics g shown this to be the healthiest area—and on no account e the 12 ft. 6 in. contour. Industrially, each coal pit l form the centre of a zone occupying a circle with a radius

of about half a mile within which no houses would be allowed excepting such as would be required for pit needs and watch- men, for which purposes about fifty would be needed in each area. Other independent factory areas would also be scheduled in convenient situations. The coal pits would be worked by electric machinery, instead of through the old-fashioned steam boilers and furnaces, and it is gratifying to note that the firms engaged have already agreed to adopt this method. The absence of smoke and chimney shafts will be the outstanding signs of progress, and the sooner the derelict shafts that have already been dotted about the countryside are pulled down the better. It will be through the presence or absence of chimneys and smoke that the public will judge whether the Kent coal firms have really "made good," and whether they are to be welcomed or looked upon as destroyers.

The selection of a coal port remains at present in the air, but it is recommended that whatever harbour is selected it should be capable of expansion up to the limit that could be required for the full export output of the coalfield and to allow for the exportation of the ironstone which lies in the southern part of the area. The ports that suggest themselves are Sand- wich (known also as Richborough), Deal, and Dover; but each of these would require heavy expenditure to make it suitable as a coal port.

As regards population, the figure is taken as 10,000 persons per pit; this will mean an increase in the population of about 280,000, or doubling the present population of the area. This increase, it is suggested, could be housed principally in eight new towns, containing an average of some 18,000 people each, and in addition to existing towns, such as Canterbury, Deal and Dover. Communications and transport, water supply and drainage are examined, and a great scheme of electrical develop- ment is outlined. The difficulty here appears to be the pro- vision of a sufficient supply of water for direct cooling purposes in Kent, a supply that exists in London, and that might mean the transportation of Kent coal for conversion into electricity in London.

To enable the project to be carried through, it is recom- mended that the following five means should be introduced, each of which is regarded as essential:—

- A. A Regional Plan and Regional Committee.
- B. Local Town-planning Schemes.
- C. A Development Company or Public Utility Society for the new towns.
- D. An Advisory Committee or Civic Society.
- E. An Advisory Art Committee.

The future of Kent is of more than local interest and im- portance. It is England's front garden, and it represents all that is beautiful and most to be cherished in amenity, archæ- ology and architecture; for this reason it is urgent that the scheme should attract wide attention. It is fortunate, indeed, in being sure of the support of powerful local bodies and interests; but whether it goes through as here outlined, or whether material modifications have to be introduced, is immaterial compared with the urgency of getting something done with the minimum of delay and the maximum of vigilance and foresight. The authors and all concerned are to be congratulated upon a very well thought out and a very practical first step, and the next step will now be awaited with interest.

* East Kent Regional Planning Scheme: Preliminary Survey." Erick Abercomby and John Archibald. (The University Press of ool and Hodder & Stoughton, Ltd., London. 1925. 10s. net.)

NOTES.

Another Society of Architects? ARCHITECTS and surveyors are being circularised on behalf of a projected organisation styled "The Incorporated Association of Architects and Surveyors." It is to comprise three grades of membership, namely, Fellows, Associates and Students, to be admitted only after examination, and its alleged object is to afford protection to those professional men who, if they remained unorganised, might, under a future Registration Act, be precluded from practising as architects or surveyors. We observe that the Association holds out the bait of membership free of examination to those who agree to join at once. But later on, when the examination system is in full swing, what advantages are to be obtained beyond those offered by the Royal Institute of British Architects, or the Surveyors' Institution? Moreover, it is not, we think, expedient that either of the professions named should be represented by more than one organisation. The spectacle of rival associations each claiming to represent the same profession is not calculated to inspire public confidence in either. The Institute and the Society of Architects endorsed this view when they agreed to form the recent amalgamation.

London's Housing. TOWN-PLANNERS and those concerned with the evils of overcrowding in urban areas have had the difficulties in the path of progress forcibly brought home to them by the inquiry into the conditions in Limehouse, which has now been concluded. The owners naturally protested against the proposed demolition of their property—this was to have been expected. But the remarkable unanimity of the tenants in their disinclination to accept any change has come as a revelation to most of us. The "back-garden" industries peculiar to the district have much to do with it, but those who got a living in this way appear to be in a minority. Even those whose work lies far outside the area in question have stated in no uncertain terms that their attachment to the houses, however dilapi-

dated, in which most of them have lived for so long outweigh any advantages which can be claimed for flats. What their attitude would have been if small houses had been offered we do not know, for apparently this alternative was not suggested. The Londoner's liking for a home which is all his own seems to have been disregarded, and this is perhaps the most striking fact revealed by the inquiry. In districts already overcrowded it is, of course, impossible to create wider streets and open spaces and at the same time accommodate the same number of people except by housing them one above the other, but in the twentieth century the prejudices of the people concerned have to be regarded. The only alternative is the formation of satellite towns, to which both industries and workers can be removed to healthier conditions, but London's Metropolitan Borough Councils cannot by themselves and individually carry out such schemes. This inquiry again suggests the desirability of a central authority to co-ordinate the housing policy in London, so as to prevent the dissatisfaction which is bound to arise in cases where a Borough Council cannot offer anything except flats to those who have to be dispossessed to make way for desirable improvements or the clearance of insanitary areas.

Unity Among the Operatives.

WE are glad to note that the National Federation of Building Trades Operatives, at their conference at Nottingham, passed a resolution asking the executive to make a serious attempt to get back into the Federation the bricklayers', masons' and plasterers' organisations which seceded a few months ago. As we recently pointed out, the National Federation alone, as now constituted, that is, without representing these important trades, cannot hope to conclude satisfactory agreements for the whole of the industry. Neither can the employers' organisation be expected to ratify agreements which are not binding on all branches of the industry. It will be to the benefit not only of the building operatives, but of the nation at large, if their interests can again be looked after by one body able to speak with a united voice.

Foreign Competition in Building. FOR the sake of our industries and workers are glad to see that scepticism regarding report that German-made concrete were to be imported into Ireland is fied. A representative of the Irish State Government has now stated that it is to be imported by Messrs. of Bremen (who have secured a £10 housing contract for the Dublin Municipal Council), is the shuttering, and the only foreign labour to be employed be limited to a few supervisors experience in the special system of concrete construction which the firm proposed to use. This bears out the surmise with a knowledge of Messrs. K special method of construction, forwarded in our issue for September. Foreign competition in building construction would be such a serious thing for our own industry if they were able to undercut prices that it is of interest to note the case of three other equally housing schemes for which this tendered in the Irish Free State builders were able to submit lower and secure the work.

Employers and Employed.

WE quoted last week sound observations by Thomas Barron on the moment as between employers and operatives in the building industry. We here detach two of Mr. Barron's remarks. It was the first and a popular one, at such conference that (the Conference of the National Federation of Building Trades Operatives) said Mr. Barron, to engage in a denunciation of employers, capitalists and such like, which, although doubt gave them much immediate satisfaction, gave them little else might be more profitable, if pleasant, therefore, to examine their own defects, and to suggest a remedy for them. If the workers in the building industry believed what they said they declared that they could run the industry without the employers should seek to equip themselves for the task. The nature of the industry such that it could most readily be what every industry ought to be, an instrument of public service at the moment the workers were ready. could only be made ready by preparation and by equipping themselves, not by the necessary preliminary study of Karl Marx and later economists, but by the actual and well-grounded knowledge of the science of running an industry. Political knowledge was good, but alone would not fit them to take that or any other industry. Their ability enough, if scientifically equipped and if full of zeal for service, to enable them to transform this ancient industry from a mere profit-making and paying business into a great service."



Plaster Relief in the New Gallery Kinema, Regent-street, London.
MR. FREDERICK LESSORE, Sculptor.



Plaster Relief in the New Gallery Kinema.

"As workers," he continued, "they had a responsibility for the provision of houses which they could not shirk, amount of sophistry as to its due to capitalism or any other would excuse them. Even the profit was being made out of need must not deter them from their service. The greatest word in the supersession of the profit by the idea of service which it takes would be their determination on the part of workers to spare no effort of task until every family in the shrouded under conditions of decency. He appealed to every one to consider how far he could go in this matter, even at personal cost it would be worth while if by so doing they not only succeeded in meeting the needs of their own folk, enabled to convince the doubting that it was possible to run an industry for private gain, but for the only reason really justified its existence, that it was performing a great service to those who needed such service."

It is not often that the R.I.B.A. Galleries contain so interesting and effective a display as now that they are filled with decorative pictures by Mr. Reginald Pictures which are really and displayed in so decorative a seldom seen in our galleries. The word has carried out a great of admirable painted windows, of his cartoon designs for shown; it is only to be regretted that examples of his actual glass could not have been exhibited so in sense of colour values might be seen. Some of his attractive panels of painted glass might have been shown. The poetic of the artist's work should appeal to all.

THE limitations on architectural design which so often result from an endeavour to obtain satisfactory acoustic conditions in an assembly or concert hall are considerably reduced by the developments in electrical science.

Some two or three years ago we predicted a useful future for wireless amplifiers in improving the acoustics of buildings, and since then amplifiers have been installed in the assembly hall of the League of Nations' building at Geneva and the Senate at Washington, with satisfactory results. Now the House of Lords is to be improved in the same way. Broadcast amplifiers will be concealed under the floor, and the benches furnished with headphones on handles.

A Trade Training Experiment.

WE hear that an interesting experiment in building construction is being carried out in the United States. The Hampton Normal and Agricultural Institute is established for the education of men of the black races. Mr. Whittemore Brown, who was recently in London, reports that he is in charge of a special course of building construction at the Institute and has been in touch with many of our prominent contractors in this country with a view to making the classes as up-to-date as possible. The aim of the course is to train the negroes to appreciate good architecture and to have a sound structural sense. A thorough training in one building trade—usually in carpentry or bricklaying—is given. It is found that after this they take up the other building trades very readily so that they are in a position to supervise building contracts intelligently. This course for helping men to equip themselves to fill the higher positions in the building industry has been brought to the notice of our British Board of Education, and it is possible that there will be developments on these lines in some of our technical colleges.



Plaster Relief in the New Gallery Kinema.

Our Exports. So yet another of our national monuments, Warwick Priory, is to be exported to America. It is good to know that it will be carefully re-erected and looked after, though this is small consolation to those in this country who cherish beautiful specimens of English architecture. We are told the building is being removed "for the benefit of the English-speaking people in America"; whether they will appreciate it in its new setting we do not know—certainly we shall miss it.

"One Touch of Nature."

BEHIND the grim realities of life there lie sentiments of human kindness which occasionally come into the limelight of publicity, and such was the case in a court of law the other day when an architect, Alderman Gunton, gave a light sentence in his magisterial capacity and helped the offenders against the law by paying their fines himself. He gave as a reason that he was pleased to find that the delinquents were willing to work and their trouble was caused by their not finding the promised work ready.

Rent and Rates.

MAY we ask one question of those who advocate rent strikes? "If the rent is withheld and the landlord's income ceases, who is to pay the rates necessary for the carrying on of any local services at all?"

A READY-MADE decorative picture of aircraft service appeared in *The Times* recently, showing the action of a 16-pounder. Photographs such as this should be translated into permanent records of artistic history.

Town Planning and Oxford.

THE town-planning problems of the day are many and serious, and one is now presented to us in the case of Oxford and the future of the area now being cleared on the east of St. Aldate's, between Christ Church and Follybridge. The future of Oxford cannot be a purely local affair; and it is to be hoped that the Council will take a broad view of the possibilities for further enhancing their beautiful city.

GENERAL NEWS

Change of Address.

Mr. William J. Fitt, L.R.I.B.A., has transferred his office from 11, Bolton-street, Piccadilly, W. 1, to 126, Bishopsgate, E.C. 2.

Mr. Hamilton H. Turner, F.S.I., has removed to 19, Queen Anne's Gate, S.W.1. Telephone No.: Victoria 2015.

Salonika Fair.

The Department of Overseas Trade is informed that the opening date of the Salonika International Fair has been further postponed until May 15, 1926.

A Stronger Steel.

A German newspaper recently published details of a new process of producing steel invented by a Swiss named Bosshardt. The new steel—which is to be called "Freund steel"—will, it is claimed, admit of a saving of 40 per cent. in weight and of 30 per cent. in cost for constructional purposes.

Epsom New Grand Stand.

Plans have been prepared by direction of the Epsom Grand Stand Association for the building of a new grand stand that will hold 20,000 people. The scheme will involve the demolition of the present buildings together with Barnard's stand on the right and Langlands Number 1 stand on the left.

Structural Engineers' Examination in India.

The Institution of Structural Engineers has, in response to repeated requests, made arrangements to hold the December Examinations for Graduateship and Associate-Membership in Bombay, India, as well as in the usual English centres. Intending European or native candidates should communicate with Mr. H. Foster King, Chartered Bank Building, Fort, Bombay.

University of London, University College.

On Monday and Tuesday, October 5 and 6, from 10 a.m. to 1 p.m., students of the Bartlett School of Architecture will be received by the Senior Tutor, Professor Richardson. On Wednesday, October 7, at 5.45 p.m., the students of the evening courses in Architectural Design and of the Architecture Atelier will assemble for the coming session.

Liverpool Architectural Exhibitions.

An exhibition of prize drawings by students of the Liverpool Architectural Society will be on view at the University School of Architecture, Ashton-street, from October 7 to 17.

An exhibition of work by the late Adrian Berrington will be held in the Society's Library at 13, Harrington-street, from October 12 to 23. All etchings and other drawings exhibited will be for sale.

Sulgrave Manor.

Mr. and Mrs. A. W. Weddell, who are at present visitors in London, have recently expressed to the authorities of the Virginia Historical Society, at Richmond, Virginia, their desire to build at Richmond a replica of Sulgrave Manor, the ancestral home of the Washingtons. The authorities of the society have accepted this offer, and Mr. and Mrs. Weddell are now with their architect making a study of Sulgrave Manor, as well as other and larger Jacobean houses.

A Malta Monument.

The Maltese Government has decided to place a commemorative statue in the principal piazza of the capital facing the High Courts of Justice. Mr. Antonio Sciortino, head of the British Academy at Rome, is the sculptor who has been selected to carry out the work, which, according to his sketch models, will take the form of three life-size figures grouped to form a symbol of Fortitude, Victory, and Thanksgiving mourning for the dead.

Proposed Manchester Tube.

The proposal for an underground railway at Manchester was discussed at a recent meeting of the North-Western Section of the Institute of Transport. A comprehensive scheme for

linking up various parts of Manchester by means of subways has for some time been before the City Council, and has been debated. with the result that a Corporation committee is now investigating the possibility of introducing the Tube system.

More Dublin Houses.

The Ministry of Local Government has sanctioned the proposal of the Dublin Borough Commissioners to raise £500,000 for the provision of houses for the working classes.

Bridlington Spa Reconstruction.

The Spa Committee at Bridlington has decided to call in the services of Messrs. Blackmoor & Sykes, architects, Hull, in connection with the £50,000 reconstruction scheme.

Proposed Catholic Churches.

The Guild of Our Lady of Ransom propose to find the funds to erect a Catholic church in every diocese of Great Britain.

Wembley Housing Exhibit.

The Ministry of Health invited representatives of fifty local authorities to inspect the exhibit of housing methods and building materials at Wembley, on Wednesday. A report will appear in the next issue of *The Builder*.

Town Planning.

In view of the general importance of town planning not only to local authorities and their officials, but also to private interests concerned in the development of land, the part of the Annual Report of the Ministry of Health for 1924-1925, which deals with this subject has been published separately. The report contains a statement not only of the position of town planning schemes throughout the country at the end of the year and of the progress of regional planning, but also of the attitude of the Ministry on a number of points of general importance which have arisen in connection with town planning and with appeals relating to proposed developments. Copies of the publication may be purchased, price 6d., directly from the Stationery Office at the following addresses: Adastral House, Kingsway, London, W.C.2; 28, Abingdon-street, London, S.W.1; York-street, Manchester; 1, St. Andrew's-crescent, Cardiff; or 120, George-street, Edinburgh; or through any bookseller.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

Lowest Tender Not Accepted.

SIR,—With regard to "A London Firm's" letter on this subject in your last issue, we tendered for a church school in a quarter of London, and were lowest by £3. The council accepted another tender. We sent an account for the usual charge for measuring, etc., but this was returned unpaid by the chairman of the council. We then wrote to a prominent firm of surveyors to say that if the matter was not adjusted they could take our name off their list of builders; they chose to do the latter. There is apparently no means of redress. The church council sold their principles for £3. Would they have done so if the difference had been 25 per cent. instead of a trifle of under 1 per cent.? Probably not.

"ANOTHER SUFFERER."

SIR,—We read with interest the letter from a London firm regarding the acceptance of tenders other than the lowest in private competitions. We have found recently several such instances, and we think in invitation tendering, the builders invited should have some guarantee that the lowest tender will be accepted. Could not some combination of builders approach architects with this end in view?

A PROVINCIAL FIRM.

COMPETITION NEWS

Cookstown Technical School.

Cookstown Technical Instruction Co. invite architects to submit plans for technical school, to be erected at Cookstown, Co. Tyrone. Full particulars may be applied to Mr. R. C. Burke, Technical School, Cookstown, to whom designs should be sent not later than Thursday, October 2.

Houses, Moor Park.

Moor Park, Ltd., invite contract builders to submit designs of houses to be erected upon the Moor Park estate in accordance with the details of the competition, full particulars of which will be sent on application to Moor Park, Ltd., Moor Park, Herts. The prizes are: first, £100; second, £50; third, £25. [We suggest that the promoters of the competition should invite designs from architects.]

Maternity Hospital, Leeds.

The design of Mr. G. W. Atkinson, Leeds, for an extension of the Maternity Hospital in Tyde-terrace, has been selected as the first place. Mr. R. Burns Dick, Leeds, was the assessor.

Competitions Open.

Newcastle Fire and Police Station. Premiums: £500, £300, £100. Mr. P. S. Worthington, F.R.I.B.A., Assessor. June 12.

Town Hall, &c., Pretoria. Open to architects residing in South Africa or Registered under Architects' Act, of 1909, Transvaal. Assessor to be appointed by R.I.B.A. Premiums: £250, £150, £100. April 24.

Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply parties, 35, Old Queen-street, S.W.1. Aug 7.

New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool. Aug 14.

Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London. Jan. 2.

Plan for construction of Conference Hall, for League of Nations, Geneva. International Competition, Sir John Burnet being British representative on Jury of Assessors. 100,000 Swiss francs to be divided among architects submitting best plans. Programmes will be deposited in due course with R.I.B.A., 9, Conduit-street, where intending competitors should apply. Single copies from Secretary-General, League of Nations, Geneva, on payment of 20 Swiss francs.

* Competitions when "warned" or "warned" R.I.B.A. are starred.

MEETINGS

MONDAY, October 5.

Society of Engineers.—Major V. A. son on "Bridges: Their Renewal in France During the Great War." House, Piccadilly, W.1. 5.30 p.m.

TUESDAY, October 6.

Institution of Heating and Engineers.—Autumnal General Meeting, Caxton Hall, Broadway, W.1. 7 p.

THURSDAY, October 8.

Victoria and Albert Museum.—Weekly on "Posters." At South Kensington, S.W.7. 6 p.m.

Resignation.

Mr. E. H. Harbottle, Devon County Council, has resigned his appointment.



Design for Bank Premises, London.

PROFESSOR C. H. REILLY, Architect.

EVOLUTION AND REVOLUTION IN DESIGN

By J. HEMBROW.

THERE is in architectural circles and amongst partly-informed but interested lay thought a tendency to restlessness, impatience and revolt against the wise restraint which respect for tradition imposes upon the anarchially disposed in design at the present time. We sincerely hope we shall never find architecture in the position of the worlds of painting, music, poetry and sculpture, which suffer from the fact that obscure hideousness is so often blatantly foisted upon the public by a few ruthless fanatics who have the presumption to assert that their impossible noises, their ill-drawn abortions, metreless balderdash and chiselled frightfulness have divine qualities which it is beyond the brain power of the ordinary public to comprehend—it is merely "Dadaism" without the honesty of the "Dadas" frank buffoonery.

It is folly to call at once for a new style as many are doing now—a new style cannot be created in a day, any more than it can be avoided when it comes. All true progress, whether it is the progress of design, the development of science, or the rise of life from the primordial slime, is gradual, and each graduation is based on what has gone before—the stag did not spring from the amphibian in one step, nor was the horse created as an improvement by any sudden futurist of nature. Such departures from nature's stately step are called freaks—nature destroys them and they should be destroyed.

We have all endured instances of the architectural futurists' efforts towards wilful "Bolshevism"; fortunately they have always stultified themselves. Whether it is that

special hideousness (we mean hideousness that is studied, not the every-day frightfulness of the speculative builder) is so readily observed that it is early recognised and sometimes obliterated, we do not know; we hope it is so. In any case, except in the matter of *l'art nouveau* which flourished longer than was comfortable or good for us, we do not remember when we have suffered further than by extremes in fashions and styles—which is, of course, the old danger of the vogue—a danger that we are just as much open to in this generation of Renaissance as our fathers were during the Gothic revival, when some of the most hideous things this country has ever suffered were put upon her good-natured face.

In point of fact, the present revival of Renaissance and the developing treatment of it, adapting it to modern needs, is hardly so much a fashion as a judicious selection of the style best suited to our present needs. The columniated treatment so much used for banks at the present time is not a mere selection by architects from the great styles; it reflects the fact that the greatest light area combined with solidity and dignity is obtained by such a treatment, and the reason for its adaptation to business premises is largely the same. This country has poor light values, and therefore glass area is of enormous significance. No other style gives the same opportunity. Anyone who has been in a warehouse affected by the well-meant enthusiasm for Venetian Gothic of Ruskin will appreciate this. There is generally artificial lighting all day. The architects forgot, as Ruskin forgot, that Venetian light and English light are rather different.

If those who are crying out for something new cannot find consolation in what we consider to be the very healthy state of design in this country to-day, they may, if they care to do so, look upon the source of the next development and trace how it is gradually affecting architectural style. If they are young or middle-aged it will be quite possible that they may see the passing of the transitional period in which we are now, and the first flowers of the new style which is bound to evolve. It will come—we cannot prevent it; we shall only delay it by attempting to attain it by revolution. But when the new style comes we think it will have possibilities for beauty beyond what we at present enjoy. We shall have a new instrument in our orchestra of design—we refer to the plasticity of concrete

and its capacity, reinforced, for tension as well as compression. If the restless ones consider the results of the use of concrete in design of bridges and one or two other uses, particularly buildings and towers, the strong, flowing lines rendered possible



Equestrian Model for Galashiels War Memorial (Bronze).

MR. T. J. CLAPPERTON, Sculptor.



War Memorial Figure at Canonbie, Dumfriesshire. (Bronze, 7 ft. high.)

MR. T. J. CLAPPERTON, Sculptor.



Bishop Morgan (Life-size Marble in Cardiff City Hall).

MR. T. J. CLAPPERTON, Sculptor.

comparatively new material, they will where to look for the nucleus of the change. Even now it has been used in theatre—and its masters are feeling their towards its ideal treatment.

concrete will definitely affect our design in future. The Greeks used post and lintel, Gothic and its forbears the arch—these all styles hitherto depended for tension on wood and iron. Now we have a material suitable for both stresses, and design will inevitably alter—is being altered now. Its change will be slow. Like the rise of animal from its early forms, it will move step by step from one proved stage to another. Sudden unformed spasms of effort will be treated by nature as nature treats her sports and abortions; they will be ignored or trodden out. That should aim at development and progress must agree, but let us proceed cautiously, avoiding the errors that our fathers made and cast aside. We shall only be tripped by these if we dash to right or left from the straight and narrow path of true aspiration. It is evolution, not revolution, that makes for progress.

THE WORK OF MR. THOMAS J. CLAPPERTON

By T. P. BENNETT, F.R.I.B.A.

It is always interesting to follow the career of a sculpture gold medallist of the Royal Academy Schools. This Royal Academy distinction is perhaps the highest prize obtainable by a student of sculpture, and quite a number of the men who have secured the coveted distinction have proceeded to carve out careers which have brought them prominently to public notice.

Mr. Clapperton won the Gold Medal in 1905, travelled in France and Italy. Returning home, his first commission was in connection with the Mungo Park Memorial at Glasgow, for which he designed some semi-allegorical figures of African natives. These figures have an interest of their own, and though they may not, perhaps, possess extreme artistic interest, they provide very fascinating subjects in a direction more or less untouched by other men. A work of much greater merit was completed in 1914, when the figure of "Bishop Becket" was modelled for the Cardiff City Council.

This figure achieves considerable distinction, showing real ability in the massing and composition, and pronounced artistic feeling in the simple folds of the drapery and cloak, which give the figure so much dignity. Without departing violently from precedent, it manages to secure an individuality which raises it above the general level, and shows that its author is capable of great things in commemorative sculpture. At this time he also modelled two colossal stone groups for the National Museum of Wales, one named "Mining" and the other "Shipping." Of these, "Shipping" is perhaps the most valuable as a decorative composition; the general arrangement of the figures and the play of light and shade are equally happy. The broad treatment of drapery and detail makes them suitable for high positions in which they are placed, enabling them to carry the weight of the



"Shipping": Group on National Museum of Wales. (Portland stone).

MR. T. J. CLAPPERTON, Sculptor.

architecture in an extremely satisfactory manner.

In common with most of the younger members of the profession, Mr. Clapperton's career was seriously interrupted by the war, but since returning from the Army he has executed memorials in Minto, Canonbie, Earlstoun, Shenley, and other places. Of these, the figure on the monument at Canonbie is an essay in the representation of the khaki-clad soldier, which secures distinction by considerable breadth and simplicity, and a sympathetic attractiveness from the general attitude of the figure, the expression of the face, and particularly the angle of the head. It is a cause of much satisfaction that this, and other soldier figures on monuments erected in commemoration of the war, have avoided the dullness and commonplace character of the khaki-clad soldiers which commemorate the South African war, and the figure on the

Canonbie Memorial should undoubtedly be placed on a high level.

Another very interesting soldier figure is that on the Mewburn Memorial in the Church of St. John Lee, Hexham, Northumberland, a group made for a private family, and for that reason, perhaps, having a softness of outline and suavity of handling which, while being more or less suitable for this type of memorial, causes a certain loss of vigour as compared with the memorial previously referred to.

Mr. Clapperton is at present engaged upon the Gallowshields War Memorial, a mediæval subject symbolic of chivalry.

Torquay Beauty Spot.

Torquay Town Council have decided to buy Stoodley Knowle Meadow for £4,000 in order to prevent its being sold for building purposes.



Mewburn Memorial in Church of St. John Lee, Hexham, Northumberland. (Marble).

MR. T. J. CLAPPERTON, Sculptor.

LEADING CONTENTS. PAGE

THE EAST KENT SURVEY	485
NOTES	486
GENERAL NEWS	488
COMPETITION NEWS	488
EVOLUTION AND REVOLUTION IN DESIGN	490
THE WORK OF MR. THOMAS J. CLAPPERTON	491
PHILIP WEBB AND HIS WORK—X	498
STRAITS SETTLEMENTS REGISTRATION	500
SCHOOL PROSPECTUSES	501
ABERDEEN WAR MEMORIAL	501
ARCHITECTS' AND BUILDERS' INQUIRY BUREAU	502
THE BUILDING TRADE	503
THE INTERNATIONAL CONGRESS OF BUILDING AND PUBLIC WORKS	504
NEW BUILDINGS IN LONDON	506
CONTRACTS, COMPETITIONS, &C.	508
PROPOSED NEW BUILDINGS AND OTHER WORKS	510
THE SCOTTISH BUILDER	513
TENDERS	515

ILLUSTRATIONS

A New Insurance Building in the City.

In the design of the new building in Threadneedle-street, for the Eagle, Star & British Dominions Insurance Co., the peculiar irregularity of the site clearly indicated a vertical treatment, and the architects, Messrs. Gunton & Gunton, F.F.R.I.B.A., have adopted with success a Byzantine style of architecture. The plinth is in Cornish granite and the elevations are generally of Portland stone, with the introduction of a good deal of coloured marble for decorative details, especially in the form of roundels set in the wall face in vertical strips flanking the arches. The balconies at the first and sixth-floor levels are also decorated with coloured marbles. The tower portion of the building is crowned with a dome, which bears an eagle, carved and gilded. The roofs which project from the tower are covered with red Italian tiles.

In the interior, marble becomes of primary importance, many varieties being used in the entrance hall for walls, floors, chimney-piece and pilaster capitals. Other rooms, as well as the staircase, show a rich use of marble for interior decoration. The rooms of the directors

are on the second floor, and are panelled in mahogany. The other floors are chiefly devoted to offices. The general contractors were Messrs. Bovis, Ltd., and the following were sub-contractors: Steelwork, Messrs. Moreland, Hayne & Co., Ltd.; Italian tiles, Messrs. Ames & Finnis; Portland stone, Messrs. Nine Elms Masonry Co.; Cornish granite, Messrs. South-Western Stone Co.; stone carving, bronze eagles, and ground floor plaster ceiling, Messrs. H. H. Martyn & Co., Ltd., Cheltenham; marble work, Messrs. H. T. Jenkins & Son; heating and ventilation, Messrs. Nicholson, London; bronze windows, Messrs. Henry Hope & Sons; wrought iron and other windows Messrs. Crittall Manufacturing Co., Ltd.; electrical work, Messrs. Francis Polden & Co., Ltd.; lifts, Messrs. Express Lift Co.; floors, Messrs. Siegwart Fireproof Flooring Co., Ltd.

Sidney Sussex College, Cambridge.

This new block is a good example of the way in which artistic effect may be obtained with the least possible display of decoration. The Portland stone doorway arrests the attention

at once. It rules the whole, not ostentatiously but with a quiet assurance. The central of the elevation facing north is marked by sturdy yet graceful stone vases. These, with delicate roundels on the main door, are exterior ornaments. The building is of brick and Portland stone, the construction fireproof throughout. The one large staircase leading to all the 36 sets of rooms is a departure in college building, as is the method of heating throughout. Bath and lavatories are provided on each floor. There is one Fellow's set consisting of sitting room, a dining room, a bedroom, ante-room. Mr. T. H. Lyon is the architect. The builders were Messrs. William Sainsbury of Cambridge.

The sub-contractors were: Heating, Broadhurst Craig & Ching; concrete, Truscon (Messrs. Trussed Concrete Steel Co.); wood floors, Messrs. Stanhope Floor; asphalt, Messrs. Lawford & Co.; iron fittings, Messrs. Jennings & Co.; ironwork, Messrs. Nettlefold & Sons, Ltd.

Design for Bank Premises.

The drawings published in this issue are a competition design, by Professor C. H. for bank and business premises proposed to be erected at the corner of Albemarle-street and Piccadilly. Mr. Curtis Green, A.R.A., was the successful competitor, which was limited to five competitors, the directors of the bank acting as their own assessors.

Proposed House at Wimbledon.

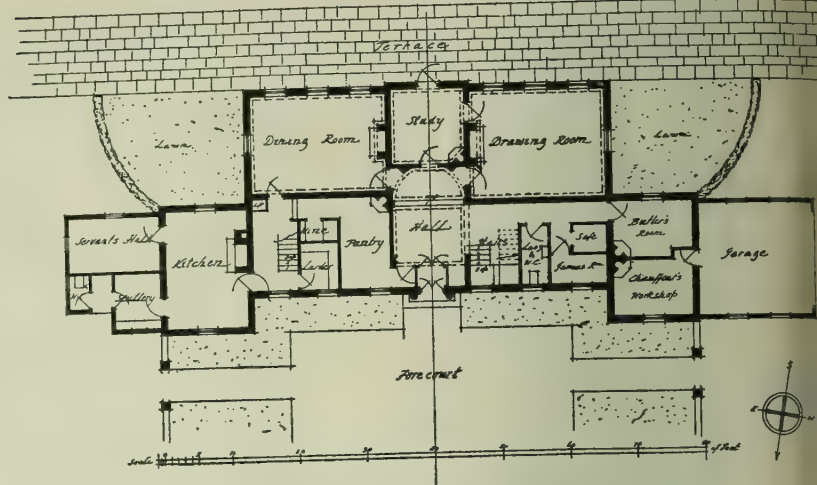
The site of this proposed house, for Mr. Smith, is $1\frac{1}{2}$ acres, thus allowing the stand back from the road with its elevation facing north. Most of the offices are on this side, leaving the garden at the rear, unobserved by servants. The scheme is to a great extent by the sizes of the room, dining room, and best bedroom which had to correspond with the client's present house. Internally, it is a plain Georgian, to harmonise with Haskett-Smith's antique furniture. The walling is to be 2 in. purple stock with red sand-faced bricks, and a pantile roof. The estimated cost, including everything but garden work, is about £10,000. Mr. Geoffrey Fildes, A.R.I.B.A., is the architect.

Dundee Secondary School Competition.

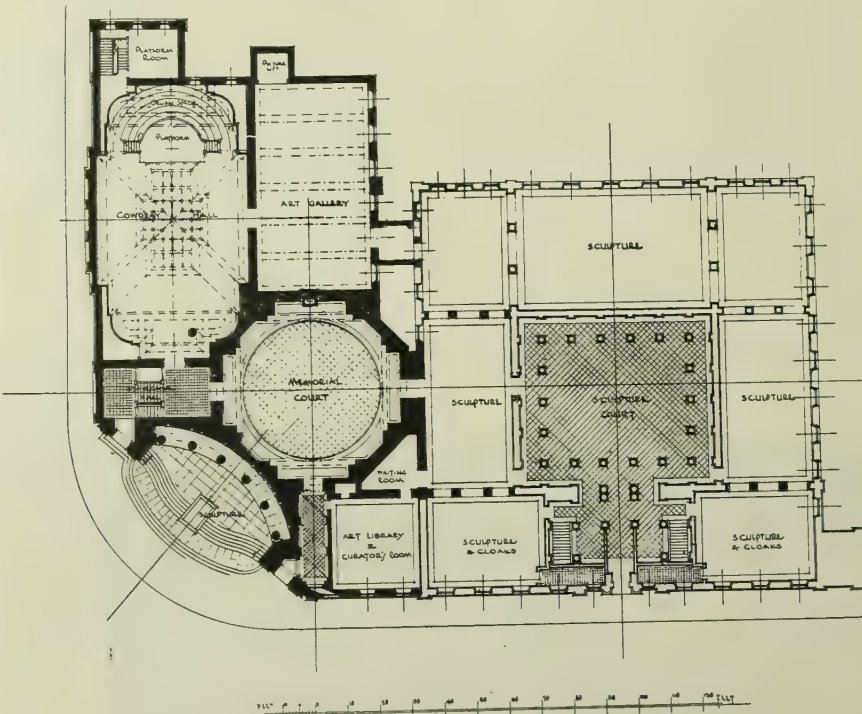
We illustrate this week the design second in the recent competition for the Dundee Secondary School in Perth-road, Dundee. The architects are Messrs. MacLaren, Somers & Thoms. The first premiated design, by Messrs. Thoms & Wilkie, was illustrated in our issue of September 11.

Aberdeen Art Gallery.

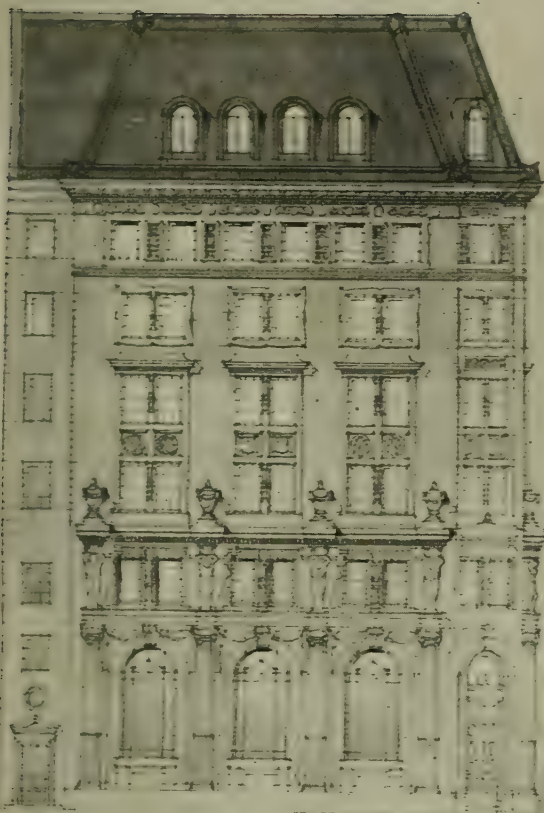
A description of the Aberdeen Art Gallery extension appears on page 501.



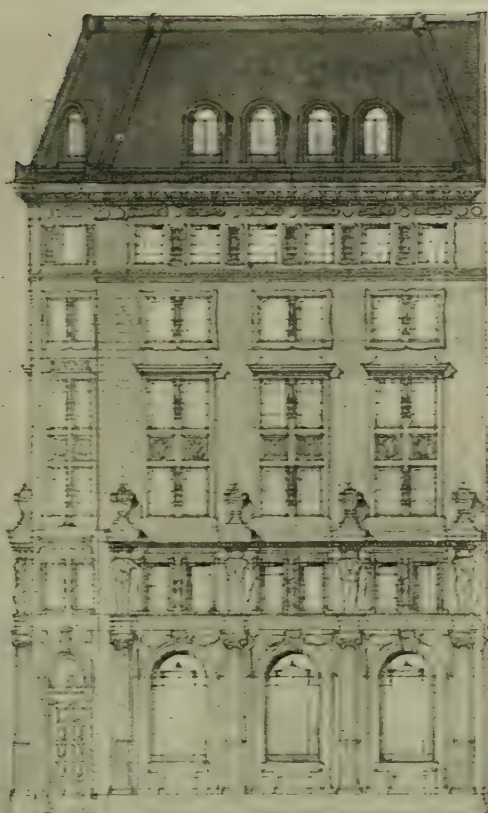
Plan of Proposed House at Wimbledon.
MR. GEOFFREY FILDES, A.R.I.B.A., Architect.



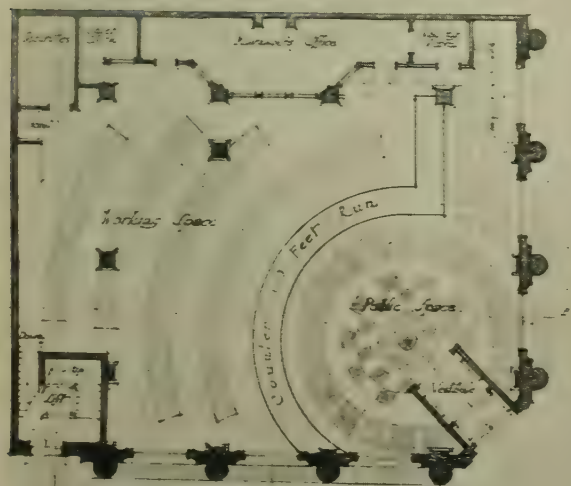
Plan of Aberdeen Hall of Remembrance.
MESSRS. A. MARSHALL MACKENZIE & SON, Architects.



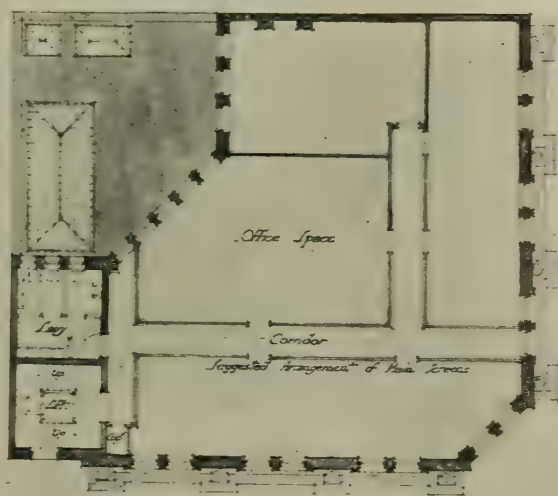
ELEVATION TO PICCADILLY



ELEVATION TO ABCHURCH LANE



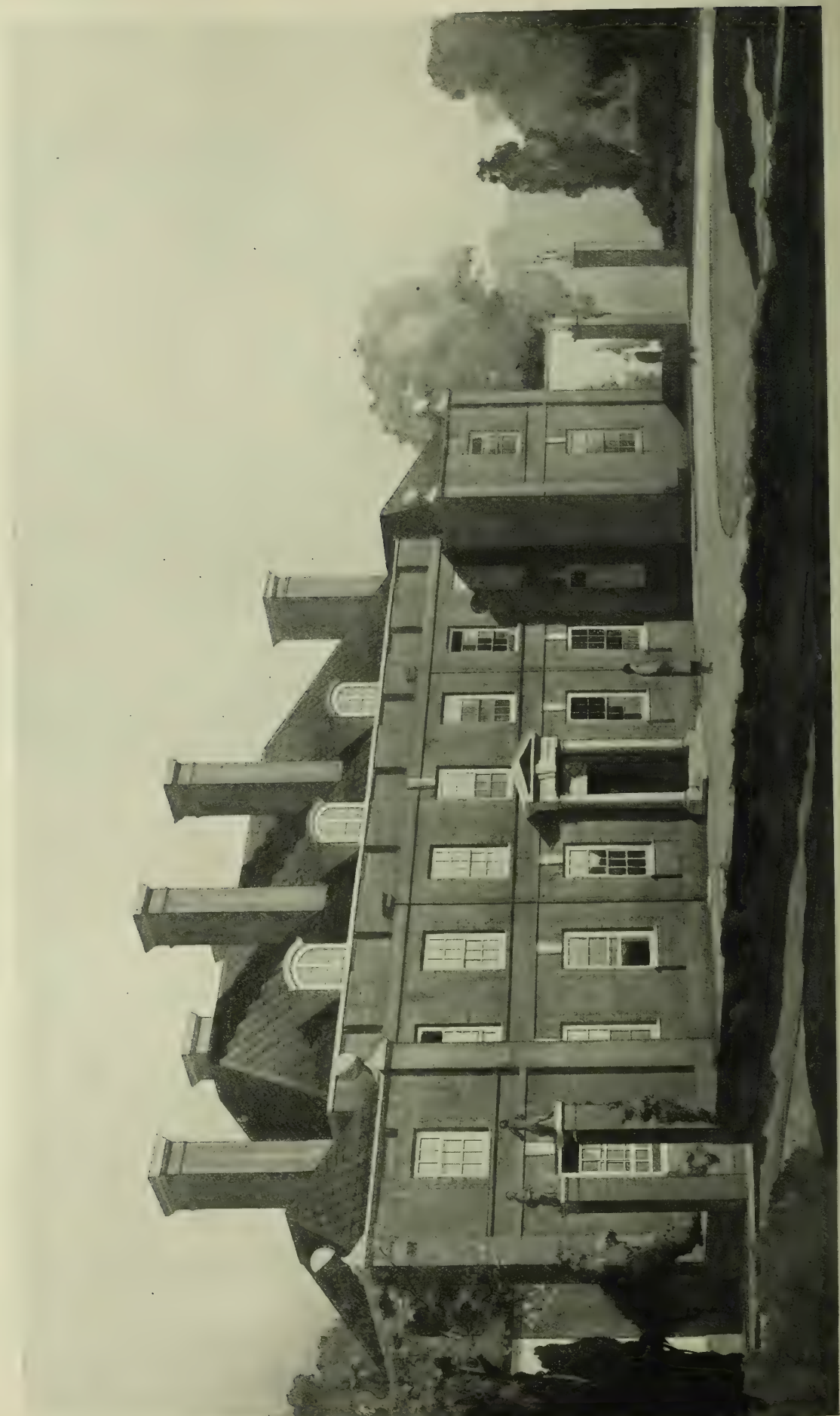
GROUND FLOOR PLAN



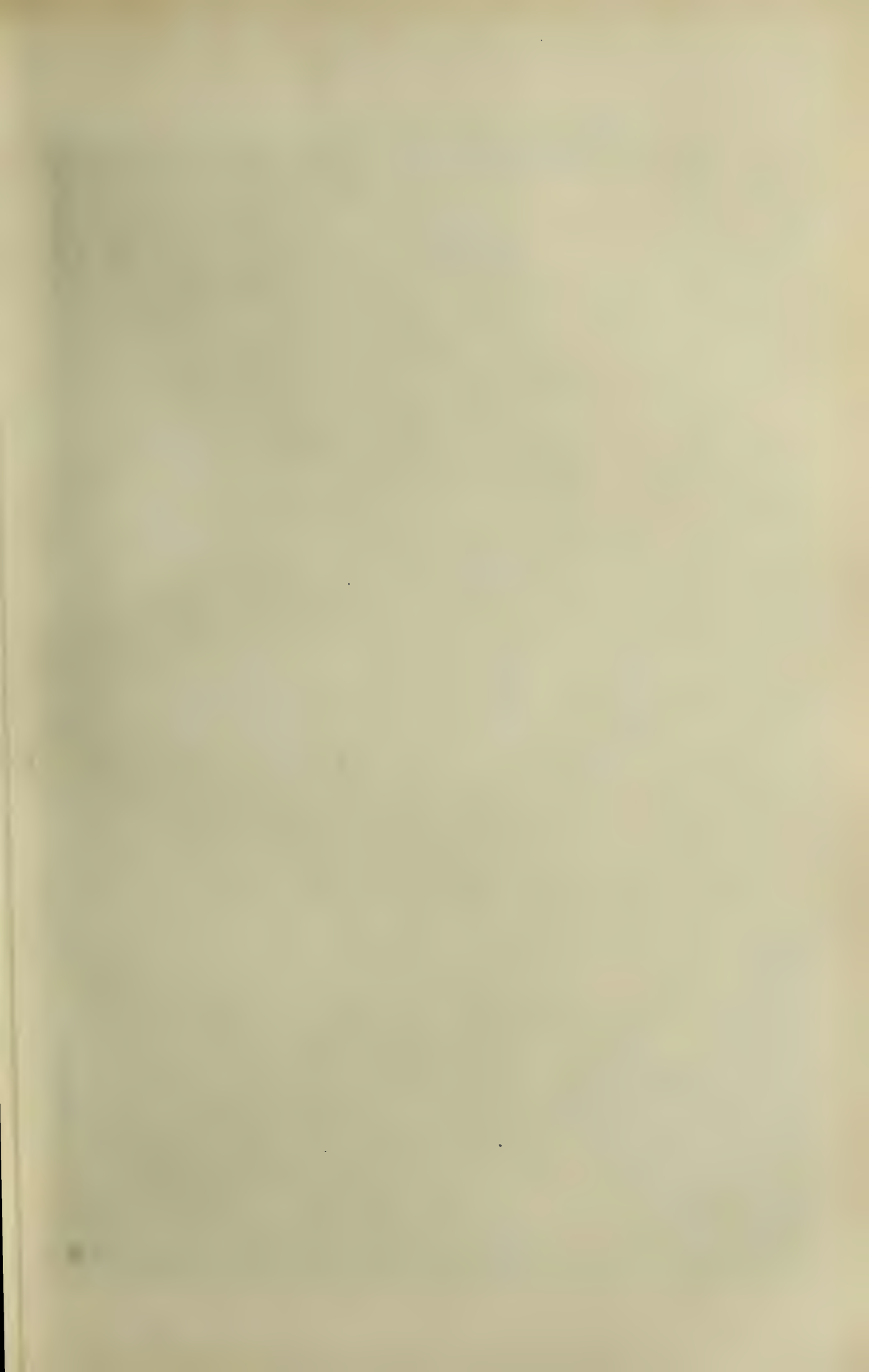
TYPICAL FLOOR PLAN

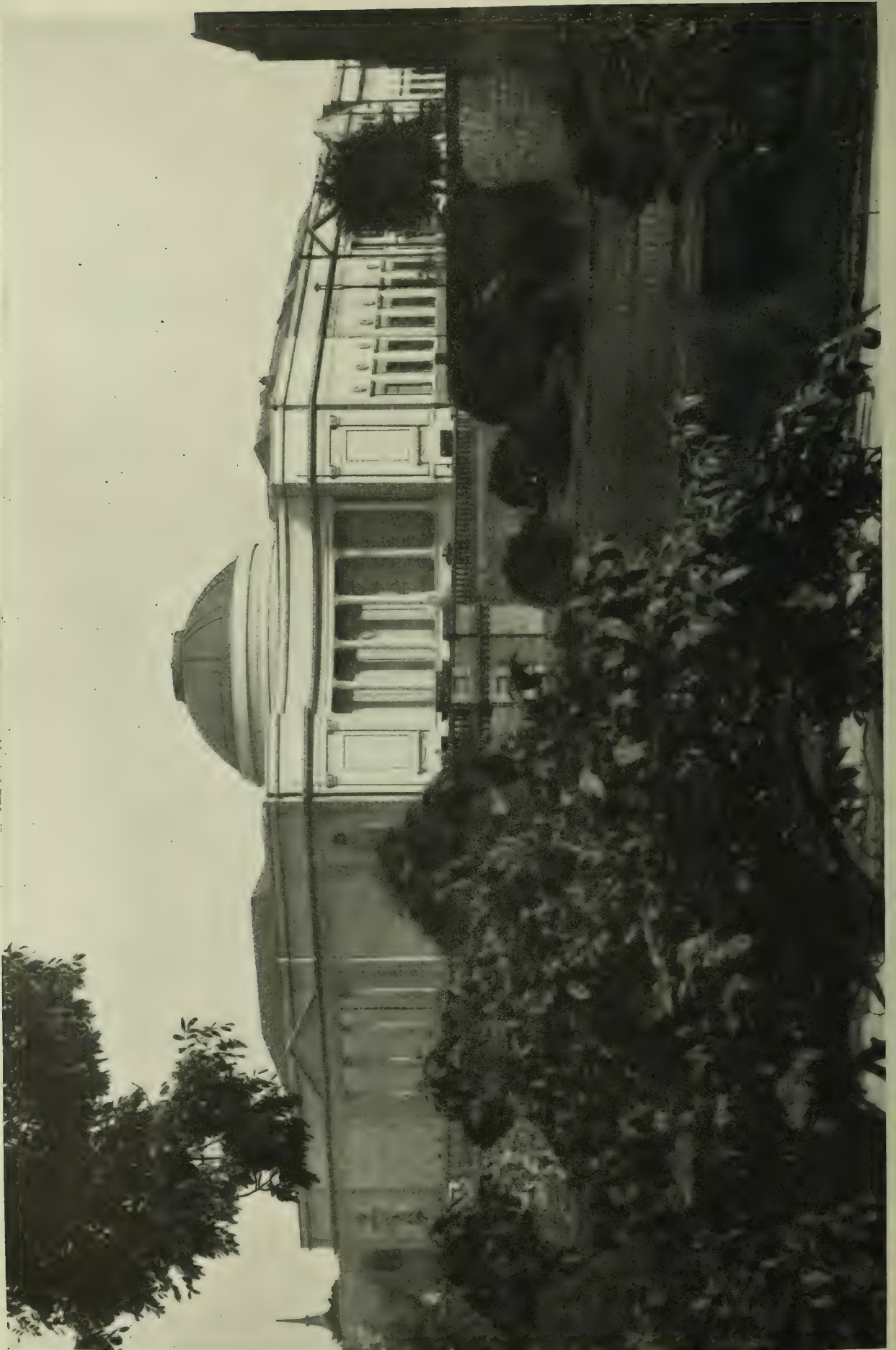
Design for Bank Premises, London: Elevations and Plans.

PROFESSOR C. H. REILLY, Architect.

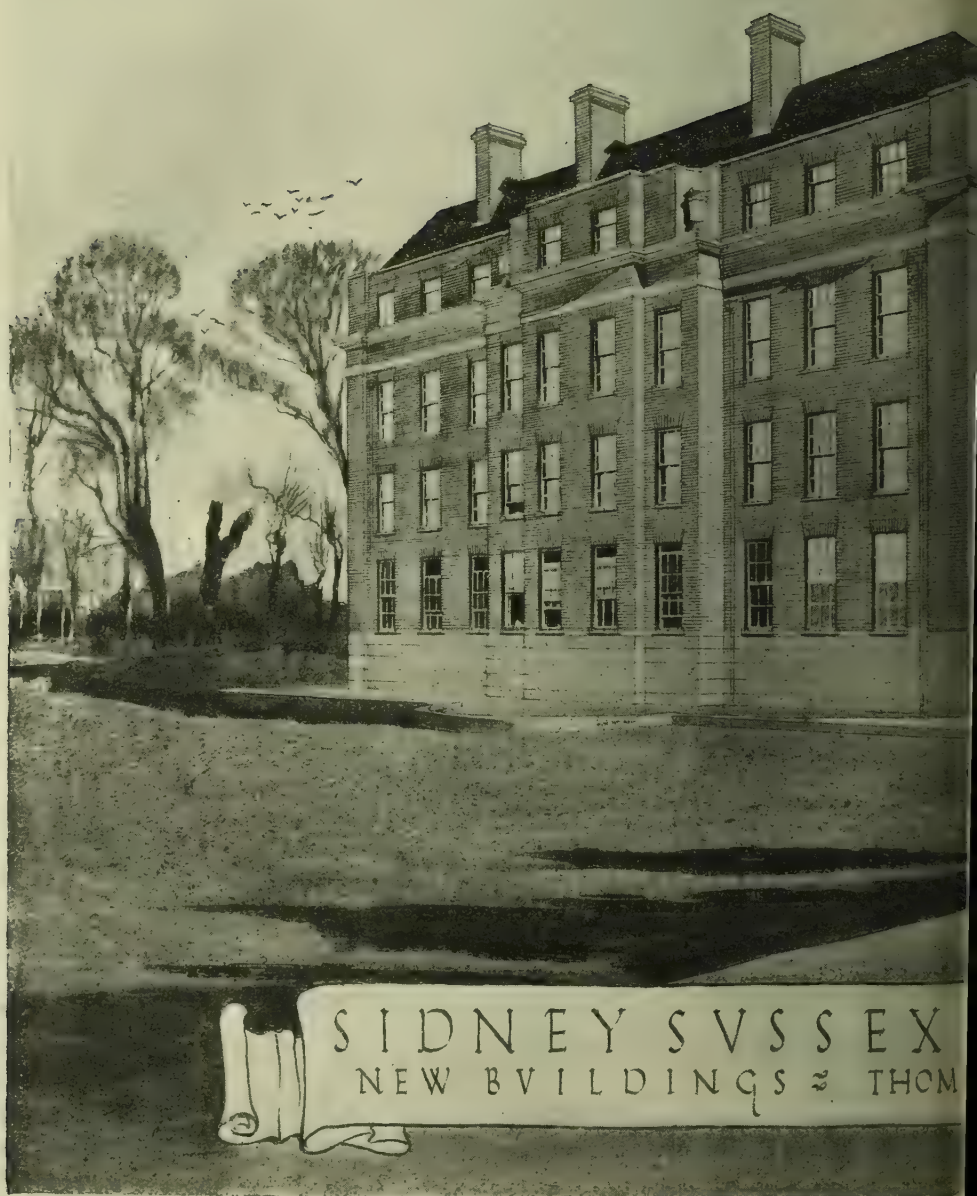


Proposed House near Parkside, Wimbledon.



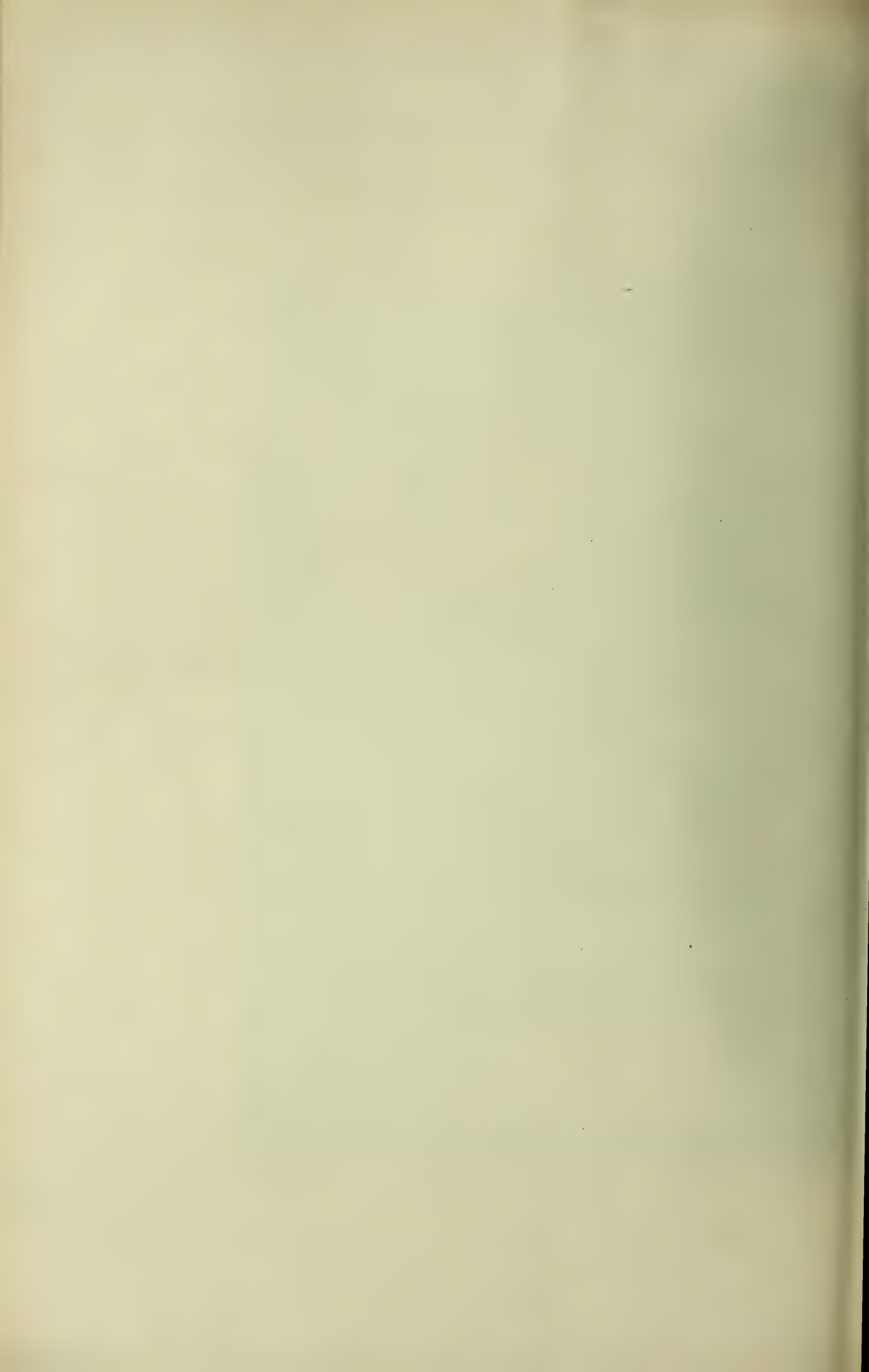


Aberdeen Art Gallery Extension.

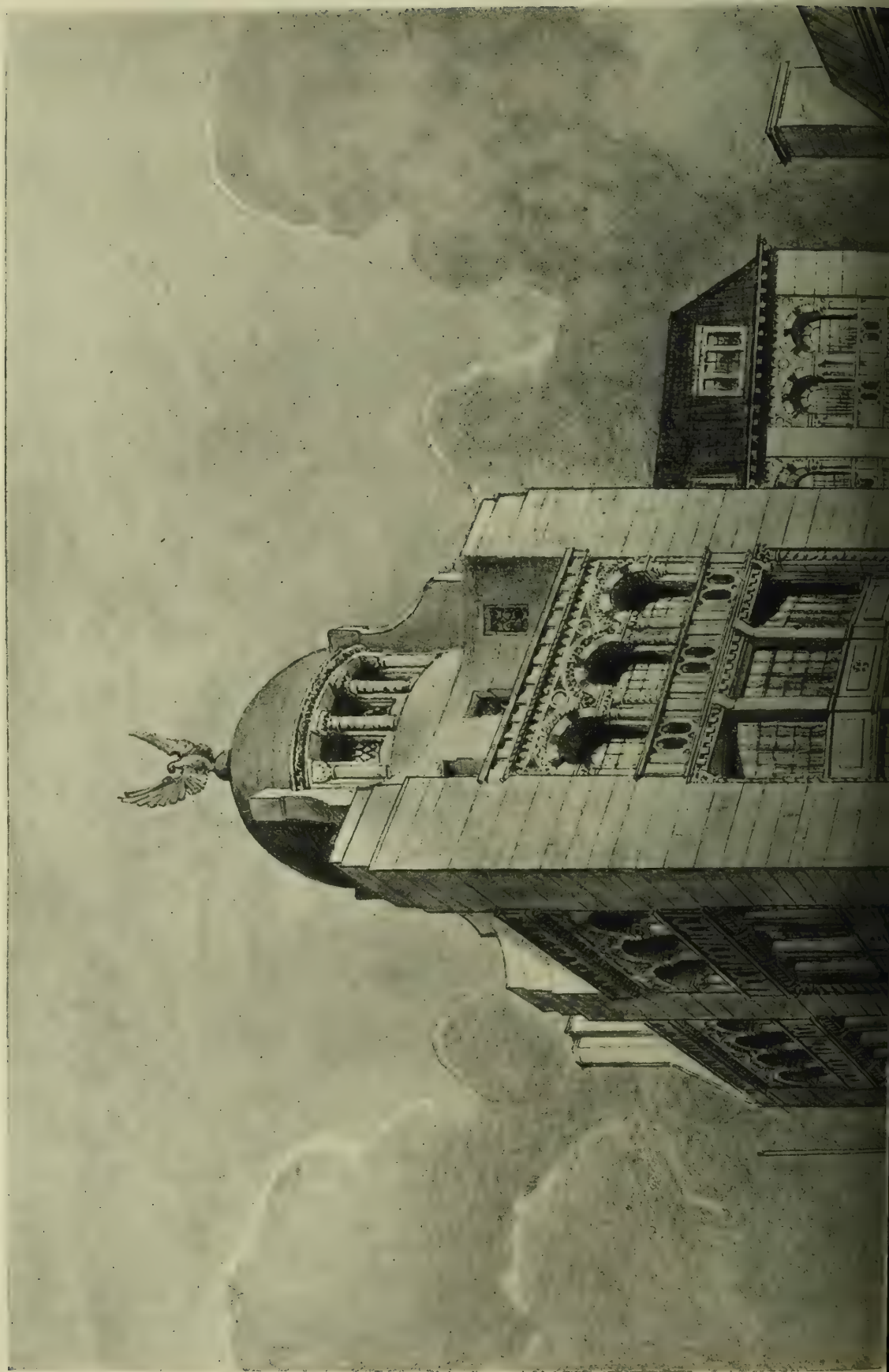


SIDNEY SVSSEX
NEW BVILDINGS ~ THOM





THE BUILDER. OCTOBER 2, 1926





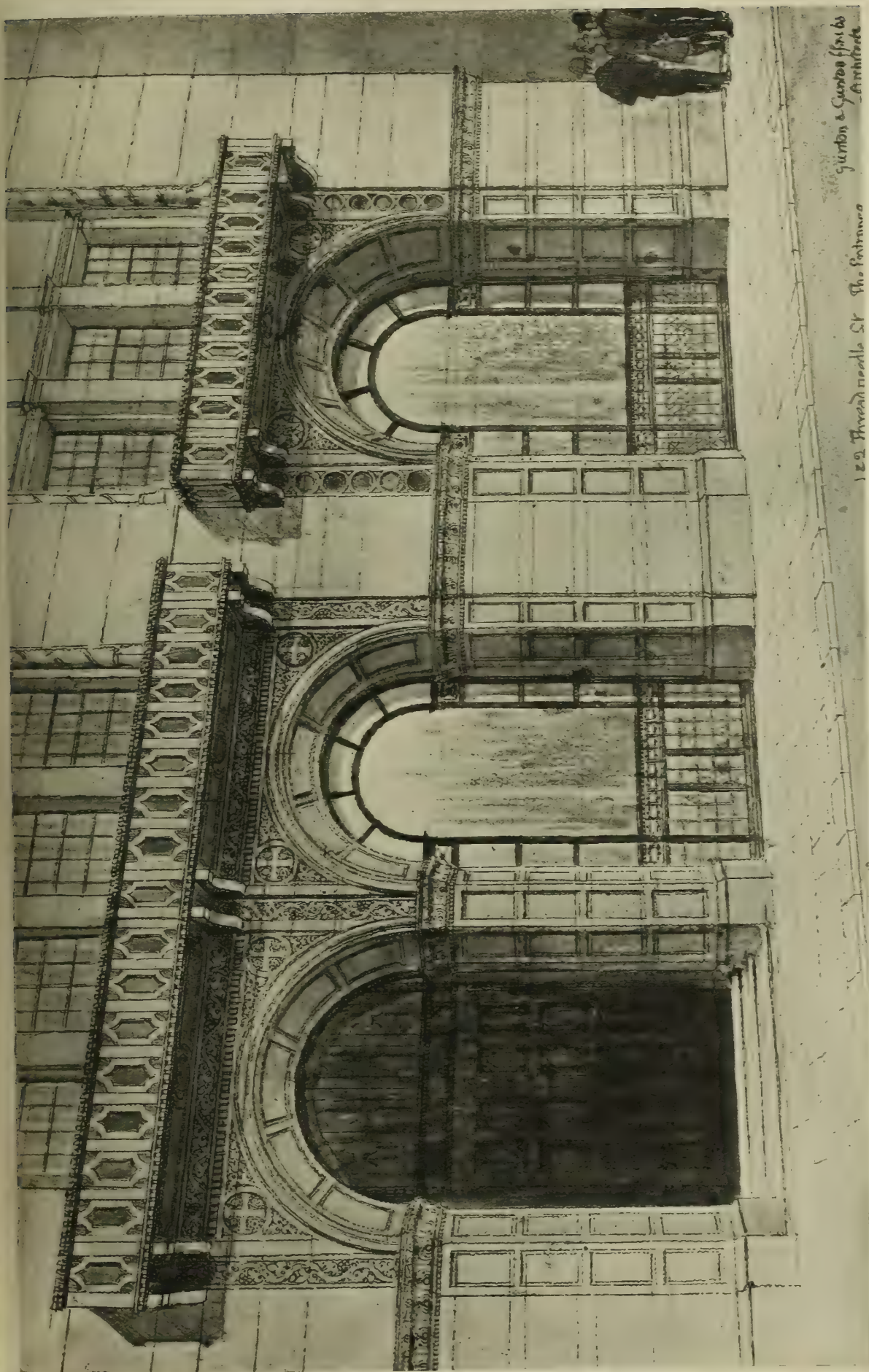
New Premises for the Eagle Star and British Dominions Insurance Co., Ltd.

Messrs. GUNTTON & GUNTTON, F.F.R.I.B.A., Architects.

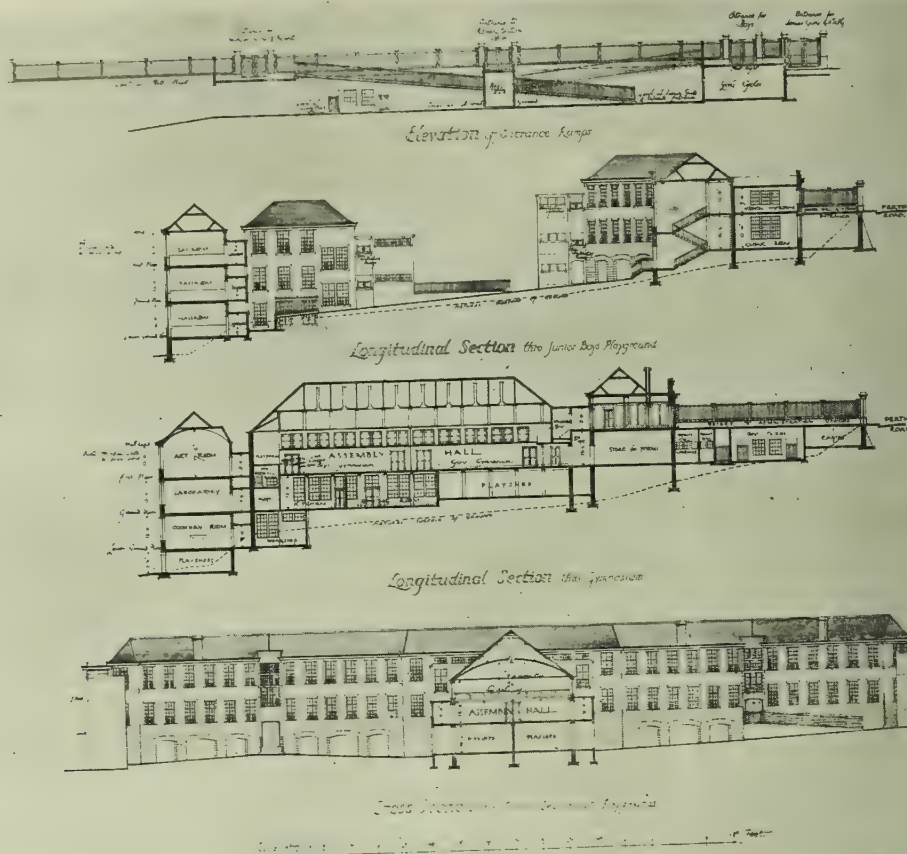


Aberdeen Art Gallery Extension : Detail of Hall of Remembrance.

MESSRS. A. MARSHALL, MACKENZIE & SON, Architects.



New Premises for the Eagle, Star & British Dominions Insurance Co., Ltd.: Detail of Threadneedle-street Front.
Messrs. GUNTON & GUNTON, F.R.I.B.A., Architects.



PRIMARY
DEPARTMENT

North Elevation



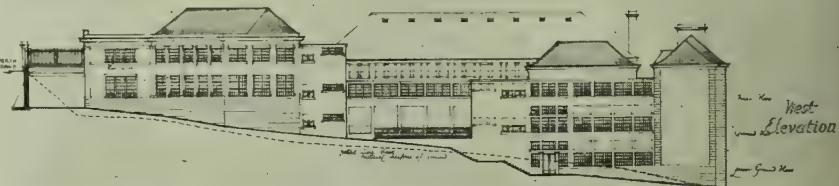
SECONDARY
DEPARTMENT

East Elevation



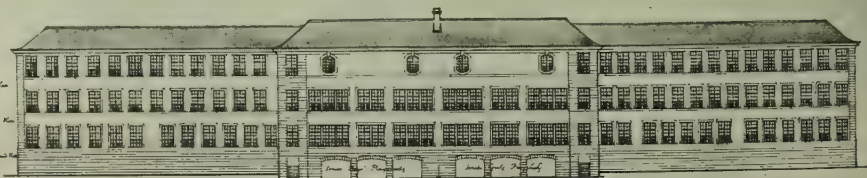
PRIMARY
DEPARTMENT

West Elevation



SECONDARY
DEPARTMENT

South Elevation



Dundee Secondary School Competition: Second Premiated Design.

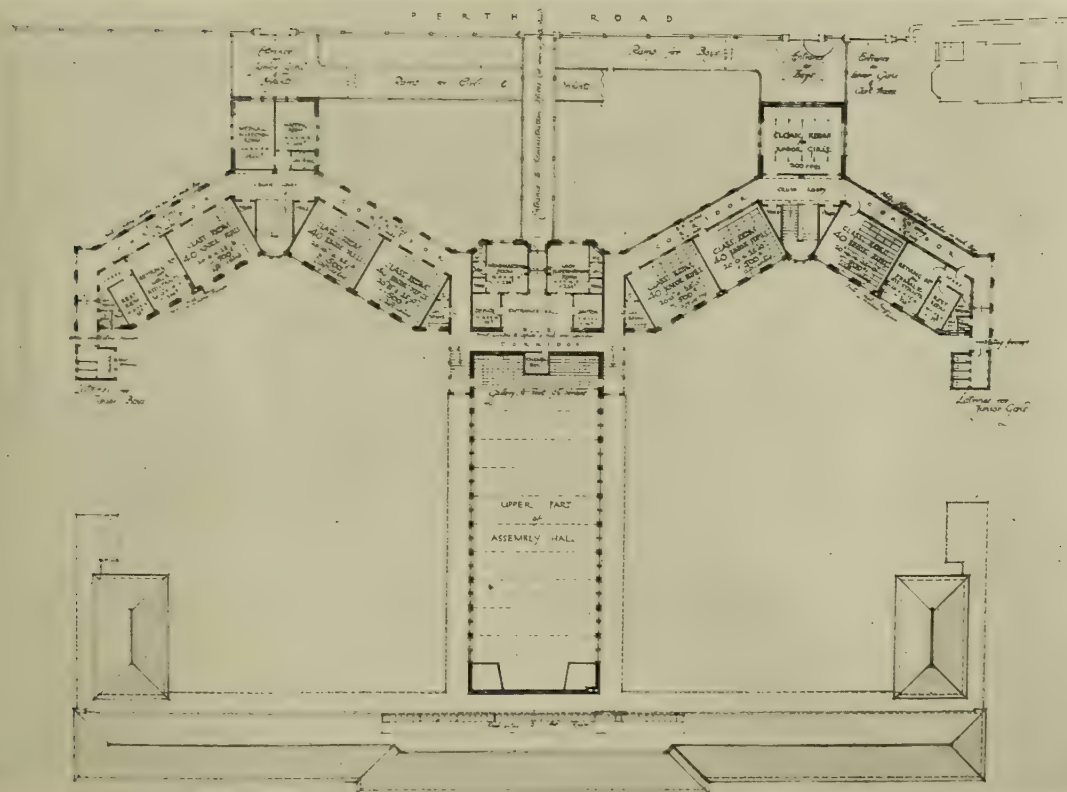
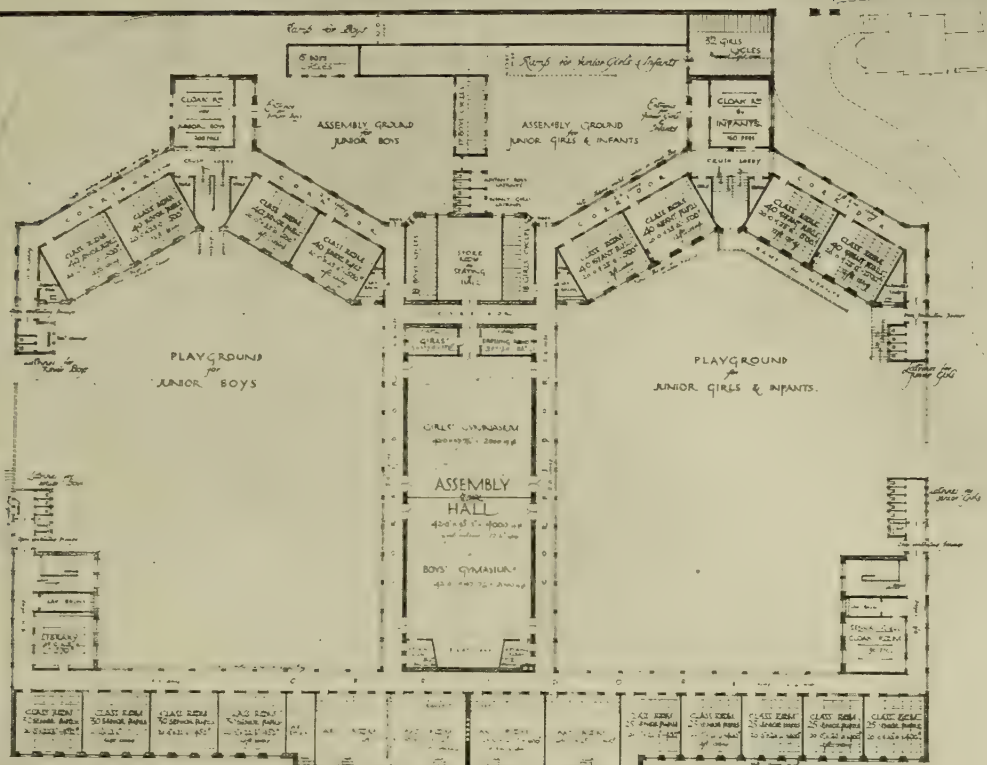
MESSRS. MACLAREN, SOUTAR & SALMOND, Architects.

PRIMARY
DEPARTMENT

Lower
Ground Floor

SECONDARY
DEPARTMENT

First Floor



Dundee Secondary School Competition : Second Premiated Design.

MESSRS. MACLAREN, SOUTAR & SALMOND, Architects.

PHILIP WEBB AND HIS WORK.—IX.

By W. R. LETHABY.

A WINTER IN ITALY. LETTERS.

(Continued from September 4.)

To Mrs. and Miss Faulkner:

Florence, November 26, 1884. My dear Friends,—. . . I have been much disinclined to write anything from my crowded head. I fancy that my head is more overwhelmed by the tongue in it being more or less disused; the good-natured Murray being the only one to whom I can remark anything either in jest or earnest. I left London on the 9th and went from Dover to Ostend, then to Bruges, Ghent and Brussels, all with Wardle as companion—a very good one, who watched me in the most kindly manner. I left his shielding arms on the 17th and travelled by night train to the St. Gothard Pass. From Basle and upwards there was snow, and complete winter up to the mouth of the tunnel. After starting out into the Italian side, I came into clear, bright sunshine again—another world with no snow. I came in the late afternoon to Lugano, my present good host Murray arriving there also about 10.30. Besides the quite lovely scenery of this Italian Switzerland and the pretty town there was one of the noblest frescoes in the world to see, in wonderful condition and as wonderfully lighted with perfect sun. We journeyed to Como and stopped, and then to Milan and stayed there, afterwards to this place on the 21st. Murray's home having many rooms, he has very kindly put at my disposal two in which I can be solitary after my manner and do some work. I shall not attempt to tell you of the wonders of the land. I confess to finding such a dim waste of glory and beauty at times really oppressive. You must not think that I do not enjoy the wonders, for I do so, but they are piled up and are apt to set me musing in a rather melancholy way. . . .

To Boyce:

Florence, November 27, 1884. . . . There has been too much to see and dream over for anything like friendly writing; added to which I was obliged to bring some work, and in Florence I had to take up that. It rather saves me from becoming moody under the impress of staring at the vast wreck of ancient art strewn over this country. Wardle went with me to Brussels, and now the good-natured [Fairfax] Murray, with whom I am staying, helps to temper wonders to my soul. I am driven to desperation by the multitude of things which cannot be passed by hastily. I thought to pay but general heed to pictures, but I find that they lay hold irresistibly. I was so caught in the net of a tremendous Luini fresco at Lugano on my first stepping into Italy that I have barely recovered from the surprise after more than a week. Murray is a fine sleuth-hound, scenting out many hidden things. I have been obliged to add to my business by taking some lessons, and the governess must have gone home with hands upraised at the stupidity of the English. If she had known enough English herself she would have cursed me surely. Sincerely the friend of both of you.—Philip Webb.

To Mrs. and Miss Faulkner:

Florence, December 7, 1884. My dear Friends,—I had your kind letter from the hand of Kate, dated November 29. . . . I liked Bruges very much indeed, and, I fancy, much as you did. Wardle and I were quite active in going about, and saw much. St. John's Hospital and the Jerusalem church impressed me most, perhaps, but the belfry was always a pleasure. Of course, I went to see the "Adoration of the Lamb," and luckily the guide went to his dinner and left us alone for some time. The pictures there and at Brussels were more than enough to get through with attention, but here they are by the thousand, and do what I may, many only just get looked

at, which is a shame, or would be if it could be avoided. I had two days at Pisa last week and found that place crammed in like manner. Like an embarrassment of friends, one has to pick out those most to one's heart and stiek to them, so I do with the pictures. To-morrow I go again to the Uffizi to try and lay hold of the greatest works there, but after all, the frescoes remaining on the walls built for them are most to my content. Consider an old building of the thirteenth and fourteenth centuries, all dreary and half forgotten, having the walls more or less covered with works of the time, and all the life that has gone on and been touched by these works for 500 or 600 years. This was the case in a church about four miles out of Pisa (San Piero in Grado) lying in the fields, only a farm-house adjoining it. A large old ghostly church of the thirteenth century, with the walls above the arches all covered with stories: the painting dim mostly and in spaces nearly gone, but yet wonderful in its diminished splendour. This church was not lighted up with bright sun, for it rained, but in spite of this gloom I got used to it and came away with regret. Pisa itself is also full of wonders, but they are almost deserted and neglected, except in the Duomo, where worse has happened in the way of scraping and touching up. Your description of going to the S.D. Federation gathering interested me much. It was the first news of active life at home that I had heard of. . . . What I have seen of the land in the plains makes me stare with amazement at the laborious care with which the tillage is carried on, labour on labour, so that the whole is as closely dealt with as a garden; indeed, the ground looks as if it were one vast garden, clean and tidy as such. This patient labour of man and beast is very touching to me. I think I know—or, rather, feel—what Ruskin means with his beating down of Shelley and raising up of Keats, for I have had some of the feeling of distaste for the former which I can hardly explain, except that I think Shelley wrote more from the head than the heart. I am sorry to learn that you have been somewhat sleepless, as that wears one away and leaves nothing in repayment for the waste. Take exercise, for I believe that air and exercise are the only help for such evil. I smile when I write this, thinking of my own determined opposition to any way but of my choosing. . . . Send Charles my love and any cheery word from me. I feel that it would take fifty years for me to be able to make even a bad joke in Italian. My last English was at Stanhope's grand old villa, half a mile from here, where I dined last Monday with Murray. The weather to-day has been quite foggy, so that when I walked into the middle of the town I could not see the top of Giotto's tower. Last Monday I went up to its top and saw a world of splendour all round. I made a note of the preparation at the top for the lantern stage which was never built and would have made such a perfect finish for it. I am intending to go into the construction of Bonnelleschi's dome, as that is very interesting from a builder's point of view. If you are in want of books, you had better go to Raymond Buildings. Mrs. Long would be glad to give you some tea. This would be an excuse for going out.

To Miss Faulkner:

Florence, January 3, 1885. . . . I went up to San Miniato on the first January, and as I was leaving gathered a leaf of the bay-tree or laurel proper, which I put into this letter to sweeten it. The great Michael Angelo, one of my dearest of friends, was very fond of S. Miniato, which overtops and smiles on Flor-

ence so little away from and yet so far bene it. As you look from galleries and of places in this city, you see, and say, "there is San Miniato!" almost as if you said "there is sweet old Michael." In his days he fortified the place, and the decay fortifications still remain as a home for v. plants. I had been on the morning of day to see again his marble work in its home at San Lorenzo in the city. You remember that I have small casts of two the figures [Dawn and Night] on my bo case. I was left alone in the Sacristy—called—for an hour or so, for though so came in to look they did not stay more t five minutes. The keeper came in once twice to see that I was not breaking off t (the statues') noses, but finding me t taking notes, he returned quickly to tell to put on my hat so as not to take cold, thus well earned a pinch of snuff, which took to kindly. I shall have some photogra to show you when I return which will quic the meaning of these few words. I thank for your news about the S.D. Fed.; and day came a long letter from Morris giv chapter and verse for the times he has b going through. It does not look all black me, for I see better light through the holes disruption—a deal of sifting *must* go on revolution times, as people are necessarily cepted as allies in all these movements w they must really be enemies. Even the D has his uses. The necessity of evil has b preached about often enough, but it is painful complaint, and the world is seam and scarred with the effects of the disease, day being bright and fine, in the morning went up into the dome of the Duomo on p pose to examine, as I had promised mys the construction of this great work of Bon leschi. I had before made myself acquai with its construction from books, so that knew what to look for when I got in betw the arched and ribbed shells of its mightin The work was well done, and therefore long as it stands it will be good to look. Of course, your own personal work has st still lately, but I am sorry to think of y being likely to have to part from your worl lad—must this be so? I suppose you ha however, got well on with the piano case, that when you take it up again it will quickly to its finish? I start Rome-wa about the middle of next week, I think, st ping at San Simignano, Siena, Orvieto, my way there, and this will take about week. I shall let Mr. Jack (at Raym Buildings) know my address as soon as know it myself, so if you should want to s any message before I again write, please s it to him. With my kindest love to mother, believe me very sincerely yo Philip Webb.

Also you will not forget me to Charles w you see him.

To Boyce.

Florence January 5, 1885. . . . You do v to attend at the Anti-scrape meetings as many of the half- or quarter-hearted mem take no interest. . . . I have seen Lug Como, Milan, Pisa, Lucca, Pistoja and Pr and I have worked away here pretty stead . . . The pictures are a great hindrance, many and so good that I have been unable resist looking hard and long. I had a b of fresh enjoyment over the Benozzo Gozz in the chapel of the Pal. Riccardi, and t took my breath away. . . . I can see that suffers less than others do who saw Flor 20 or 30 years ago. The loss of the wall immense. I have counted the towers and of wall remaining. . . . My work did fo me. I have done one fit and another m me in Rome, so that friend and assistant J at home be not too heavily taxed. . . . I s for Rome on Wednesday, taking Gemignano and Siena on the way. . . .

To Boyce.

Florence, March 5, 1885. . . . I only go Rome 2 days after the high flood of Ti

had risen after heavy rains. The water into the Pantheon, etc. I was there weeks, but most of my mornings I had to do home work; the days were short; ever, I was helped by friends, especially Middleton. After the Sistina, perhaps I most taken by the Pinturricchios in the Rooms at the Vatican. I did a good deal of walking round in the Campagna, and not throttled by the herdsman's dogs. My way back here I stayed at Assisi, Perugia, and Arezzo. After work time I have had out to refresh my memory of frescoes and engravings. The good and great Fra Angelico I think, never be forgotten. His work did surprise me in spite of what I knew of Giotto and M. Angelo I need say no more. The Pantheon was rather a surprise to the good, as St. Peter's was to the bad (speaking broadly). Even M. Angelo did not lick it into satisfactory shape. His library at San Lorenzo (the library) here much interested me. Middleton had to rush home to England. I am looking forward to his book on Roman antiquities. I got on well with him, and he is "a little creature to shoe behind." Mrs. Boyce's violets and Etampes are in front of me now. The cold was a bore, but the people enjoyed it which I was glad—and I could avoid the cold. . . . If your colds still stick to you get the fresh air!

Miss Kate Faulkner.

Rome, January 24, 1885. I have been here many days. Rome has been very cold indeed; fingers had to be thrust into pockets to keep them usable. I left Florence on the 7th and went to Siena, spent some 5 days there and found the place full of interest: a walled town, the streets all up hill and down dale, the middle of the place being on a hill and the hills which radiate like fingers. The cathedral and the town hall are the great things; the other churches, though noble in design, are mostly almost bare. The cathedral is extraordinarily full of work of a strange kind. . . . One of the chief delights of Siena is the number of large mediæval houses still standing. I went to San Gimignano, but only there long enough to see its strange and rude beauty. From Siena I went to Pistoia, a noble city on a rock high above the Arno, which soon runs into the Tiber. As the weather was stormy, and as the authorities had been blundering over their repairs of the cathedral, a considerable part of the cathedral was washed with rain; even frescoes being washed away. I am somewhat indurated against sight-seeing, but I confess I do not like to do so. I shall hardly be sorry when my time is up and I can pretend to earning an honest living, for as it is now—in spite of the work I feel somewhat of an idle man, living on the sweat of the labours of poverty. Rome is almost a terrible place; very wonderful and it has many beautiful things, but from its appearance the memories it gives me are a grim look. The place is full of the remains of palaces, both lay and priestly, and it gives me a devilish cast. I am most kindled by my friend Middleton, who is hard at work on a history of Rome, and as I live in a room on the same floor as his I pick up many interesting things. M. Angelo's ceiling of the Sistine Chapel in the Vatican is the most wonderful and comforting. The ancient ruins are wonderful, truly, but also terrible indeed. In Rome has shown what a curse he can be to himself. Just now I went for a walk in the Campagna and back by Tiber's side. The country, too, has a terrible look, softened and there by some grace of beauty. I think that the most gentle things I have seen are the happy jackdaws playing about in the streets and settling on the wind-vanes. These creatures have their myriad homes in the cracks and the ruined walls of the Colosseum and the places of the Cæsars. They make the place human with their active and clattering talk. If you write again,

after you have told me how you both are I should be glad to know how the new [Socialist] League is getting on. I heard from Morris just after the break up, and I should like to know if things are going pretty well in the new form.

To Miss Kate Faulkner.

Rome, February 7, 1885. . . . Morris said in his last letter that he would send me a "Commonweal," but as I have not yet had it, I fancy it may have been confiscated. Therefore, if you will be so good as to send me a copy in an envelope, I should like it. Next to my walks outside the city, a little way into the Campagna, and the looking into the old or Byzantine churches, I have not had such pleasure in Rome as my second going to the Sistina Chapel, where I stayed for about two hours. There were but few people there, so that the more real and familiar people on the ceiling came home to me. This great boon of M. Angelo's to the world is a triumph of art, imagination and beauty. I could live comfortably in this vast hall with *self and cat*, so noble and pleasant is the art. I find that three parts of the—so-called—splendid buildings of Rome are brutal in their magnificence, whereas this greater creation than all is to me as free from offence as a small, quiet room. I say "to me," for I find few in sympathy with me on this point. Raphael's extraordinary skill, artificial in an artificial time, commands attention and much futile gabble—I am quite sick of it. I have just been to the Villa Borghesi, where there are ancient statues by the hundreds, good and bad; but the building and marble decoration, etc., are so offensive that I was glad to get away, even from the good things, into the open ground about. which is really beautiful in its half-neglected but not ragged state. The garden (old park, rather) of great size are a boon to the Romans, as it is free to all for four days in the week, where they can roam about and gather flowers, which are many—violets making the now warmer air quite strongly scented with their own special scent. Jackdaws by the flock make a noise which is a comfort in this country, where the smaller birds are so killed down. After two or three tries, I at last got into the Pantheon, which is closed to the people on account of taking down of much theatrical rubbish, put up for the anniversary of the death of the late fat King. By dexterously putting my hand into breeches pocket, the custodie let me through the gate, and I was satisfied with wonder at the area and dome of this noted Roman work. It is really a quite impressive vault; comparatively low down, with a big hole in the centre open, and the rain coming in as it has done since the building was set up. This is the only light into it, and it is ample. The Italian Government had decided to cover this light with glass, but there was enough row made to stop them, so that the meaning of the building will so remain—yet awhile! The Italians are quite reckless in destroying the smaller remains of greatest antiquity in order to set up long rows of houses of a lofty Bayswater type—though I am bound to say, of not quite so bad a kind. I rather think, Kate, that you are in want of me, to tell you candidly, as I always do, what I think of your work; for I feel sure that from long, continued strain in doing so great a labour you are not able yourself alone to make out what it is really like. However, I shall not see it in its finished state, as I should so much like to do. It seems to me that such work as raising patterns with gesso must be disappointing to you, as to do it perfectly one would have to be brought up to it in a traditional manner; but I felt satisfied, and more so, in the way you had done it. Added to your personal disappointment, you should allow for all hearty workers being dissatisfied with the outcome of labour which has taken some time to do. You must comfort yourself by imagining what my houses look like to me when I see them

finished, or as nearly finished as the people who are to live in them care for. My comfort is in setting about another work to drive the taste of the former away. I shall, I fancy, be leaving here in a week or ten days; enclosed is an anemone gathered just outside the walls of Rome; it is a common wild flower here.

To Miss Kate Faulkner:

Florence, March 8, 1885. . . . I leave for Bologna to-morrow. I received the first number of "Commonweal" at Rome, and the second number here. I am deeply interested in the progress of this new venture, and no one except Middleton, whom I have seen, cares at all for such matters. I met a very pleasant Oxford man in Rome, Bradley by name, stepbrother, I think, of the Dean of Westminster, who did not dislike talking of Socialism. He is now a professor at Liverpool. Morris's poems were both a great delight, and I liked his tone compared with the rest of the paper, which I think rather weak—I suppose it must be so. I think I told you that Middleton had to rush home to England to his father, who was stricken with paralysis. I had a letter the other day, and he said he had been in Oxford and met Charles and Morris at Bywater's rooms. When I left Rome on February 19, I went to Assisi, a beautiful town pitched on a high hill. The chief church is a double one, one under the other, and both covered with paintings by Orcagna, Giotto, and other early Italian men. The church also is beautiful, and I was all busy during my stay in trying to understand what I saw. I went from Assisi to Perugia, the chief interest of which place is its Palazzo Pubblico; the churches also are fine, in spite of terrible transformations. . . . Arezzo—another hill town, but not so high up—had in its Franciscan church a series of frescoes by Piero della Francesca, a painter much to my mind. There are two pictures of his in the National Gallery. The chief, a Baptism of Christ, gives his characteristics very well—great purity and simplicity. Frescoes permanently beautify a building, whereas separate pictures become, too much, objects of mercantile exchange, of which over-reaching is the chief element. All noble framed pictures should be in public galleries. After Arezzo I came on here, where I have been at my home work. The spring is now showing, many things are quite green and the almond trees in full bloom. On sunny days one gets to the shady side of the street. . . .

To the same:

Venice, March 28, 1885. My dear Kate,—I never was a good letter writer, and here, between work of various kinds and natural indolence, I am too weak in the matter. I was greatly pleased with your note of the kind mother's being about again, it makes me ashamed to be away, as I should be at home helping all I could those friends who like to have such poor aid as a kindly face can give—My love to her. I left Florence on March 9. Bologna is a pleasant and still much of a mediæval town, mostly built on arches to the streets, so that one can walk about under vaulted cover. Ravenna is wonderfully interesting, but as a town poor, the only beauty being in the churches, which not only are old but have the air of very great age on their faces. Forlì is a pleasant place, but not of great interest. Of Venice, having heard much talk since I was a boy, nothing had spoiled it to me when I came to walk about its strange ways. I have been here a fortnight and am still untired. Added to the deep interest of its history, it is still very lovely to look at, and there being no wheels to trouble one (always extraordinary in effect), the standing about is so comfortable. To push or be pushed about in striking-looking boats is a never failing pleasure—everywhere some pieces of admirable architecture turn upon one. These are the gentler delights; the greater and more terribly lovely,

such as St. Mark's Church and the Ducal Palace, are always touching. I cannot say that I like travelling, after all is said, but Venice gives one less cause for regret that I am not at work. I have all sorts of vain regrets myself, but when I write to you I feel inclined to say that you must be of good cheer, as if only saying it should be enough to clear your way of anxieties. I rejoiced from what you said and from what Morris also wrote to me, that the meeting at Oxford, with Charles in the chair, was successful in spite of difficulties. I am so with our friends in heart that I blush that I can do next to nothing to forward the cause. However, I look to claiming my place with them on my return, though of so little strength for helping. A. C. Bradley, of Balliol, is here; I go with him to-morrow as far as Padua, and return here for a few more days. Murray came here, and he is now at work on a study of St. George, by Carpaccio, for me—memorial of a delightful work by a painter who pleases me so greatly. When I leave I go to Verona, to stay as long as my nearly ended time will allow. I did not smile when you told me the piano was not yet gone, as I felt quite seriously your wish to make it as perfect as you could—all art work should be done in that spirit. I shall hope to see it when the owner has it.

To the same:

Venice, April 4, 1885. I had your kind letter with the "Commonweal," and as it had two of Morris's things, I the more rejoiced. I am very anxious both for Morris and Charles, as they will both of them be very earnest in their labours, and neither of them wanted any added work. Still, there is a kind of obstinacy which one gladly puts up with in one's friends, even though they and we suffer by it. I leave here to-morrow for Vicenza, on my way to Verona for two or three days, after which I shall make my way to other towns and leave Milan on the 15th or 16th. I must not delay any longer getting to my home work. Venice I have found a pleasant place, as over and above its great monuments of beauty it has so many old houses that perhaps more of a mediæval town is to be seen here than anywhere. I need hardly say that the cold and formal architecture of the Renaissance looks duller here than in other places. Venice is also blessed with many pigeons, and they make alive even a stupid and pompous piece of building. The canals and shallow seas are also a continual pleasure, and the absence of wheel traffic a boon beyond comparison. Still, I do not really care for travelling, though I should be more ready if I knew the language; I like to speak to all I meet, the more so as I get older. I also wish to get back to avoid the daily reproach that my friends are without even my small backing in their efforts for the mass of mankind. . . . Bless me! After all, I may be able to see the piano before it goes from Queen's-square. I was at Padua the first three days of this week, and found it a pleasant city, full of streets built with arches on each side to carry the houses. I was lucky in having bright weather for the day I went to Torcello, which is a place all too sad. Its two strange churches stand side by side as if they were the last of the place, as very nearly they are.—Yours very sincerely, PHILIP WEBB.

The Sargent Exhibition.

Sir Frank Dicksee, President of the Royal Academy, speaking at the opening of the Liverpool Autumn Exhibition at the Walker Art Gallery, announced that a large bronze crucifix designed by the late John S. Sargent is to be included in the exhibition of his works at the Royal Academy in January and February, and it is hoped that ultimately a place for the crucifix will be found in St. Paul's Cathedral. The crucifix, which is 13 ft. by 18 ft. in size, is at present in America; it was designed for the Boston Public Library.

STRAITS SETTLEMENTS REGISTRATION

A MONTH or two ago the Institution of Structural Engineers protested to the Colonial Office against the provisions of a Registration Bill for the Straits Settlements which sought to preclude all who were not members of the Royal Institute of British Architects from carrying out any architectural work which, under local bye-laws, includes civil and structural engineering and surveying. The Surveyors' Institution, the Institution of Civil Engineers, the Institution of Structural Engineers and other professional bodies, registered similar formal protests. The Colonial Office has now offered one of two saving clauses. The first of these, in exempting members of various institutions from the provisions of the Bill, seeks to define the professions of civil and structural engineering, &c. The second saving clause to which the Institution of Structural Engineers has with certain reservations agreed is worded as follows:—

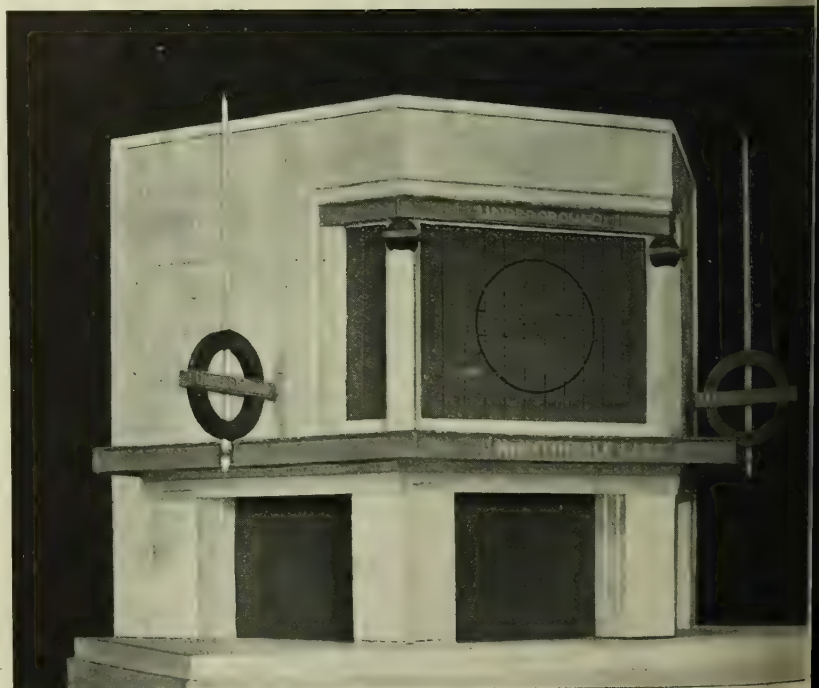
"... Nothing in this Ordinance shall be construed as debarring any person who is a Chartered Civil Engineer, or a Bachelor of Engineering, or a Bachelor of Science of any British or British Colonial University, or a member of the Institution of Structural Engineers, or a member of the Royal Sanitary Institute, or a member of the Institution of Mechanical Engineers, or a member of the Institution of Electrical Engineers, or a member of the Surveyors' Institution, or a member of the Institution of Municipal and County Engineers, or a member of the Institution of Mining and Metallurgy, from exercising his functions as a civil, structural, sanitary, mechanical, electrical, or mining engineer, or as a surveyor . . ." The Institution of Structural Engineers asks for these additional words to the last sentence above: "notwithstanding that these functions may include the submission of plans, &c., under the Registration Enactment." In bringing this matter to public notice, the Institution points out that, before any attempt is made to promote Bills for registering members of the architectural, engineering or surveying professions, it would be very much better for previous unity between various representative institutions to be arrived at.

REPAIRING ST. PAUL

The *Journal of the Society of Engineers* for July-September records a visit to St. Paul's Cathedral by a party of members, to whom works of reparation were explained by Resident Engineer, Lieut.-Col. C. E. Sankey, D.S.O. The machinery for m and injecting neat cement grout (it consists of an electrically driven air pressor, pneumatic engines for working paddles that keep the grout stirred, and the pump working by compressed air) pumps the grout into the holes at a maximum pressure of 50 lb. per sq. in. Pneumatic are used for drilling the grout holes. The positions of the grout holes are carefully selected, being in some cases as much as 16 ft. long, 1½ in. in diameter, in a nearly horizontal position. They slope slightly downwards, the object being that the final grout would be in by the action of gravity. The pressure for the grout varies from 20 to 50 lb. per sq. in. according to circumstances, and the holes on the opposite side of the pier are arranged so that they "break-joint" with the first. The grouting is started at the lower level of the piers in the crypt, and will gradually work upwards. After the grouting has been completed, the grout holes will be drilled out and reinforcing bars of metal of a non-corrosive quality will be inserted in the drilled holes and grouted up. Thus in the end the piers will not only be well grouted, but will be reinforced. The total weight on the eight piers, including their own weight, is over 60,000 tons.

NEW UNDERGROUND STATIONS

The illustration given below shows the type of station entrance and hall which has been decided on by the Underground Railways. It will shortly be built for stations on the City and South London extension. The design probably be adopted in all future station reconstructions. The architects are Messrs. Adams, Holden & Pearson, F.F.R.I.B.A., who are also designing the new headquarters of the Underground Railways at St. James Park Station.



The New Type of Underground Railway Station.

MESSRS. ADAMS, HOLDEN & PEARSON, F.F.R.I.B.A., Architects.

SCHOOL PROSPECTUSES

ARCHITECTURAL ASSOCIATION.

We have received the prospectus of the Architectural Association, which was founded 1847 for the purpose of promoting and providing facilities for the study of architecture. Its chief educational work is in connection with the School of Architecture, which is controlled entirely by the Council of the Association. It receives the support of the Royal Institute of British Architects and has a representative on the Council of that Institute. All students when entering the school become members of the Association, the membership of which includes most of the leading architects of the country and the majority of architects in London, who use the premises of the Association and take part in its affairs. The opportunity thus afforded to those commencing their architectural career in the school to come into immediate contact with the practical world of architecture is extremely valuable.

The course consists of five years at the school, after which the student must spend six months in an architect's office before being eligible for the School Diploma. This passed successfully, the student must pass the R.I.B.A. professional practice examination and spend a further six months in a builder's office before obtaining the Associateship of the Institute.

The social side is not neglected, there being tennis clubs, athletic clubs, etc. Full particulars of the Association are contained in the annual "Year," which may be had on application.

REGENT-STREET POLYTECHNIC.

The prospectus of the School of Architecture, Building and Surveying (Evening Department) of the Polytechnic, London, has just been issued: the session for 1925-26 commences on September 8. The syllabus includes the following courses: Architectural design and composition, practical geometry, building construction, land surveying and levelling, builders' quantities and professional practice, building law, valuation, etc. The Polytechnic Diploma and the Senior Grouped Course certificate are awarded to students reaching the necessary standards of proficiency. Sir James Fletcher, F.R.I.B.A., is the President of the School, and Mr. G. A. Mitchell, R.I.B.A., the Principal.

COLLEGE OF TECHNOLOGY, MANCHESTER.

We have received the prospectus for the opening session of the Manchester College of Technology, which commences on October 8. The University Courses offer systematic training in the principles of science and art as applied to architecture; mechanical engineering, sanitary engineering, the building trades, etc. The College possesses extensive workshops in which students can put to practice their theoretical training; in addition there are machines especially constructed for demonstration, experiment and original research. Students who, having passed the Matriculation Examination, or its equivalent, satisfactorily complete a three-years' Ordinary or Higher Course, become entitled to the degree of Bachelor of Technical Science.

WESTMINSTER TECHNICAL INSTITUTE.

In proximity to the many professional offices and around Victoria-street has rendered it desirable that to the Westminster Technical Institute should be assigned the function of providing technical instruction to young architects, surveyors, valuers, estate agents, constructors, and others engaged on the professional side of the building trade. Systematic and progressive courses of study extending over a period of years have been arranged, with the assistance of a highly

experienced and qualified staff of teachers. These courses are exactly adjusted to the requirements of the various classes of students, and extend from the instruction essential to the junior draughtsman to the specialised study required by the most advanced students. In the announcement recently issued by the Royal Institute of British Architects regarding the R.I.B.A. Statutory examination, emphasis is laid on the necessity for a careful study of the London Building Acts and of building construction. The classes at the Institute provide an opportunity for acquisition of the comprehensive knowledge of these subjects, in both their theoretical and practical aspects, requisite to success in this examination.

The Principal will be pleased to forward to intending students and others interested in the work of the Institute, copies of the prospectus, containing full particulars of the courses of instruction, syllabuses of work, and fees.

WILLESDEN POLYTECHNIC.

We have received the 1925-26 prospectus of the Willesden Polytechnic, the syllabus of which includes a day building construction course. Mr. G. Ayres, Inter.B.Sc., is the head of the course, which consists of a year's elementary building construction and mathematics, and a year's more advanced work; in addition there is workshop instruction in carpentry and joinery. There is also a plumbing and domestic sanitary engineering course, and a course of mechanical engineering. Readers interested should write to the Secretary of the Institute, Priory Park-road, Kilburn, N.W., for particulars.

ROYAL INSTITUTE OF BRITISH ARCHITECTS

Intermediate Examination, November, 1925.

The centres for this examination will be London and Leeds. At both centres the examination will be held from November 20 to 24 inclusive. At the London centre the oral examination will be held on November 24; at the Leeds centre on November 25.

Silver Medal for Recognised Schools.

The R.I.B.A. Silver Medal for the best set of drawings submitted at the annual exhibition of designs of students of Recognised Schools exempted from the Final Examination has been awarded to Miss Thelma Silcock (Diploma in Architecture, School of Architecture, University of Liverpool).

Examinations.

The following are the dates for the forthcoming R.I.B.A. examinations:—

Intermediate Examination.—November 20, 21, 23, 24 and 26, 1925. (Last day for receiving applications October 17, 1925.)

May 28, 29, 31; June 1 and 3, 1926. (Last day for receiving applications, April 23, 1926.)

Final and Special Examinations.—December 2, 3, 4, 5, 7, 8, and 10, 1925. (Last day for receiving applications, October 30, 1925.)

July 7, 8, 9, 10, 12, 13 and 15, 1926. (Last day for receiving applications, June 4, 1926.)

Examination for the R.I.B.A. Diploma in Town Planning.—June 30; July 1, 2 and 5, 1926. (Last day for receiving applications, March 1, 1926.)

The Smoke Abatement League.

Arrangements have been made by the Smoke Abatement League of Great Britain to hold a conference at the Palace Hotel, Buxton, from Friday, October 2, until Monday, October 5. The chief subject of discussion will be a proposal to establish in each large municipality a "smoke abatement" department in the charge of a qualified engineer, whose duty it would be to advise all who seek help in the choice of a means of lighting or heating. The public is invited to attend.

BERDEEN WAR MEMORIAL

The Aberdeen War Memorial, opened this week by the King, is in the form of a Hall of Remembrance. It is built of light grey granite, roofed by a dome covered with copper, and stands at the corner of two streets in the centre of a group of buildings forming the Art Gallery, having the original Art Gallery on one side and the new Cowdray Hall and Museum on the other. The exterior of the Hall of Remembrance is a crescent of six Corinthian columns upon a stylobate, and in front upon a terrace of steps is a lion guardian in granite modelled by Mr. W. McMillan, A.R.A. The architects for the group of buildings are Messrs. A. Marshall Mackenzie, LL.D., R.S.A., F.R.I.B.A., and A. G. R. Mackenzie, F.R.I.B.A.

The interior of the Hall of Remembrance is approached by a vestibule having marble floor and a flight of marble steps. The court is octagonal on plan with a large circular dome supported by four great arches. The floor and dado and the architraves are of dove and white marble. A circular balcony or gallery surrounds the court giving access to the various picture galleries on the first floor. A casket of gilt bronze containing the book of the Roll of Honour stands upon a white marble table in a shrine or niche in the north wall. The Cowdray Hall, which prolongs the building to the left, is built of pink and grey granite, like the original Art Gallery. The platform is arranged to accommodate a small choir and orchestra or a numerous party conducting a public meeting, and behind it is the large organ, by Binns, of Leeds, gifted by Viscountess Cowdray. The hall accommodates 700 people. The woodwork is of African mahogany, stained to a soft grey colour; and the walls are lined with the grey canvas used elsewhere in the picture galleries. The acoustic properties have had special attention, Mr. Hope Bagenal, A.R.I.B.A., acting as consultant on this matter, the problem being to adjust the design for the joint use of the hall for lectures and music.

The new buildings also include an addition to the Macdonald Collection—where are displayed the portraits of artists by themselves, which makes that collection unique in this country—and two new galleries for pictures. The upper gallery is lighted so that the light falls on the pictures and the spectators remain in comparative darkness, and reflections on the pictures are reduced to a minimum.

The principal contractors were: Mason, Geo. Hall's Trustees, Aberdeen; carpenter, R. & F. Reid, Aberdeen; plasterers, Roger & Baxter, Aberdeen; plumber, A. McRobb, Aberdeen; slater, Geo. Farquhar, Aberdeen; painter, J. S. Maclaren, Aberdeen; marble work, John Youden & Co., Glasgow; electric lighting, J. C. Laing, Aberdeen; heating, Claud Hamilton, Aberdeen. The lion was cut in granite by Mr. Arthur Taylor, Aberdeen, from the model by Mr. W. McMillan, A.R.A., Chelsea.

Forthcoming Books.

Messrs. B. T. Batsford's list of autumn announcements includes the following: Professor Richardson, F.S.A., is collaborating with H. Donaldson Eberlein in producing a work on "The English Inn, Past and Present," illustrated by photographs, old drawings and sketches; and also "The Smaller English House from the Restoration to the Victorian Era, 1660-1840," illustrated by photographs and drawings. "Living Sculpture," a series of photographic figure-studies by Bertram Park, with a historical introduction by G. Montague Ellwood. "A History of Wall-paper Design in England from the Earliest Times to 1914," prepared for the Wall-paper Manufacturers' Association by J. L. Edmondson and A. V. Sugden. "Sketching in Lead Pencil," for artists, architects, and others, by Jasper Salwey, illustrated by the author and a number of well-known draughtsmen. "The Roman Alphabet and Its Derivatives," by Allen W. Seaby, Professor of Fine Arts, Reading University.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting!—ED.

Water in Basement.

REPLY TO "A BUILDER'S ASSISTANT," SEPTEMBER 8.]

SIR,—The fault in the construction of the basement floor, as described by your correspondent, appears to be that though he has probably made a thoroughly waterproof skin to the floor, there is no strength in it to resist the upward pressure of water, which is considerable at basement depth. If possible, it would be best to wait for a dry spell of weather, make good the waterproofed surface, and lay thereon a 4 in. bed of concrete as a loading coat. The walls do not appear to be mentioned, but it is hardly likely that water does not penetrate these also, in which case they should be similarly waterproofed, and an outside skin of 4½ in. brickwork built against them. The most satisfactory method of all is for the waterproofing of walls and floor to be executed in asphalt, laid in two layers and similarly loaded with a bed of concrete and supported, as to the walls, with a skin of brickwork. The basement then becomes a tank from which all water is definitely excluded. Another wise provision is for a pit in the floor, from which any water that may collect can be baled out, but care must be taken that the pit also is adequately waterproofed.

"CONSTRUCTION."

SIR,—To make an absolutely water-tight job of an underground cellar, asphalt it to the damp-course level or 6 in. above ground level, and make a tank of the whole basement. The first thing is to get the place quite dry by means of sump holes dug at intervals all round the outside of the job deep enough to be below the inside floor level. The water that accumulates should be taken away frequently, and after three or four days the cellar should be dry. Then asphalt the walls and work from the outside to the centre of the room, making sure that the fillets at angles are properly made. The bottom must be immediately concreted with at least 6 in. of concrete to prevent the asphalt blowing up. As soon as the concrete is set firm enough to walk on, build a 4½ in. wall right round up to the height of the asphalt. Then fill in the sump holes, but not before.

W. TOLLEY.

A possible way to treat the walls and floor is with ¾ in. thick asphalt in two layers. In the case of the floor, lay asphalt on concrete and then cover with 6 in. of Portland cement concrete. In the case of the walls, render the asphalt 6 in. above the ground level, well tucked into the joints of the brickwork, and then either build 4½ in. thick brickwork in front of asphalt, or put up shuttering and put in 6 in. of Portland cement concrete, continuous with the floor concrete; you will then have formed a tank, so to speak. I have applied this method to many bank vaults and it has not failed to keep away the water. One might also have a sump hole at some distance to attract water from the building.

G. W. H.

Architect's Fee for Abandoned Work.

[REPLY TO B. WARE, SEPTEMBER 11.]

SIR,—Your correspondent's letter under the above head opens up a very wide and serious subject. It is very easy to point out the unwisdom (a) of not joining a professional society, and (b) undertaking work at less than the generally accepted rate of remuneration; but most of us know too bitterly how difficult it is, particularly in the case of a young man starting in practice, to avoid the offence at all times.

Having made a bad bargain, perhaps as the only means of getting something built, the architect must make the best of it, and the only point in doubt seems to be the time at which the agreed fee becomes due. Holding the letter of appointment, in which payment on completion is stipulated, the architect is quite within his rights in interpreting this to mean "the certified date of completion," i.e., the date on which the building became ready for occupation as far as the building, apart from furnishing, is concerned, and which is the date from which the specified number of months of maintenance is dated. This latter period is not for the purpose of completing things not done, but for making good defects that may appear after completion. Building owners should realise how very unfair and unwise this bartering for lower fees than the accepted scale is. Either the appointed architect is fully competent or not. If not, then it is foolish to employ him; if he is, then he is entitled to the remuneration that has been generally recognised to be a fair return for services rendered.

"WORTHY OF HIS HIRE."

Roofing Felt.

[REPLY TO "G. W. H.," SEPTEMBER 18.]

SIR,—In reply to my original letter, I have been sent some excellent samples of roofing felts, through the medium of your office, one of which is a bituminous hair-felt, that seems very good, combining the qualities of non-conducting nature together with the long life of the bituminous treatment. For the benefit of "G. W. H." I would mention that this form of felt is about double the price of ordinary hair felt, but appears to be excellent money's worth.

"CLIMATE."

Quantities.

[REPLY TO "C. H.," SEPTEMBER 18.]

SIR,—The clause quoted by your correspondent appears to be one of those "water-tight" affairs that delight the official mind. Needless to say it is very unfair, since it is obvious that to object would mean exclusion from the opportunity of tendering. "C. H." may, however, comfort himself in that, should he be threatened with grave injustice through the operation of this clause, he might go to law with every chance of a successful issue. Such matters are treated on their merits in a court of law, where the aim is equity and justice. Generally, however, surveyors to councils are men in whose hands a contractor need not fear to place himself.

"JUDICE."

SIR,—A consideration of the clause quoted, apart from any other terms of the contract (which, of course, should be referred to), would clearly appear to constitute the surveyor sole arbitrator; and his final certificate is in the nature of an award. The surveyor must do his best to act fairly and impartially whatever his natural bias may be; for, if the contractor can prove that the surveyor has acted unfairly or partially, then the decision of the latter is not binding on the contractor. "C.H." might with advantage refer to the articles on "Arbitration in Building Disputes" in our issues of January 9 and 16, 1925, where these matters are fully dealt with.

"LEGAL."

Porcelain Enamelled Taps.

[REPLY TO "CAUTIOUS," SEPTEMBER 25.]

SIR,—Two and a half years ago I fitted porcelain enamelled taps to bath and lavatory bowl in my own house. They were brass taps stamped by the local water department, and then returned to makers to be enamelled. The taps to the bath are still satisfactory, but the hot tap to the bowl is badly chipped. Singularly, the cold tap to bowl and hot tap to bath are slightly discoloured. I fitted similar

taps to a house occupied only by a man and his wife twelve months ago, and these are quite satisfactory. I should only fit them the bath myself, unless the house were occupied by very careful people, and then not over the sink we have white metal taps, a rub with a dry cloth each day keeps them in a shining condition.

H. M. RICHARDSON.

SIR,—As a user of these taps, I can confirm the opinion of "Cautious" that they are "liable to be damaged by chipping"; is a great fault with them. Another drawback is that the taps are clumsily designed, and is almost impossible to fill a kettle; the and spigot occupy nearly the whole of space of the bow handle of the kettle.

L. J. N.

Permanent Colouring of Roughcast.

[REPLY TO R. M. P., SEPTEMBER 18.]

With reference to this question, one needs more information. Is the colouring property already erected, or is it for work to be built? If the first, one should, of course, colour cream with a washable outside paint, distemper. If the job is an entirely new one, render the walls with white cement, and white spar for the roughcast.

G. W. H.

SIR,—If the white roughcast is mixed with yellow ochre to the required tint the colour should remain permanent. If it is to be coloured afterwards, wash with limewhite tinted with ochre to the required tint and fixed either with a little Russian tallow mixed in, or with a small proportion of coal tar. The latter method is generally known, but I can answer for efficiency.

"FIXATIVE."

Preservation of Bath Stone.

[REPLY TO "VOX," SEPTEMBER 18.]

SIR,—Paint will not have a deleterious effect upon the stone, but it would be a great pity to use it. Other methods can be adopted with good effect. One is to apply with a brush solution of silicate of potassium. Another is to apply with a brush a solution of paraffin wax or paraffin oil. In either case the treatment should be adopted only when the wall is absolutely dry.

"SURFACE."

The Bath stone should be re-dressed and treated with one of the many advertised preservatives for stone, or it may be painted when it is thoroughly dry. I have a house that has been painted for 30 years, and it gives no trouble whatever.

G. W. H.

Preventing Verdigris on Copper Pipes.

[REPLY TO MR. J. B. HUTCHINS, F.S.I., SEPTEMBER 18.]

SIR,—Where copper pipes are left exposed to their appearance they should be lacquered though this is a costly treatment. I do not think the varnish would be likely to remain as a permanent protection, and if the above suggestion is beyond the means of the job the only alternatives are either to sacrifice the appearance and have the pipes japanned, or for the future housewife to reconcile herself to a periodical application of good elbow grease.

"CUPRA."

Bituminous Paint.

[REPLY TO "J. A.V.," SEPTEMBER 18.]

SIR,—I can only think that the surface has not been properly rubbed down and cleaned before applying the paint, or that the bituminous paint is of inferior quality. For fresh work an undercoating of good water-paint is a wise provision before putting on the final coat.

"PAINTS."

THE BUILDING TRADE.

TECHNICAL INSTRUCTION IN STRUCTURAL ENGINEERING

report of H.M. inspectors on technical education in structural engineering, just as it has been written by those inspectors not as advisers to the Board in respect of engineering and building education. The report is intended for the information of the public, but it is thought that it will also be of use to all those in the structural engineering industry who are concerned with the education of apprentices, as well as to training bodies, officers of local education authorities, and teachers in technical schools. Inspectors have had the advice and help of several gentlemen with special experience in the industry.

The report deals with the technical training engaged in the design, construction, and erection of steel structures, so far as concerns technical schools and colleges. Much of the more advanced instruction for this industry is given in University institutions, the details of which, in most cases not being aided by grants from the Board of Education, lies outside the scope of the report. So closely connected educationally and often industrially, structural steel work is the use of concrete in combination with steel for various types of structures, that some reference to this part of civil engineering and building is made in the same report.

Technical training in schools and colleges (the report states) may conveniently be considered under two heads:—

(a) Full-time courses, extending over a period of about three years.

(b) Part-time courses, attended generally in the evenings, extending over a period of several years and usually concurrent with the gaining of experience in the industry, mainly in the drawing office.

Full-time Courses.—Full-time courses in engineering, often called mechanical or marine, are held in many technical schools and colleges, as well as in practically all Universities and provincial University colleges. These courses provide the most complete form of instruction in mathematics, mechanics and natural science, as well as mechanical drawing, which is available. In the last year of the course there are frequently opportunities for some degree of specialisation, extending to groups of students or even to individuals. The work of civil and mechanical engineering usually includes, associated with the study of the theory of structures, some practical design of steel structures, which are worked out in the college drawing office, under the supervision of the staff, not differing widely from those of the practice, along with the detailed study of designs gathered by the instructors from actual or other sources. Although college education can never entirely supersede practical experience in the industry, perhaps in no other branch of engineering can the college-trained student be of such full and immediate service in the production. In many branches of mechanical engineering design exact and complete strength calculations are not usually possible, and design is largely a matter of experience, while in structural steel design in particular the most important stresses are calculated with reasonable accuracy, and the design of them is a direct and obvious application of graphic and analytical statics, and is definitely taught in the colleges. Moreover, concurrently with the increasing use of structural steelwork and the increased complexity of structures, there has arisen a demand for greater ability in the computation of stresses in the more difficult cases which will require a higher degree just the kind of skill which a full-time course in a technical or Uni-

versity college can cultivate—i.e., skill in applying the principles of advanced technical mechanics to practical problems. It is certain that the untrained draughtsman, without a technical education of considerable depth, cannot make a serious attempt at stress computation of an articulated steel structure of a type with which he has not previously been familiar.

The existing provision of full-time courses is probably quite sufficient to meet the demand for trained men, because almost any full-time engineering course is adaptable to the needs of structural engineers. Some instruction in structural work is also provided in three or four full-time courses for building students in London and in one or two cases in the provinces. No doubt, if further provision of full-time courses in building is made, proper regard will be had to the needs of building students in respect of structural work.

(b) *Part-time Courses.*—Such courses are generally held in the evening, and are of the various kinds outlined later. A large proportion of designers and draughtsmen have had full-time general education up to the age of at least 16 years before entering the industry. For the remainder and for most of the apprentices entering works at an earlier age, attendance at a preliminary technical course, of which the essential subjects are mathematics, drawing, science, and English, is a condition precedent to successful technical study. Such preliminary courses, known under the name of Junior Courses, are to be found in all districts where any provision of technical education is made.

A consulting engineer or other designer frequently leaves a large amount of detail to be designed by subordinates. In the case of, say, a large articulated bridge structure, much of this detailed design may be work of a high order demanding a deep technical knowledge and an appreciation of the whole design. But in other cases—e.g., in a steel frame building—it may consist of details of a standard order which can be filled in by a draughtsman without much knowledge of the theory of structures. Thus it comes about that a large number of draughtsmen are employed who have not had a considerable scientific training. Many of these attend evening classes, and some of the more ambitious of them secure in this way a good technical training and become first-class designers. A complete curriculum usually covers some five years of progressive evening study.

Senior Courses.—The first three years of evening technical training, known as a senior course, is largely unspecialised and covers three evenings per week, devoted generally to mathematics, mechanical drawing and science respectively. The nature of the work in science and mechanical drawing will vary somewhat with the predominant industry of the district, but the science will consist largely of mechanics, introducing some knowledge of the strength of materials and elementary applications of the theory of elasticity. If, as is usual, the course is a general one appropriate to all branches of engineering, it will include some work in branches of engineering such as prime movers, which is of comparatively little direct interest to the structural engineer. But neither educational considerations nor public economy point to specialisation at a very early stage between different branches of engineering. In a few cases also the course at this stage is allied to that provided for architectural and building students, and here, again, the course contains elements which are included primarily to meet the needs of those engaged in

some branch of the building industry. But whatever may be the composition of the senior course, it cannot too strongly be urged that it should give thorough grounding in the principles of mechanics with some application to problems in the strength and elasticity of materials, including the elements and theory of bending, before a serious attempt is made to teach the theory of structures.

The senior course must include the necessary mathematics, which, in addition to algebra and trigonometry, should include the elements of the calculus. The student who is in a drawing office may have acquired considerable proficiency in draughtsmanship, but even in such a case experience shows that the practical applications of geometry to be learnt in a mechanical drawing class of a senior engineering or building course are not to be despised. Structural engineering frequently demands the use of geometry as a means of calculation as an alternative to other means. It is, however, most undesirable that graphical methods should be relied upon to such an extent as to supersede other means of calculation.

Senior technical courses, unspecialised but appropriate to the needs of the structural engineer, are to be found very widely distributed. In many districts they mark the highest stage to which organised, progressive, grouped courses of instruction, suitable for the structural engineer, are to be found, though occasionally an isolated class in theory of structures or a class in design, of an advanced character, may be available. Thus the completion of a senior course, followed perhaps by some special class in structural engineering, will for some students represent the high-water mark of their technical training. For others, and particularly those who aspire to become designers, the work of the senior course will be important mainly as a preparation for more advanced and more specialised studies.

There is another course of training which may sometimes, with advantage, be followed by the steelwork draughtsman who does not push his studies to an advanced stage, or go deeply into the theory of structures with a view to becoming a designer. He may broaden his knowledge of other types of construction by taking up the study of general building construction in brick, stone, timber and concrete, as well as in steel. He thereby increases his potential usefulness, for in many instances firms deal, not only with constructional steelwork, but with other portions of the construction of steel-framed buildings. He may not always find a standard course drafted to suit his individual needs and previous preparation, but there will usually be little difficulty in selecting, with the advice of the technical staff, a suitable combination of classes.

Advanced Courses.—In the larger technical colleges or schools there is often to be found more advanced evening instruction in structural engineering, for which the senior course forms a preparation, either as an organised advanced grouped course, or otherwise. It is not possible to lay down the best form which this instruction should take, for the form varies, and must vary, somewhat from place to place according to local and individual needs and the relations to other courses. But at this stage it is possible to give advanced instruction in the theory of structures, and individually, or occasionally by class instruction, to work out designs in a practical manner, and afford the draughtsman or designer opportunities which may rarely or never come within his reach in the course of his daily work in the drawing office. The educational opportunities open to the industrious student to pursue his own subject with some aid from his teachers are in some cases almost unlimited, and reach, at least, as high a standard

in structural design as can be reached by a full-time student.

But there is a demand for instruction in advanced courses of a more modest order, both for general structural steelwork, such as cranes, roofs, girders, and so forth, and for reinforced concrete work. There is also a demand for a more restricted instruction in certain branches of structural steelwork, notably in the application to steel-frame building. While structural engineering in the accepted sense of the term extends to work which lies outside the ordinary province of the builder, the increasing use of steel construction and of reinforced concrete in modern buildings renders it desirable that the builder should be acquainted with the principles upon which the design of such work is based, and particularly with the standard forms of steel and concrete construction and with the practical methods which are employed in the erection of the structure. This gives rise to a demand for some classes in structural engineering with a restricted aim, primarily for building students, who do not require to go, for example, into the question of the maximum stresses arising from a moving load in the way that is necessary for the bridge designer. The work of such classes is intended to provide students with a broad knowledge of the principles and practice of steel and concrete building construction. In some few centres, notably in institutions with a large concentration of building work, or in a monotechic institution for instruction in building, it has been found practicable to provide separate classes of such a type for building students. Frequently, however, the number of students is too small to permit of special treatment of this kind. In such cases it is most desirable that, even though the building students may have to attend the classes intended for general structural engineers and taught by engineers, they should receive some individual attention and be given examples suitable to their peculiar needs in the designs worked out in the school drawing office. This attention to the needs of building students attending general structural engineering courses has perhaps not always been given as fully as it might have been. There is a strong case for co-operation of all the teachers concerned.

Teaching.

The subject of structural engineering is taught as a part of a course or as a separate subject, sometimes by full-time members of the school staff and sometimes by visiting teachers, who are engaged in the industry. It is not possible to generalise as to the quality of the teaching, but it is often good. Perhaps the most common instances of unsatisfactory teaching are to be found among visiting teachers whose own theoretical training has not been good. Although practical designing experience in a teacher is most desirable, it should never be forgotten that the most important function of the teaching is to give the theory which cannot generally be learnt as part of the work of a firm's drawing office. It is, therefore, most desirable that the teacher should be able to appreciate exactly what ancillary knowledge his students have acquired or are acquiring, and to co-ordinate his own work with that of others. Too frequently the professional draughtsman or designer teaching an evening class as a specialist fails in this respect, and sometimes technical schools fail to provide the specialist with properly prepared pupils. The temptation is strong prematurely to hand students over to the specialist.

Valuable instruction can be provided for the craftsman, or apprentice who will become a craftsman. Courses for crafts within an industry are sometimes known as "minor" courses. The fitters, machinists and smiths do not require different instruction from that provided for the same crafts within other branches of the engineering industry. Reference may be made, in regard to the needs and provision of technical education for these craftsmen, to a report of H.M. Inspectors on trade or workshop courses in mechanical en-

gineering, which, it is understood, will shortly be issued.

There is a valuable opportunity for the provision of minor courses to serve the needs of platers and template makers. Their primary educational need is a thorough understanding of a working drawing. This can be obtained by actual practice in making mechanical drawings, which, at a comparatively early stage, can take the form of structural steel details, many of which lend themselves well to easy exercises in projection. No very great progress has yet been made in the successful provision of minor courses for platers, though some attempts have been made. Tradition counts for much in these matters, and something can be done by employers and foremen to encourage their apprentices to attend courses. Schools, too, can, with great advantage, co-operate with the works in organising courses with the advice of the managers, which would be both valuable and reasonably attractive to works apprentices. The essential subjects in such a course are undoubtedly mechanical drawing and calculations, each illustrated freely with examples drawn from structural steelwork. Steelwork erectors are craftsmen who do not usually serve an apprenticeship to the industry. They are recruited as adults and frequently from men with a seafaring experience. Technical education has not normally any object to serve for such men.

The Report is published, price 2d. net, by H.M. Stationery Office.

THE INTERNATIONAL CONGRESS OF BUILDING AND PUBLIC WORKS

As already recorded in *The Builder*, Mr. Roland B. Chessum, of London, was recently elected President of the International Federation of Building and Public Works on the nomination of the National Federation of Building Trades Employers. The Fourth Congress of the International was held in Paris in June last, when Mr. Chessum received a cordial welcome from the delegates representing forty-two countries. On Tuesday, September 15, Mr. Chessum and Mr. R. F. Van Ophem, of Paris, Director of the International, were present at a meeting of the Administrative Committee of the National Federation held at 48, Bedford-square, to enable the latter gentleman officially to remit to Mr. Chessum the office of president. The president of the National Federation, Mr. Jno. Croad, welcomed and introduced Mr. Van Ophem to the Committee.

Mr. Van Ophem, in the course of his remarks, said that it was just twenty years ago in Liège that the first International Congress of Building and Public Works met, which gave birth to the International Federation he had the honour to represent, and in the name of which he had come officially to invest Mr. R. B. Chessum (who was designated by the National Federation) as its President. It was with the greatest satisfaction that the authorised representatives of the National Federations learned during a council held on June 14 last, that the British Federation was taking a hand in the International Presidency, and it was with equal pleasure that they unanimously elected the National Federation's candidate, whose high courtesy they had had the pleasure of appreciating in many instances, as well as his intimate knowledge of international subjects. The late lamented president, Mr. Despagnat, was really very pleased, as were all his colleagues—and he (Mr. Van Ophem) in particular—to see the National take the lead in the International, the authority of which was so vividly illustrated during the recent Paris Congress, when forty-two nations were represented by seven hundred delegates. In handing over the presidency to Mr. Chessum, Mr. Van Ophem appealed for the National Federation's close co-operation and support, and felt convinced of obtaining both. In conclusion he said the British colleagues had before them a noble effort to continue and

a noble work to perform, and that the International Federation and its permanent office believed that, with the support of the National Federation and under the British chairmanship, many vital problems for the International would be solved. He expressed the gratitude of the International for what the National Federation had done already and for what he was sure they would do in the future.

The National President (Mr. Croad) could assure Mr. Van Ophem that it was with very great pleasure that the members of the Administrative Committee had heard his speech, and he had to compliment him on the power with which he had been able to express himself in the English language, on behalf of the Committee he sincerely thanked him for his address.

Mr. Chessum, the President of the International, said the members, having heard Mr. Van Ophem address them in their own language, could not, he thought fail to appreciate some of his own feelings when he had been addressing not only his French compatriots, but also a mixed assembly of a Congress where forty-two countries were represented. He was glad to have the opportunity of replying and formally accepting the presidency at Mr. Van Ophem's hands, chiefly because he was deeply sensible of the great honour that had been conferred upon him by being the first Englishman who had ever held that position. As he became more familiar with the details which surrounded this important office, the more he was deeply convinced of the obligations that were cast, not only upon the individual, but on the groups of individuals who were responsible for the maintenance of the existence of the Federation Internationale. Those who attended the recent Congress in Paris must have been struck by the warmth of their reception, the cordiality and the *bon camaraderie* that existed among the delegates who so attended. The subjects were discussed with great enthusiasm, and preparation of the reports for those subjects had entailed on the different countries represented a vast amount of time, consideration and expense. He was the more sensible of the responsibilities of this position and of the need of the enthusiastic support of the National Federation of Building Trades Employers: the outlook that is given from the Bureau of the International Federation. Correspondence has already commenced to flow in from various countries that had attended those meetings.

He would like to refer to a proposition which was made on behalf of the Americans in connection with an international competition, a view to promoting and facilitating the construction of houses for the middle and intellectual classes. The suggested form of competition was that a sum of one thousand dollars should be awarded in prizes of hundred, three hundred, and two hundred dollars. In due time the Bureau would be the actual forms to the National Federation of Building Trades Employers for their consideration, and it was hoped their active support would be forthcoming. There would also be sent in due course a list of the members posing the new Bureau as constituted when the Congress took place in Paris.

He had been able to secure from Mr. Van Ophem some details with regard to the finances of the International, and found that the revenue was much below what it ought to be, and that the expense of running the International had largely fallen upon the shoulders of the gentleman who was there that day to whom they were giving a welcome. It was a position which was intolerable, an burden ought to be borne by the respective countries, and so win the support which would enable the duties of the International Federation Administration to be conducted in a way as to be worthy of its great office.

With the decease of their late president, M. Despagnat, there had been lost to the International Federation a man held in the very highest regard, a man of whose ability everyone was well aware, and he (Mr. Chessum) was conscious, in following the

of such a past master in conducting the affairs of the International Federation, of the gravity of the responsibility he had undertaken. If at the end of his term of office he was able to feel that through his appointment as an individual and a representative of his great country, supported by the National Federation membership, had been able to improve in some small degree the international relations, then he would consider that he had contributed something to a work which was one of the highest ideals that any man could hope to aspire to. It was in that sense that he had gladly taken on the position, and with the deep conviction that he would be heartily supported by the National Federation of Building Trades Employers who had permitted him to accept the position. He appealed to the individual members to take interest in the affairs of this great International Federation, read its propaganda which reached their headquarters, and consider the results of its deliberations.

Continuing, Mr. Chessum said he would like that meeting publicly to tender to Mr. Van Ophem his keen appreciation of his consistent friendship since the first time when he (the speaker) had represented the National Federation at any of the meetings of the Federation Internationale. He would reserve further comments until another occasion, which he hoped they would grant him, in order that he might be able to preach the gospel that he held, and which he was deeply convinced was right, to members of the National Federation throughout the country, in order that they might go back to their Regions and invoke more interest in the Internationale.

Mr. Ernest J. Brown said he desired to take the opportunity, as the oldest past-president of the National Federation present, to say how pleased they were as an Administrative Committee, and how pleased were the members of the London Region present, at the election of Mr. Chessum to the office of International President, and how grateful they were to their friend Mr. Van Ophem for coming here to perform that act of courtesy. On behalf of those who had been responsible for the appointment of Mr. Chessum, he thought they should offer Mr. Van Ophem their best thanks for making this journey to London and for the many kind courtesies he had shown to those who had had the privilege of meeting him and his colleagues in Paris.

This, on being put to the vote, was carried with enthusiasm.

On Tuesday evening, September 15, Mr. W. Croad, the president of the National Federation, entertained the president and secretary of the International Federation (Mr. J. B. Chessum and Mr. R. F. Van Ophem) to dinner at the Hotel Victoria, Mr. A. G. White (National general secretary) also being present. After dinner a long conversation took place on the aims, ambitions, income and policy of the International.

THE TRADE UNION CONGRESS

For late years the reports of the proceedings of Trades Union Congresses have been read with a sense of disappointment, for whilst the nation is earnestly desirous to see peace established both in industrial affairs at home and in international relations, the general tenor of the speeches delivered at Congress have been belligerent as regards industrial matters. Some of the resolutions, instead of being directed to an improvement in industrial relations and conditions under the existing order of affairs, have been concerned with a revolution of the whole system.

Since 1913 the trade unions have been political as well as industrial organisations, and the introduction of the political element into account for the tone of the speeches, for we have never heard of peace in politics. Political feeling is always expressed in belligerent terms; between all parties it runs high at every election, and on such occasions the ex-

tremists, from the strength of their political fervour, take the leading part, but the opinion of the majority, though not voiced, is generally found to support the happy mean between extremes. Of course, it may be regretted that trade unions should no longer be what they were, purely industrial organisations concerned with industrial conditions, but it was the natural outcome of remedial industrial legislation that a political element should be introduced into industrial matters and that a water-tight bulkhead could no longer be maintained between the industrial and the political aspect of such questions. Unfortunately, at Congress the political side takes pre-eminence, and thus the proceedings almost pass out of the sphere of such journals as ours, which take no attitude in politics, but only regard the industrial aspect of questions.

One of the first resolutions moved at this Congress related to a consolidation of forces for militant purposes, having for its object the conferring upon the General Council the power to call a general strike. This resolution stood over for further consideration. Another resolution was directed to limiting the number of unions with a view to amalgamation. This resolution might have something to be said for it from an economic point of view, for, as Mr. Naylor, M.P., who moved an amendment, pointed out in his speech, conflict between unions engaged in mutual operations is the cause of cost to employers and ratepayers, but the avowed object of the resolution was to facilitate combined action in the event of disputes arising. This resolution, as well as Mr. Naylor's amendment deprecating the merging of all unions in one big union, was not carried. But a resolution moved by Mr. Joseph was carried on a card vote by 2,456,000 votes to 1,218,000. This resolution was as follows: "That this Congress declares that the Trade Union movement must organise to prepare the unions in conjunction with the party of the

workers to struggle for the overthrow of capitalism; at the same time Congress warns the workers against all attempts to introduce capitalist schemes of co-partnership, which in the past have failed to give the workers any positive rights, but instead have usually served as fetters retarding the forward movement; Congress further considers that strong, well-organised shop committees are indispensable weapons in the struggle to force capitalists to relinquish their grip on industry, and therefore pledges itself to develop and strengthen workshop organisation." This resolution expresses the objection to co-partnership which was openly avowed in the "Lever Case," that community of interest with the employers saps the influence of the unions, and it also forges a "weapon" to be used for the coercion of members of the unions.

Speaking on the first of the above resolutions, Mr. A. J. Cook is reported as saying: "The power of Labour was a great power. The Trades Union Congress was the parliament of the future." Mr. J. H. Thomas's observation, made in a speech to railwaymen at Scarborough before the opening of Congress, seems apt in connection with such utterances, for he reminded his hearers that, however strong and powerful any section of the workers might be, it was not stronger nor more powerful than the community as a whole. Speaking on this resolution at Congress, Mr. Thomas pointed out that if the resolution was passed it would put the General Council in the unfortunate position of having to determine what was or was not a vital principle. But it would put the community in a more unfortunate position, for a trivial occurrence may occasion the raising of what the unions may deem to be a vital principle. Recently a dispute arose out of the unauthorised action of an official in excluding a pet dog from an omnibus. The handling of that official by his employers might well give rise to circumstances which the

COMPARISON OF PRICES OF BUILDING MATERIALS IN SEPTEMBER, 1925, WITH CURRENT PRICES.

Material.	Sept. 1925.	Oct. 1	Rise.	Fall.
	£ s. d.	£ s. d.	%	%
Bricks—				
Best Stocks	4 3 6	4 3 6	—	—
Flettons	2 13 3	2 13 3	—	—
Glazed	21 10 0	21 10 0	—	—
Thames Ballast	0 10 6	0 10 6	—	—
Thames Sand	0 14 6	0 14 6	—	—
Shingle (¾ in.)	0 12 9	0 12 9	—	—
Portland Cement	2 18 0	2 18 0	—	—
Ground Blue Lias Lime	2 4 6	2 4 6	—	—
Grey Stone Lime	2 11 9	2 11 9	—	—
Bath Stone	0 2 9½	0 2 9½	—	—
Portland Stone	0 4 4	0 4 4	—	—
Good Sound Building Timber—				
4 in. x 11 in.	32 0 0	32 0 0	—	—
3 in. x 11 in.	28 0 0	28 0 0	—	—
2 in. x 11 in.	28 0 0	28 0 0	—	—
3 in. x 9 in.	25 0 0	25 0 0	—	—
3 in. x 7 in.	23 0 0	23 0 0	—	—
3 in. x 4 in.	23 0 0	23 0 0	—	—
Slates—				
24 in. x 12 in.	37 12 6	37 12 6	—	—
22 in. x 12 in.	34 0 0	34 0 0	—	—
20 in. x 10 in.	25 12 6	25 12 6	—	—
18 in. x 10 in.	17 12 6	17 12 6	—	—
16 in. x 8 in.	13 15 0	13 15 0	—	—
R.S. Joists	13 10 0	13 10 0	—	—
Iron—				
Common Bars	13 10 0	13 10 0	—	—
Mild Steel Bars	11 0 0	11 0 0	—	—
Steel Bars	11 0 0	11 0 0	—	—
Cut Nails	20 0 0	19 10 0	—	2 50
Sheet Lead	51 10 0	52 10 0	1.94	—
Glass—				
15 oz. Sheet	0 0 3½	0 0 3½	—	—
21 oz. Sheet	0 0 4½	0 0 4½	—	—
26 oz. Sheet	0 0 5½	0 0 5½	—	—
Raw Linseed Oil	0 3 10	0 3 10	—	—
Turpentine	0 6 0	0 6 10	13.89	—
Ground English White Lead	60 5 0	61 15 0	2.49	—
White Lead Paint	81 5 0	82 15 0	1.85	—
Red Lead	55 0 0	56 0 0	1.82	—

NEW BUILDINGS IN LONDON.

unions might consider raised a vital principle, and such a dispute might contain seed which would fructify into a general strike.

Mr. P. Leigh moved a resolution calling for the consolidation of all existing laws relating to the safety of those concerned in road traffic, which also contained suggestions as to the condition on which driving licences should be granted, and this was carried unanimously.

Unemployment was only touched upon slightly; a resolution, moved by Miss Wilkinson, that Congress should accept the National Unemployed Workers' Committee as an affiliated body, was ruled out of order; but a resolution moved by Mr. Hayday, M.P., calling upon the Government immediately to introduce an amending Act to provide for the payment of continuous benefit to the unemployed without reference to extended or standard benefit, and calling on the General Council to consult with the Labour Party with a view to introducing a Bill to enable the Ministry of Labour to appoint trade unions as agents to administer wholly and solely the Unemployment Insurance Acts on behalf of their members, if they so desired, with adequate and proper remuneration for this administrative work, was, however, agreed to.

The first part of this resolution appears to lose sight of the fact that Unemployment Insurance is a system of insurance which originally was founded upon an actuarial basis. Circumstances have compelled the system to be relaxed to meet what was hoped would be temporary distress; but a stage may be reached when the idea of "insurance" will drop out altogether and benefit be administered under another title. It is of vital importance that the scheme of insurance against unemployment should stand on a sound financial basis when normal conditions again prevail, and it may be a question whether it is not to the interest of those who are receiving benefit to which they are contributing that the scheme should be kept intact, and exceptional benefit be paid as assistance under another name and from a special fund.

A long resolution was moved by Mr. Fawcett in relation to the houses erected under Lord Weir's scheme, which was to the effect that all working-class representatives on all public bodies interested in housing schemes should be called upon to do their utmost to frustrate the adoption of the Weir house scheme until Lord Weir's firm agrees to observe the same rates and conditions as every other employer in the building industry, and this was carried unanimously. During the discussion one speaker appears to have expressed his dislike of that form of building, but from the resolution itself and the general terms of the speeches, it appears that the houses were not in themselves objected to, but the sole question was the wages rates paid to those employed in their construction.

A resolution that "this Congress instructs the General Council to urge upon His Majesty's Government the desirability of giving to national agreements voluntarily entered into and approved by joint industrial councils the same validity as awards under the Trade Board Acts, 1909 and 1918, with the object of ensuring the observance of fair conditions of labour by all engaged in the industry whenever requested by parties to the agreement" was carried by a large majority. We notice that in the debate some objection was taken to the resolution on the grounds that it might open the door to compulsory arbitration and that it might deprive the unions of the immunity from legal proceedings conferred by the Trades Disputes Act.

The Trades Union Congress, within the limits of a short week, has to consider such a vast number of subjects raised by resolutions set down by any of the affiliated unions without selection, that its proceedings should not be judged by the same standards which would apply were the subjects for debate selected by the Central Body alone and Congress made the occasion for consultative deliberation on urgent industrial questions.

Bermondsey.—The "George" public house, in Flockton-street, S.E., is to be pulled down and rebuilt in connection with the L.C.C. Hickman's Folly slum clearing scheme. Plans have been prepared by the brewery's surveyor.

Camberwell-grove.—The L.C.C. have agreed to give financial support to the extension scheme of the Mary Batchelor School for Girls at Camberwell-grove, S.E. Mr. W. Curtis Green, A.R.A., architect, 5, Pickering-place, S.W.1. The cost will be approximately £40,000.

Chelsea.—New buildings are being erected at St. Mark's College in King's-road, Chelsea, for students and staff. Messrs. Rice & Son, contractors, 15, Stockwell-road, S.W.9. Messrs. Beazley & Burrows, architects, 17, Victoria-street, S.W.1.

Chertsey.—A new printing hall, &c., for Messrs. Rawlings & Walsh, Ltd., will shortly be erected at Windsor-street, Chertsey. Mr. W. J. Parker, architect, High-road, Byfleet. Messrs. W. G. Tarrant & Co., Ltd., contractors, Chertsey-road. Constructional steelwork by Messrs. Young & Co., 6, Queen Anne's-gate, S.W.1.

Croydon.—A local syndicate has promoted a scheme for the erection of 22 blocks of flats. Mr. Frank Windsor, architect, 1, Station-approach, Croydon.

East Ham.—Messrs. Davies & Emanuel & Henry C. Smart, 73a, Queen Victoria-street, E.C.4, have prepared plans for new shop and showrooms in Green-street, for Messrs. Rego Clothiers, Ltd., outfitters.

Eltham.—A new public house is to be erected in Eltham High-street, S.E. Mr. Nowell Parr, architect, 42, Cranley-gardens, South Kensington, S.W.7, on behalf of Messrs. Style & Winch, Ltd., Battersea.

Fleet-street.—Messrs. Mabey & Johnson, 4, Cullum-street, E.C.3, are pulling down old buildings on the site of 56, Fleet-street, E.C.4, preparatory to the erection of large premises for occupation by the *Glasgow Herald* and *Glasgow Evening News*. The architects are Messrs. Percy Tubbs, Son & Duncan, 30, John-street, Bedford-row, W.C.1.

Gower-street.—A large block of property in Gower-street, W.1, is to be pulled down and new showrooms and workshops erected for Messrs. Maple & Co., Ltd., Tottenham Court-road, W.1. Plans by Mr. J. McPherson, the company's architect.

Gray's Inn-road.—The governors of the Royal Free Hospital in Gray's Inn-road, W.C., have decided to erect new children's ward and other buildings at a cost of about £50,000, to plans prepared by Messrs. H. V. Ashley & Winton Newman, F.R.I.B.A., 14, Gray's Inn-square, W.C.

Great Smith-street.—New premises are to be erected on the site of Nos. 35-38, Great Smith-street, to provide additional accommodation for the National Library for the Blind in Tufton-street, S.W.1. Mr. Sydney Tatchell, F.R.I.B.A., architect, Bank Chambers, 32, Strand, W.C.2. Messrs. Higgs & Hill, Ltd., builders, Crown Works, South Lambeth-road, S.W.

Horseferry-road.—The Trustees of the Peabody Donation Fund are to build a block of tenement dwellings on a site in Horseferry-road, S.W.1, bounded by Great Peter-street and Chadwick-street. Mr. Victor Wilkins, F.R.I.B.A., architect, 12, York Buildings, Adelphi, W.C.2.

Kennington Oval.—Designs are to be prepared for the erection of large buildings in connection with the removal of the Archbishop Tenison's Grammar School from its present site at St. Martin's-in-the-Fields.

Kingston.—A sum of about £13,000 is to be allocated for the building of an assembly hall and additional classrooms at the Kingston Grammar School. Messrs. Jarvis & Richards, architects, 60, Tufton-street, S.W.1.

Lambeth.—The estimated cost of rebuilding and extending the Borough Polytechnic Institute in Borough-road, S.E.1, is estimated at

£79,804, exclusive of the purchase of site additional buildings. Mr. W. Courteney Maitre, F.R.I.B.A., architect, 133, Moorfields, E.C.

Lewisham.—A nurses' home, &c., is to be erected at the Infirmary for the Lewis Board of Guardians. Messrs. J. Doug Mathews, Son & Ridley, architects, 3, P. Bakehouse-court, Godliman-street, E. Messrs. Leslie & Co., Ltd., builders, Kensal square, W.8, whose tender amounts to £15,000.

Little Trinity-lane.—A new warehouse is to be built for the Hudson Bay Co., the contractor being Messrs. Trollope & Colls, Ltd., 5, Coleman-street, E.C.2. Messrs. Williams & Cox, architects, 27, Henrietta-street, Covent-garden, W.

Limhouse.—Extensions to Messrs. Taylor & Co.'s premises in Church-lane, Limhouse, E., are being carried out by Messrs. William Shurmer & Sons, Ltd., Riverside Works, Upper Clapton, E. Steelwork by Messrs. Young & Co., 6, Queen Anne's-gate, S.W. Messrs. William Bradford & Sons, of Cannon Chambers, Regent-street, S.W.1, are the architects.

Long Acre.—New printing works and warehouse are to be built at Nos. 87-91, Long Acre, W.C., for Odhams Press, Ltd. Messrs. Francis Chambers & Son, architects, 119, College-lane, E.C.4.

Loughborough Junction.—The Salvation Army propose to build a new mission hall on a site in Wanless-road, S.E., to accommodate some 400 persons. Mr. Oswald Archer, architect, 101, Queen Victoria-street, E.C.4.

Ludgate Hill.—Additional showrooms are to be built at No. 60, Ludgate Hill, E.C.4, for Messrs. W. Abbott & Sons, Ltd., boot and shoe manufacturers.

Merton.—The Cannon Hill estate at Ray Park, S.W., consisting of over 250 acres, is to be developed on "garden city" lines, having been purchased by Mr. George Blay, of New Malden. About 2,000 houses, the first of which have been designed by Mr. F. H. Hooper, 67, North-side, Clapham Common, S.W., and Mr. H. G. Turner, Perrymount-road, Haywards Heath, are to be erected.

Muswell Hill.—The governors of the Horns Finchley and Wood Green Isolation Hospital in Coppett's-road, N.W.10, propose to expend about £24,000 upon extensions. Mr. E. Lovegrove, architect, Southwood-lane, N. 6.

New Oxford-street.—The Westminster Bank Ltd., are to build new bank premises in New Oxford-street, W.1. Messrs. J. Campbell Jones, Son & Smithers, architects, 9, Dowgate-hill, Cannon-street, E.C.4. Messrs. L. H. & Roberts, builders, 144, Lower Clapton-road, E.

Newington Causeway.—It is proposed to build an outpatients' department in Newington Causeway, S.E., for the South London Hospital for Women. Mr. Marcus E. Collins, F.R.I.B.A., architect, 115, Old Broad-street, E.C.2.

Piccadilly.—Shops and flats are shortly to be erected upon a site in Piccadilly, W. Messrs. Trehearne & Norman, architects, Windsor House, Kingsway, W.C. Messrs. Griggs & Co., builders, 100, Victoria-street, S.W.1.

Regent-street.—The corner shop and office premises in Regent-street and Glasshouse-street, W.1, are to be rebuilt under the supervision of H.M. Office of Woods and Forests to the plans of Messrs. North, Robin & Wildes, 35-39, Maddox-street, W.1.

South Kensington.—Sketch plans are under consideration for new buildings for the Museum of Practical Geology. The work will be supervised by H.M. Office of Works, Storey's-gate, S.W.1.

Shoreditch.—"The Britannia" public house at Maidstone-street, E., is to be rebuilt. The owners are Messrs. West's Brewery Co., Ltd. Hackney-road, E.2. Mr. S. F. S. Y. F.R.I.B.A., architect, Bank Chambers, John-street, E.C.1.

Warwick-street.—New shop and office premises are to be erected on the site of Nos. 23, 24, Warwick-street, W.1. Mr. F. Cul Nichols, architect, 37, Norfolk-street, Strand, W.C.2. Messrs. George Parker & Sons, Ltd., builders, 124, Summer-road, Peckham, S.E.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	C'pters. Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Accrington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Altrincham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Ashton-under-Lyne.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barnsley.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barrow-in-Furness.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barry.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bath.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bedford.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Birkenhead.....	1/8	1/8	1/8 1/2	1/8	1/8	1/8	1/8	1/3 1/2
Birmingham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bishop Auckland.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Blackburn.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Blackpool.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bolton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bournemouth.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Brentford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Brentwood.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Bridgwater.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1 1/2
Brighton.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bristol.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Burnley.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Burton-on-Trent.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Bury.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Cambridge.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Cardiff.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chatham.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Chelmsford.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Cheltenham.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Chester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chesterfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Colchester.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Coventry.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Crews.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Darlington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Derby.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Doncaster.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Dudley.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Durham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
E. Glam.(Mod. Vall.).....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Eastbourne.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Exeter.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Folkestone.....	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/1 1/2
Gloucester.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Grantham.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Grays.....	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/7 1/2
Grimsbay.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Great Yarmouth.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Guildford.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Hallifax.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Harrogate.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hartlepool.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hastings.....	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/1 1/2
Hereford.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Huddersfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hull.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Ipswich.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Launceston.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leamington Spa.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Leeds.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leicester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Lichfield.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Lincoln.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Liverpool.....	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
Llanelli.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
London { 12 m. radius.....	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/4 1/2
{ 12-15 m. radius.....	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
Loughborough.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Luton.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Maidstone.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Manchester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Manstield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Merthyr Tydfil.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Middlesbrough.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Newcastle-on-Tyne.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Newport Mon.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Northampton.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Norwich.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Nottingham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Oakham.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Oldham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Oxford.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Plymouth.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Pontypidd.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Portsmouth.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Preston.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Reading.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Rochdale.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Rochester.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Rugby.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
St. Albans.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
St. Helens.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Scarborough.....	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/2 1/2
Sheffield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Shrewsbury.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Southampton.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Southend-on-Sea.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Southport.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
South Shields.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stockport.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stockton-on-Tees.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stoke-on-Trent.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stroud.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Sunderland.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Swansea.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Swindon.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Taunton.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Torquay.....	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Tunbridge Wells.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Wakefield.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Walsall.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Warrington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
West Bromwich.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Wigan.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Windsor.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Wolverhampton.....	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Worcester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
York.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2

(For rates of wages in the Building Trade in Scotland, see page #13.

West Ham.—Alterations and improvements are to be made to shop premises at Nos. 36-38, Woodgrange-road, E., owned by Messrs. L. W. Pratt & Sons, drapers. Mr. R. C. Turner Gordon, architect, 304, Romford-road, West am.

Westminster.—Westminster C.C.'s new baths Marshall-street, S.W. 1, will shortly be started. Plans under the direction of Mr. Veit, City Surveyor, to whom Mr. A. R. Conder, R.I.B.A., 42, Cecile Park, W. 8, has been appointed architectural assistant.

Willesden.—A new factory and warehouse to be erected in Edgware-road, N.W. 10, to plans by Mr. A. H. C. Arnell, 59, Bridge-lane, Ealing Green, N.W.

Wilton-road.—Large market and shop premises are to be erected in Wilton-road, S.W. 1, on the site of old property at Nos. 104-105. Mr. S. Gordon Jeeves, architect, 16, Hanover-square, W. 1.

TRADE NEWS.

Bell's United Asbestos Co., Ltd.

The directors of this company have declared an interim dividend on the ordinary shares of 1s. per share, being 2½ per cent. (actual) less income tax, on account of the current year. The dividend will be paid on October 19 to shareholders on the register on October 5, and the ordinary share transfer books will be closed from October 5 to 17, both dates inclusive.

The "Apex" Hollow Concrete Block.

A new hollow concrete block, known as the "Apex," patented by Mr. L. A. Pitcher, of Leicester, and made on the Springfield block machine manufactured by Messrs. Goodwin, Kirby & Co., Ltd., of St. Margaret's Ironworks, Leicester, is claimed to have many special advantages, including the following:—(1) The cost of production is low owing to the small amount of material required in comparison with the area covered; (2) there is a complete and continuous air circulation ensuring dryness and facilitating maturation of the block; (3) there is ample strength owing to the bridges connecting the inner and outer wall surfaces being part of one block; (4) the block is easy to handle. It may be added that the block is made face upwards, thus enabling a much more impervious face to be formed than would otherwise be possible. Considerable saving in mortar is also effected. A variety of different face patterns may be offered. The machines are light and easily portable, so that they can be taken on to building site and the blocks made on the job if necessary.

Coulsdon Court Estate.

Messrs. Trehearne & Norman, architects, wish to point out with regard to our paragraph under this heading last week that they are only acting as architects for the approval of the plans of any houses to be erected, and not architects for the Estate.

The Building Surveyors' Association.

The next quarterly general meeting of this Association is to be held in the Council Chambers, Town Hall, Leeds, on Saturday, October 10. The following is a suggested programme, the giving out of the first part of which depends on the number of members able to attend in the morning. 10.20: Meet by General Post Office, Leeds. 10.30: Move off to visit modern building works of Messrs. Montague Burton. 11.0: Lunch at Gambit Café, Park-row. 11.15: Visit Art Gallery and Municipal Buildings. 12.15: Paper by Mr. F. E. Drury, M.Sc., F.R.S., M.I. Struct. E., Head of Building Department, College of Technology, Manchester. 1.30: General meeting. Those who propose to attend should communicate with Mr. M. Cross, Secretary, Lit. and Organising Secretary, 42, High-street, Bramley, Leeds.

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

OCTOBER 5.—**Cambridge**.—BATHS.—Public slipper baths, Gwydir-street, for the T.C. G. W. Teasdale, Borough Engineer and Surveyor. Deposit £2 2s.

OCTOBER 5.—**Carterton**.—INSTITUTE.—Women's Institute at Carterton. Mrs. Clarke, Belmont, Carterton.

OCTOBER 5.—**Halifax**.—PAINTING.—Redecoration of the Victoria Hall, Town Hall, for the C.B. Borough Engineer, Crossley-street. Deposit £1 1s.

OCTOBER 5.—**Hindley**.—SCHOOL.—School off Leigh-road, Hindley Green, to accommodate 450 scholars, for the U.D.C. H. Wade, 2, Birley-street, Blackpool. Deposit £5 5s.

OCTOBER 5.—**Kent**.—SCHOOL.—Extension of the Cranbrook Grammar School for Boys, in the County of Kent, for the E.C. County Education Architect, Room 69, Sessions House, Maidstone, between the hours of 10 a.m. and 4 p.m. (Saturdays and Sundays excepted). Deposit £2 2s.

OCTOBER 5.—**Lexley**.—PLUMBING.—Fitting up of the proposed special subjects centre at the Loxley Council School, for the West Riding E.C. W. Wood, Divisional Clerk, Education Offices, Penistone.

OCTOBER 5.—**Manchester**.—WALL.—Retaining wall in Barlow-road, Levenshulme, for the T.C. City Architect. Deposit £1 1s.

OCTOBER 5.—**Newmarket**.—HOUSES.—Erection of 12 brick and slated parlour houses, in six pairs, at Laureate Paddocks site, for the Newmarket U.D.C. W. H. Eley, Surveyor, Godolphin House, Newmarket.

OCTOBER 5.—**Plymouth**.—WALL.—Construction of a new retaining wall at Clayton-road, Prince Rock, for the C.B. J. Wiberley, Borough Engineer and Surveyor. Deposit £2 2s.

OCTOBER 5.—**Ripon**.—HOUSES.—Twenty-six houses, for the T.C. City Engineer. Deposit £5.

OCTOBER 5.—**Rawdon**.—LIGHT.—Installation of electric light to the Mitchell Memorial Home, for the Board of Governors. W. H. Brown, County Hall, Wakefield.

OCTOBER 5.—**Wallasey**.—LODGE.—Gatekeeper's lodge at Mill-lane, for the C.B. Borough Engineer and Surveyor (Architectural and Housing Department). Deposit £1 1s.

OCTOBER 6.—**Kew Gardens**.—POST OFFICE.—Erection of a branch Post Office at Kew Gardens, for the Commissioners of His Majesty's Office of Works. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

OCTOBER 6.—**Plymouth**.—PAINTING.—Painting and other work required to be done at the Central Relief Office, 19, North-street, Plymouth, for the B.G. W. H. Davy, Clerk to the Guardians, Poor-Law Offices, Greenbank-road, Plymouth.

OCTOBER 6.—**Plymouth**.—HEATING.—Heating and hot-water installation at the new Nurses' Home at the Institution, 60, Vicarage-road, for the B.G. Consulting engineer, W. M. Binny, 38, Carlton-road, Putney, S.W.15.

*OCTOBER 7.—**Admiralty**.—DEMOLITION WORK.—For the demolition of temporary roof buildings, &c., at Admiralty. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

OCTOBER 7.—**Chichester**.—HOUSES.—Erection of 44 non-parlour houses (in pairs) in Lewis-road (off Adelaide-road), for the Corporation. Whitehead & Whitehead, architects, 18, South-street, Chichester. Deposit £1 1s.

OCTOBER 7.—**East Stow**.—HOUSES.—For sixteen houses at Combs and fourteen houses at Stowupland, for the R.D.C. Hunt & Coates, architects, 51A, Abbeygate-street, Bury St. Edmund's.

OCTOBER 7.—**Gravesend, Kent**.—FLATS.—Erection of 48 flats in twelve blocks of four flats each on the King's Farm estate, for the Corporation. Thomas H. Dunch, architect, 27, Clements-lane, London, E.C.4, or the Clerk, 4, Woodville-terrace, Gravesend, Kent. Deposit £2 2s.

OCTOBER 7.—**London, N.W.8**.—STAFF ACCOMMODATION.—New staff accommodation at the North-Western Fever Hospital, Lawn-road, Hampstead, N.W.8, for the Metropolitan Asylums Board. Office of the Board, Victoria-embankment, London, E.C.4. Deposit £1 in respect of each work.

OCTOBER 7.—**London, S.W.18**.—TOWN HALL.—Erection of a new town hall and alterations to the existing town hall, at High-street, Wandsworth. The buildings will be partly constructed of reinforced concrete. For the Wandsworth B.C. Ernest J. Elford, M.Inst.C.E., Borough Engineer, 215, Balham High-road, S.W.17. Deposit £2 2s.

OCTOBER 7.—**Rochdale**.—CONVENIENCE.—Gentlemen's convenience at Wet Rake Gardens, for the C.B. Borough Surveyor.

OCTOBER 7.—**Sheffield**.—CONVENIENCES.—At (1) Burngreave-road (Abbeyfield Park), (2) Langsett-road (adjoining new public baths), and (3) Lead Mill-road and Matilda-street, for the T.C. F. E. P. Edwards, F.R.I.B.A., City Architect. Deposit £2.

OCTOBER 7.—**Sutton (Surrey)**.—CLEANING, PAINTING AND REPAIR WORK.—At Belmont laboratories and stables, at Sutton (Surrey), for the Metropolitan Asylums Board. Office of the Board, Victoria-embankment, E.C.4. Deposit £1 in respect of each work.

OCTOBER 7.—**Various Places**.—VARIOUS WORKS.—Alterations, additions, tiling, chimney stacks, building accommodation, coal store (these various works to hospitals, homes, and wards), for the Metropolitan Asylums Board. Office of the Board, Victoria-embankment, E.C.4. Deposit £1 in respect of each work.

OCTOBER 7.—**West Derby**.—PAINTING.—Internal painting to dormitories, day rooms, corridors, and staircases, &c., of the west block, for the B.G. E. B. Bailey, L.R.I.B.A., architect, 9, Cook-street, Liverpool.

OCTOBER 8.—**Birmingham**.—ELECTRICAL INSTALLATIONS.—In the new extension of the Nurses' Home at the Selly Oak Hospital, for the B.G. N. W. Greenway, Consulting Engineer, of Lloyds Bank Chambers, New-street. Deposit £2 2s.

OCTOBER 8.—**Earlsfield**.—HALL.—Erection of a new concert hall, &c., at the Deerhurst Club and Institute premises, 2-4, Steerforth-street, Earlsfield, S.W.18.

*OCTOBER 8.—**Folkestone**.—HOT-WATER HEATING.—Installation of a low pressure hot-water heating system at the Morehall Council School, for the Borough E.C. A. E. Nichols, M.Inst.C.E., Borough Engineer and Surveyor, Church-street, Folkestone. Deposit £5 5s.

OCTOBER 8.—**Middlesex**.—HOUSES.—Erection and completion of houses on the Priory-road site, for the Hampton U.D.C. Sidney H. Chambers, Surveyor, Public Offices, Hampton, Middlesex.

OCTOBER 8.—**Milnsbridge**.—HOUSES.—Four houses, together with street work, on the estate at Cowlesley, for the Perseverance Co-operative Society. J. Ainley, architect and surveyor, 55, New-street, Huddersfield.

OCTOBER 8.—**Newport**.—BUILDING.—For (1) construction of new offices; (2) erection of 10 flats, Maindee Police Station, for the T.C. Borough Architect.

*OCTOBER 9.—**Bilston**.—TELEPHONE EXCHANGE AND ALTERATIONS.—Erection of a Telephone Exchange at Bilston, and alterations to the Post Office, Bilston. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

OCTOBER 9.—**Leeds**.—HEATING.—Installation of a low-pressure hot-water heating apparatus in the Female Infirmary Block of the Bramley Institution, for the B.G. James H. Ford, Clerk to the Guardians, Poor Law Offices, South Parade, Leeds.

OCTOBER 9.—**London**.—EXCHANGE.—Employment Exchange at Shoreditch, for H.M.O.W. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

*OCTOBER 9.—**Shoreditch**.—EMPLOYMENT EXCHANGE.—Erection of an Employment Exchange at Shoreditch. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

OCTOBER 10.—**Kimbleworth**.—HOMES.—Six homes at Tan Hills, for the Durham County Aged Mineworkers' Home Committee. R. Hann, 8, South View, Kimbleworth.

OCTOBER 10.—**Liskeard**.—HOUSES.—Fourteen houses in five blocks, for the T.C. H. R. Venning, Lic.R.I.B.A., Architect, Midland Bank Chambers.

OCTOBER 10.—**Nottingham**.—HOUSES.—Erection of 24 and 40 non-parlour houses in blocks of two, four and six, on the Hallcroft housing estate, Retford, for the East Retford Corporation. Robt. E. Wilson, Borough Engineer and Surveyor, Market-place, Retford, Notts. Deposit £1 1s.

OCTOBER 10.—**Stoke-on-Trent**.—HEATING.—Heating, hot and cold water, and gas services at the new two-ward block, Infectious Diseases Hospital, Bucknall, for the T.C. Martin & Martin and W. H. Ward, architects, 106, Colmore-row, Birmingham. Deposit £2.

OCTOBER 12.—**Chelmsford**.—ADDITIONS.—To the laundry at the Institution, Wood-street, for the B.G. Tooley & Foster, F.R.I.B.A., architects, Warwick House, Buckhurst Hill.

OCTOBER 12.—**Dublin**.—PAINTING.—Certain painting works and works incidental thereto at the undermentioned barracks:—Island Bridge Barracks, Dublin; Collins Barracks, Cork; Renmore Barracks, Galway; Templemore Barracks, Templemore. Felix Cronin, Major-General, Quartermaster-General, Portobello Barracks, Dublin. Deposit £1 1s.

OCTOBER 12.—**East Molesey**.—HOUSES.—Erection of 29 houses at Sprighton-road, West Molesey, for the East and West Molesey U.D.C. Council Offices, St. Mary's-road, East Molesey. Deposit £1 1s.

OCTOBER 12.—**Forehce**.—COTTAGES.—Three pairs of cottages at Costessey and Hingham, for the R.D.C. Wm. Partridge Smith, Clerk, Vicar-street, Wymondham. Deposit £1.

OCTOBER 12.—**Hucknall**.—HOUSES.—Ten non-parlour type houses and ten parlour type houses, for the U.D.C. E. W. Bostock, Chartered Architect, Engineer and Surveyor. Deposit £1 1s.

OCTOBER 12.—**Long Crenndon**.—HOUSES.—Five houses at Oakley, Brill, for the R.D.C. A. J. Webb, architect, The Cottage, Long Crenndon, Thame.

*OCTOBER 12.—**Middlesbrough**.—ALTERATIONS, &c.—Alterations to premises and erection of a new Sorting Office at Middlesbrough. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

OCTOBER 12.—**Middlesex**.—STORES' DEPOSIT STABLES, &c.—Erection of Stores' Depot, stabling, &c., at Northwood, for the U.D.C. H. R. Metcalf, A.M.Inst.C.E., Council Offices, Northwood, Middlesex. Deposit £2 2s.

*OCTOBER 12.—**Pontypool**.—ALTERATIONS AND ADDITIONS.—Alterations and additions to the Post Office, Pontypool. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

OCTOBER 12.—**Reading**.—CONVENIENCES.—Public sanitary convenience on the Fairground, Great Knollys-street, for the C.B. Borough Surveyor.

*OCTOBER 12.—**Uxbridge**.—ADDITIONS.—Additions and alterations to the Isolation Hospital, Yeading-lane, Hayes, for the Joint Hospital Board. W. L. Evans, F.R.I.B.A., architect, 54, High-street.

OCTOBER 13.—**Adwick-le-Street**.—Provision of low pressure sectional boiler and extensions to heating apparatus at Adwick-le-Street—Park Council School, for the West Riding E.C. Education Department, County Hall, Wakefield.

OCTOBER 13.—**Edmonton**.—ELECTRIC LIGHTING.—Electric lighting and power installation at the Ende House, Chase Side-crescent, Enfield, for the B.G. Barrs, 6, South-square, Gray's Inn, London, W.C.1.

*OCTOBER 13.—**Halesworth**.—REPEATER STATION.—Erection of a Telephone Repeater Station at Halesworth. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

*OCTOBER 13.—**Harrow**.—PUBLIC CONVENIENCE.—Erection of a public convenience for both sexes at Havelock-place, Harrow, for the U.D.C. J. Per Bennetts, Engineer and Surveyor, Council Office, Harrow. Deposit £1.

OCTOBER 13.—**Liverpool**.—ALTERATIONS.—To Prot Pumping Station, for the Corporation. W. Engineer, Alexandra-buildings, 55, Dale-street. Deposit £1 1s.

OCTOBER 13.—**London, E.C.2**.—SUBWAY.—Construction of a subway 12 ft. in diameter and about 750 ft. in length on the east side of St. Martin's-le-Grand and the south side of Gresham-street, in the City of London, for the Corporation. City Engineer's Office, Guildhall, E.C.2. between the hours of 10 a.m. to 1 p.m. and 2 p.m. to 5 p.m. Deposit £2 2s.

OCTOBER 13.—**London, S.E.18**.—ALTERATIONS AND ADDITIONS.—Alterations and additions at the Waltham Arsenal and Town Social Club. The Secretaries on personal application between the hours of 11 a.m. and 2.30 p.m., Mount Pleasant, Plumstead, S.E.18.

*OCTOBER 13.—**Marks Tey**.—REPEATER STATION.—Erection of a Telephone Repeater Station at Marks Tey. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

OCTOBER 13.—**Owston**.—SCHOOL.—New school, 1,040 children at Owston, Skellow, near Doncaster, the West Riding E.C. Education Department, County Hall, Wakefield.

OCTOBER 13.—**Stockfield-on-Tyne**.—CHURCH.—Church at Stockfield-on-Tyne. J. Potts & Son, architects and surveyors, 57, John-street, Sunderland.

OCTOBER 13.—**West Riding**.—BUILDING.—For additional cloakroom accommodation at Ousef Council School; (2) installation of a low-pressure heating apparatus at Grindleton-lane Ends Council school and (3) erection of a new school at Askern Sutton-for the C.C. Education Department, County Hall, Wakefield.

OCTOBER 14.—**Llanelli**.—REMODELLING LIBRARY.—Remodelling of the existing library and such part of the Llanelli Athenæum and Llanelli N. Memorial as are involved in accordance with R.I.B.A. Conditions of Contract, &c., for the B.C. Council. H. A. Gold, M.C., A.R.I.B.A., 14, Bedford-row, London, W.C.1. Deposit £3 3s.

OCTOBER 14.—**London, S.W.6**.—FLATS.—Erection of three blocks of flats comprising 36 dwelling Wyld-road, Fulham, for the Fulham A. F. Holden, Borough Engineer, Town Hall, Fulham. Deposit £2 2s.

OCTOBER 14.—**Milngavie**.—HOUSES.—Forty huts at Lennox-avenue, for the T.C. Frank A. B. Prichard, 6, Buchanan-street. Deposit £1 1s.

OCTOBER 14.—**Port Talbot**.—PAINTING.—Paint the exterior of the following schools: (a) Ewam Infants' School, Talbach, Port Talbot; (b) Cwm Schools, for the T.C. Moses Thomas, Education Officer, Aberavon.

OCTOBER 15.—**Bristol**.—FLATS.—Erection of block of flats at Eugene-street, St. James, Bristol, for the Housing Committee of the City Council. Planning Dept., 51, Prince-street. Deposit £1.

OCTOBER 15.—**Gloucester**.—POLICE STATION.—Erection of a police station at Pucklechurch, Bristol, for the Standing Joint Committee of Gloucestershire County Council. E. S. Sinnott, C.C. Surveyor, Shire Hall, Gloucester. Deposit £2 2s.

OCTOBER 15.—**Waltham**.—SCHOOL.—School, Peaks-lane, Waltham; near Grimsby, for the H.C. E.C. Scorer & Gamble, architects, Bank-Chambers, Lincoln. Deposit £2 2s.

*OCTOBER 16.—**Lancs**.—TELEPHONE EXCHANGE.—Erection and completion of a new Telephone Exchange at Churchtown, Lancs, for the Commission H.M.O.W. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

*OCTOBER 16.—**Norwich**.—PAVILION.—Erection of a new two-story pavilion for 16 cubicles, with a new ward and additions to the nurses' quarters. Isolation Hospital, Bowthorpe-road, for the Corporation. J. S. Bullough, A.M.Inst.C.E., City Engineer, Guildhall, Norwich. Deposit £5.

OCTOBER 17.—**Barnet**.—HOUSES.—Erection drainage, &c., of 181 houses (126 parlour and 55 parlour), on the Wellhouse estate, for the Surveyor, Council Offices, Wood-street, Barnet. Deposit £3 3s.

*OCTOBER 17.—**Portsmouth**.—SCHOOL.—Erection of a new public elementary school in Meor Southsea, for the Education Committee. Adr Sharp, Town Hall, Portsmouth. Deposit £3 3s.

OCTOBER 17.—**Stafford.**—HOUSES.—Erection of houses of the non-parlour type on the Little-housing estate, for the Corporation. W. Plant, Inst.C.E., Borough Engineer, Borough Hall, St. 11. Deposit £1 1s.

OCTOBER 18.—**Oxford.**—Offers will be received, by ground rent, for 75 years' building leases, of plots 20 ft. frontages to St. Aldate's-street. Town Surveyor's Office, Town Hall.

OCTOBER 19.—**Thame, Oxon.**—HOUSES.—Erection of houses on the East-street housing site, for the T. Robinson, Council's Architect, Town Thame. Deposit £2 2s.

OCTOBER 20.—**Sheffield.**—ALTERATIONS.—To the home at the Firvale Hospital, Sheffield, to provide additional bedroom accommodation, for the B.G. Whitehead, architect, 34, Goddard Hall-road. Deposit £5 5s.

OCTOBER 20.—**Thurcroft.**—EXTENSIONS.—To the school, for the West Riding E.C. The Education Department, County Hall, Wakefield.

OCTOBER 21.—**Welwyn, Herts.**—HOUSES.—Erection of further 38 houses on the London-road housing site, for the Welwyn R.D.C. H. G. Cherry, 7, Buckminster-street, Adelphi, W.C.2. Deposit £3 3s.

OCTOBER 21.—**York.**—ADDITIONS.—Alterations and additions to the existing engine house and offices at electricity generating station, for the T.C. F. W. City Engineer. Deposit £2 2s.

OCTOBER 26.—**London.**—COTTAGES.—283 cottages, each of three story flats, nine lock-up shops with dwellings over, and other incidental work, at the Hart-lane estate, Lordship-lane, Tottenham, for C.C. Architect to the Council, the County Hall (N. 3), Westminster Bridge, S.E.1. Deposit £2.

OCTOBER 26.—**Rochester, Kent.**—HOUSES, DRAINAGE AND SITE WORKS.—Erection of 66 houses (32 par-

lour and 34 non-parlour) on the Maidstone-road, for the Corporation. William Law, C.E., City Surveyor, Guildhall, Rochester. Deposit £3 3s.

OCTOBER 27.—**Ilford.**—LIBRARY BUILDING, &c.—on and completion of library building, together with Town Hall basement under, and extension of

law offices over, at Oakfield-road, for the U.D.C. W. M. Inst.C.E., Engineer and Surveyor, Town Ilford. Deposit £5 5s.

OCTOBER 28.—**London, E.8.**—BUILDING WORKS.—Engineering works, being the erection and completion of electricity sub-stations, one at Gainsborough-road, Ley, and one at Holly-street, Hackney, for the City Metropolitan B.C. Borough Electrical Engineer, 306, Mare-street, Hackney, E.8. Deposit £2 2s.

DATE.—**Buckfastleigh.**—ALTERATIONS.—To the Eastleigh Co-operative Society's business premises, E. Society. Bridgman & Bridgman, F.R.I.B.A., B.A., architects and surveyors, 9, Fleet-street, London.

DATE.—**Buckhaven and Methil.**—REPAIRS.—Exterior brickwork, joiner, plumber, slater, plaster and painter works of 52 new houses to be erected, for T. L. Brown, Burgh Engineer.

DATE.—**Inverness.**—ALTERATIONS.—Mason and fitter concrete, plumber and heating engineer, and fittings work at alterations to Bank of Scotland, street. R. Carruthers, Ballantyne & Taylor, 28, Queen's Gate.

NO DATE.—**Barnbury.**—HOUSES.—Erection of 46 houses at Grimsbury, for the Borough Council. S. N. Borough Surveyor, Borough Surveyor's Office, Barnbury.

NO DATE.—**Portsmouth.**—ALTERATIONS AND ADDITIONS.—Extensive alterations and additions to G. House, Chandos-street. Timothy White Co., Ltd., Construction Dept. 30, Chandos-street, Portsmouth.

MATERIALS. etc.

OCTOBER 5.—**Belfast.**—PIPES.—320 tons of 18 in., 12 in., and 9 in. cast iron pipes, together with 15 ft. tapers, &c., for the C.B. City Surveyor. Deposit £2 2s.

OCTOBER 5.—**Hebburn.**—MATERIALS.—Earthenware pipes, roadstone and tarmacadam, concrete and kerbing, for the U.D.C. Surveyor.

OCTOBER 5.—**Tending.**—GRANITE.—Granite, for the High Road Surveyor, Great Bentley.

OCTOBER 10.—**Edinburgh.**—MATERIALS.—Repairs on way and foot pavements, also granolithic paving; sand and whinstone, granite and tarmacadam materials, also artificial flagstones and bituminous materials; cement brick and fireclay goods, for the A. Grierson, Town Clerk.

OCTOBER 12.—**Bromley.**—MATERIALS.—Broken stone, Kent ragstone, and Chert or Sevenoaks stone, and footpath gravel, and tarred ragstone, for the L. O. Wall, Clerk of the Council.

OCTOBER 13.—**Leeds.**—KERB.—15,000 lin. yards of 12 in. and 500 lin. yards of circular granite kerb, for C. E. W. Cockerlyne, Highways and Permanent Engineer, 1, Swingate.

OCTOBER 14.—**Swinton.**—FENCING.—1,000 yds. of iron fencing and gates, for the U.D.C. Mr. W. H. G. Engineer and surveyor.

OCTOBER 16.—**Lydenburg (South Africa).**—PIPES.—Pipes, specials, valves, &c., for the T.C. Department of Overseas Trade, 35, Old Queen-street, London.

ENGINEERING, IRON AND STEEL.

OCTOBER 5.—**Port Talbot.**—TANK.—Construction of flowing works at the Power Station:—(a) Section discharge pipe line, with sump and discharge well; (b) 10,000 gallon storage tank; structure and foundations, for the T.C. Borough Electrical Engineer, 10, Canal Buildings, Aberavon.

OCTOBER 7.—**Wembley.**—STEELWORK.—Steelwork structure in connection with the reconstruction and strengthening of the Metropolitan District Railway at Alperton Station, for the U.D.C. Cecil R. W. Engineer and Surveyor. Deposit £5 5s.

OCTOBER 10.—**Bolton-le-Sands.**—BRIDGES.—Road-works and two bridges (reinforced concrete bridge over Lancaster and Kendal Canal and masonry bridge over an occupation road) in connection with the construction of the new road, for the Lancashire C.C. W. H. Schofield, County Surveyor, County Offices, Preston.

OCTOBER 10.—**Gunthorpe.**—BRIDGE.—Ferro-concrete bridge over the River Trent, for the Notts C.C. J. Cracroft Haller, County Surveyor, Shire Hall, Nottingham. Deposit £5.

OCTOBER 10.—**Notts.**—EXTENSIONS.—Extension of bridge at Thurgarton, and extension and strengthening of bridge at Gamston, for the C.C. J. Cracroft Haller, County Surveyor, Shire Hall, Nottingham. Deposit £3 3s.

OCTOBER 12.—**Stratford-upon-Avon.**—RESERVOIR.—Pumping station and the construction of a balancing reservoir at Warwick-road, for the Corporation. F. W. Jones, Borough Surveyor and Water Engineer. Deposit £3 3s.

OCTOBER 15.—**Cape Province.**—STEELWORK.—Structural steelwork for Palmiet River Bridge, Cape Province, for the South African Railways Committee. Department of Overseas Trade, 35, Old Queen-street, London, S.W.1.

OCTOBER 15.—**Cranbrook.**—SEWERAGE.—Construction of a filter bed, humus tank and dosing chamber, and for the erection of a chestnut spile fence, at Willesey, sewage disposal work, for the R.D.C. J. H. Bailey, Sanitary Surveyor, Penryn.

OCTOBER 15.—**London.**—GIRDERS.—Girders required for the Jelium Bridge, for the India Store Department. Director-General, 11, Belvedere-road, S.E.1.

OCTOBER 19.—**Uxbridge.**—RESERVOIR.—Reinforced concrete reservoir work for the construction of a reinforced concrete reservoir, for the U.D.C. Indented Bar Concrete Engineering Co., Ltd. Deposit £2 2s.

OCTOBER 22.—**Bilston.**—RESERVOIR.—Concrete service reservoir, of about 850,000 gallons capacity, at Goldthorn-hill, for the U.D.C. H. Lapworth, 15, Victoria-street, Westminster. Deposit £3.

OCTOBER 24.—**Whittingham (near Preston).**—HEATING.—Proposed centralised low-pressure hot-water heating, new calorifiers, pumps, steam and condenser services for the main building, and centralised hot-water system and boiler plant for the old annexe, for the County Mental Hospital Committee. C. Hutton Wright, Consulting Engineer, Dale Cottage, Spital, Cheshire. Deposit £1.

ROAD, SEWERAGE, AND WATER WORKS.

OCTOBER 5.—**Anglesey.**—ROADS.—Construction of new lengths of roads (diversions) for road widening and improvements on sections of the Coastal main road, for the C.C. W. E. Jones, County Surveyor, Graig, Llanfair P.G., Anglesey. Deposit £3 3s.

OCTOBER 5.—**Barnsley.**—MAKING-UP.—Back road between Bridge-street and Honeywell-street, and Chapel-square, Worsbro' Common, for the C.B. Borough Engineer, Fairfield House Offices.

OCTOBER 5.—**Brentford.**—PAVING.—Resurfacing of the haunches of a portion of Boston-road with reinforced concrete and wood paving, for the U.D.C. W. J. W. Westlake, Surveyor.

OCTOBER 5.—**Cannock.**—SEWER.—Laying of 540 yds. of 9 in., 12 in. and 15 in. sewers, and other works in connection therewith, at St. John's-road, for the U.D.C. R. Blanchard, Engineer and Surveyor.

OCTOBER 5.—**East Riding.**—RECONSTRUCTION.—Widening, strengthening and resurfacing the trunk road, Hull-Selby road, and for carrying out certain improvements and diversions in connection therewith, and all works incidental thereto, from a point south of the road to Barby Landing (near Selby) on the Selby-York road, to Booth Ferry-road junction, near Barnhill-lane (Howden), approximately 6½ miles, for the C.C. County Surveyor, County Hall, Beverley. Deposit £5 5s.

OCTOBER 5.—**Gellygaer.**—ROADS.—Excavation and filling (about 20,000 cu. yds.) ballasting, road-making, kerbing, channelling, and fencing for the approaches to the ferro-concrete bridge in course of construction (Ystrad Mynach to Gllfach), for the U.D.C. F. Read, Engineer and Surveyor. Deposit £2 2s.

OCTOBER 5.—**Leicester.**—MAINS.—Laying of rising mains, 44 in. diameter, 33 in. diameter, 27 in. diameter, 24 in. diameter, 20 in. diameter, 10 in. diameter, and 6 in. diameter, together with all special bends, tees, angle branches, &c., the assembling and fixing of sluice valves, opening and closing gearing and electric motors where required, the construction and completion of valve chambers, &c., and all other works in connection therewith, for the T.C. E. G. Mawbey, City Engineer and Surveyor. Deposit £5.

OCTOBER 5.—**Loce.**—MAINS.—Laying of 12 miles of 8 in. iron water mains, 1 mile of 6 in. iron water mains, and the construction of a reinforced concrete service reservoir to contain half a million gallons of water, and other works, for the U.D.C. G. H. Ivory, A.M.I.C.E. Deposit £3 3s.

OCTOBER 6.—**Maldens and Coombe.**—MAKING-UP.—For (1) making-up the carriageway with reinforced concrete and maintaining St. John's-road, New Malden; (2) paving with artificial stone slabs the footways in St. John's-road, New Malden, for the U.D.C. R. H. Jeffes, Engineer and Surveyor. Deposit £1 1s. each.

OCTOBER 6.—**Spalding.**—SEWERS.—Supplying and laying of about 21,230 lineal yds. of 12 in., 9 in., and 6 in. stoneware pipe sewers, together with manholes and appurtenant works, for the U.D.C. C. Franklin Murphy, chartered civil engineer, Lloyds Bank Chambers, Morpeth. Deposit £5.

OCTOBER 7.—**Birmingham.**—SEWERS.—Construction of about 395 yds. brick and concrete culvert, and 398 yds. stoneware pipe sewers, together with incidental works in Long Acre and adjacent lands, for the T.C. Herbert H. Humphries, City Engineer and Surveyor. Deposit £2.

OCTOBER 7.—**Wembley.**—SEWER.—Construction of about 980 yds. of concrete tube surface water sewer, for the U.D.C. Cecil R. W. Chapman, Engineer and Surveyor. Deposit £2 2s.

OCTOBER 7.—**Wembley.**—ASPHALTING.—Surfacing of the new concrete carriageway of East-lane, North Wembley, approximately 25,000 sq. yds., with bituminous asphalt, 2 in. in thickness, for the U.D.C. Cecil R. W. Chapman, Engineer and Surveyor. Deposit £2 2s.

OCTOBER 7.—**Wembley.**—MAKING-UP.—Sudbury-avenue and part of Sylvester-road (total approximate length, 1,030 yds.), for the U.D.C. Cecil R. W. Chapman, Engineer and Surveyor. Deposit £2 2s.

OCTOBER 7.—**Wembley.**—WIDENING.—Reconstruction in concrete and widening of East-lane, North Wembley, a total length of about 2,140 yds., including all sewers and fences necessary, for the U.D.C. Cecil R. W. Chapman, Engineer and Surveyor. Deposit £5 5s.

OCTOBER 8.—**Swansea.**—REPAIRS.—To (1) Park Wern-road; (2) back-street, at rear of Uplands-crescent, leading from Eaton-crescent to rear of Gwydr-crescent; (3) Kilvey-terrace, for the C.B. J. Richard Heath, Borough Engineer and Surveyor.

OCTOBER 9.—**Leeds.**—TARRING.—Covering the garage yard at the Beckett-street Institution with tarred slag macadam, for the B.G. J. H. Ford, Clerk to the Guardians, Poor Law Offices, South Parade.

OCTOBER 9.—**Southampton.**—ASPHALTING.—Asphalting, paving and other works in Britannia-road and Shirley-road, for the C.B. Borough Engineer, 33-35, French-street. Deposit £1 1s.

OCTOBER 9.—**Wemyss.**—PIPES.—Supplying and laying about three miles of cast-iron pipes of diameter 15 in., together with sluice valves, &c., and including the construction of incidental and relative works, for the Wemyss and District Waterworks Board. Crouch & Hogg, Chartered Civil Engineers, 17, Lynedoch-street, Glasgow. Deposit £2 2s.

OCTOBER 10.—**Aberystwyth.**—MAINS.—Provision and laying and jointing of water mains at Aberystwyth, together with all necessary special fittings, for the Council. H. B. Ward, Chartered Civil Engineer, Commerce Chambers, 15, Lord-street, Liverpool. Deposit £3 3s.

OCTOBER 10.—**Gunthorpe.**—ROADS.—4,500 lineal yds. of new approach roads to the proposed bridge at Gunthorpe, for the Notts C.C. J. Cracroft Haller, County Surveyor, Shire Hall, Nottingham. Deposit £5.

OCTOBER 10.—**Hertford.**—KERBING.—Excavation, kerbing, and other works connected with the widening to the south side of Ware-road, for the T.C. Borough Surveyor. Deposit £2 2s.

OCTOBER 10.—**Hertford.**—FENCING.—200 lin. yds. of wrought-iron fencing and other works connected therewith to footpath at Port-hill, for the T.C. Borough Surveyor. Deposit £1 1s.

OCTOBER 10.—**Hertford.**—PAVING.—530 lin. yds. of kerbing, concrete slab paving, and other works connected to footpaths on the north side of Ware-road, for the T.C. Borough Surveyor. Deposit £2 2s.

OCTOBER 10.—**Inverness.**—ROAD.—Construction, reconstruction and surfacing road from Spey Bridge to the County boundary, a length of approximately 15½ miles, including earthworks, bridges, bottoming, surfacing, drainage, and fencing of the Inverness-Perth-road, for the C.C. The Chief Engineer, 98-104, Academy-street, Inverness. Deposit £3 3s.

OCTOBER 10.—**Mytholmroyd.**—PAVING.—Sett paving, pointing of boundary wall, &c., at the Burnley-road Council School, for the West Riding E.C. A. Bellby, Education Officer, Sowerby Bridge.

OCTOBER 12.—**Barnes.**—RESURFACING.—Resurfacing a portion of Lower Richmond-road, Mortlake, for the U.D.C. Surveyor, The Council House, High-street, Mortlake, S.W.14.

OCTOBER 12.—**Barnes.**—RESURFACING.—Resurfacing a portion of Lonsdale-road, for the U.D.C. Surveyor, The Council House, High-street, Mortlake, S.W.14.

OCTOBER 12.—**East Riding.**—RECONSTRUCTION.—Widening, strengthening and resurfacing the trunk road, Hull-Selby road, and for carrying out certain improvements and diversions in connection therewith, and all works incidental thereto, from a point south of the road to Barby Landing (near Selby) on the Selby-York road, to Booth Ferry-road junction, near Barnhill-lane (Howden), approximately 6½ miles, for the C.C. County Surveyor, County Hall, Beverley. Deposit £5 5s.

OCTOBER 12.—**Letchworth.**—EXTENSIONS.—To the main drainage system, for the U.D.C. H. Humphreys & Sons, Consulting Engineers, 28, Victoria-street, Westminster. Deposit £2 2s.

OCTOBER 12.—**Manchester.**—SEWER.—Construction of a 12 in. diameter pipe sewer and manholes in Deansgate and Castle-street, Knott-mill, for the T.C. P. M. Heath, Town Clerk. Deposit £1 1s.

OCTOBER 12.—**Newbiggin-by-the-Sea.**—FOOTPATH.—Laying 900 yds. cement footpath, &c., for the U.D.C. R. Appleby, surveyor. Deposit £1.

OCTOBER 12.—**Romford.**—MAKING-UP.—Of Elm-grove, Sylvan-avenue, and Woodland-avenue, Hornchurch, the total length being about 1,500 yds., for the R.D.C. W. J. Grant, Surveyor, 16A, South-street.

OCTOBER 12.—**Skegby.**—SEWERS.—Construction of about 4,765 yards of stoneware and iron pipe sewers varying in size from 7 in. to 12 in. diameter, with manholes and all appurtenant works, and the erection of detritus pits, Dortmund tanks, mud drying beds, and other sundry works, for the R.D.C. W. H. Radford & Son, Chartered Civil Engineers, Albion Chambers, King-street, Nottingham. Deposit £3 3s.

OCTOBER 13.—**Epsom.**—SEWER.—Construction of about 900 yds. of stoneware sewers of 12 in. diameter, together with manholes and other appurtenant works, for the R.D.C. John Taylor & Sons, engineers, Caxton House, Westminster, S.W.1. Deposit £5.

OCTOBER 13.—**Harrow-on-the-Hill.**—WIDENING.—Widening and reconstruction of Eastcote-lane, including the construction of a new concrete and bitumastic road, for the U.D.C. J. Percy Bennetts, Engineer and Surveyor. Deposit £1.

OCTOBER 14.—**Carshalton.**—MAKING-UP.—Of Rotherfield-road, for the U.D.C. W. Willis Gale, Surveyor. Deposit £2.

OCTOBER 14.—London.—MAINS.—For laying of 42 in., 36 in. and 30 in. diameter cast-iron pipes, from Abbey-road, Hampstead, to Myddleton-square, Clerkenwell, for the M.W.B. H. E. Stilgoe, Chief Engineer. Deposit £10.

OCTOBER 14.—London.—PAVING.—Providing and laying crosstred deal blocks, on a new concrete foundation, in portions of St. Mark's-road and Palace Gardens-terrace, for the Kensington B.C. Borough Engineer and Surveyor.

OCTOBER 15.—Great Ouseburn.—SEWERS.—Construction of about 6,000 lin. yds. of pipe sewers, varying in size from 9 in. to 18 in. diameter, together with manholes and other works, in the parish of Acomb, for the R.D.C. E. J. Silcock, engineer, 25, Victoria-street, Westminster, S.W.1. Deposit £5.

OCTOBER 15.—Southwell.—PIPES.—Provision and laying of about 300 yds. of 9 in. stoneware pipes, together with the construction of the necessary manholes, in Lower Kirklington-road, for the R.D.C. Sands & Walker, Milton Chambers, Nottingham.

OCTOBER 16.—Castle Donington.—MAIN.—Providing and laying about 1,900 yards of 2 in. cast-iron water main at Kegworth, for the R.D.C. G. & F. W. Hodson, engineers, Bank Chambers, Loughborough. Deposit £5 5s.

OCTOBER 16.—Rushcliffe.—SEWER.—533 yds. of 9 in. and 6 in. sewer and manholes from Watnall-road to the Hospital site, Hucknall, for the Hospital Committee. E. W. Bostock, Architect to the Committee, Council Offices, Watnall-road, Hucknall.

OCTOBER 17.—Stretford.—PAVING.—Paving in granite setts, &c., part of Warwick-road North, for the U.D.C. E. Worrall, Surveyor. Deposit £2 2s.

OCTOBER 20.—Nesscliffe.—WIDENING.—Road widening for a length of approximately 2,000 yards, including drainage, setting back of farm buildings and contingent works, at Nesscliffe, about 8 miles from Shrewsbury, for the Salop C.C. W. H. Butler, County Surveyor, County Buildings, Shrewsbury. Deposit £5 5s.

OCTOBER 21.—Barking.—ROAD.—Construction of a bridge, with steel girders, brickwork abutments, parapets, &c., and piled foundations, to carry the East Ham and Barking by-pass arterial road over the Barking-Thibury line of the L.M. & S.R. Co., near Ripple road, Barking, Essex. A short length of culvert to carry the Mayes Brook is also included in the work to be carried out, for the M.T. Chief Engineer, Roads Department, M.T., 7, Whitehall-gardens, S.W.1. Deposit £25.

OCTOBER 21.—Bournemouth.—MAKING-UP.—Of Keswick-road and Grasmere-road, for the C.B. F. F. Dolamore, Borough Engineer. Deposit £1 1s.

OCTOBER 21.—Glasgow.—ROAD.—Construction of section D-E (Polkennet to Starlaw), Contract No. 4, of a new road from Glasgow to Edinburgh, for the T.C. D. A. Donald, engineer, 271, Alexandra-parade. Deposit £3 3s.

Competitions.

(See Competition News, page 488.)

Auction Sales, Tenders, etc.

OCTOBER 6-10.—Newmarket.—Perry & Phillips will sell, on the premises, Cheveley Mansion, near Newmarket, the whole of the interior and exterior fittings. The fabric of the mansion will be sold for demolition. Auctioneers, 59, High-street, Bridgworth.

OCTOBER 7.—Hull.—W. H. Pickard, F.A.I. Without reserve, timber at the City Hotel, Lowgate, at 11.15 a.m. Auctioneer, Hull.

OCTOBER 7 AND 8.—The Manoeuvres Camp, Worthing Down and Sutton Scotney.—James Harris & Son, incorporated with Hall, Pain & Goldsmith, will sell, at the Pump House, 200 yards from the R.A.F. Water Tank on the Winchester to Sutton Scotney road, on the 7th, and at the field adjoining the Sutton Scotney G.W. Railway Station, on the 8th, temporary galvanised iron shelters, water tanks, pipes, corrugated iron, timber (various dimensions). Auctioneers, Jewry-chambers, Winchester, also at Portsmouth, Fareham and Petersfield.

OCTOBER 13.—London, E.C.3.—Fuller, Horsey, Sons & Cassell will sell by order of S. Pearson & Son (Contracting Department), Ltd., on completion of the contract for the construction of the Queen Mary Reservoir, at Littleton, near Staines, in lots, at the Merchants' Hall, Baltic Exchange, St. Mary Axe, E.C.3, contractors' plant and machinery. Auctioneers, 11, Billiter-square, E.C.2

OCTOBER 13 AND 14.—Andover, Hants.—Charles R. Davis & Co. will sell, by order of the executors of Sydney Bell (deceased), upon the premises, 15, London-street, and the yards in Dene-street, East-street, and Railway Siding, Andover, Hants, the whole of the stock-in-trade, plant and rolling stock of a builder, contractor, decorator and undertaker, stock of timber, &c. Auctioneers, 285, Borough High-street, London, S.E.1.

OCTOBER 14.—London, W.1.—H. Ley-Clark & Barff will sell, at 47 to 49, New Cavendish-street, W.1, carved oak chimney-pieces, mirrors, frames, pedestals, cabinets, &c. Auctioneers, 3A, Wimpole-street, W.1.

OCTOBER 14.—Ramsgate.—Veyard & Yates will sell, without reserve, first portion to clear site at Chatham-street, High-street, timber and building material (arising from demolition of Townley Castle Schools). Auctioneers, 365, Norwood-road, London, S.E.27.

OCTOBER 20.—London, S.E.—J. T. Skelding & Co. will sell, by order of Messrs. J. Lyons & Co., Ltd., who are removing to more suitable works, Walworth-road, S.E., the well made and expensive modern shop fittings and building materials, including mahogany and walnut panelling, doors, counters, showcases, &c. Auctioneers, 48, Gresham-street, Guildhall, E.C.2.

OCTOBER 20.—Middlesex.—Hampton & Son will sell, by order of the mortgagees, at the St. James's-Estate Rooms, St. James's-square, S.W.1, building estates within a 12 mile radius of Marble Arch, Mill Hill, Middlesex, the Mylesdown Estate of nearly 48½ acres. Auctioneers, 20, St. James's-square, S.W.1.

DURING OCTOBER.—Sussex.—Knight, Frank & Rutley will sell, by direction of Mr Edward Huth, at The Goldings Hotel, Hayward's Heath Station (unless previously disposed of privately as a whole), the freehold residential sporting and building property known as the Wykehurst Park Estate (remaining portions), Bolney, including the Stanley Mansion; also private residence known as "Hazeldean," in all extending to about 380 acres. Auctioneers, 20, Hanover-square, W.1.

Public Appointments.

OCTOBER 2.—Near Watford.—A Tracer is required for the Building Research Station, Garston, near Watford. The Secretary, Department of Scientific and Industrial Research, 16, Old Queen-street, S.W.1.

OCTOBER 6.—Manchester.—Resident Clerk of Works in charge of maintenance staff required at the Manchester Royal Infirmary. Frank G. Hazell, at the Infirmary.

OCTOBER 7.—Southport.—Temporary Junior Surveying Assistant required by the County Borough Council. A. E. Jackson, M.Inst.C.E., Borough Engineer, Town Hall, Southport.

OCTOBER 8.—Liverpool.—Surveying Assistant in the Land Steward and Surveyor's Department required by the Finance Committee of the City of Liverpool. Walter Moon, Town Clerk, Municipal Buildings, Liverpool, endorsed "Application for Surveying Assistant."

OCTOBER 10.—Gloucester.—CLERK OF WORKS.—To supervise the erection of new grammar school buildings in Northbeach, by the Education Committee. R. S. Phillips, County Education Architect, Shire Hall, Gloucester.

OCTOBER 12.—Bridlington.—Clerk of Works required for housing scheme by the Borough Council. Borough Engineer and Surveyor, Municipal Offices, Quay-road, Bridlington.

OCTOBER 12.—London, S.E.6.—Technical Assistant required in the Borough Surveyor's Department by the Metropolitan Borough Council of Lewisham. John W. Shuter, Town Clerk, Town Hall, Catford, S.E.6.

OCTOBER 12.—Wembley, Middlesex.—Temporary Clerk of Works required to superintend the erection of 50 brick-built cottages and flats on the Council's housing site, for the U.D.C. Cecil R. W. Chapman, Engineer and Surveyor, Council Offices, Wembley.

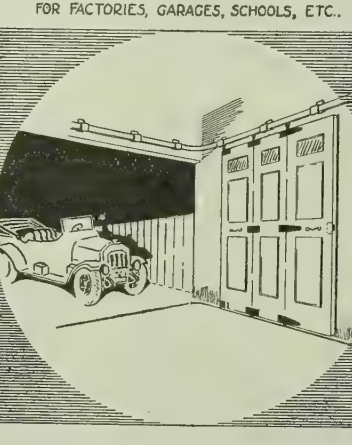
OCTOBER 19.—West Riding of Yorkshire.—Architectural Assistant required by the Education Committee in the office of the Architect. Education Department, County Hall, Wakefield.

NO DATE.—London, W.C.2.—Surveyors' Clerks are required in the Directorate of Works and Buildings, Air Ministry. Secretary (S.2), Air Ministry, Kingsway, W.C.2.

Lockwood's Manual.

We have received a copy of "Lockwood's Manual," revised and enlarged edition, containing six hundred receipts for the use of the small builder and handyman. It is called "The Decorator's and Renovator's Assistant," and deserves its name, for it covers every branch of house decorating and is full of practical hints and advice.

THE "HENDERSON" SYSTEM
SLIDING DOOR GEAR
FOR FACTORIES, GARAGES, SCHOOLS, ETC.



"TANGENT JUNIOR" FOR LIGHT DOORS.
"TANGENT SENIOR" FOR HEAVY DOORS.

WRITE FOR BOUND CATALOGUE B.24 TO—
P.C. HENDERSON, LIMITED.
BARKING, ESSEX. PHONE: EAST HAM 242.

PROPOSED NEW BUILDINGS & OTHER WORKS

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building work taking the responsibility of commencing before plans are finally approved by the authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ABBERLEY.—Martley R.D.C. are being asked the Worcester C.C. what steps are to be taken to improve the isolation hospital.

APPLEBY.—The Housing Committee has considered the question of adopting a scheme for the erection of 12 houses, and has instructed the surveyor to submit block plans of a lay-out of the houses.

BALFACASTLE.—The Antrim C.C. has approved borrowing of £10,000 for building a combined technical and secondary school.

BALROTHERY.—The Consulting Engineer has submitted to the R.D.C. a scheme for a new water supply to Balbriggan and Skerries at an estimated cost of £27,750.

BARNES.—The U.D.C. are considering the provision of public swimming baths.

BARNSELY.—The Sites and Buildings Sub-Committee has received a letter from the B.E. stating that, subject to the approval of the proposed loan by the M.H., would sanction the erection of a new Council School, Winthorpe at an estimated cost of not more than £14,157.

BEWLEY.—Worcestershire E.C. are considering provision of increased school accommodation at Bewdley and Wribbenhall.

BIRMINGHAM.—The E.C. propose to proceed with second section of work at the new school on the Billingham estate providing additional accommodation for pupils. It is proposed to complete the East Wing, Centre Block on the Moseley Boys' Secondary School by direct labour, at an estimated cost of £13,000. Managers of St. Vincent's R.C. schools have submitted an amended plan of a proposed new school, Vauxhall-grove, with a available accommodation for children.

BLITH.—The T.C. recommended the approval of principle of the formation of a Joint Hospital for the treatment of smallpox.

BOURNEMOUTH.—The foundation-stone of Bournemouth's new pavilion, which is to cost £200,000, been laid.

BRENTFORD.—The Gas Accumulator Co., of Brentside House, have a scheme for internal reconstruction of Brentside House for the provision of accommodation. Refreshment rooms are to be provided at Boston Manor Park, at a cost of about £1,500. The Surveyor is to report on the cost of converting Mansion House into living quarters, and alternatively for a public hall. Plans have been passed for houses on a garden estate for Messrs. Douglas & Barley, Ltd.

BRIGANTON.—Funds are being raised for the erection of a church hall in connection with Clermont Congregational Church, Preston. The scheme is estimated to cost £2,350. The C.B. resolved (a) that the Borough Surveyor be instructed to report with an estimate of the cost of improving the accommodation at Western Bandstand lavatory, and (b) that the Committee are unable to recommend the Council to demolish the men's lavatory at the Western Borough Bandstand but are prepared to consider any scheme which may be submitted for improving the same.—The M.H. prepared to approve the tender of Messrs. J. L. & Son, Ltd., for the erection of 16 concrete hop-parlour type, in Hereford-street.—The Council resolved that application be made to the M.H. for sanction of borrowing of £3,000 to defray the cost of the chase of a portion of Hodshrover Meadow as a site for the Moulsecomb Junior Mixed School.—Plans pass 10 garages, 1A, Dyke-road-drive, for Mead & (Brighton), Ltd.—The T.C. propose to erect 32 flats at a cost of £18,000, at Moulsecomb.

BROMSGROVE.—Worcestershire E.C. propose to carry out a scheme for remodelling the Stourbridge school.

BUCKINGHAMSHIRE.—Under the auspices of County Council, local authorities are to combine the provision of accommodation for mentally defective children.

BURNHAM-ON-SEA.—Particulars are now available of the instructions which have been given to surveyor of the U.D.C. respecting the provision of additional shelters and conveniences. At the St. Vincent's shelter alone it is estimated £3,000 will be spent. Victoria-street, at an estimated cost of £195, a scheme approach to the town will be made, in accordance with a long deferred scheme.

BURY.—Plans have been approved for the erection of 20 houses in Mosley-street, Market-street, Woodley-street.

CARDIFF.—Funds are being raised by the parish of St. Joseph's, Cardiff, for the erection of a new school and plans are being prepared by Messrs. F. R. & Son, Capital and Counties Chambers, 30, Commercial-street, Newport.

* See also our List of Contracts, Competitions, etc.

CARLTON.—Plans were approved for the erection of eight additional houses on the Standhill-road site, an estimated cost of £4,810, for the U.D.C. The necessary sanction has been received for the erection of a second lot of 16 houses on the Conway-road site, and the Council has decided to make application for necessary loan.

CASTLEBAR.—£32,000 has been made available by the Ministry of Finance for the restoration of the literary barracks.

CHORLEY.—The T.C. has received sanction to borrow £1,925 required to purchase land between Harrison and Pilling-lane for house erection.

LITAKEORE.—Plans have been prepared for the erection of a proposed new fire station, ambulance accommodation and offices, at an estimated cost of £5,000.

CONVENTRY.—The E.C. recommend that application be made for sanction to a supplemental loan of £2,174 in respect of extensions at Barr's Hill Secondary school, and the Housing Committee recommend that application be made to the M.H. for sanction to a loan of £270,000 for the erection of additional houses and site at the Radford housing estate.

DARLINGTON.—The T.C. have decided to build 100 houses on the Eastbourne site, subject to the approval of the M.H.

DONCASTER.—It is proposed to erect a new church, at a cost of over £2,000, on a site at Askern.

DONOGAL.—The C.C. has decided that the courthouse should be rebuilt.

DOVER ALE.—The Parish Church is to have central steeple.

DUBLIN.—The Carnegie Trust Fund has agreed to contribute a sum not exceeding £25,000 for the erection of two child welfare centres. A new Roman Catholic church and two new schools are to be erected at Marino.

DUNGA NON.—Government sanction has been given a loan of £10,000 for the erection of a town hall.

DURHAM.—The R.D.C. are to erect 50 houses at the M. by direct labour.

ECLESALL.—The Higher Education Sub-Committee recommend steps to be taken to acquire the Union Hives. The Edge, for the purposes of a secondary school for boys. The B.E. has approved the proposed purchase of a site in Hagg-lane, Intake, for additional secondary school accommodation.

EVESHAM.—The R.D.C. are negotiating for the purchase of a site suitable for the erection of 100 houses.

ESSEX.—The Waltham Abbey and Cheshunt Councils are asking the M.T. to construct a £60,000 arterial road connecting the two parishes.

FINSTALL.—Improvements are to be undertaken by the Worcestershire E.C. at the Council school.

GARFORTH.—The D.C. proposes to erect 10 semitached houses, for which tenders are shortly to be invited. Plans and specifications are being prepared by Mr. G. Birkinshaw, architect, Sun Buildings, Park-view, Leeds.

GOSPORT.—The Corporation are to seek sanction for a loan of £61,000 for the erection of 122 houses on the Iron estate. The Borough Engineer is to prepare plans of conveniences for erection in Gosport Park and Kings Bottom. In connection with the proposed erection of a school on the Brockhurst site the E.C. has decided to invite architects to send in their names with particulars of work they have carried out, and some will be selected to submit competitive sketch plans.

GREENFORD.—Consideration is being given by the owners of the Betham Trust to the possibility of providing a new infants' school.

HALESOWEN.—The governors of the Halesowen Grammar School have prepared a scheme for enlargements, which will cost about £20,000. Preliminary approval has been given by the Staffordshire and Worcestershire E.C.'s.

HALIFAX.—The M.H. has held an inquiry into the Corporation's proposal to clear Crossfields area.

HARROW.—Middlesex E.C. has obtained a site in East-lane for the erection of an elementary school.

HESTON AND ISLEWORTH.—The U.D.C. passed plans: Perry Bros., 79 houses, Lampton Hills estate, Ingleby-road; Building Enterprises, Ltd., 10 houses, 10 one bungalow, Spring Grove-road; Home Counties Ltd., 12 houses, Jersey-road; W. J. Harris, nine houses, Elmsworth-avenue; L. Fowler, 10 houses, Heston Garden Village estate; W. A. Harris, 10 houses, Elmsworth-avenue; A. J. Sparrow, R.I.B.A., parish hall, Isleworth.

HORBLING.—The cost is estimated to be £1,000 for restoration of St. Andrew's Church, Horbling, near Lingborough, which is considered to be unsafe.

HULL.—Important improvements in the navigation of the upper reaches of the River Humber near Goole are foreshadowed at a meeting of the Humber Navigation Board. The Aire and Calder Navigation is constructing a training-wall on the right bank of the River Ouse, and it is proposed to extend the same conjunction with a training-wall on the left bank of the River Trent. The estimated cost of the works is £76,000.

ILFORD.—Plans passed by the U.D.C.: L.C.C. lay-out of houses, Ilford (No. 5) Section, Becontree estate; P. E. Brand, Ltd., 26 houses, 1-51, Ambleside-road; P. E. Brand, Ltd., 88 houses, 2-44 and 1-43, Antwood-gardens, 2-44 and 1-43, Grasmere-gardens; G. Wilks, 89 houses, 2-46, Brook-road; 1-67, Folk-road, 31-61 and 50-80, Hertford-road; P. E. Brand, Ltd., 20 houses, 2-40, Redbridge-lane; C. W. Huggan, 12 houses, 300-322, Kingston-road; P. E. Brand, Ltd., 22 houses, 1-22, Southdene-gardens, 1-22, Danehurst-gardens, 1-13 and 2-16, Inglehurst-gardens; Suburban Developments (London), Ltd., 18 houses, 1-19, Southview-crescent, 266-280, Perth-road; Hines, Warwick, seven houses, 94-106, Wards-road; Haines & Warwick, 16 houses, 19-49, Vicarage-lane.

HARROW.—The T.C. are making application to the M.H. for the erection of 100 houses by direct labour. The Council has also decided to proceed with the scheme to convert the premises at the corner of Grange-

road and Walter-street into a maternity and child welfare clinic.

KIDDERMINSTER.—The M.H. has sanctioned the erection of 100 houses by the T.C.

LANXFIELD PLAIN.—The U.D.C. has obtained sanction from the M.H. to borrow £2,350 for the erection of houses at West Kyo.

LEAMINGTON.—The M.H. held an inquiry into the T.C.'s application for power to borrow £9,635 for improving the Pump Room.

LICKEY END.—Worcestershire E.C. are to improve the cloakroom and lavatory accommodation and install hot water apparatus at the elementary school.

LONDON (HACKNEY).—The B.C. recommend that the existing urinal in Lauriston-road be abolished, and a new six-stall urinal erected in Victoria-Park, at an estimated cost of £440.

LONDON (HOLBORN).—The B.C. has decided to purchase some dilapidated houses in Betterton-street, and recondition them at a cost of £12,800, for use as accommodation for the working classes.

LONDON (LEWISHAM).—The B.C. passed plans: A. Durbin, Baring-road, eight houses; J. G. Stephenson, for L.C.C. Downham Estate, 42 houses; T. A. Boughton, Penberth-road, eight houses; A. J. Glock, South-end-lane, 20 houses; A. J. Glock, Brightling-road, 26 houses; W. J. Scudamore, Ltd., Dallinger-road, 10 houses; W. T. Champion & Sons, Tatnell and Grierson-roads, 29 houses; Englen Bros., Ashwater-road, 12 houses; Middletons (Builders), Ltd., Blythe Hill-lane, 10 houses; Thos. H. Sawyer & Son, Ltd., Embleton-road, 45 houses; Dorrell Bros., Adams-kill-road, 10 houses; T. A. Boughton, Thomsbeach-road, 10 houses; F. C. Benstead, Kilgour-road, 10 houses; Thos. H. Sawyer & Son, Ltd., Shell-road, 21 houses.

LONDON (POPULAR).—The M.H. has asked for details in connection with the proposal of the B.C. to erect a maternity and child welfare centre, at a cost of £15,000.

LONDON (SOUTHWARK).—Plans have been prepared for the governors for raising the height of the Borough-road Polytechnic in Earl-street, Lancaster-street, and Borough-road.

LURGAN.—The U.D.C. has received a letter from the Ministry of Home Affairs regarding the loan of £10,000 for housing, stating that before a grant could be sanctioned the Council should take into consideration the question of a scheme with plans and other details, a.c.

LYE AND WOLLESCOTE.—The Lye U.D.C. propose to erect an additional 100 houses.

MARGATE.—The Corporation propose to build 75 additional houses on a site close to the public park, at an estimated cost of £30,000.

MERTHYR TYDFIL.—The T.C. are to erect 12 houses by direct labour, at an estimated cost of £4,200.

MEXBOROUGH.—The Council are asking for sanction to build 615 houses.

MORECAMBE.—The E.C. has under consideration schemes for enlarging the West End elementary school and the erection of a new elementary school for the Lancaster-road district. The M.H. has sanctioned a loan of £1,000 for the construction of conveniences at Anstable Holme.

MORETON.—Funds are being raised by the parishioners of the Church of the Sacred Heart for the proposed erection of new school buildings.

MULLINGAR.—The Mental Hospital Committee has decided to build houses for their staff.

NORTHAMPTON.—A proposal is afoot for a £40,000 road-reconstruction scheme.

NORTHINGHAM.—The B.G. has provisionally approved plans for extensions to the Bagthorpe institution. The scheme is to provide a separate hospital for 150 children. The hospital has been designed by Messrs. W. B. Stair & Hall.

OLDBURY.—The U.D.C. contemplate the erection of 100 houses. Worcestershire E.C. has approved plans for the erection of a headmaster's house at the Secondary School, at an estimated cost of £1,000.

OLDHAM.—The M.H. has given formal sanction to the borrowing of £16,000 for the erection of dwellings on the Hollings housing site.

PETERSFIELD.—Plans of 48 new houses proposed to be erected by Mr. T. Draper beyond Novell-road were approved by the U.D.C.

PLOMESHATE.—The R.D.C. has received notice from the East Suffolk C.C. stating that they propose to construct a bridge and retaining wall at Rendham at an estimated cost of £1,039.

PORTLAND.—The U.D.C. are to consider the formation of a housing scheme.

PRESTON.—The E.C. had decided to proceed with the erection of an elementary school on the land in Selborne-street. The Unemployment Grants Committee has approved the reconstruction of Crown-street and 11 other streets. The Borough Surveyor is authorised to obtain the tenders for the erection of 100 houses on the Delaware-street site.

RADSTOCK.—The architect is to prepare plans for the erection of 12 parlour-type houses on the West Hill site.

RAWMARSH.—The U.D.C. has recommended the Chairman and a Surveyor to interview the M.H. with regard to the building of 100 houses, and ask for sanction for the building of a further 20 houses. The M.H. has sanctioned the borrowing of £47,307 for the 100 houses.

REAR.—The Borough Surveyor has been instructed by the T.C. to prepare plans and estimates for the erection of a floral hall.

RIPON.—The appeal for subscriptions toward the estimated cost of extensions to the Ripon Cottage Hospital is being fairly well responded to. The estimated cost of the building and equipment is £5,600. The extensions to be carried out comprise: A block containing a men's ward of ten beds, a women's ward of ten beds, a children's ward of six cots, two large verandas, and a nurses' duty room.

ROCHDALE.—The Council have decided to make application to the M.H. for permission to erect a further batch of 60 to 70 houses on a part of the Tuff Hall estate. Plans have been approved for 190 of the 200 subsidy houses which have been sanctioned.

ROTHERHAM.—The E.C. has decided to extend the Badsley Moor-lane Council school to provide 250 places.

ROYTON.—Plans were submitted and approved by the E.C. for the proposed new school at Crompton House. A central school is now very much in evidence with the Committee, and plans have been prepared by the County Architect for a school with a total accommodation for 412 scholars.

SEGEFIELD.—The R.D.C. has approved plans for the erection of a masonic hall at Ferryhill, for the Rowlandson Lodge.

SHARDLOW.—The M.H. has held an inquiry concerning the water supply to an extensive portion of its area, including the parishes of Draycott, Ockbrook, Borrowash, Chellaston, Elvaston, Ambaston, Thulston, Aston, Shardlow, Breaston, &c. It was resolved to launch a scheme, subject to the approval of the M.H., to cost upwards of £41,000, by which the whole of the area concerned would be supplied from the Derwent Valley water scheme.

SHERINGHAM.—The U.D.C. has decided to build a public hall in Bridge-road, at a total cost of £7,000.

SOUTHSEA.—In connection with the Southsea Common scheme another £20,000 is to be spent this winter by the T.C.

SPILSBY.—The R.D.C. has received from the M.H. approval, conditionally, for the erection of 22 houses: Tynston St. Peters 6, Eastville (No. 2) 8, Stickford, Old Bellingbroke, West Fen, Friskney, Low Road, and Wainfleet St. Mary 2 each. The Council decided that tenders be invited.

STOKE-ON-TRENT.—The Sewage Works Committee recommend the approval of the sewage works scheme at Trent Vale. The purpose of the scheme is to deal with the Stoke and Fenton areas, and the estimated cost of the construction of the works is £117,806. The Committee also recommended that the scheme be adopted, and the M.H. be asked to sanction a loan for the work.

The Town Clerk has received sanction to borrow £329,000 for the erection of 700 houses on the Meir and Abbey sites, by the M.H. The T.C. recommended that application be made for sanction to the borrowing of £2,250 for the purchase of additional land for housing in the Northwood Park area. The Baths and Markets Committee are considering the erection of abattoirs.

STOURPORT.—The U.D.C. has acquired a housing site of 94 acres. Worcestershire Standing Joint Committee have purchased a site at Lickhill-road, for the erection of two police cottages.

SUN ERLAND.—The E.C. entered upon the preliminary stages of an expenditure involving nearly £250,000. They agreed to seek tenders for the erection of a new secondary school, the cost being £102,000, and to purchase land in Durham-road, near the Children's Hospital, as well as to enter upon the compulsory purchase of part of the old Sunderland football ground in Newcastle-road. On both the pieces of ground the Council proposed to build elementary schools.

SWANSEA.—The M.H. has agreed to the acceptance of the tender of £63,500 in respect of the Llanmallet sewerage scheme. The C.B. resolved that the Main Drainage Committee be urged to extend as soon as possible the sewer at Llangfelach-road, Treboeth, to enable the houses in the proposed ten new streets at Penlan estate, Treboeth, providing for building plots for about 600 new houses to be joined thereto instead of to cesspools or septic tanks. The C.B. are to apply to the M.H. for sanction to the loan of £75,540 to cover the cost of the work in the erection of a school.

The Home Secretary has approved plans for the Llanmallet Police Station prepared by the Borough Architect, and the C.B. has resolved that the Borough Architect be requested to obtain tenders for the erection of the Police Station. The Director of the E.C. reported that the B.E. had approved the plans submitted for the new school at Llanmallet, and the Council resolved that the Director and the Borough Architect obtain tenders for the erection of the school.

The Borough Estate Agent reported that the Earl of Jersey was prepared to sell the freehold of a piece of land at Winch Wen, Llanmallet, to the Corporation, for the purpose of the erection of a sub-station, and which the C.B. decided to purchase.

TOTTENHAM.—The U.D.C. passed plans: Thirteen houses, Elm Park-avenue; two houses as shops, St. Ann's-road; eight houses, Downhills-avenue, and for a road showing 12 houses; six houses, The Avenue; parish hall, St. Benetfink; five houses, Coniston-road; six houses, Boundary-road; United Methodist Church, The Avenue; preliminary plan of factory, Tiverton-road; four houses, Boundary-road.

TRALEE.—The U.D.C. adopted the Town Surveyor's scheme for main intercepting sewerage for the town, which would cost £29,582 19s. 10d., and a scheme for relaying the streets and surfacing in concrete at a cost of £45,911 6s. 4d.

WEETSLALE.—The R.D.C. has resolved to make application to the M.H. for permission to erect an additional 45 houses on the Seaton Burn site.

WEMBLEY.—The Surveyor has prepared a scheme for a western outfall sewer which is estimated to cost £51,841. It is suggested that the Surveyor should prepare plans for a town hall at the earliest possible moment, and meanwhile it is recommended to invite tenders for temporary office accommodation at the rear of the Council offices at a cost of about £1,000.

The Surveyor is to prepare plans for a caretaker's lodge at the cemetery and the erection of a chapel in under consideration. Plans passed: 38 houses, Bassingham-road and 12 in Danethorpe-road, for A. Holland.

WATLEY.—The U.D.C. has instructed the surveyor to prepare plans and estimates for construction of a glass shelter.

WOLVERHAMPTON.—Funds are being raised by the parishioners for a proposed new parish hall.

WOODHOUSE (SHEFFIELD).—The West Riding E.C. has decided to provide additional accommodation at the secondary school, at an estimated cost of £2,426.

WORCESTERSHIRE.—The C.E. are negotiating with school managers with regard to structural improvements at various non-provided schools throughout the county in accordance with recommendations made by the B.E.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames, up to London Bridge.			
	£	s.	d.
Best Stocks	4	3	6
Second Hand Stocks	3	13	6
Per 1,000, Delivered at London Goods Stations.			
	£	s.	d.
Flettons, at	2	13	3
King's Cross	2	13	3
Do, grooved for plaster	2	15	3
Do, Bullnose	3	8	3
Best Stourbridge Fire brick—			
2 1/2 in. 8 1/2 in. 3 in.	10	3	0
GLAZED BRICKS—			
Best White			
Ivory, and			
Salt Glazed			
Stretchers	21	10	0
Headers	21	0	0
Quoins, Bullnose and 4 in. Flats	28	0	0
Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.			

BREEZE CONCRETE SLABS.

Delivered London			
	£	s.	d.
1 in. per yd. super	2	4	
2 1/2 in. " "	2	4	
Thames Ballast	10	6	per yd.
Pit Sand	13	9	"
Thames Sand	14	6	"
Best Washed Sand	14	6	"
1 in. Shingle or Ferro-Concrete	12	9	"
1 in. " "	14	0	"
1 in. Broken Brick	11	6	"
Pan Breeze	7	6	"
Best Portland Cement, British Standard Specification, Test £2 13s 0d to £3 3s 6d, alongside at Vauxhall in 30-ton lots.			
Ferrocrete per ton extra on above	0	10	0
Super Cement (Waterproof)	4	8	0
Roman Cement	8	15	0
Parian Cement	5	15	0
Keene's Cement, White	5	15	0
" Pink	5	10	0
Plaster, Coarse, Pink	3	0	0
" Fine White	3	12	0
Sirapite, Coarse	3	9	0
" Finish	3	17	0
Grey Stone Lime	2	11	9
Chalk Lime	2	4	6
Best Ground Blue Lias Lime	2	4	6
Hair	32	0	0
Granite Clippings	1	12	0
NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 3d. if returned in good condition within three months, carr. pd.			
Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dp't.			

STONE.

BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube.	2	9 1/2
Do, do, delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube.	2	11 1/2
1 PORTLAND STONE—		
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube.	4	4
Do, do, delivered on road wagons at above stations, per ft. cube.	4	5
White basebed, 3d. per ft. cube extra.		
NOTE.—1d. per ft. cube extra for every foot over 20 ft. average, and 4d. beyond 30 ft.		

HORTON-YOOP STONE—		
Delivered at any Goods Station, London.		
Small random blocks, up to 10 ft. cube, P. ft. cb.	17	0
Random blocks from 10 ft. and over	27	0
Sawn two sides	27	0
Sawn three or four sides	32	0
YORK STONE, BLUE—Robin Hood Quality, Delivered at any Goods Station, London.		
6 in. sawn two sides landings to sizes (under 30 ft. super.)	5	6
6 in. rubbed two sides, ditto	6	0
3 in. sawn two sides slabs (random sizes)	2	3 1/2
2 in. to 2 1/2 in. sawn one side slabs (random sizes)	1	6 1/2
1 1/2 in. to 2 in. ditto, ditto	1	4
HARD YORK—		
Delivered at any Goods Station, London.		
Scrapped random blocks	6	3
6 in. sawn two sides landing to sizes (under 40 ft. super.)	5	1 1/2
6 in. rubbed two sides ditto	6	1 1/2
4 in. sawn two sides slabs (random sizes)	2	10
3 in. ditto	2	1 1/2
2 in. self-faced random flags	9	0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Lills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 x 11	£32 0	3 x 3	£23 0
4 x 9	28 0	3 x 11	28 0
4 x 8	26 0	2 x 11	28 0
4 x 7	25 0	3 x 9	25 0
3 x 8	24 0	2 1/2 x 9	25 0
3 x 7	23 0	3 x 4 1/2	23 0
2 1/2 x 7	22 0	3 x 4	23 0

PLANED BOARDS.

1 x 11	£32 0	1 x 9	£30 0
--------	-------	-------	-------

PLAIN EDGE FLOORING.

Inches.	per sq. inches.	per sq. inches.
1 1/2	21/-	32/6
1 1/4	23/-	37/6
1	25/-	

TONGUED AND GROOVED FLOORING.

Inches.	per sq. inches.	Inches.	per sq. inches.
1 1/2	25/-	1 1/2	16/6
1 1/4	32/6	1 1/4	20/-
1 1/2	37/6	1 1/2	25/-

MATCHINGS (BEST).

Inches.	per sq. inches.	Inches.	per sq. inches.
1 1/2	25/-	1 1/2	16/6
1 1/4	32/6	1 1/4	20/-
1 1/2	37/6	1 1/2	25/-

BATTENS.

2 1/2 x 2	2 6 per 100 ft.
-----------	-----------------

SAWN LATHS.

Per bundle	0 2 4
------------	-------

AND UP THICK.

Dry Austrian Wainscot, per ft. cube	0 14 0 to 0 13 0
Dry American and/or Japanese Figured Oak, ft. cube	0 15 0
Dry American and/or Japanese Plain Oak, ft. cube	0 11 0 to 0 13 0
Dry sq. edged Honduras Mahogany, ft. cube	0 16 0 to 0 13 0
Dry Log cut Honduras Mahogany, ft. cube	0 18 0 to 1 1 0
Dry Cuba Mahogany, ft. cube	1 4 0 to 1 10 0
Dry Teak, ft. cube	0 13 0 to 0 15 0
Dry American Whitewood, ft. cube	0 11 0 to 0 14 0
Best Scotch glue, per cwt.	4 10 0 to 4 7 0
Liquid Glue, per cwt.	4 7 0 to 5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc carried paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

4 1/2 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 13 0
20 by 10	25 12 6		

TILES.

Best machine-made tiles from Brosely or Staffordshire district	5 12 6
Ditto hand-made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen)	0 9 6
Hand-made	0 9 6
Machine-made	0 9 0

METALS.

JOISTS, GIRLERS, &c., TO LONDON STATION PER TON—	£ s. d.
R.S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.

Diameter.	£ s. d.	Diameter.	£ s. d.
1/2 in.	12 10 0	1/2 in. to 1 in.	11 5 0
1 in.	11 10 0	1 in. to 2 1/2 in.	11 0 0

WROUGHT-IRON TUBES AND FITTINGS—(Discount off List for lot of not less than £7 net value delivered direct from Works, 2 1/2 per cent. less above gross discounts, carriage forward if sent from London Stocks.)

Tubes.	Fittings.	Flanges.
Sizes.	Under.	Under.
Black Gas 1/2 to 1 1/2	47 1/2 to 50 1/2	37 1/2 to 40 1/2
Blue Water 1/2 to 1 1/2	42 1/2 to 45 1/2	32 1/2 to 35 1/2
Red Steam 1/2 to 1 1/2	37 1/2 to 40 1/2	27 1/2 to 30 1/2
Galv'd Gas 1/2 to 1 1/2	37 1/2 to 40 1/2	27 1/2 to 30 1/2
Water 3/4 to 1 1/2	32 1/2 to 35 1/2	22 1/2 to 25 1/2
Steam 2 1/2 to 3 1/2	27 1/2 to 30 1/2	17 1/2 to 20 1/2

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Nozzles.	Angles and Stop Ends.
3 in.	1 1/2	1 1/2	3 1/2
3 1/2 in.	1 5/8	1 5/8	3 1/2
4 in.	1 7/8	1 7/8	3 1/2
4 1/2 in.	1 10/16	1 10/16	4 1/2
5 in.	1 11/8	1 11/8	5 1/2

O.G. GUTTERS.

3 in.	1 7/8	1 7/8	3 1/2
3 1/2 in.	1 7/8	1 7/8	3 1/2
4 in.	1 8/8	1 8/8	3 1/2
4 1/2 in.	1 10/16	1 10/16	4 1/2
5 in.	1 11/8	1 11/8	5 1/2

RAIN-WATER PIPES, &c.

Per yd. in 6 ft. lengths.	Pipe.	Bends, stock Branches, angles, stock angles.
2 in. plain	1 9/16	1 2/4
2 1/2 in. " "	1 11/16	1 4/4
3 in. " "	2 1/4	1 8/4
3 1/2 in. " "	2 10/16	2 2/4
4 in. " "	3 3/8	2 4/4

L.C.C. COATED SOIL PIPES—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Pipe.	Bends, stock Branches, angles, stock angles.
2 in. in. per yd. in 6 ft. plain	2 11	2 3
2 1/2 in. " "	3 5	3 5
3 in. " "	4 1	4 1
3 1/2 in. " "	4 5	4 5
4 in. " "	4 11	4 11

L.C.C. COATED DRAIN PIPES—London Prices ex Works.

Per yd. in 6 ft. lengths.	Pipe.	Bends, stock Branches, angles, stock angles.
3 in. in. per yd. in 6 ft. plain	4 3	5 9
4 in. " "	6 3	6 11
5 in. " "	7 10	12 0
6 in. " "	9 6	15 0

Gasken for jointing 38/6 per cwt.

IRON—

Common Bars	£ s. d.	Staffordshire Crown Bars—good merchant quality	£ s. d.
	13 10 0		14 10 0
			14 5 0
			15 5 0

Staffordshire "Marked Bars"	£ s. d.	£
Mild Steel Bars	16 10 0	16 10
Steel Bars, Ferro-Concrete quality, basis price	11 0 0	12 0
Hoop iron, basis price	16 0 0	17 0
Galvanised	31 0 0	32 0
Soft Steel Sheets, Black—	£ s. d.	£
Ordinary sizes to 20 g.	13 10 0	14 10
" " 24 g.	14 10 0	15 10
" " 26 g.	16 10 0	17 10
Sheets Flat Best Soft Steel, C.I. & C.A. quality—	£ s. d.	£
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	19 10 0	21 10
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g.	21 10 0	22 10
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 24 g.	21 10 0	25 10
Flat and Galvanised Corrugated Sheets—	£ s. d.	£
Ordinary sizes, 6 ft. to 9 ft. to 20 g. and 24 g.	18 10 0	19 10
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g.	19 0 0	20 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	22 0 0	23 0
Sheets Galvanised Flat, Best quality—	£ s. d.	£
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	22 10 0	23 10
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0	26 10
Best Soft Steel Sheets, 26 g.	27 0 0	27 0
Cut Nails, 3 in. to 6 in. (under 3 in. usual trade extras.)	19 10 0	21 0
METAL WINDPOWS.—Standard sizes, suitable for complete houses, including all fittings, painting, coats, and delivery to job, average price ab	£ s. d.	£
1s. 4d. to 1s. 7d. per foot super.		

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	52 10
Pipe in coils	54 0
Soil Pipe	56 0
Compo pipe	57 0
NOTE.—Country delivery, 30s. per ton extra; 10s. up 3 cwt., 3s. per cwt. extra, and over 3 cwt. and under 10 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.	
Old lead, ex London area, at Mills	37 10 0
Do., ex country, carriage forward	38 10 0

COPPER.

Seamless Copper tubes (basis)	per lb.
Strong sheet	" 2
Thin	" 2
Copper nails	" 2
Copper wire	" 2

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BID COOKS.

IRON.

1 1/2 in. 1 in. 1 1/2 in. 1 1/2 in. 2 in.

29/- 45/- 76/- 153/- 246/- 510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COOKS.

UNIONS.

1 1/2 in. 1 in. 1 1/2 in. 1 1/2 in. 2 in.

41/6 62/- 92/- 174/- 300/- 538/- per doz.

NEW RIVER PATTERN SCREW DOWN MAIN FIREST.

IRON.

1 1/2 in. 1 in. 1 1/2 in. 1 1/2 in. 2 in.

39/6 60/- 116/6 per doz.

CAPS AND SCREWS.

1 1/2 in. 1 in. 1 1/2 in. 1 1/2 in. 2 in.

7/6 10/- 14/- 23/- 30/- 42/- per doz.

DOUBLE NUT BOILER SCREWS.

1 1/2 in. 1 in. 1 1/2 in. 1 1/2 in. 2 in.

7/6 11/- 17/- 29/- 36/- 63/- per doz.

BRASS SLEEVES.

1 1/2 in. 1 in. 1 1/2 in. 1 1/2 in. 2 in.

10/- 12/- 20/- 24/- 31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES.

1 1/2 in. 1 in. 1 1/2 in. 1 1/2 in. 2 in.

35/- 56/- 98/- 162/- 228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH BRASS CREAM.

IRON.

1 1/2 in. 1 in. 1 1/2 in. 1 1/2 in. 2 in.

8 lbs. S. traps 33/- 41/- 56/- 101/- per doz.

8 lbs. S. traps 35/- 45/- 66/- 126/- per doz



CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	s. d.
Add if in clay	" "	1 0
Add for every additional depth of 6 ft.	" "	0 6
Planking and strutting to trenches	per foot super	0 5
Do to sides of excavation, including shoring	" "	1 0

CONCRETOR.

Portland cement concrete in foundation 1 to 6	per yard cube	32 0
Add if in underpinning in short lengths	" "	7 0
Add if in floors 6 in. thick	" "	3 3
Add if in beams	" "	3 9
Add if aggregate 1, 2, 4	" "	10 0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	2 6

BRICKLAYER.

Reduced brickwork in lime mortar and Fletton bricks	per rod	£ s. d.
Add if in stocks	" "	30 0 0
Add if in Staffordshire blues	" "	7 10 0
Add if in Portland cement and sand	" "	22 0 0
	" "	1 10 0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0 0 1½
--	---------------	--------

POINTING.

Neat flat struck or weathered joint	" "	0 0 3
-------------------------------------	-----	-------

ARCHES.

Extra only to the price of ordinary brickwork:—		
Fair external in half brick rings	" "	0 0 10
Axed in stocks	" "	0 1 9
Rubbed and gauged jointed in putty camber or segmental	" "	0 6 0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	" "	0 1 0
Setting ordinary register grates and stoves	each	1 0 0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	" "	4 15 0

ASPHALTER.

Half-inch horizontal damp course	per yard sup.	s. d.
Three-quarter-inch vertical damp course	" "	4 3
¾ inch on flats in two thicknesses	" "	8 6
Angle fillet	per foot run	6 3
Skirting and fillet 6 in. high	" "	0 3
	" "	1 2

MASON.

York stone templates fixed	per foot cube	13 0
York stone sills fixed	" "	22 0
Bath stone and all labour fixed	" "	10 6
Portland stone fixed	" "	20 0

SLATER.

Welsh 16 in. x 8 in. 3 in. lap, including nails	per square	72 9
Do. 20 in. x 10 in. Do. Do.	" "	80 9
Do. 24 in. x 12 in. Do. Do.	" "	90 0

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	5 0
Do. joists	" "	5 6
Do. roofs, floors and partitions	" "	6 0
Do. trusses	" "	8 6

Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-
Flat centering for concrete floor, including struts or hangers	" "				50 0
Do. to beams	per ft. sup.				1 0
Centres for arches	" "				1 6
Gutter boards and bearers	" "				1 0

FLOORING.

Deal-edges shot	per sq.	1	1½	1¾	
Do. tongued and grooved	"	44/6	53/-	60/6	
Do. matchings	"	49/-	57/6	65/-	
Moulded skirting, including backings and grounds	per ft. sup.	45/-	51/-		
		1/6	1/9	2/0	2/6

SASHES AND FRAMES.

One-and-a-half moulded sashes or casements	per foot super	s. d.
Two Do. Do. Do.	" "	1 10
Add for fitting and fixing	" "	2 1
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights; average size	" "	0 3

DOORS.

Two-panel square framed	per ft. sup.	1½" 2/1	1¾" 2/4	2" 2/6
Four-panel Do.	" "	2/5	2/8	2/11
Two-panel moulded both sides	" "	2/8	2/11	3/2
Four-panel Do.	" "	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

Deal wrot moulded and rebated	 per foot cube	1'	1½'	1½'
Plain deal jamb linings framed	 per ft. sup.	1/7	1/8	1/10
Deal shelves and bearers	 "	1/4	1/6	1/4
Add if cross tongued	 "	2d.	2d.	2d.

STAIRCASES.

Deal treads and risers in and including rough brackets	1" 2/1	1½" 2/4	2" 2/9	2½" —	3" —
Deal strings wrot on both sides and framed	1/8	2/	2/2	2/8	—

Housings for steps and risers	each	0 11
Deal balusters, 1 in. x 1½ in.	per ft. run	0 9
Mahogany handrail: average 3 in. x 3 in.	" "	6 1
Add if ramped	" "	11 10
Add if wreathed	" "	23 3

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8d.	Rim locks	2/-
Sash fasteners	11d.	Mortice locks	4/-
Casement fasteners	1/5	Patent spring hinges and letting in to floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

Rolled steel joists	per cwt.	18
Plain compound girders	" "	19
Do. stanchions	" "	21
In roof work	" "	27

RAIN-WATER GOODS.

Half-round plain rebated joints	ft. run	3" 1/6	4" 1/9	5" 2/-	6" 2/6
Ogee Do.	" "	1/9	2/-	2/6	3/6
Rain-water pipes with ears	" "	1/9	2/7		
Extra for shoes and bends	each	4/4	5/11		
Do. stopped ends	" "	1/11	2/4½	3/7	4/4
Do. nozzles for inlets	" "	2/2	2/7	3/10	4/4

PLUMBER.

Milled lead and laying in flashings and gutters	per cwt.	67
Do. Do. in flats	" "	66
Extra labour and solder in coated cesspools	each	6
Weld joint	per ft. run	0
Soldered seam	" "	1
Copper nailing	" "	0

Drawn lead waste per ft. run	1/2	1/9	2/0	3/4	4/0
Do. service	1/8	2/2	2/7	3/10	
Do. soil	" "	" "	" "	" "	6/4
Bends in lead pipe	each				3/3
Soldered stop ends	" "	1/2	1/8	2/1	2/10
Red lead joints	" "	11d.	1/-	1/3	1/11
Wiped soldered joints	" "	2/10	3/6	4/-	4/11
Lead traps and cleaning screws	" "				14/7
Bib cocks and joints	" "	6/4	9/7	15/4	41/-
Stop cocks and joints	" "	15/4	17/2	25/8	64/-

PLASTERER.

Render, float and set in lime and hair	per yard sup.	s. d.
Do. Do. Sirapite	" "	2 2
Do. Do. Keen's	" "	3 3
Add sawn lathing	" "	1 1
Add metal lathing	" "	2 0
Portland cement screed	" "	2 2
Do. plain face	" "	3 3
Mouldings in plaster	per l girth	0 0
One-and-a-half granolithic pavings	per yard sup.	5 6

GLAZIER.

21 oz. sheet plain	per foot sup.	0 0
26 oz. Do.	" "	1 0
Obscured sheet	" "	1 1
½ in. rolled plate	" "	0 9
½ in. rough rolled or cast plate	" "	0 10
½ in. wired cast plate	" "	1 1

PAINTER.

Preparing and distempering, 2 coats	per yard sup.	0 0
Knotting and priming	" "	0 0
Plain painting 1 coat	" "	0 0
Do. 2 coats	" "	1 1
Do. 3 coats	" "	1 1
Do. 4 coats	" "	2 2
Graining	" "	2 2
Varnishing twice	" "	1 1
Sizing	" "	0 0
Flatting	" "	0 0
Enamel	" "	1 1
Wax polishing	per foot sup.	0 0
French polishing	" "	1 1
Preparing for and hanging paper	per piece 2/- to 4/-	

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright. Prices include both materials and labour.

TENDERS

Applications for insertion under this heading should be made to "The Editor," and must reach him not later than Tuesday evening.

Notes accepted. † Denotes provisionally accepted. Notes recommended for acceptance. Notes accepted subject to modification.

NICK-LE-STREET.—Forty-six houses at Clifton, for the Corporation. Plans by Mr. G. H. surveyor:—

Bull & Son..... £22,897

STON.—Twenty-three houses in Clifford-terrace, Betley-road, and Central-avenue, for the Mr. E. A. Bush, surveyor:—

R. Carr, Nottingham..... £11,492 1 6

H. Brough, Beeston..... 10,962 14 0

Rice, Chilwell, Notts..... 10,075 0 0

R. H. Hooton, Beeston..... 9,885 0 0

T. Rice, Beeston..... 9,789 0 0

IGHTON.—Steelwork cooling pond at Southwick, C.B.:—

Identified Bar and Concrete Engineering Co., Ltd..... £3,583

STOL.—198 houses, for T.C.:—

John Knox—152 non-parlour houses.

Malone—26 non-parlour houses.

W. Norris—12 parlour houses.

E. Green—eight parlour houses.

LSLE.—External painting of (a) 74 houses at a City, Stanwix; (b) 32 at Boustead's Grassing; at Denton-street, for the T.C. Mr. H. C. Marks, Engineer and Surveyor:—

Warruthers & Kent, Carlisle..... (a) £135 10

Norris & Scott, Carlisle..... (b) 58 0

..... (c) 42 0

AN.—Repairs to the County Home, for the Board:—

Power, Cavan..... £120

STER.—Alterations in the Girls' School, for C.:—

Lellan Bros., Chester..... £253

STER.—Repairs to premises, Nos. 22, 24, 26, 32, and 34, Oulton-place, for the T.C.:—

Williams, Chester..... £183

ORLEY.—Pavilion in Astley Park, for T.C.:—

Fairclough & Sons.

ORLEY.—Special Subjects Centre at Duke-er E.C.:—

Hampson, Chorley.

YDON.—Sundry works of cleaning, painting, pairs to 25 cottages on the Sewage Farm, for the

Stevenson, Croydon..... £1,341 15 6

Mansell, Croydon..... 860 0 0

Atch. Speechley & Co.,

Hampstead..... 615 16 0

J. Moore, Hornsey..... 606 10 0

Daniels & Son, Streatham..... 578 7 11

R. Hozer, Ltd., Croydon..... 483 11 0

M. Bleach & Co., Norbury..... 471 14 0

E. Everett & Sons, Croydon..... 414 10 0

Singapore, South Norwood..... 391 11 0

Turnand & Pickett, Wallington..... 334 16 0

William Palmer & Sons, Clerk-ell..... 311 9 0

YDON.—Sub-station in Enmore-road, for the

ace & Marsh, Ltd., Waddon..... £845 0

J. Saunders, Thornton Heath..... 835 0

Mettt & Steel, Ltd., Thornton

Heath..... 797 5

H. Smith, Croydon..... 715 0

YDON.—Sub-station in Croham-road, for the

ace & Marsh, Ltd., Waddon..... £190 0

H. Smith, Croydon..... 182 0

Mettt & Steel, Ltd., Thornton

Heath..... 172 1

YDON.—Two cottages, 81 and 82, Wilford-road, C.B.:—

Martin, Croydon..... £820

YDON.—Sub-station in Wellesley-road, for the

ace & Marsh, Ltd., Waddon..... £489 0

H. Smith, Croydon..... 481 0

J. Saunders, Thornton Heath..... 470 0

Mettt & Steel, Ltd., Thornton

Heath..... 172 10

LINGTON.—Administrative block at the new, for the Executive Building Committee of

Clington War Memorial Hospital Committee:—

Dougill & Son, Darlington.

KEY.—Repairs to the Courthouse, for the C.:—

theth Kilcawley, Enniscrone £1,389 9 10

J. Moloney, Ballina..... 1,175 18 6

omas Kennedy, Enniscrone..... 810 0 0

GRINSTEAD.—Thirty cottages, for the on the Ashurstwood site (14 parlour and

parlour). Mr. E. A. Chilton, A.R.I.B.A., t. Town Hall Chambers, Uckfield:—

Bodde, East Grinstead..... £17,420

Waters, Forest Row..... 16,400

Bosker, Horsham..... 15,945

H. Bartlett, Wivesfield Green..... 14,910

EASTRY.—Sanitary work and improvements at the Lower House, for the R.D.C.:—

*Gillman Bros..... £389 17 4

Subject to M.H. approval.

FULBOURN.—New wards, assistant medical officer's house, and additions to existing Mental Hospital, for the Committee. Mr. A. P. MacAlister, F.R.I.B.A., architect, 20, St. Andrew's-street, Cambridge. Quantities by Adam K. Ball & Son, 7, King's Bench Walk, Inner Temple, E.C.4:—

Miskin & Sons, St. Albans..... £31,419 0 0

Pitcher Construction Co.,

London..... 27,999 0 0

J. Smith & Co., London..... 26,713 0 0

W. H. Hunt, Cambridge..... 25,430 0 0

Bovis, Ltd., London..... 25,385 0 0

Kidman & Sons, Cambridge..... 25,043 0 0

Johnson & Bailey, Cambridge..... 24,719 14 4

Thackray & Co., Huntingdon..... 24,637 8 0

Architect's estimate..... 30,000 0 0

GLASGOW.—Several works in connection with the erection of the operating theatre, &c., at Robroy-ston Hospital, for the T.C.:—

*Matthew Henderson, Ltd..... £3,440 0 1

GLASSHOUGHTON.—Extensions to the Houghton Hotel, for Messrs. John Smith's Tadcaster Brewery, Ltd. Messrs. Garside & Pennington, architects, Pontefract:—

*Wm. Horner, Pontefract.

GLOSSOP.—Repairs at Hadfield Council School, for E.C.:—

*T. Aldous & Son.

GOSPORT.—Erection of Central School, for E.C.:—

*J. Hunt, Ltd..... £6,678 10

HAILSHAM.—Eight houses on the White site, for the R.D.C.:—

*A. E. Mason, Hailsham..... £4,060

HARPENDEN.—Alterations to a building, for use as a mortuary, for the U.D.C.:—

*A. Harris & Son..... £128 10

HARROGATE.—Thirty houses on the Bilton Grange estate. Mr. C. E. Rivers, Borough Engineer and Surveyor. Quantities by Mr. C. E. Rivers:—

Bricklayer, &c.:—

*W. Birch & Son, York..... £6,944 15 0

Joiner:—

*J. Allen & Son, Harrogate..... 3,479 17 3

Plasterer:—

*J. Tomlinson, Harrogate..... (a) 692 10 0

*J. & H. Barker, Harrogate..... (a) 579 9 0

Slater:—

*Luty & Son, Harrogate..... (a) 443 15 0

*Wright Bros., Harrogate..... (a) 516 6 0

Painter:—

*Summerscales & Waterhouse,

Halifax..... 496 18 2

Ferrying:—

*J. W. Taylor, Harrogate..... 115 0 0

(a Apportioned.)

HEMSWORTH.—112 non-parlour type houses at Wortley-place estate, Barnsley-road, for the U.D.C. Mr. A. Wright, surveyor:—

*J. Stothard, Cudworth, near Barnsley £56,084

HORSTED KEYNES.—Oak gates, dwarf concrete wall, and oak paling fencing, with concrete posts, at Holy Well Pumping Station, in Keyford-lane, for the Mid-Sussex Joint Water Board. Mr. F. Martin, Engineer, Waterworks Offices, Bolto-road, Haywards Heath:—

E. West, Burgess Hill..... £275

*H. White, Haywards Heath..... 246

ILFORD.—Heating apparatus at the isolation hospital, for U.D.C.:—

*Calley, Meikle & Co..... £1,801

KIDDERMINSTER.—Classrooms at Kidderminster High School, for Worcestershire C.C.:—

*E. Oakley, Stourport..... £922

LEEDS.—Extensions to the premises of *The Yorkshire Post*, in Basinghall-street, for the Conservative Newspaper Co., Ltd. Messrs. Chorley, Gribbin & Foggitt, architects, Park-place:—

*General Contractor—Saml. Flockton, Leeds.

*Steelwork—Saml. Butler & Co., Ltd., Stanningley.

*Asphalter—Tunstalls, Rock Asphalte Co., Ltd., Leeds.

LEEDS.—Reconstruction of the Medical School in Park-street. Messrs. A. & F. Mosley, architects, 6, Wormald-row:—

*Wm. Irwin & Co., Ltd.

LEEDS.—500 houses on the York-road site, for the T.C.:—

*A. Braithwaite & Co.:—

A2 type..... £419 3 3 each

A3 type..... 460 0 0 each

LONDON.—Thirty-two tenements on the Parmer-street site, for the Bethnal Green B.C. Mr. E. C. P. Monson, F.R.I.B.A., architect:—

H. Knight & Son..... £31,418

C. P. Roberts & Co., Ltd..... 30,100

S. E. Moss..... 28,151

W. Lawrence & Son, Ltd..... 27,972

Allen Fairhead & Sons, Ltd..... 27,923

Rice & Son..... 27,816

Bovis, Ltd..... 27,598

Patman & Fotheringham, Ltd..... 27,372

W. Jones & Sons, Ltd..... 27,221

A. Monk..... 26,730

*W. Simms..... 25,607

All of London.

LONDON.—Tenders accepted for August by H.M. Office of Works:—

Building Works: Acton, Ministry of Pensions Office

—Urinal accommodation: Dent & Hellyer, Ltd., London, W.C. Beauchief (Sheffield) Telephone Exchange—Plasterer: Chadwick & Son, Sheffield.

Bermundsey Employment Exchange—Fencing: W. Turner, Riley & Co., Ltd., London, S.W. Flooring:

Sieghart Fireproof Floor Co., Ltd., London, W.C. Glazing: George Farniloe & Sons, Ltd., London, E.C.

Joinery: The Metropolitan Joinery Co., Ltd., London, S.W. Paving, Stairs and Landings: Malcolm Mac-

Leod & Co., Ltd., London, E.C. Plumbing, &c.: W. H. Gascoigne & Co., London, W. Railing (W.I.):

T. W. Palmer & Co., London, S.W. Tar Paving: Permaite, Ltd., London, E. Birkdale Telephone

Exchange—Asphalter: Val de Travers Asphalte

Paving Co., Ltd., London, E.C. Glazier: G. W. Wagdin, Ltd., Liverpool. Ironfounder: McIntyre &

Sons, Ltd., Liverpool. Slater and Plasterer: Thomas Southworth & Sons, Southport. Steps, Landings, &c.:

Liverpool Artificial Stone Co., Ltd., Liverpool. Burgh

Heath Telephone Exchange—Asphalte: Lawford & Co., London, E. Steelwork: The Standard Steel Co.,

Ltd., Croydon. Chatham P.O.—Alterations, &c.: C. E. Skinner & Son, Ltd., Chatham. Douglas

(Glasgow) Telephone Exchange—Alterations, &c.: William Shaw & Son, Ltd., Glasgow. Exeter Tele-

phone Exchange—Alterations, &c.: W. F. Drew, Ltd., Chalford. Kew Gardens. Temperate House

Annexe—Plasterer: Thorn & Co., Sutton. Linney

Head (Pembroke-shire) Coastguard Station—Alter-

ations to Cottages: S. G. Thomas, Pembroke. Llantwit

Major (Glam)—Erection of Coastguard Cottages, &c.:

W. A. Jones, Llantwit Major. Maclesfield P.O., &c.:

—Stonework: The Stancliffe Estates Co., Ltd.,

Matlock. Maidstone P.O., &c.—Erection: G. E. Wallis & Sons, Ltd., Maidstone. Manchester Parcel

Sorting Office—Alterations: J. Gerrard & Sons, Ltd.,

Manchester. Marks Tey Repeater Station—Erection

of Hut, &c.: F. Hutton & Son, Colchester. Peter-

borough—Maintenance work: J. Guttridge & Sons,

Peterborough. Portwrinkle (Cornwall)—Erection of

Coastguard Cottages, &c.: W. H. Pitt, Plymouth.

Richmond Park—Erection of Cottage: Linpus &

Son, Kingston-on-Thames. Richmond-terrace, &c.:

W.S.—Erection of Buildings in Gardens: A. Roberts &

Co., Ltd., London, W. St. Albans Wireless Station—

Erection: Tacchi & Burgess, St. Albans. Sunderland,

Borough-road Employment Exchange—Alterations,

&c.: Randle & Co., Ltd., Sunderland. Wellington

(Salop) P.O., &c.—Stonework: Grinshill Stone

Quarries, Ltd., Grinshill.

MALTON.—New infirmary and hospital on a site in

Middlecave-road. Mr. J. E. Bladen, architect, Liver-

pool:—

*Lyon, Malton.

MARTLEY.—For (a) 22 houses at Clifton and

Astley, and (b) 10 at Great Whitley, for the U.D.C.:—

(a) *T. J. Lockyer.

(b) *H. Miller.

NEWBURY.—Thirty-two houses on the site abutting on St. George's-road, for the T.C.:—

W. Benham..... £14,404

W. Mason, Leeds..... 13,440

J. Smallbone, Stratley..... 13,755

J. Gibbs, Hungerford..... 13,026

Cooke Bros..... 12,108

R. A. Wickens..... 11,861

*Hoskings Bros..... 11,672

Surveyor's estimate..... 12,480

NEWCASTLE-UPON-TYNE.—Electric lighting 300 houses on the High Heaton estate, for the T.C.:—

H. W. Anderson, Gosforth..... £2,600 0 0

Campbell & Isherwood, New-

castle..... 2,586 7 6

Robson & Coleman, Newcastle..... 2,800 0 0

H. A. Davie, Ltd., Sunderland..... 2,212 15 9

F. L. Gray, Whitley Bay..... 2,011 12 6

H. W. Aldrich, Gateshead..... 2,000 0 0

G. W. Dodds & Co., Wallsend..... 1,980 0 0

Falconer, Cross & Co., New-

castle..... 1,938 6 0

Wilson & Ridley, Newcastle..... 1,812 9 3

Gray Bros. (Newcastle), Ltd.,

Newcastle..... 1,755 15 0

J. P. Ward & Co., Newcastle..... 1,615 9 0

Fletcher Bros., Newcastle..... 1,611 6 0

Jesmond Electrical Co., New

PAIGNTON.—Boundary wall at the Preston housing estate, for the U.D.C. :—
 *Caunter Bros.

PORTSMOUTH.—Additions at 18-20, Fratton-road. Mr. A. J. Lewis, Architect :—
 *John Lay & Co., Portsmouth.

PORTSMOUTH.—Alterations at 40, Fratton-road, for Mr. Gordon Cole. Messrs. Thomas & Wilkins, architects :—

Jno. Croad	£695
John Lay & Co.	668
John Harding	419
A. E. Porter & Sons	411
*F. J. Privett	392

PORTSMOUTH.—Lock-up shops and garages at Highland-road. Mr. J. W. Walmisley, architect, Southsea :—

F. Corke & Co.	£4,852	0	0
A. E. Porter & Son	4,593	0	0
Light Bros. & Flowers	4,569	0	0
F. Bevis, Ltd.	4,525	0	0
F. H. Jordan, Ltd.	4,500	0	0
John Lay & Co.	4,489	0	0
C. E. Brown	4,482	15	6
H. Jones & Son	4,469	0	0
Jno. Croad	4,356	0	0
Frank J. Privett	4,287	0	0
Sam'l. Salter	4,285	0	0
*E. & A. Springings	4,040	0	0

RAWMARSH.—Public baths, for the U.D.C. :—
 *Building & Engineering Co., Ltd. £19,645

ROTHERHAM.—Thirty-four houses on the East Dene estate, for the C.B. Mr. C. A. Broadhead, architect, Devonshire House, Moorgate :—

Saul & Sons, Ltd., Rotherham	£15,555
A. Thompson, Rotherham	15,446
W. & F. Blair, Rotherham	14,800
*Baldwin & Co., Rotherham	14,260

STOKE.—Conversion of 34 privies and four pails in Trentham area, for T.C. :—

*H. Cooke, Longton	£626	10
--------------------------	------	----

TULLAMORE.—Reconstruction of the County Courthouse, for the Offaly C.C. Mr. MacNamara, architect, Dublin :—

Walter O'Flaherty, Galway ..	£46,594	0	0
James Beckett, Ltd., Ringsend ..	43,275	0	0
Kinlan & Co., Dublin	38,000	0	0
Patrick Sheridan, Newbridge ..	37,976	0	0
J. F. Keating & Sons, Ltd.	36,569	0	0
C. Doyle, Mullingar	36,401	0	6
J. R. Thompson, Dublin	36,226	0	0
James Wynne & Co., Dundalk ..	35,734	0	0
MacNally & Co., Ltd., Dublin ..	33,950	0	0
*James Fleming, Newry	32,139	8	2

WANDSWORTH.—Public library at Earlsfield, for the B.G. :—

†H. Somerset & Son, Ltd., Clapham ..	£9,193
--------------------------------------	--------

WARSOP.—Workshop and store at the depot, Burns-lane, for the U.D.C. :—
 *A. Eastwood & Sons, Warsop

£612

WOLVERHAMPTON.—New brick gable and wall to the old battery room at the Commercial-road works, for the C.B. :—
 *A. M. Griffiths

£405

WORCESTER.—Repairs to Shirehall and Judges' lodgings, for C.C. :—
 *Paine & Sanders

£519	10
------	----

A CORRECTION.

With regard to the result of the tender for rebuilding 15-17, Praed-street, W.1, for Messrs. Curtis's Furnishing Stores, Ltd., the price of the accepted tender submitted by Messrs. G. Godson & Sons, Ltd., of Kilburn-lane, is £13,632 and not £16,323, as stated in our last issue.

J. J. ETRIDGE, J^r. Ltd

SLATING AND TILING

SLATE MERCHANTS
CONTRACTORS.

Inspections and Reports made on
OLD OR FAULTY ROOFS
 in any part of the country.

Telephone: Bishopsgate 1944/5, or write.

Bethnal Green Slate Works,
 BETHNAL GREEN, LONDON, E.

BEST SEASONED

OAK FLOORING

AUSTRIAN
RUSSIAN
JAPANESE

PREPARATION TO ANY SECTION
 CAN BE UNDERTAKEN AT ONCE

SYDNEY **PRIDAY & S^o**

WAINSCOT OAK MERCHANTS (EST. 1888)

Phone
 CLISSOLD
 6254
 (2 lines)

OAK WHARF
 RAVENSDALE ROAD
 LONDON. N.16.

FITZPATRICK & S^o

Masons and Paviers,

455, OLD FORD ROAD, BOW,
 Phone: EAST 4908.

Granite Setts and Kerb (redressed and hand), York Paving Spur Stones, G Chippings, and Granolithic and Sett Pav

HIGH-CLASS

FLOORING

of every description in
 WOOD BLOCKS. PARQUET
 SEASONED T. & G. WAINSCOT
 TEAK AND MAPLE.
 FACTORY AND ROADWAY PA

STEVENS & ADAIR

LIMITED

VICTORIA MILL, POINT PLEASANT
 WANDSWORTH, S.W.18.
 (Phones: Putney 1700 & 1701)

School & Hospital Stoves

MAKERS OF

WRIGHT'S IMPROVED and also SHORLAND PATENT
 WARM AIR VENTILATING PATTERNS.

GEO. WRIGHT (LONDON)
 19, Newman St., Oxford St., London, W.1
 Burton Weir Works, Rotherham.



PARQUET & WOOD-BLOCK FLOORING supplied and fixed in any locality.
 Post, or Phone (Park 1885), Particulars of requirements to
TURPIN'S PARQUET FLOORING CO.,
 25, NOTTING HILL GATE,
 LONDON, W.11.
 ESTD. 1866

Established 1899. Estimates Free.

LINO-LIKE JOINTLESS COMPOSITION FLOORING MANUFACTURER, Wall and Floor Tiling Contractor. Terrazzo, Roman and Ceramic Mosaic Pavior.

O. TRAMONTINI, 551, LONDON ROAD, SOUTHEND-ON-SEA

J. GLIKSTEN & SON

LIMITED

Specialities in
SEASONED
HARDWOODS

MAHOGANY WALNUT
 JAPANESE, AMERICAN and
 WAINSCOT OAK, TEAK,
 WHITEWOOD, &c.

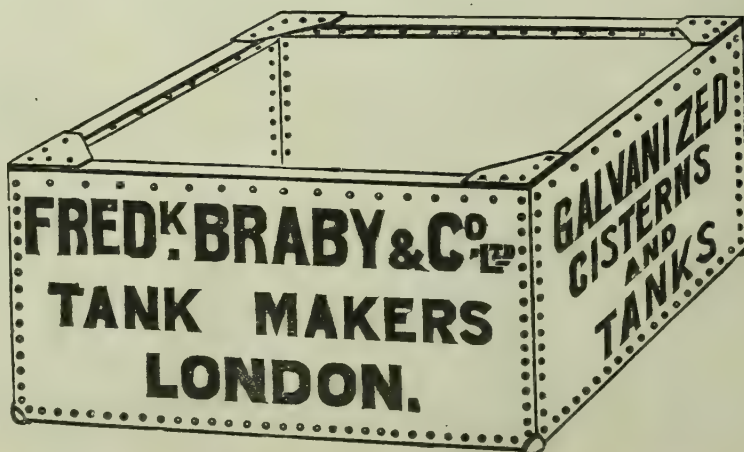
REGISTERED OFFICE AND WHARF

CARPENTERS RD.
STRATFORD
 LONDON E.15

Telephone :
 EAST 3771
 (5 lines)

Telegrams
 GLIKSTEN 'PHONE
 LONDON

OUR
 CISTERNS,
 TANKS, and
 CYLINDERS



ARE
 BRANDED
 "SUN"
 BRAND.

TELEPHONE:
 MOUNT 3923 (6 Lines).

Chief Offices : 352 to 364, EUSTON ROAD, LONDON, N.W.1.

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

VOL. CXXIX.—No. 4,314

OCTOBER 9, 1925.

TOWN PLANNING

THE recent publication of the Preliminary Survey for the East Kent Regional-Planning scheme, followed last week by the seventh annual country meeting of the Town-Planning Institute at Canterbury, has aroused public interest to an extent which is quite unprecedented in England, which is of good augury for the adoption of a new scheme and better way for industrial development, not only in the fair county of Kent, but also in the greater question of the rectification of past mistakes and the orderly development of new industrial areas.

The problem is one which in a greater or less degree must affect every man, woman and child living in these islands; it is no new thing, but in the bad Victorian days when industrialism triumphed over all the finer qualities, instincts and inspirations of the race, it was believed that industry and beauty were conflicting interests between which no possible union could be imagined.

Therefore, as was inevitable in this race for material rewards, other considerations were ignored and the countryside was defaced by ignoble and squalid mining towns and villages, thickened and polluted by smoke, gases and foul waste products, which turned whole districts into a semblance of Hell rather than Paradise.

Concurrently with this industrial race occurred what one may call its psychological by-products: the decay of tradition in the building crafts and other industries, the industrial robbery of the workman, the growth of class hatred and a spirit of revolt, which (as we are now beginning to perceive) had its roots in bad housing conditions and the abolition of natural beauty. It is difficult to estimate the extent of this evil, but the connection between mean streets and badly-lighted rooms and debased and mean lives is sufficiently marked to merit attention.

The natural result of an impartial consideration of such a heritage, from what might with some truth be entitled "the Dark Age of Materialism," is a desire for some remedy, some method in our madness, some better way of providing for the needs of the mass of our citizens.

"Town Planning" is the modest term which, in effect, signifies the substitution of order in place of muddle, by the application of forethought and technical skill to the solution of the extraordinarily varied problems presented by modern civilisation. It is not merely a question of providing a certain number of reasonably decent dwellings and convenient facilities for traffic, but rather a laborious and detailed investigation of natural conditions, such as subsoil, sites, rainfall, contours, birth statistics; the daily or seasonal movements of populations; the natural or special requirements of various trades and industries, followed by a deduction from the facts thus obtained.

With such information the modern town planner prepares his scheme for future development and so directs the natural exceptional growth of the city, town or village to the advantage of all its inhabitants.

In the same manner the skilled technician who is called upon to prepare a Regional Plan first ascertains all the factors which may influence the future development of a series of towns or villages comprised in a district which, for some

economic or other reason, are interrelated and whose interests and needs are similar and usually urgent.

Such problems, as in the case of the district round Manchester, are often still further complicated by the mistakes of the past, and the best that can be done is to save what remains, fight against blind opposition for the gradual improvement in existing conditions, and stimulate public opinion so that, in time, these will no longer be tolerated.

The exceptional interest of the problem presented by the industrial future now anticipated for south-eastern Kent lies in the fact that the Regional Plan starts, as it were, on a "clean slate," unhampered by any of the haphazard and muddled development inherited by less fortunate districts.

But here, as elsewhere, no matter how excellent the scheme or how well-considered the plan, the realisation of it depends on public opinion. The danger is that although the Regional scheme as a whole may be carried, so to speak, "by acclamation," yet that during the long period—say, twenty or thirty years—which may elapse before its completion, this original enthusiasm may wane, and many, if not all, the most valuable provisions for preserving natural beauty and the amenities of the district may be sapped by the forces of commercialism and speculation. Take, for example, the question of open spaces, and the limitation to excessive growth of a built-upon area by the provision of a wide belt to be reserved for agricultural land, two of the most important features in modern town planning. Does anyone imagine that when the value of land in any new town or village rises to a certain figure it will be possible to preserve either of these amenities unless public opinion is sufficiently well informed and convinced of their value to prevent any interference with the original town or regional plan? Failing this it may well be that the last state of the town or district will be worse than had no scheme been prepared.

For this reason the public interest aroused by the East Kent draft scheme, due in no small measure to the statesmanship and prescience of the late Lord Milner, and the untiring efforts of such members of the East Kent Advisory Committee as His Grace the Archbishop of Canterbury, the Dean, and the Chairman of the Committee, marks a definite advance on the right road, and should encourage those who believe in the practical value of town planning in this and other districts to join together in the necessary work of overcoming local prejudice, opposition, or doubt, so that the result of their labours may not be lost when the first serious difficulties impede progress.

An excellent example of the value of this public-spirited lead in town planning is afforded by the letter addressed to a local contemporary by Dr. Bell (the Dean of Canterbury), on the subject of the preservation of a site which is of some importance in the improvement of the "built up area" of the city of Canterbury, where, by a brief but lucid exposition of the facts, dangers and possible remedies, the Dean will, no doubt, play the part of the watchman on the tower and warn the citizens of dangers which too often pass unheeded until the time for action has passed away. May we have many who will follow this example and lead the way to the finer and better England which may otherwise remain the dream of enthusiasts, stifled by the forces of inaction and inertia.

NOTES.

The Object of Architectural Propaganda. A CORRESPONDENT, whose apparently well-meaning letter we give on another page, is not very happy in the suggestion he makes

that there is a widespread feeling amongst "amateurs" of architecture that the object of the propagandists of architecture is not to help the art, but to help the practice of architects—"that is, the real object is not to benefit the country, but to benefit the profession," though there may be some implied reservation in his somewhat hesitating reference to amateurs. In noting the ungenerous nature of the suggestion, we can assure our correspondent that whatever the belief of "amateurs" of architecture, the paramount desire on the part of all architects worthy of the name is to improve the architecture of the country; while the desire to improve "the status of the members of an institute," though a very worthy one, is subordinate to the widespread and genuine desire to improve the art. There can be little doubt that public taste in architectural matters is improving, and if so, this is ample justification for the propagandist efforts of architects and others on behalf of the art.

Another American Scholarship

WE learn that a proposal has been made to certain persons eminent in the architectural and building world, with a view to the establishment of a trust fund similar to

the American Travelling Studentship of the R.I.B.A., founded a short time ago. The time is not ripe to give details of this proposal, but the suggestions have already been warmly welcomed. Details of any scheme need carefully thinking out, for the plan to enable young English architects to study commercial architecture in America has resulted in the first student deciding to remain on the other side of the Atlantic and not come back again!

Industrial Art.

It has been pointed out by certain writers to the Press during the last week that the inferiority of design in British manufactures to-day is very marked, and the show of work in the British pavilion at the Paris Exhibition has been cited as an illustration of this. This endless controversy as to the responsibility and cause of failure to give better artistic quality to our manufactures is thus brought to the fore again. And, again, one must ask whether the public gets a fair chance? We all know that between the manufacturers and the public there come those who have to conduct the sale of the goods. If the salesman presents to the public something inferior in design and there is nothing better to choose from, then it does not follow that the public buys what it can get just because it likes it. We must allow the public some credit for better taste, unless we find that with both good and bad before them they chose the inferior. It is not exhibitions which necessarily indicate truly the capacity

that there is in the country for good design; the architectural room at the Royal Academy, and the numerous exhibitions of pictures, fail to represent a great deal of admirable work which constantly being done. Candidly, we feel that there is still much difficulty in getting a fair exploitation of our artistic talent in the productions of our industries.

THE Kent Rural Commu-

The Village Council, under whose auspices a Blacksmiths' Conference was convened

March with very encouraging practical results, has now completed its inquiry into other rural crafts. The inquiry has shown that the smith is not the village craftsman whose position is precarious. The village wheelwright, particularly, has also been affected by decline in horse traffic in country districts. With a view to considering whether practical steps can be taken to improve the outlook for this skilled and versatile craftsman—whose disappearance would be a source of no small inconvenience to the farmer—the Kent Rural Community Council is convening a further Conference in Maidstone this Saturday, and as satisfactory results of the Blacksmith Conference were largely due to public interest which it aroused, which found expression in a demand for smiths' work, it is to be expected that similar interest will be taken in the Wheelwrights' Conference. The members of the Conference will include representatives



- A FLOATING STAND for a NAVAL REVIEW -



Galashiels War Memorial.
ROBERT LORIMER, A.R.A., Architect.
T. J. CLAPPERTON, A.R.B.S., Sculptor.

of the Ministry of Agriculture, the County Council, the National Farmers' Union, the National Employers' Association of Vehicle Builders, the National Council of Social Service, the Industries Bureau, representative architects and builders, and many village craftsmen. The Conference will be held in the Sessions House, Maidstone, at 10 a.m., and we wish it every success.

THE havoc now being wrought on the country-side in order to facilitate motor traffic, or the superfluous requirements of motor traffic, can we think, be justified by those who put their claims as paramount. We would, however, of an instance—and it could be multiplied—in which a group of old trees, at the end of a lovely village, were cut down to make the locality much disfigured, in order to promote the safety of the motorist. The trees stood at the junction of two roads where they converged to unite them, and the motorist on one road was therefore enabled to see across to the other, with the result that accidents were more numerous than before, and the increased speed at which he travelled! This haste to meet the demands of motor interests is leading to grave detriment and to a loss of beauty in the country-side we can ill afford to lose, a little more consideration

should be shown for this side of the matter and more intelligent direction and restraint shown in regard to changes which have led only to an increase of the evil they were intended to prevent.

A CORRESPONDENT says he has been asked if the stone figures peeping up at odd places over the sculptured frieze of Messrs. Liberty's new building in Regent-street are a joke, and if they are intended to remain. They present a striking target, and a sportsmanlike errand boy might have a shot at them. We fear this is a case in which the symbolism of sculpture is likely to miscarry.

Tradition and Vagary.

THERE is so much lack of boundaries to-day, that thought and action tend to wander unguided by those wholesome restraints which, whatever we call them—tradition, precedent, custom—yet have their value in deciding for us the limits within which our work should be done. This is not to say that originality and personal approach is undesirable, but rather that these things enable them to function properly. But if we become too much governed by the hour and the fancied needs it sets up, which, at this time, are directed to display and the advancement of commercial publicity, we may suffer from an invasion into the more disciplined and becoming limitations of art, in our haste for commercial success. And we feel this so much in this case of the new "Liberty" building in Regent-street,

when looking at the frieze which stretches across the arc of the building. The three stone figures leaning over the parapet, as though they were looking to see if there was any room for them in the frieze, or had wandered out of it, will appear absurd enough to most people. But the lack of taste which promoted it, the sacrifice of the legitimate objects of decoration for a "publicity" appeal, so contradicts the spirit out of which anything that is beautiful can come, that we hope this curious innovation will be cut away.

IN the "personal" column of *The Times* there appeared recently a notice to say that glass painters are required for America, to paint in the mediæval manner. Does not this advertisement rather illustrate the fact that the advertisers are a good way behind us in their apprehensions of the needs of art which is also exemplified in the design of the new Cathedral for New York? It would seem they are thinking less in terms of what we need to-day than of what we have left behind, and belonged to about 50 years ago. While we are seeking the artist again, and looking for the creative impulse in art, they would appear to aim at consolidating the outworn and the derivative, mistaking semblance for reality. The conventional imitation of the mediæval manner is not one to stimulate the life of the Church to-day, which needs the grasp of life and first-hand experience, if it is to be a living witness to religion.



Galashiels War Memorial.
SIR ROBERT LORIMER, A.R.A., Architect. MR. T. J. CLAPPERTON, A.R.B.S., Sculptor.

GENERAL NEWS

Professional Announcement.

Mr. Robert Cromie, F.R.I.B.A., is now practising at 73, Edgware-road, Marble Arch, W. 2. Trade catalogues are invited.

Appointment.

The School of Architecture at University College, Dublin, under Professor Butler, F.R.I.B.A., is enlarging its activities during the coming session. Mr. Frank Scarlett, B.A., late of London University School of Architecture, has been appointed assistant to the Professor.

Partnership.

Messrs. Edmund Wimperis & Simpson, F.F.R.I.B.A., of 61, South Molton-street, W.1, and Mr. L. Rome Guthrie, F.R.I.B.A., of 37, Bruton-street, W.1, have entered into partnership, and will practise under the name of Wimperis, Simpson & Guthrie, at 61, South Molton-street, W.1.

Change of Address.

Mr. Alfred J. Taylor, F.R.I.B.A., has changed his address to 4 & 5, Bridge-street, Bath.

Mr. L. Jacob, quantity surveyor, has removed his offices to 58, Gordon-square, W.C.1.

Mr. W. A. Aickman, F.R.I.B.A., has removed to 58, Gordon-square, W.C.1. Telephone No.: Museum 6550.

Mr. T. Lawrence Dale, F.R.I.B.A., has changed his London address to 22, Craven-street, Strand, W.C. Telephone, Regent 7178.

Birch Hall, Manchester.

Birch Hall, built in the fifteenth century and headquarters of the Parliamentarians in the Civil War, is soon to be demolished and a new Grammar School erected on the site.

Dawnay Scholarships.

The three R.I.B.A. Archibald Dawnay Scholarships for Construction, competed for each year by students in the various architectural schools in Great Britain, have this year all been won by students at the Architectural Association.

Abolition of German Import Licences.

The Board of Trade announce that, as from October 1, the requirement of import licences is withdrawn for all commercial goods imported into Germany except those of which a list is published in the *Board of Trade Journal*.

Warwick Priory.

The portion of Warwick Priory still standing, which includes the Saxon wing, the sixteenth-century part, and the Georgian wing, has been sold to an American and will be taken down and transported to the United States.

Stone Age Relic.

A drinking cup, resembling a small modern bowl, of solid stone about 3 in. high and 4 in. in diameter, was recently discovered at Barnhill. The fact that the vessel is without a handle points to its being a relic of the early Stone Age and of more than ordinary interest.

Proposed Hospital for Stoke.

A big half-a-million hospital scheme for Poor Law purposes, providing for the erection of an infirmary of 400 beds and capable of expansion to 800 beds, together with its own nurses' home, &c., was approved by the Stoke-on-Trent Guardians recently.

Moslem Mosque near Wimbledon.

Excavations for the building of their first London Mosque were begun at Southfields recently by the Ahmadiyya Moslems. The new structure, which will be white, and of an Arabian style of architecture, will be surmounted with a dome rising about 50 ft. high.

Downing College, Cambridge.

Downing College has acquired a site for a library, of which Sir Giles Gilbert Scott, R.A., has prepared provisional sketch plans. A bene-

faction of £100,000 provides one wing, but £500,000 is required for the whole building and its endowment.

New School at Truro.

Lord Eustace Percy, President of the Board of Education, during a recent visit to Truro, laid the foundation stone of the new county secondary school for girls, which is being built at a cost of £21,000 to the plans of Mr. F. G. Drewitt.

Hotel, New York.

Plans for the erection of the world's tallest hotel on Fifth-avenue, between fifty-seventh and fifty-eighth-streets, are reported to be nearing completion; this fifty-six story hotel, costing £5,000,000, will reach to the height of 610 ft., culminating in a brick tower decorated with limestone in the Italian renaissance style.

Sunderland.

The River Wear Commissioners and the Sunderland Town Council have formed a joint committee to draw up a scheme for a new river quay at Sunderland, and several business organisations in the town are contemplating the erection of warehouses and stores for general merchandise in connection with the proposal.

New Bridge Over the Ouse.

A contract has been awarded by the County Council of the West Riding of Yorkshire to the Cleveland Bridge and Engineering Co., Ltd., of Darlington, for the construction of a new bridge over the River Ouse at Boothferry, near Goole. The scheme, estimated to cost £112,500, will take two years to complete, and will be carried out to the designs of Mr. Basil Mott, of Westminster.

Manchester Town Planning.

The Town Planning Committee of the Manchester City Council recently decided to ask the City Council for authority to prepare "a comprehensive civic survey of existing and prospective conditions in the city area arising out of existing and prospective land and building uses, in order that data may be available to assist the various committees in carrying out their functions."

Lunch Time Rambles in Old London.

We have received a further series of "Lunch Time Rambles in Old London," which include Temple Bar to St. Mary le Strand, by C. L. Kingsford; "The Purlieu of Soho," by W. G. Morris, telling of the romantic associations of this interesting quarter; and "The Heart of the City," by H. M. Buckingham, a ramble through the streets and alleys in the immediate neighbourhood of the Bank of England. Each number is illustrated and contains a street plan of the district described. The price is 6d. each.

New Road Material.

Successful experiments in North Wales promise to revolutionise roadmaking throughout Great Britain. Slate dust mixed with gluten formed into mortar is spread over the roadways, and granite macadam heavily rolled in; this gives a road-surface of remarkable resilience like hard rubber. The Blaenau Festiniog Council have begun road contracts at 7d. per square yard for this type of road.

A.A. General Meetings.

The following lectures have been arranged to be given at the Architectural Association, 34, Bedford-square, W.1, on Mondays, at 7 p.m.:—October 26, Mr. H. S. Goodhart-Rendel, F.R.I.B.A. (President), "Ourselves"; November 23, Mr. Manning Robertson, A.R.I.B.A., "A.A. Excursion, 1925"; January 11, Mr. H. M. Robertson, F.R.I.B.A., "The Paris Exhibition, 1925"; January 25, Mr. Anthony Bertram, "How to Look at Pictures"; February 22, Mr. H. M. Fletcher, F.R.I.B.A., "The Architecture of Cambridge"; March 22, Capt. R. L. Reiss, Director of Welwyn Garden City, Ltd., "The Architect from the Client's Point of View"; April 26, Mr. W. R. Davidge, F.R.I.B.A., "London Development"; May 31, Prof. C. H. Reilly, F.R.I.B.A., subject to be chosen.

COMPETITION NEWS

Manchester Town Hall Extension Scheme.

Manchester Town Hall Extension Committee has decided to ask the President of the R.I.B.A. to nominate assessors for the competition for best utilisation of the extension site between Lloyd-street and Peter-street.

Competitions Open.

	Particulars published in "Builder."	
Newcastle Fire and Police Station. Premiums: £500, £300, £100. Mr. P. S. Worthington, F.R.I.B.A., Assessor.	June 12 .. No	
Town Hall, &c., Pretoria. Open to architects residing in South Africa or Registered under Architects' Act, of 1909, Transvaal. Assessor to be appointed by R.I.B.A. Premiums: £250, £150, £100.	April 24 .. De	
Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply parties., 35, Old Queen-street, S.W.1	Aug 7 .. Ja	
New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool	Aug. 14 .. Ma	
Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London	Jan. 2 ..	
Plan for construction of Conference Hall, for League of Nations, Geneva. International Competition, Sir John Burnet being British representative on Jury of Assessors. 100,000 Swiss francs to be divided among architects submitting best plans. Programmes will be deposited in due course with R.I.B.A., 9, Conduit-street, where intending competitors should apply. Single copies from Secretary-General, League of Nations, Geneva, on payment of 20 Swiss francs.	Oct. 2 .. Oc	
Labour-saving House, Moor Park Estate, to be built at a cost not exceeding £1,500 (including builder's profit and cost of making up garden and fencing, but excluding cost of site). Designs invited from builders, but if architects are employed builders will be responsible for their fees. Premiums: £100, £50, £25. Apply Moor Park, Ltd., Moor Park, Herts.	Oct. 2 .. Oc	
Technical School to be erected at Cookstown, Co. Tyrone, for Technical Instruction Committee. Apply Mr. R. C. Burke, Technical School, Cookstown.	Oct. 2 .. Oc	
*Portstewart Golf Club	—	

* Competitions when "warned" or vetoed by the R. are Stopped.

MEETINGS

SATURDAY, October 10.

Glasgow Architectural Craftsmen's Soc. Visit to "Lion Foundry," Kirkintilloch 3 p.m.

WEDNESDAY, October 14.

Institution of Engineers-in-Charge.—dential Address by Sir G. G. Goodwin. Bride Institute, Bride-lane, E.C.4. 7.30

THURSDAY, October 15.

Northern Polytechnic.—Professor A. Richardson, F.R.I.B.A., on "Relation between Construction and Design in Architecture." At the Northern Polytechnic, Hol N.7. 7 p.m.

New Churches for South London.

A £200,000 scheme to build fourteen churches, five missions, and complete or six existing churches, to cope with the population of South London, is announced by the Bishop of Southwark. Eight sites already been acquired, and building has on four.



Suggestion for Reconstruction of Menai Bridge: Fifth-Year Work (Six-Hour Sketch).

By MR. H. THEARLE (Liverpool University School of Architecture).

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

Architecture and the Local Authorities' Surveyor.

SIR,—I was very interested in your leading editorial in the issue of September 25, in which certain ideals are set forth under the headings 1, 2, 3 and 4. I am personally concerned with section 3. You are apparently unaware of the fact that in any but the most minor appointment nowadays to the position of engineer and surveyor to local authorities a careful point is made of architectural experience by Councils when interviewing candidates. I speak from post-war short-list experience.

The views in this letter must of necessity be *ex parte*, and I propose softly to accuse the architectural profession, or those of it who belong to its associations, of a somewhat illiberal lack of sympathy with members of my profession who must of necessity concern themselves greatly from time to time with questions of architectural design. Recently, on the occasion of the amalgamation of the two architectural societies, I think it would have been an altruistic gesture if membership could have been extended by invitation to those surveyors of municipal authorities who had, we will say, not less than five years' experience as architects to their Councils.

The term altruistic may need some explanation, and this is best put in the form of a query. Is the wish of the propagandists, about whom you write your editorial, that of improving the architecture in this country, or is it to improve the status of the members of an institution? I think that you will find there is a widespread feeling amongst, shall I say, amateurs of architecture that this question of propaganda is not to help architecture but to help the practice of architects—that is, the real object is not to benefit the country but to benefit the profession.

I should like to put a curious point of psychology relating to my own profession. Owing to the fact that most of us have been trained essentially as engineers, we are inclined to take a deep interest in that part of our profession which is not engineering, and from experience of my colleagues I find that in many cases this interest centres itself in architecture or its somewhat allied art of town planning.

In passing, although municipal engineers may tell you that town planning is essentially a question of engineering, I am one of a minority who consider that anyone lacking an architectural temperament and a certain amount of architectural training cannot town plan successfully. Thinking of some of the municipal men with whom I have, so to speak, grown up, I consider that the architectural work which I have seen them turn out would stand comparison by any unbiassed assessor with the work of all but the leading architects of the day, and I make bold to say that their work is considerably better on the whole than that of the average small-town architect.

I am not sanguine enough to suppose that this letter will have much effect on the views of the mandarins of the architectural profession as regards admission and consideration of those who have been for a long time a good deal concerned with local authorities' architecture, but it might be considered that after some years of the design of extensive housing schemes and the relevant site planning, baths, hospitals, above-ground conveniences, war memorials, æsthetic consideration of bridge designs, &c., the societies might admit men of an allied profession who were keenly interested in architecture and actually engaged in architectural work.

The influence which the receipt of periodical literature and attendance at meetings relating to architectural matters would have would fulfil the wish of the propagandists, at least with the class of person I am writing about. The class of architectural amateur suggested by the R.I.B.A. will not suit the case, the standard is not good enough—it must be of the same nature as the old Licentiate.

T.

Lowest Tender not Accepted.

SIR,—With reference to the correspondence in your columns, it should be remembered that there are two sides to this question. While, presumably, all the competitors in a privately invited list are able to carry out the work to the literal satisfaction of the specification, there are some contractors whose work has a character and finish not to be expressed in words, but easily more than worth such a small difference, as was mentioned by your first correspondent.

To put an extreme case: I knew of a large estate where contracts were let practically every week, and in the case of a tie, which occasionally happened, the financial official in charge would solemnly toss up, where the

technical official could have told him that of the contractors in question was decidedly better than the other.

In the case of public bodies perhaps acceptance of the lowest of a selected list is the only practicable method, but in cases it seems to be the architect's duty to point out to the owner the contractor who is likely to give him the best value for his money.

G. REA

Newsvendors' Benevolent and Provident Institution.

SIR,—I shall be obliged if you will allow me to draw attention in your columns to the dinner of the Newsvendors' Benevolent and Provident Institution, which will be held at Hotel Cecil, London, on November 5. The newsvendor works early and late that the day may be provided with their newspapers; and the purpose of this Institution is to provide those who may fall by the way, pensions for age or incapacity, or grants and other assistance to members, their widows and orphans who are in temporary difficulties. Many newsvendors have only too little opportunity for profit for illness or old age, and this Institution is to those members of the public to whom newsvendors render a daily service an opportunity to give their thanks in return.

The funds of the Newsvendors' Institution, which was established in 1839, are administered. There are at present sixty pensioners, whose welfare is constantly before the mind. Sick parents are sent to convalescent homes, orphan children are cared for in institutions, and financial help is given in cases of need. As Festival Chairman for the year, I have great pleasure in making this appeal, which, I sincerely trust, there will be a generous response. I shall be glad of offers from individuals and gentlemen willing to assist me as they can.

FREDERICK LAW

[Other letters are held over until next week.—Ed.]

A Correction.

In the note which appeared in our issue of September 18 on the Eleventh Church of Scientist, it should have been stated that Dr. Faber was consultant for the steel work for the other engineering equipment, buildings, i.e., heating, ventilation, and water supply services, Mr. F. Broadhurst was consulting engineer, Messrs. Benham being the contracting engineers for the



A Shop Front for a Perfumery: Fifth-Year Work (Six-Hour Sketch).

By MR. F. N. ASTBURY (Liverpool University School of Architecture).

THEN AND NOW

By KENNETH GLOVER, F.R.I.B.A.

is always amusing, and sometimes profitable, to look back a few years and compare conditions then and now. We are heirs of all ages, but we are occasionally inclined to find we are the refined and irreproachable product of preceding turmoils and gropings. Looking back, we shall find, not that we are forced in our belief that we are such wonderful fellows, but that, in all conscience, we have much to learn from our predecessors. In the course of some researches there came out of my dusty shelves two books, Mr. Shaw's "The English House," and Professor Kerr's "The Gentleman's House." The first published so recently as 1908, while the other came out in 1864; so that there is a space of half-a-century between the two. At first glance there does not appear much difference between these volumes. Mr. Shaw was concerned as to "The English House, How to Judge its Periods and Styles," Professor Kerr was giving the benefit of his professional experience as to "How to Plan a Residence from the Parsonage to the Palace." Apt alliteration's artful aid gives the title to the professor's title, but he disdains any literary pretensions and desired to be looked upon in no other light than as a man of business expounding, in this simple and direct manner, the knowledge acquired in the daily practice of his profession.

Mr. Sparrow's pen is the pen of a ready writer. He has a go at the architect in two chapters, entitled "Architects," and the other "Architects and Their Clients." Doubtless the chapters gave peculiar pleasure to his readers, because the layman rather enjoys the experts of all kinds getting a thrashing. He marks that we don't love doctors, lawyers, and ministers, "but we go to them when we need them." He doesn't say that we have to go to doctors when we have mysterious symptoms or severe pain because it is impossible for us to tell what is the matter or how to put ourselves right. Nor does he point out that it is impossible for the average layman to be a better than a fool if he does not take legal advice when he is "up agin the law." Of course it is done. Christian Scientists may avail themselves of medical advice, but there are extraordinary laymen who are content to conduct their own case in court. When everyone knew in 1908 that any man could design a house! Unfortunately the architects and the builders, Mr. Sparrow lumps them all together for the purpose of his attack, so that his readers are left, when they hear the piano next door, or to blame architect, builder, or both. The fire-grates, ill-fitting windows, thin floors—who is to blame? Mr. Sparrow blames these as "forced upon tenants by land-

lords." "Then," says he, "we have the greatest enemy of all—a huge window, almost as wide as the room itself, and divided into several lights." But here, again, truth will out. Who was to blame? Partly "absurd building by-laws," and partly "a belief, common among householders, that rooms could not be well lighted through openings just big enough to be in scale with the surface area of the elevations."

Mr. Sparrow is kinder to our present President of the R.I.B.A., and he quotes him with approval on the subject of windows. What do we see, looking back to 1908, which is not quite twenty years ago: a tragic, swift twenty years, which have brought wireless and cheap motor-cars and swift aeroplanes, and more Channel swimmers, and a terrible devastating war. Twenty years in these times move speedily. In 1908, was *l'art Nouveau* dead, was the last wriggling rose laid upon the bier? I forget; but doubtless it was affecting house-design, because Mr. Sparrow says: "his (a client's) one wish—and there is no harm in it—(the italics are mine)—is to have a simple good house that will not invite too much attention, like the originality of *l'art Nouveau*." It must have been a terrible time, with its attenuated roses in cast cement, in brass, wood, and bronze. Invention was the mother of attenuation. Was it, perhaps, the last wave of the precious 1890's—the backwash of Romanticism? We shall have to look up our old *Builders* and see what was going on in 1908 and thereabouts.

There can be little doubt that public taste in architectural matters has improved a very great deal during the last twenty years, and there is a more widely diffused knowledge of the true nature of architecture. This satisfactory development is, few would contest, due in no little measure to the publicity given to the work of architects by the popular journals. The motor-car has possibly helped, because it has taken so many people into the beautiful old villages of England who rarely saw them except during an annual holiday.

Unfortunately, from an æsthetic point of view, all is not gain here; too many villages have suffered the spoliation of their beauty by ugly garages and petrol signs. As Mr. Dawber pointed out at the R.I.B.A. Conference, village shopkeepers have thought to attract some of the trade of a revived village life by removing the interesting and delightful old shop windows and putting in sheets of plate glass. Alas! it is so often true that advance in one direction has to be paid for by loss in another.

But we are forgetting Mr. Sparrow and his "architects and clients." The temptation to linger over his pages is strong, but must be resisted, or Professor Kerr will continue to be forgotten on the bookshelves. One cannot

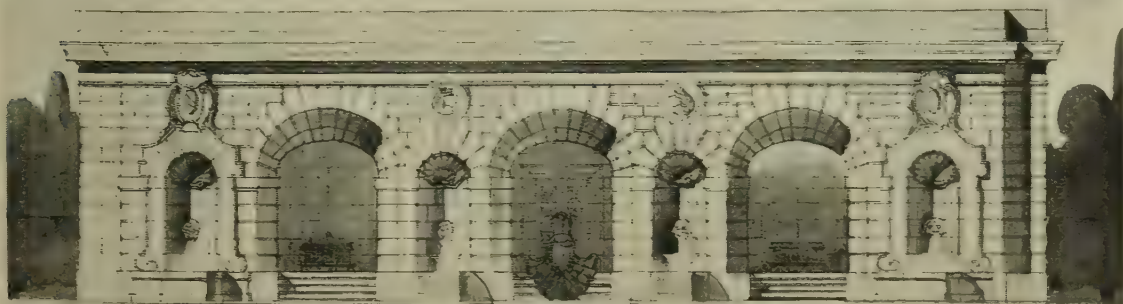
resist quoting one or two bits before we leave him:—

"It happens pretty often that the innocent-looking thing known as a plan sets a husband and wife at variance." . . . "At dinner you repeat to your wife what you remember of the architect's description, only to find that it is received in a silence filled with questions to be spoken." . . . "It is not for nothing that architects fear an English housewife." . . . "Could dear little Tommy reach the nursery window if he stood on his rocking horse?"

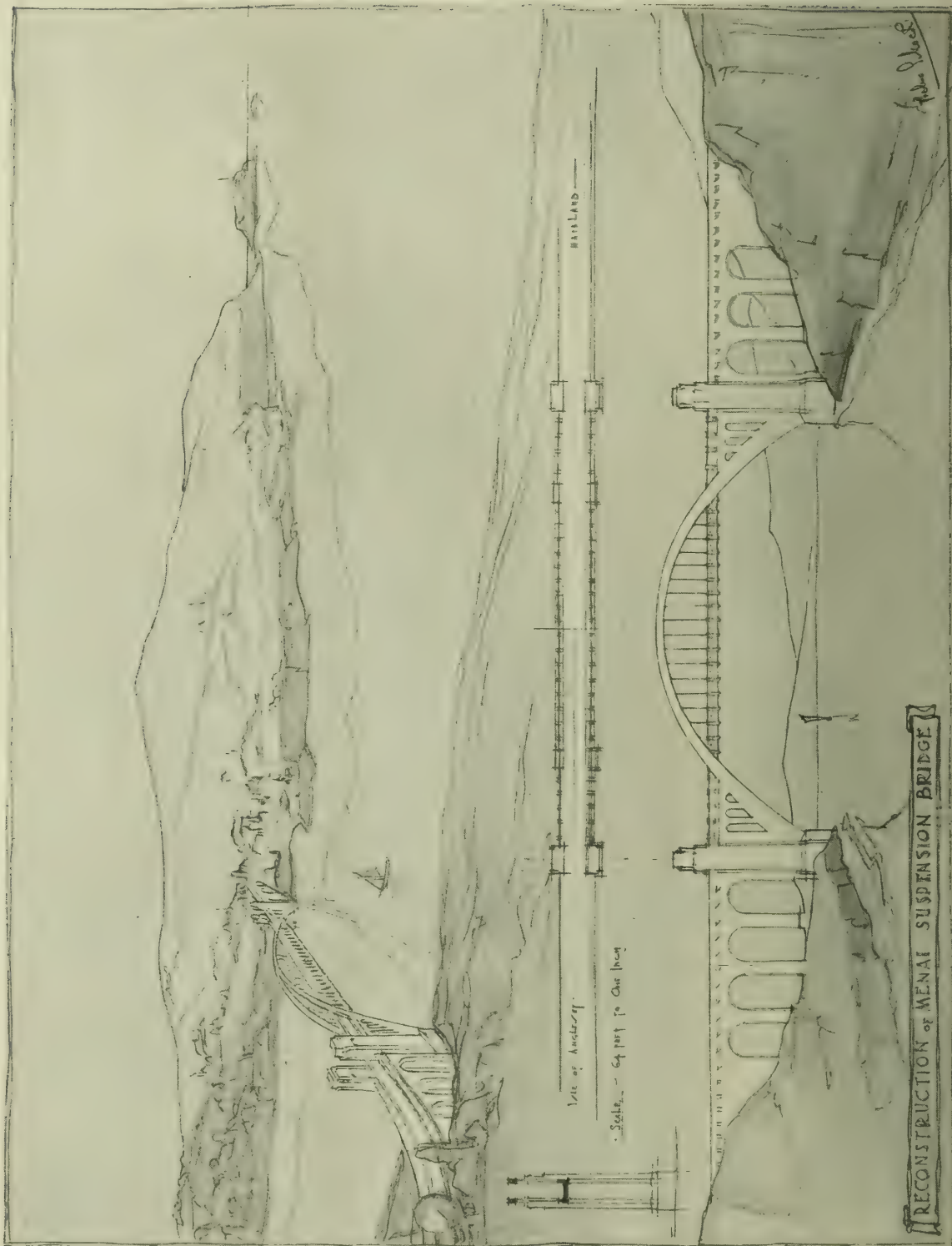
It is exactly sixty years since Kerr's "The Gentleman's House" was published. On the title-page is a vignette of Osborne House, and it is interesting to see plans of Balmoral and Windsor; but, of course, the real interest of the volume lies in its human side—what Professor Kerr thought about the styles, the glimpses of the mind of a cultured Victorian, the way things were thought about in 1865. The battle of the styles is in full swing, and contrasting Palladian and Mediæval plans are given. Then there is a very interesting criticism of Osborne, which was designed by Prince Albert and Mr. Cubitt, the builder. As might have been expected, it is full of defects and, significantly even in 1865, "Osborne has been, it is said, a good deal altered from time to time." Professor Kerr describes the character of the plan generally as "essentially Palladian, but of a *disembarrassed, re-embarrassed kind*," which is rather a mouthful. "The shackles of symmetry are first removed, then resumed." The Royal quarters were tacked on to a sprawling visitors' wing by a small chunk of corridor, about 12 ft. wide. This corridor is about 150 ft. long, with an exterior door at each end; drawing-room, billiard-room and dining-room are *en suite*, there being mere columns between them. Here is an insight into the home life of the Queen and the Prince. If Albert were playing billiards, then Victoria could watch him while playing her needle in the drawing-room. The building can only be described as a compromise between a palace, a house and a hotel, with the advantages of none.

This is one of Professor Kerr's aphorisms worth bearing in mind: "Some of our ardent archæologist-architects may occasionally stretch a point to carry the obsolete authenticities of the Middle Ages into practical house-building, but the effort is harmless—if the resident be pleased with his *ty*."

The Professor's summing-up of the style-battle is impartial enough: . . . "both types (classic and mediæval), therefore, are our inheritance in modern England, and to suggest the repudiation of either is to imply disloyalty to both." That is not far from the position to-day, and a historian of 1965 may well write of our time that it was the economy enforced by a great war which moulded an architectural style based upon the practical needs of a people, an architecture drawing from these two sources—mediæval and classic—the main elements of a truly national style.



An Aquarium: Third-Year Work. By Mr. A. C. COTTON (Liverpool University School of Architecture).



Suggestion for Reconstruction of Menai Suspension Bridge: Fifth-Year Work (Six-Hour Sketch).



READING CONTENTS. PAGE

PLANNING	517
LOCAL NEWS	518
COMPETITION NEWS	520
PLANNING	520
RESPONSE	522
AND NOW	523
PLANNING CONFERENCE	530
TECHNICAL AND BUILDERS' INQUIRY	
BEAU	534
WORK AND ARCHITECTURE	535
ABOUT PARTY CONFERENCE	536
BUILDING TRADE	537
KEY HOUSING CONFERENCE	538
WALL DWELLINGS ACQUISITION ACT	538
BUILDINGS IN LONDON	539
NG TRADE FRICTION	540
ACTS, COMPETITIONS, &c.	541
ED NEW BUILDINGS AND OTHER	
KS	543
RS	549

ILLUSTRATIONS

289-293, Regent-street.

building is now in course of erection at south-east corner of Regent-street and Portico-street. The general horizontal lines of the Polytechnic Institute have been followed in the design, forming part of the same block. The architect is Mr. C. T. Armstrong, A.R.I.B.A.

New Municipal Offices, Yeovil.

A new block of buildings provides municipal offices, council chamber and committee room, and a new entrance to the existing building, together with a public library and a new entrance to the existing building, the latter having a separate entrance. The building will face a new street which is to be between High-street and South-street, a property which has been in the possession of the Yeovil Corporation for a number of years but which at present is so surrounded by other buildings as to be incapable of being developed. The new street will afford a site not only for the new buildings, but for a future extension, and will provide a large area of sites for new business buildings on the opposite side of the road. The new buildings are to be faced with Bath stone and a tender submitted by Messrs. Bird & Son, Ltd., of Yeovil, has been properly accepted. Messrs. Petter & Warren, A.R.I.B.A., are the architects.

Convalescent Home, Skegness, Lincolnshire.

The home is to be erected by the National Convalescent Society as a memorial to those members who were killed in the war. It is planned to accommodate both men and women, and contains in all over 100 beds. A common dining room is provided, and women's day rooms and rest rooms. A billiard room is also arranged for the patients. The building is to be of brick, with occasional stone dressings, and is to be tiled. The equipment will be such as is necessary for a first-class convalescent home. Messrs. Youngs & Son, Ltd., of Norwich, are the builders. The stonework is being done by the Empire Stone Co., and the tiles by Messrs. Ames & Fenniss. The architect is Mr. Ansell, F.R.I.B.A.

Polytechnic Gold Medal Drawings.

The drawings in the fourth annual competition for the "Bossmo" Gold Medal offered to the School of Architecture of The Polytechnic, Regent-street, are as follows:—1st, Mr. R. Moore; 2nd, Mr. J. H. Peak; 3rd, Mr. G. Stevens. The winning design is published in this issue. The Gold Medal is awarded annually by Mr. Alfred C. Bossmo, the architect, for the best architectural design for a building intended to satisfy commercial conditions. The competition this year was assessed

by Mr. Septimus Warwick, F.R.I.B.A., a past student of the School of Architecture, who made the awards as given. It is pleasing to notice the interest that past students of the School of Architecture continue to show in the work of the School.

Chinese Assembly Rooms, Kuala Lumpur.

We illustrate this week the perspective of the design placed second in the competition for new Chinese Assembly Rooms, Kuala Lumpur. Other drawings were given in our issue for May 1 of this year. The perspective is by Mr. S. J. Edwards, M.A. (Cantab.), F.R.I.B.A., P.A.S.I., of Messrs. Booty & Edwards. Mr. R. M. Love, A.R.I.B.A., of the same firm was responsible for the general design. Messrs. Booty & Edwards have been appointed architects to carry out the winning design by Mr. F. A. Mallard, A.R.I.B.A., which was illustrated in our issue for February 20, 1925.

A House near Guildford.

This house has half-timber and brick for its external walls, and a tiled roof. The accommodation provided includes, on the ground floor, dining room, living room, hall, kitchen and the usual offices, and on the first floor, four bedrooms, a servant's bedroom, bathroom, h.m.c. and good cupboard space. The architects are Messrs. Baillie Scott & Beresford.

St. Thomas' College Chapel, Ceylon.

In this chapel, which follows a Romanesque manner of architecture, emphasis is given to the nave, both externally and internally, the aisles being narrow. Projecting side chapels are a feature of the east end of the chapel. Messrs. P. T. Adams & W. Small are the architects.

Students' Drawings.

We publish this week some recent work by students of the Liverpool University School of Architecture. Further examples will appear in a later issue.

STRUCTURAL ALTERATIONS TO CHURCHES

THE Chancellor of the Consistory Court of Bristol (Judge Dowdall, K.C.), giving judgment in a suit concerning alterations to the structure of a church, has laid down the following rules, which, he said, he would generally, but not always, follow both there and elsewhere in these matters:—(1) In the case of ancient churches, no important work will be allowed unless it is approved by the Diocesan Committee or the Central Committee. (2) In the case of minor work in ancient churches and of all work in important modern churches, the designs must either be approved by the Diocesan Committee or must have been prepared by an artist or architect who has seen the church and who is of recognised standing in the kind of work proposed. (3) In the case of poor modern churches, a high standard cannot be insisted on, but the best work possible in the circumstances should be encouraged, especially in so far as this can be done without misunderstanding or offence. (4) In all cases individual character is to be encouraged, provided the work is good of its kind and neither odd, nor aggressive, nor discordant. In considering a petition before the same Court for the erection in a church of a brass tablet, of considerable size, inscribed, "In remembrance of," followed by two names and a date, Judge Dowdall said that the time had come when it was necessary to point out that the mere fact that the relatives desired to erect a tablet in a church was not in itself a sufficient reason. Some further justification should be stated and established. It was admittedly appropriate that there should be remembrance in church of those whose character or services (not necessarily conspicuous) or whose munificence were the cause of gratitude and encouragement, but, apart from genuine public service, it was now generally felt that the walls of a church were not the proper place for such records.

EXHIBITION NOTES

AUSTRALIAN PICTURES.

It is pleasant to note the increasing quality of pictures from overseas. From Canada and Australia some very good work is now often before us, and only recently we found much appreciation of the pictures by Cumbræ Stewart, an exceptionally talented artist in Australia. There is a freshness and quality of interest and expression about the pictures and drawings by Hilda Prix Nicholas, at the Beaux Arts Gallery, which one seldom sees nowadays. This lady also hails from Australia, and like Miss Stewart is very facile in the use of chalk and pastel. Two or three of her chalk figure subjects here are as vivid and sparkling as anything we have seen; vivacious life shines forth from her drawing of the "Boy Scout" (50). The larger pictures, such as the "Man" and the "Laughing Soldier" (7 & 8), have a breadth and dignity of expression which many pictures of admirable technique often miss. "Motherhood" is a very successful picture of its subject, good in form and colour and having a delightful placidity of effect. Some of the smaller pictures, such as the "Timber Mills," are very attractive; and two or three, where a perspective of distant landscape is seen through a foreground of tree branches, have a distinctly pleasing decorative quality. If we were to hazard a criticism on such excellent work it would be that the painter may suffer from the defect of her qualities; her sense of breadth and summarised results may take from her some quality of detail and technique which has, after all, a charm of its own.

EUROPE'S CIVILISATION IN STONE

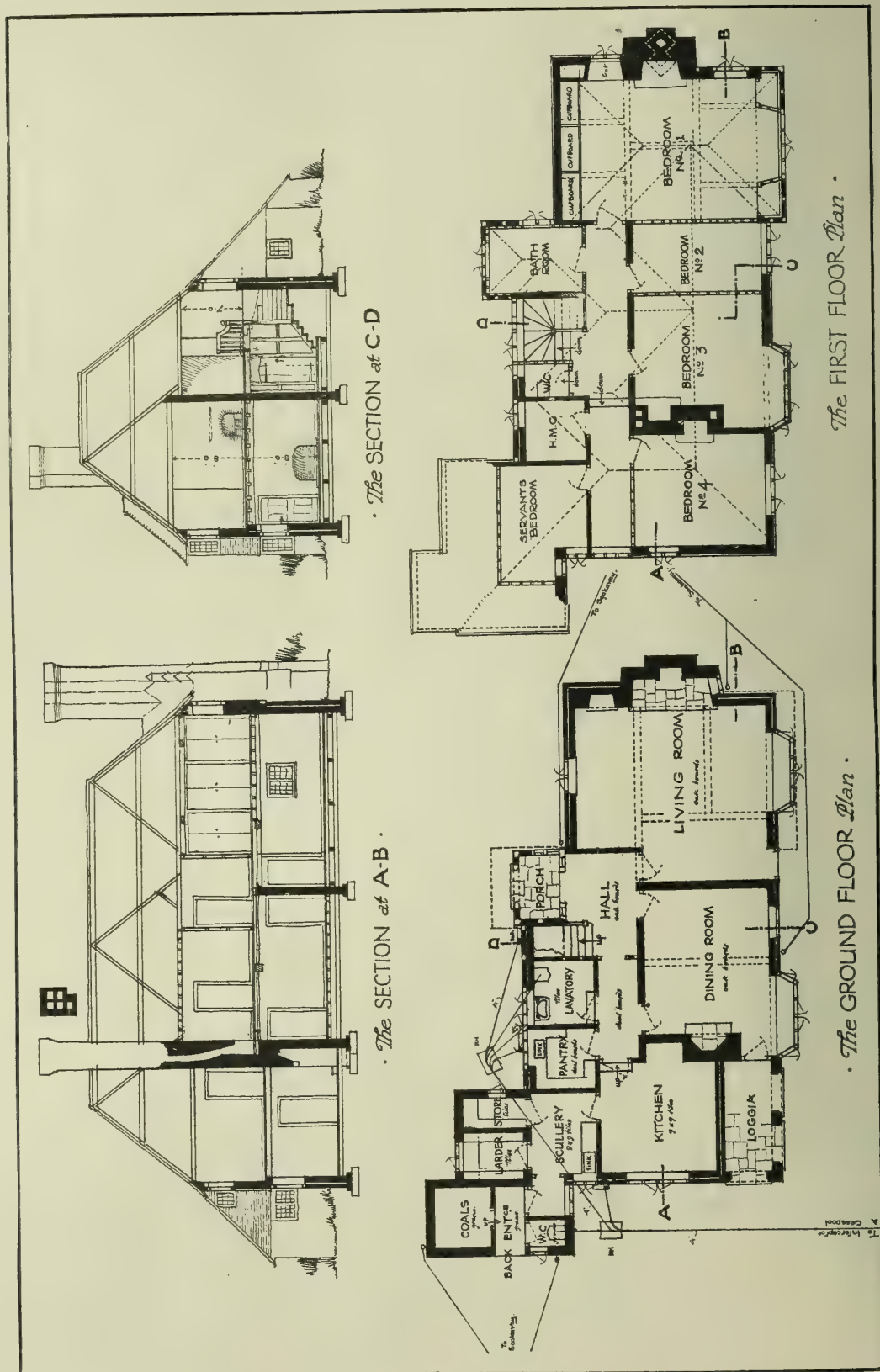
THE architecture of the Renaissance—the rebirth of Classical forms and traditions in art and life—formed the subject of a lecture, the first of a series of 24, by Sir Banister Fletcher, V.P., R.I.B.A., to be given at the Central School of Arts and Crafts. To show exactly how the subject meets a direct popular demand, Sir Banister first described its nature and scope. Architecture, he said, was a material exponent of civilisation, and a record of human aspirations and achievements, while modern design was founded on ancient precedent. A knowledge especially of the Renaissance style should form part of the equipment of artists, craftsmen, antiquaries and connoisseurs, photographers, journalists, authors and teachers, since buildings are the solid and visible background of the events of the past, and often their only remaining testimony. The traveller could thus more deeply enjoy the buildings and ruins that he visited with a knowledge of their purpose.

To put the subject in its right setting, the lecturer gave first a brief review of the world-history of the structural art up to the Renaissance, from early Egyptian tombs to Mediaeval England, and thus showed how the ground was prepared for the influx of Classical ideas from the East which gave rise to the "Renaissance." Showing the connection between architecture and history, Sir Banister dealt with some of the influences on the art of the time, such as the writings of Dante, Petrarch and Boccaccio, the newly-discovered manuscripts of the Classical writers, the fall of Constantinople, the invention of gunpowder, the mariner's compass, and printing, all of which helped to awaken the new spirit of inquiry.

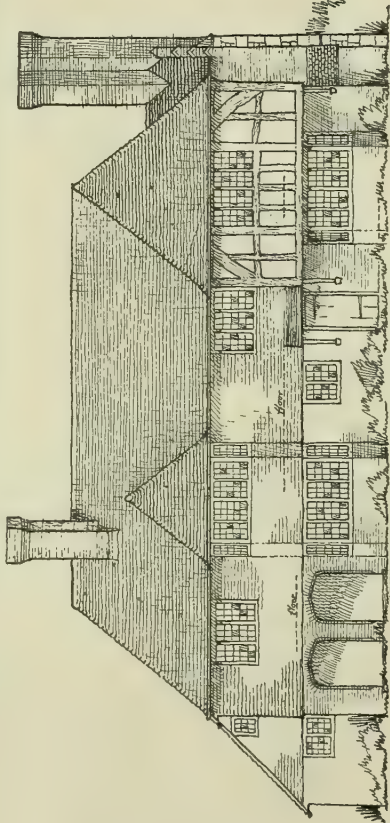
The remaining lectures will be given every Wednesday at 6 p.m., at the Central School of Arts and Crafts, Southampton-row, W.C.1. Particulars of the lectures are obtainable from the University Extension Registrar, S.W.7. Their general aim is to deal with the building of Western Europe from the fifteenth to the twentieth century.

Newport Borough Architect.

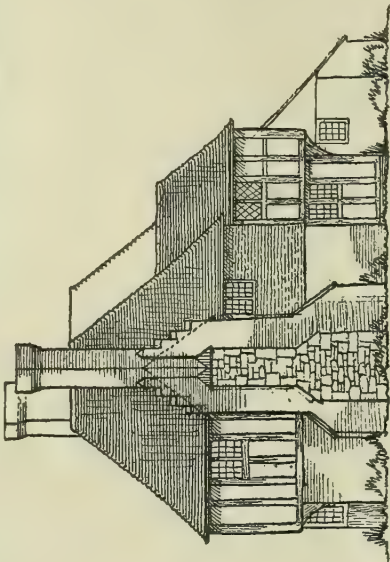
Mr. J. Blackett, A.R.I.B.A., of Liverpool, has been appointed Deputy Borough Architect to the Newport Town Council.



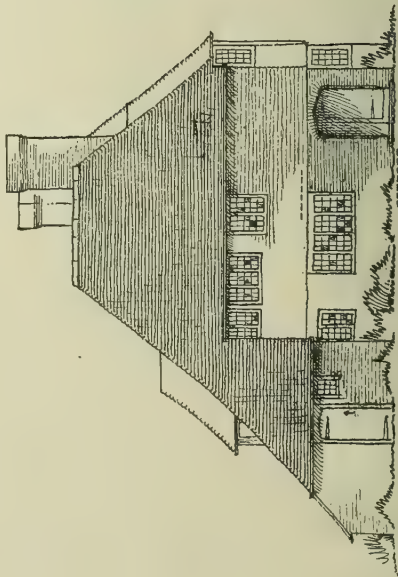
A House near Guildford : Plans and Sections.
MESSRS. BAILLIE SCOTT & BERRISFORD, Architects.



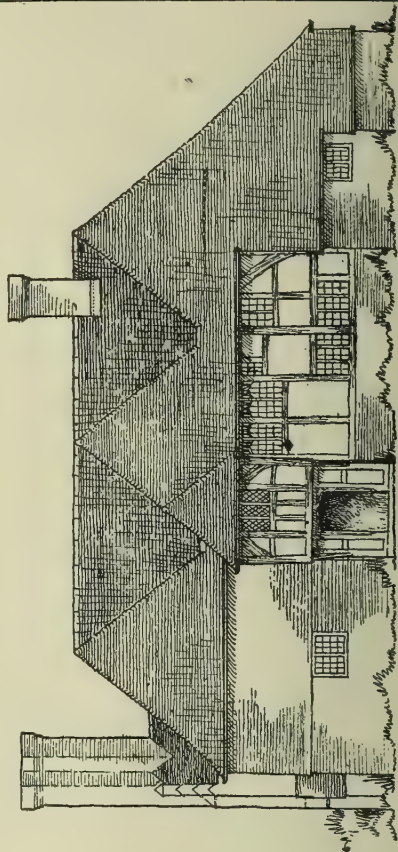
The SOUTH Elevation



The EAST Elevation



The WEST Elevation



The NORTH Elevation

A House near Guildford : Elevations.

MESSRS. BAILLIE SCOTT & BERESFORD, Architects.

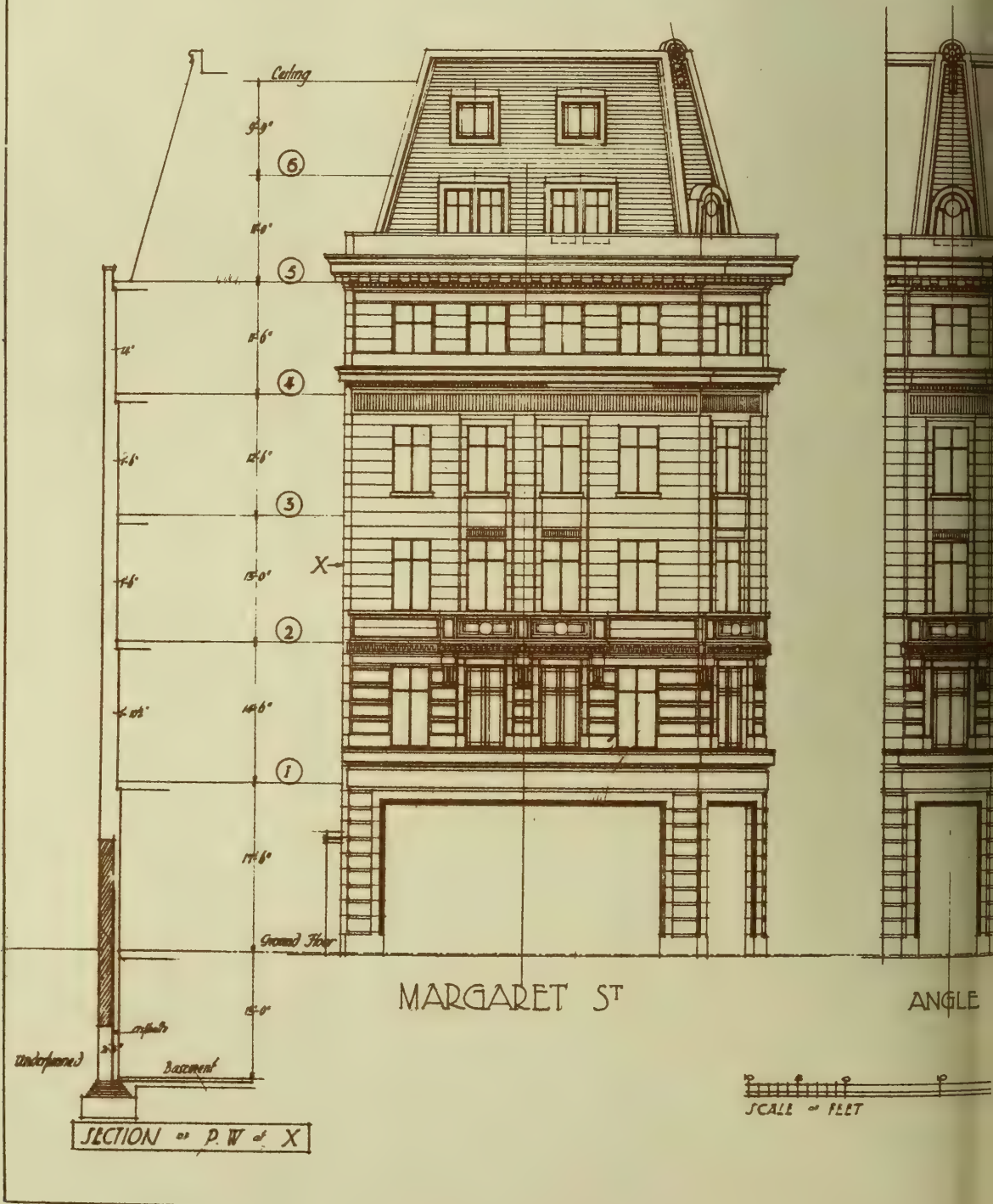


BUILDINGS YIC



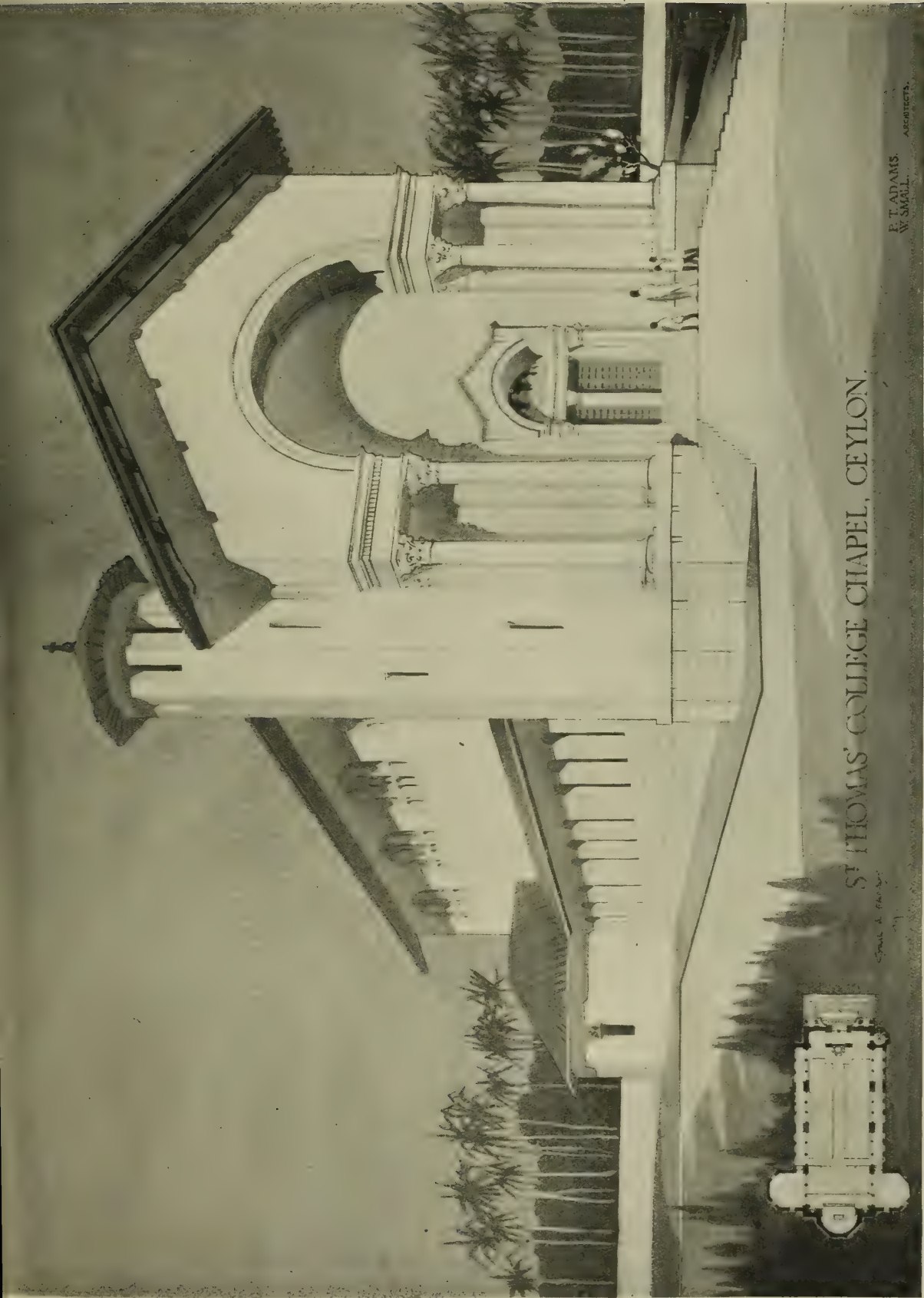
MR. W. H. ANSELL, F.R.I.B.A., ARCHITECT.

Elevations in Portland
ALL CORNICES ARE 7





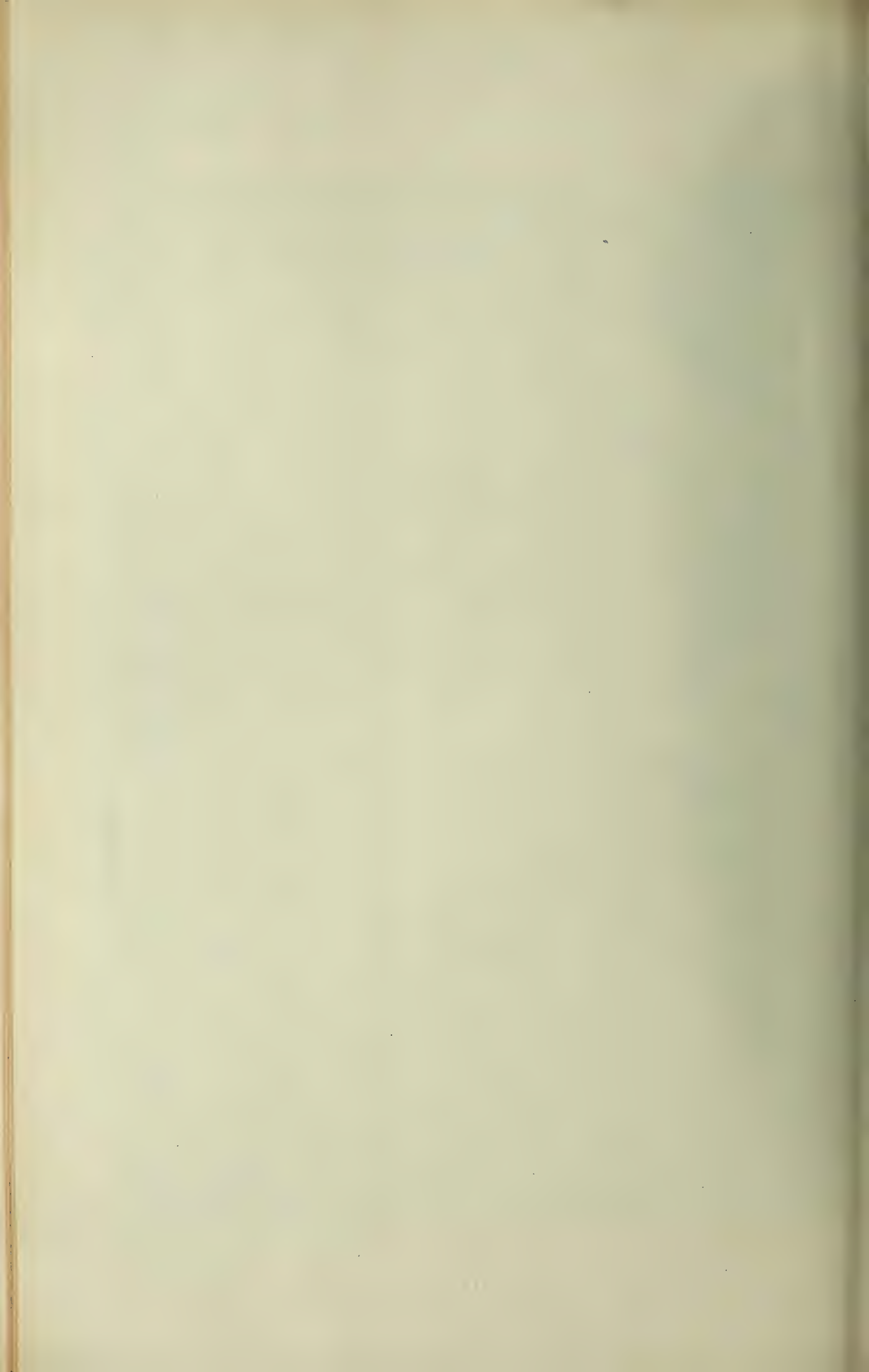




ST THOMAS' COLLEGE CHAPEL, CEYLON.

P. T. ADAMS.
W. SMALL.
ARCHITECTS.

St. Thomas' College Chapel, Ceylon. Messrs. P. T. Adams and W. Small, Architects.

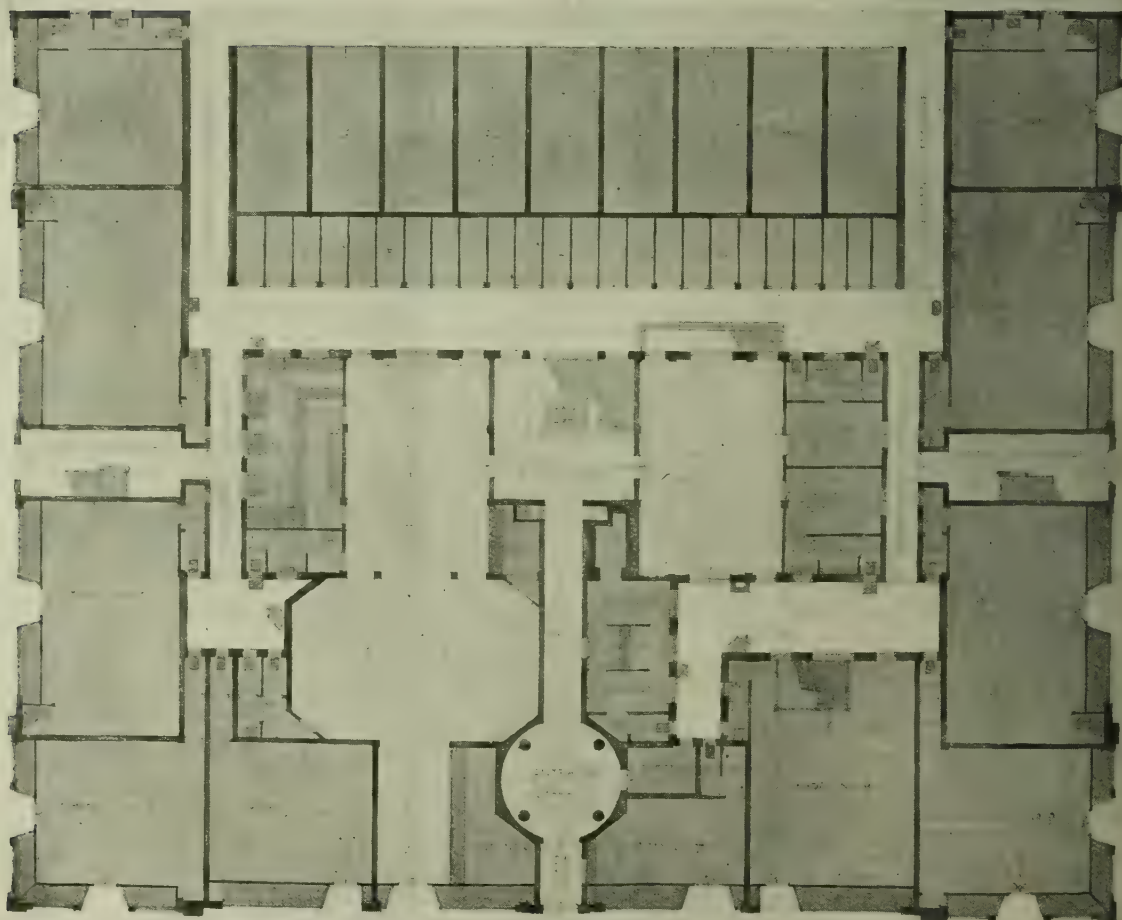




Chinese Assembly Rooms, Kuala Lumpur, Competition : Second Premiated Design. Messrs. Booty & Edwards, Architects.



PERSPECTIVE VIEW.



GROUND FLOOR PLAN.

Design for a Block of Shops and Flats.

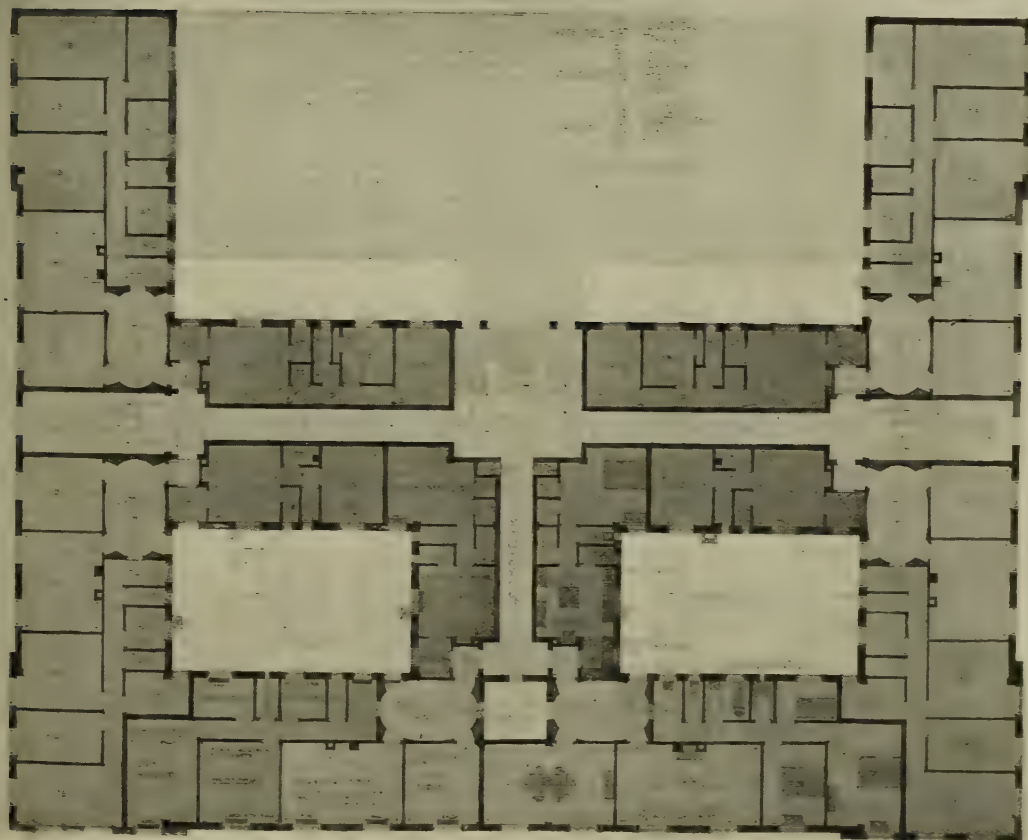
Awarded the Bossom Gold Medal, Regent-street Polytechnic.
By MR. JOHN R. MOORE.

THIRD FLOOR PLAN.



THIRD FLOOR PLAN.

THIRD FLOOR PLAN.



FIRST AND SECOND FLOOR PLANS

Design for a Block of Shops and Flats. Awarded the Bossm Gold Medal, Regent-street Polytechnic.
BY MR. JOHN R. MOORE.

THE TOWN-PLANNING INSTITUTE

THE Seventh Annual Country Meeting of the Town-Planning Institute was held at Canterbury from Friday, October 2, to Sunday, October 4. The venue was a specially appropriate one in view of the impending mining and industrial development of the East Kent region. The Mayor of Canterbury gave an official welcome to the members in the Guildhall.

PROFESSOR ABERCROMBIE (President of the Institute), who has just completed a comprehensive survey of East Kent for the Joint Town-Planning Committee (reviewed in our last issue), said that the city of Canterbury and the district of East Kent had a double interest for town planners at the moment. There was the existing beauty, and the interest which all town planners took in the vestiges of the past when preserved in such a vivid form as they found in Canterbury; and there was the added interest that the city had not been spoilt by the industrial developments of the nineteenth century, which had degraded so many of the finest cities of this country—because there was then no town planning in existence. Now there was also the extraordinary interest, the excitement, they might say, which had been caused by the development of "coal in Kent."

CANTERBURY: SOME TOWN-PLANNING PROBLEMS.

At the meeting held in the Guildhall on Friday, October 2, Mr. P. H. Warwick, M.Inst.M. and Cy.E. (the City Engineer), reading a paper on this subject, said he had been asked as the member on the spot to say a few words regarding the city which had the honour of welcoming them for this Seventh Annual Country Conference. Had the Canterbury Town-planning Scheme advanced beyond the preliminary stage, he would have been in a position to give a more detailed and descriptive paper dealing with the scheme itself. As matters stood, he could only briefly put before them an outline of some of the difficulties which his Council had already encountered, in the hope that some discussion of interest would follow.

Canterbury was the place chosen for a settlement by the primitive inhabitants long before the Romans invaded Britain, and the conquerors made it one of their chief military stations. Under the Anglo-Saxons, it became the residence of the Kings of Kent. The great event in its history was the coming of St. Augustine and the establishment of the Primacy in A.D. 597. No doubt in pre-Roman times that city was surrounded by an earthen wall and ditch, and by the discovery of Roman

bricks found embedded in the existing wall, it rather pointed that the Romans, who evidently rebuilt the gates of the city, were content with simply repairing the older walls. Until well into the last century there was probably no city in England which could show the walls in a more perfect state, and we read that in the seventeenth century there were 21 watch towers and six gateways standing. These walls, towers and gates had from time to time been repaired, for instance, Archbishop Sudbury, in 1380, rebuilt the Westgate Towers, and also repaired the walls. Unhappily, now only one gateway stood, the remainder having been demolished for improvements and, in certain cases, to obtain material for repairing roads. This Westgate was now converted into a Museum of Arms and Armour, and was annually visited by upwards of 25,000 visitors. A fine stretch of the City Wall and Watch Towers was still to be seen in the Dane John Gardens. The Castle Keep, one of the largest in England, remained, but not under the city's care.

The great glory of Canterbury, its magnificent Cathedral, could not be touched on in that paper, neither could St. Augustine's Abbey, which teemed with historical interest. It would be remembered that it was in St. Martin's Church, which contained Roman and Saxon architecture, that Augustine ministered, and for over thirteen centuries it had been continuously used for Christian worship. King Ethelbert was baptised at St. Martin's Church. He gave his palace and church in the town to Augustine, who founded on the site his cathedral, the forerunner of the present magnificent pile.

"*Ave Mater Angliae*" was the venerable title the city held, and of which it was justly proud. Dean Stanley remarked, "Canterbury can never forget that it has the glory of being the cradle of English Christianity." There was very little doubt that even from a remote period Canterbury was under municipal institutions. Before the Conquest, the city was presided over by a Chief Magistrate, or Prefect or by an officer called a Portreeve. In A.D. 1234, the city was governed by the two "King's Bailiffs." These gentlemen were superseded by a Mayor in the reign of Henry VI (1449). Edward IV in 1461, by Royal Charter, constituted Canterbury to be a county by itself, and that it should be named and called the County and City of Canterbury for ever. Perhaps these few introductory remarks, together with the plans and photographs which were exhibited, would help to

show that the city was teeming with historical associations. The beautiful buildings, and ancient structures must at all costs be preserved.

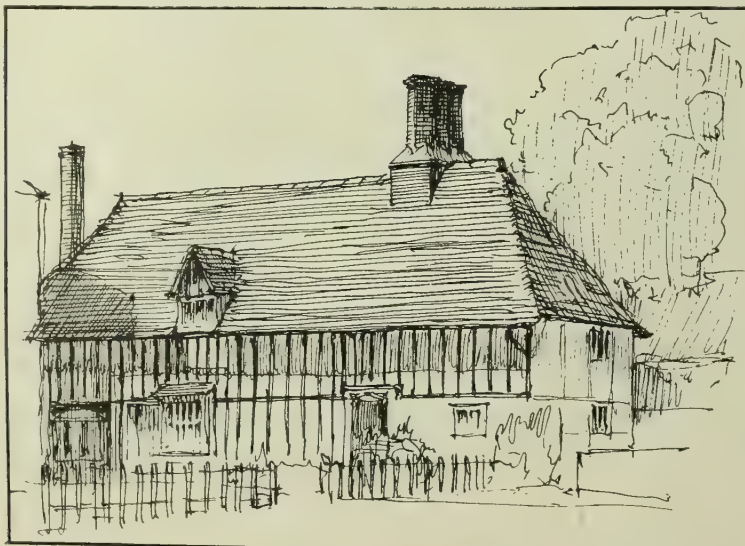
The first and chief problem was to do but still retain the city's bearing and a ties, to have powers over the built-up part of the town, to prevent modern store buildings belonging to large stores and panics from being erected next to beautiful half-timbered houses. The ordinary boundary of a scheme which excluded built-up areas certainly did not assist. It was utterly essential from a national, and even an international, view point, that a city of description should retain its amenities as full. It was anticipated that the City Council would apply for a Successive Scheme under Section 21 of the Housing Act, 1923, for protecting the area already developed especially within and near the city walls. It was hoped that if this was made the Minister of Health would grant the necessary sanction. It was interesting to note that the City of Oxford had been granted this privilege recently.

Chief of all their problems was that of Canterbury, indeed, was the heart of the East Kent. The following traffic weights through classified roads were taken in August 1925, over a period of seven days:—

Road No.	Description of Route.	No. of Vehicles.
Canterbury to—		
A28 ..	Margate ..	33,919 .. 5
A28 ..	Ashford ..	17,289 .. 2
A2 ..	London ..	12,233 .. 1
A2 ..	Dover ..	9,420 .. 1
A257 ..	Sandwich ..	4,596 .. 7
A290 ..	Whitstable ..	6,469 .. 1
B2068 ..	Newingreen(Hythe	3,413 .. 3
(1923 census)		

The shopping area now followed these through roads, and with modern traffic increasing in alarming proportions, it almost impossible to shop from a vehicle narrow ancient streets at any time of the day. The Council was considering the provision of internal by-pass roads to deal with the of the traffic to the various coastal resorts these new avoiding roads were made, the trade and shops follow their lines to a degree? If this did happen, would the fourteenth- and sixteenth-century houses which were now business premises, be void and fall into decay? Or, would the shopping centre remain and only shops necessary to meet the demands of traffic spring up on these new art? Would an internal by-pass system provide the through fast traffic, at the same time the local traffic in getting from one district to another, and by so doing ease matters the core of the town? As could be seen, great engineering difficulties would be encountered in laying down roads easy lines and gradients—demolition of property, compensation, river and railway bridges and embankment roads. The Council realised that this presented an acute financial problem bearing in mind that at present a 1d. rate levied produced only about £520.

After dealing with the road question the problem of railways appeared to rank first. To look back for a moment, it was interesting to remember that the first engine for passenger traffic was used between Canterbury and Whitstable. The Invicta locomotive built in 1852 by George Stephenson, at present now in the Council's possession, during the opening of this railway in May 1852 were worthy of attention. The engine presented to the City Council by Sir Salomons, Bart., and now stood on a platform the old City Moat Gardens. This Invicta engine was one of the chief centres of interest at the Franco-British Exhibition, and



Cottage at Nonnington.

ly at the Stockton and Darlington Rail-
centenary, and at the British Empire
ation at Wembley.

past engineers of the South-Eastern &
am and the London & Dover Railways
title or no regard for town planning when
constructed their lines and stations.
rbury struggled in the grip of the railway
as, the tentacles radiating from the
stations. The city was hemmed in by
ges and embankments, but the greatest
ar—both dangerous and exasperating—
a main line level crossing right in the
Others at St. Stephens, Broad Oak and
were all within a mile. The abolition
crossings, especially that at St. Dun-
which was in the city area, was a
urgent matter. The City Council on
l occasions had approached the Southern
ay Company, but, so far, had received
or no assistance. Naturally, the sug-
internal by-pass system of roads made
on for through traffic to avoid this level
ng. It was obvious that a central station
g all lines would mean considerable
my to the railway company, besides being
ore convenient for all rail users. A fur-
difficulty was the exclusion of extensive
a property from the Canterbury scheme.

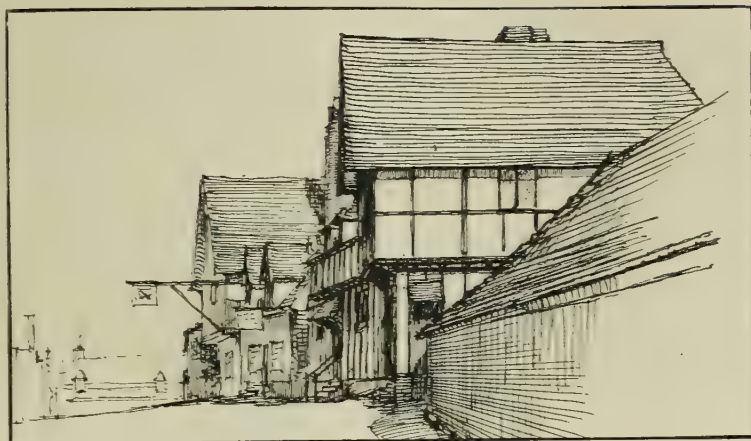
was thought that the most desirable posi-
for a factory area lay to the north-east
city, and was on the north side of the
ro Margate (A28) hence the undulating
to the south of this road would be an
able position for industrial dwellings. It
high and open, healthy and picturesque—
well named "Scotland Hills" and "Old
". The area comprised some 664 acres,
ich 591 acres were within the city bound-
and extended from the Sturry-road across
Littlebourne-road; and from the Cavalry
cks practically to the village of Fordwich.
subsoil was of gravel with a light layer of
ble soil above. This stretch of land
far the most desirable for houses, exist-
the boundary, but, alas, it was Crown
rty and had been excluded by the
stry of Health from the scheme. The
ill's reason for including this land in the
planning area was, that in case a future
nment economised in fighting forces or
ferred the Cavalry Depot to another town,
and might then be controlled. However,
170 acres had recently been leased to
ate local company for use as a golf
which should prove a useful diversion.

development area was again further cur-
by the presence of the river and consider-
arshy land. The city was situated in a
valley, through which the river Stour
owed, but which centuries ago was nearly
l by an inlet of the sea. In past genera-
the river had been used considerably
commercial waterway. It was understood
e stone for the building of the Cathedral
rought in barges up the river to the
Port of Fordwich, but now numerous
ade barging impossible. This valley
w-lying, about 50 ft. above Ordnance
marshy and quite unfit for building
es. This ran right through the city,
ng at each side of the built-up area.
anticipated that building for domestic
es would be prohibited on this ground.
s of which might be utilised for playing
and allotments.

apologised for the brevity of his little
at the same time he hoped some of those
might help to introduce those who were
at their first pilgrimage. Canterbury,
as she was of all her antiquity, hoped
pace, as far as possible, with modern
ments.

URG AND INDUSTRIAL ENTER- PRISE IN KENT.

he afternoon session PROFESSOR ABER-
dealt at length with the probable
of the mining and industrial enterprises
and the need for careful town-planning
out the region in order to provide for the
population. He stated that the general
ion had been arrived at that about 18 to



Wingham Village.

20 pits would be adequate to deal with the whole
of the coalfield. No one would like to hazard
a definite figure as to the duration of the field,
but it was established quite definitely that it
would take several hundreds of years to get the
coal out of the soil of Kent. They had to pro-
vide for increases of population, not only for the
purpose of getting coal, but for various other
industries and occupations that would follow on
the raising of coal in that district. In the report
that had been prepared for the East Kent
Regional Committee they had made various
estimates of the populations that were likely to
come into Kent as a result of those changes. At
the present time there were about 300,000 people
living in the East Kent region, and it was
thought that the industrial population would be
nearly as much as that again. That, of course,
would not come at once; but if they estimated
30 years as the time in which the coalfield would
be fully developed they would then have to add
a considerable amount for the normal growth of
the existing towns. He thought, on a conserva-
tive estimate, that if coal continued to be the
main source of power, the population of East
Kent would be increased to between 600,000 and
700,000 in 30 or 40 years' time. With regard to
the question as to how this population was to be
settled, Professor Abercrombie said that if the
matter were left entirely to itself, without any
restrictive control, they would naturally have
a series of housing schemes attached to each pit.
He questioned whether from a sociological point
of view, apart from other considerations, it was
wise to allow those small communities to spring
up with only one single interest in life. The
proposal of the regional committee would be to
group the populations into larger communities.
There would, perhaps, be one or two towns the
size of Folkestone, three or four the size of
Canterbury, and possibly a couple the size of
Herne Bay or Deal.

The DEAN of CANTERBURY entertained the
members of the conference at tea at the Deanery.
He also presided at the evening meeting and
read a letter to the conference from the Arch-
bishop of Canterbury.

A PROGRESSIVE PROGRAMME FOR TOWNS AND COUNTRY.

At this public meeting, held in the Chapter
House, Mr. G. L. Pepler, F.S.I. (Past Pre-
sident), said that the title given to his address
was intended to emphasise the fact that town
planning represented much more than plans
put on paper by experts. It included a general
policy of development in which every inhabit-
ant had an interest. Even to those who had
made town planning their profession, it might
be an advantage, from time to time to pause
and consider the main purpose that inspired
their work. He would suggest that the main
object of town planning was to provide that all
land should be used to the best advantage, for
the benefit of the community as a whole. If
this were a correct description, its importance
was obvious, since it was on land we lived and
on land all our activities were performed.

Even ships and aeroplanes did but journey
from land to land.

It was the more amazing that in our small
island the use of our limited supply of this
essential commodity had so often been care-
lessly left to chance. One explanation was, he
thought, that in the industrial era of last cen-
tury, people were so engrossed in discovering,
harnessing and exploiting new forces that their
perspective was distorted and, also, they had
no time to spare for other things. These new
forces, also, seemed so prodigal in their possi-
bilities, and we seemed so sure of our
supremacy, that a good deal of waste could
pass unnoticed.

To-day, impoverished by a great war, and
amidst the stress of world-wide competition,
we could no longer afford the waste and con-
fusion that followed the haphazard develop-
ment of land. He invited them to consider for
a moment a few items of the waste that was
now caused by things being in their wrong
places: Land with rail or water frontage
specially suitable for industry by economising
its transport, occupied by houses; extra
lengths of power mains required because fac-
tory sites had not been reserved near the
generating stations; factories hemmed in by
houses and unable to expand; houses and fac-
tories jumbled together to their mutual detri-
ment; all kinds of travel and transport that
might be saved if the functions of business and
of workplace and home were properly related;
fertile land wasted by spasmodic outbreaks of
development and barren land carefully saved;
the consumer increasingly divided from the
producer; beautiful buildings destroyed or
hemmed in by incongruous erections. These
were only a few items; a little thought would
add many more. The trouble was we usually
didn't bother to think—we accepted.

The daily waste caused in our unplanned
towns by the consequent congestion of traffic
in the streets was graphically illustrated by an
example recently given to the British Associa-
tion by Colonel Tudsbury, of the Ministry of
Transport. He had ascertained that the
annual cost of traffic delays to one London
firm of caterers, in connection with their fleet
of 3 heavy motor vans and 18 delivery vans,
was £17,940. If one firm experienced this
loss, the total annual wastage from this cause
must be stupendous and amounted to a serious
handicap to commerce and a severe indirect
tax on the community. He had laid special
emphasis on the effect on industry and com-
merce because on that our livelihood depended.
It was, of course, equally as important that
the surroundings of our homes should be
healthy and pleasant with ample opportuni-
ties for recreation, and that our towns and
villages should have some dignity and grace.

The machinery for obtaining much of what
we desired was provided by the Town-planning
Acts. No one pretended that it was yet a per-
fect machine, but it would carry us a long way
if we equipped ourselves to make intelligent
use of it, by studying the problems of rural and

urban development so that we might have a policy to guide the machine. The Town-planning Institute was the professional body that dealt with these things. Its headquarters were in London, but annually it held a conference in the provinces and had come to Canterbury this year, partly because it was such a delightful and inspiring place, but chiefly because East Kent to-day presented perhaps the most critical problem of planning in the whole of Great Britain.

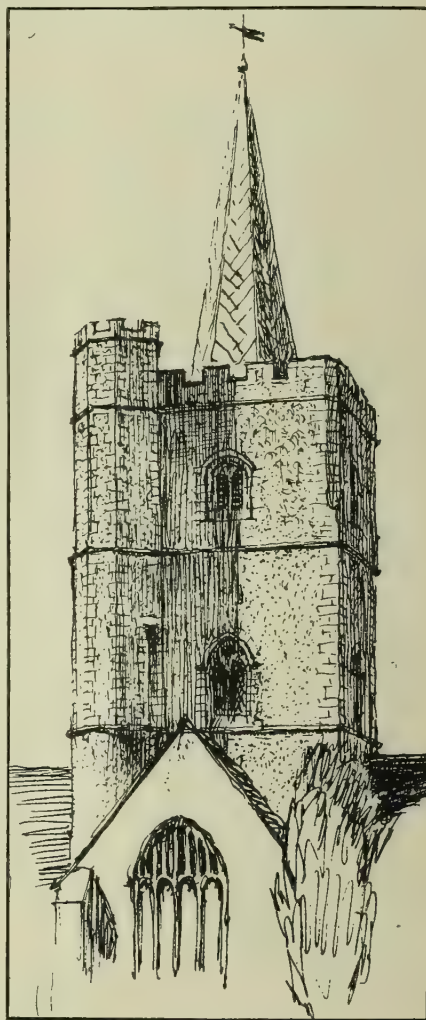
That corner of England—its front door to the Continent—had always occupied a key position. For centuries it had represented much of value in the life of the nation, and much of its history could be traced there, from Roman times and even before that. The mediæval glories of Canterbury and of the Cinque Ports had not passed away, evidence still remained of the sanctuary afforded to persecuted Protestants, their famous seaside towns were increasingly thronged with visitors from afar, and many beautiful villages still stood in that fertile and lovely countryside. All this and more they had represented in the wealth of the nation, and now their representation was to be even more complete because they were about to take a large share in its industrial life. The problem before them seemed, therefore, to be to facilitate the full development of this new asset and at the same time to preserve the rich heritage that they already enjoyed and that was so precious a part of the fabric of the nation.

Coal and iron had laid such a devastating hand on other parts of the country that at first sight the problem might appear insoluble. Happily, however, they were in a much more fortunate position. In the first place they started with a practically clean sheet and at a time when knowledge had greatly advanced. Also the leaders of those in whose capable hands the development of the greater part of the coalfield now rested had expressed themselves as anxious to co-operate with the local authorities so that the region might be developed on sound and orderly lines. They would, therefore, only have themselves to blame if they let things drift into chaos; but there must be a definite policy and a plan. Fortunately steps had already been taken to deal with the situation. On March 6, 1922, a conference, at which he had the honour to preside, was held at the Guildhall, Canterbury, and since then a Joint Town-planning Committee has been formed, representing the 17 local authorities in the region, with the object of preparing an outline plan of development. In addition, His Grace the Archbishop of Canterbury summoned a conference at Lambeth Palace, which resulted in the promotion of the East Kent Development Committee. This Committee had no statutory functions, but was formed for the purpose of focussing voluntary help. The first chairman was Lord Milner—whose loss they all so deeply deplored—who devoted to its service much of his valuable time and thought. It included also people prominent in the affairs of the region and of the Church, and leaders of the new industry, so that it was peculiarly well equipped for its task.

The course followed by the Joint Town-planning Committee was to instruct Professor Abercrombie to make a careful study of the region, to consult with the surveyors to the local authorities and with the mine owners and then present his studies and recommendations, in the form of a report illustrated by maps and diagrams, etc. This report had now been published and was the subject of Professor Abercrombie's address that afternoon. It was copiously illustrated with plans and photographs, and copies could be obtained from Mr. F. A. Cloke, 51, Strand-street, Sandwich, the honorary secretary of the Joint Committee. The report represented an exhaustive and illuminating survey of the region. Its main features, its resources, and its potentialities were all set out in such a way that the pros and cons of development could be understood and a judg-

ment could be formed. Such a store-house of information, written in so attractive a literary style, gave them an unequalled opportunity of appreciating their own possessions, and of understanding the vital problem with which they were faced.

Speaking in that place, one realised the important part that Canterbury should play in this new scheme of things, and that no doubt its citizens would take care to see fulfilled. The Corporation already had a Town-planning Scheme in hand. While geographically not the centre of the region, their history surely entitled them—if they made the necessary effort—to be its spiritual and cultural apex, and probably its shopping "West end." How could these things be added without causing the wasteful congestion to which he had already referred, or destroying the delightful



Ash Church.

characteristics of their city as it stood to-day, and that brought them visitors from far and wide? Might not a solution be found by preserving the core of their city intact, and providing round about it an adequate ring road boulevard, which would not only act as an absorber and distributor of traffic, but would also form the starting-off place for the inevitable expansion of the city, which, in its turn, should be limited by a belt of open country? One pictured the core so preserved as a place immensely attractive, free from the rush of traffic where one could move about one's business and pleasure in peace and comfort. A pleasant contrast to the chaotic centres of most of our old towns that had expanded indefinitely.

These were only suggestions based on general observations. The form of development best suited to the locality was a matter for

the people of the locality to decide, in consultation with the landowners, and representatives of business, industry, welfare, art and the like. There was no suggestion that great public works should be barked upon at once. The proposal was a programme should be laid down so that in all money spent either on public or private development should be fully effective—not wasted, as had so often been the case in the past because there had been no general scheme of things to fit into and help for. The preparation of a sound programme for development for the region and the towns and villages in it, and its realisation, were matters that a citizen could just pass on to expert or even to his own council, and feel that his personal responsibility was covered. Necessary as were expert advice and administration, they were of little avail without the driving force of public opinion. It mattered immensely to every man, woman and child that the region in which they should develop on a sane plan that would take the economical and efficient carrying of industry, and would ensure clean, healthy and pleasant surroundings for their homes and a worthy expression of corporate life. It was, therefore, the duty of all to make their aspirations known and to help forward the preparation and realisation of that plan.

Saturday's Proceedings.

On Saturday a motor tour was made of the district, visits being made to Betteshanger Colliery, Sandwich, Deal, Dover, &c. In the evening, PROFESSOR ABERCROMBIE presided at a dinner at the Colliery Hotel, Canterbury, which was attended by a large number of members of the Town-planning Institute, by the Mayor of Canterbury (Alfred Pope), the Dean of Canterbury (Dr. G. J. Bell), Mr. H. E. H. Rice (chairman, East Kent Town-Planning Committee), and representatives of many East Kent bodies.

DR. RAYMOND UNWIN, in proposing the toast of "Town Planning," said the source of his inspiration came from a tenth muse—for design, and beauty in place of scramble, confusion, and haphazardry. There had been many times in the past when Kent had borne the brunt of resisting the invader. It was now threatening the beautiful county of Kent a different kind of invasion, because it came from their own people; a more insidious and more insidious, because it was coupled with vandalism and permanent works and with much that came. It was to be resisted not with blind opposition or mere pugnacity, but with pathy and enlightenment. Those who visited the new Betteshanger Colliery that evening were impressed by the wonderful ideas that were being worked out by men who were devoting their lives to improving the amenities and increasing the safety of the region. They could not expect that these men should also be as careful not to spoil the land. It was for the men of Kent to take that care and to cherish the beauty which had been given to them.

MR. W. R. DAVIDGE, who gave the toast "Our Guests," remarked that he took his inspiration from the fact that Dr. Unwin in that his inspiration came from a tenth muse, who was, no doubt, a real being quite equal to the nine with whom he was already acquainted. He thought, however, one could not fail to be inspired by this ancient and historical city of Canterbury, with its memories of Cæsar, St. Augustine, and Thomas A'Beckett, and other famous characters in English history. With regard to the plan of the industrial development which had been the subject of their meetings and discussions, he thought the vital thing was to carry out the plan of the country with us, as they could hope to see the complete realisation of the Regional Plan unless it was backed by public opinion. He felt he was expressing the opinion of all those present in thanking their guests who were really their hosts—for the delightful way they had been received and entertained, and wished especially to express their gratitude to the Dean, who had not only allowed them



Group photograph of the Town-Planning Institute Conference, Canterbury, taken in the Cathedral precincts.

NOTE.—The right-hand side of the upper portion “reads on” to the left-hand side of the lower.

meet in the beautiful Chapter House, but, with the other members of the Advisory Committee, had done so much to arouse public interest in this important matter. In this connection he would also like to express their appreciation of the valuable work done by the late Lord Milner, the Archbishop of Canterbury, the Chairman of the Advisory Committee (Mr. Price), and the City Engineer (Mr. P. M. Warwick).

SIR R. TOWER, responding for the guests, said the inhabitants of Canterbury were as modest about their heritage as they were tenacious of their opinions; some like himself, no doubt felt some anxiety with regard to the proposals which might come from the Town-Planning Institute, but the result was, he thought, sufficiently reassuring to enable their various local societies, archaeological or otherwise, to feel they may sleep quietly in their beds. He thought they need no longer be afraid of the progress of industrialisation, as the safeguarding of the treasures which formed so unique a heritage of the county was now assured.

MR. H. V. LANCHESTER (Past President), proposed the health of "The President."

PROFESSOR ABERCROMBIE (President), in his reply, said he was glad of this opportunity of saying how greatly he appreciated the chance of doing this piece of work in East Kent with his friend Mr. Archibald. He had been greatly encouraged by the kind way in which his proposals had been received, and was impressed by the keen interest taken in the scheme, especially by the late Lord Milner, whose influence and advice was invaluable. With this interest and the energetic help of members of the Advisory Committee, he felt the future of East Kent was assured—their aim was not to destroy but to fulfil the reasonable development of the region. They had two good friends in the Dean and Mr. Rice, and with two such staunch supporters they need have no fears for the future.

DR. BELL (the Dean of Canterbury), replying to the toast of his health, said he felt it was a particularly auspicious pilgrimage which brought members of the Town-Planning Institute to Canterbury at this juncture. They much appreciated the sympathy which members had expressed, and felt assured that if the Mayor or any responsible body of their citizens approached the Town-Planning Institute on any matter of special difficulty, they would meet with a cordial and helpful assistance.

Town-Planning Progress.

The following local authorities (who are under statutory obligation to prepare town-planning schemes in respect of their areas) have reported to the Minister during the quarter ended September 30, 1925, that they have passed resolutions deciding to do so:—

Leicester, Loughborough B. London, London County Council (3rd Area). Middlesex, Hendon U.D.C. (2nd Area). Staffs, Stoke-on-Trent T.C. (3rd Area). Warwick, Coventry T.C. Yorks (N.R.), Eston U.D.C.

The following local authorities (not being authorities under statutory obligation to prepare town-planning schemes, who have voluntarily taken effective steps in the preparation of a scheme) have also reported to the Minister during the quarter ended September 30, 1925, that they have passed resolutions deciding to prepare town-planning schemes:—

Chester, Bollington U.D.C., Disley R.D.C., Hoylake and West Kirby U.D.C. (2nd Area), Yeardsley-cum-Whaley U.D.C. Devon, Plympton St. Mary R.D.C. (2nd Area). Essex, Chingford U.D.C. Lancs, Norden U.D.C., Thornton U.D.C. (2nd Area), Whitworth U.D.C. Middlesex, Staines U.D.C. Salop, Aitcham R.D.C. Somerset, Minehead U.D.C. Surrey, Carshalton U.D.C. (2nd Area), Epsom R.D.C. (Areas 4-9). WALES.—Glamorgan, Cardiff R.D.C. (3rd Area).

The following preliminary statements have been approved by the Minister of Health for the quarter ended September 30th, 1925:—Great Berkhamstead T.C., Rochford R.D.C. (Rawreth Area).

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting!—Ed.

Sale of House: Question of Contract.

SIR,—I built a house and later a person approached me and verbally agreed to pay £800 for it. He paid £100 deposit and I gave him a receipt for that amount, worded thus:—

"Received from Mr. — of..... the sum of One Hundred Pounds (£100) deposit on account of Eight Hundred Pounds purchase price of One Detached House situate at....."

Purchase price	£800
1st deposit	£100

Balance due	£700
-------------------	------

Signed.....

The buyer entered the house on May 26, 1925, and the building was completed in accordance with my plans (which had been duly approved by the local authority) a few days afterwards. I am now requiring the balance of the purchase price (i.e., £700), but the "buyer," who is now occupying the house, refuses to pay the balance until the house is completed to his satisfaction. The additional work that he requires to be done will cost about £25, but this work was not included in the original bargain, neither was it included in the drawings (these were in my name). The "buyer" by the way, does not hold the leasehold for the land as yet; this deed is awaiting my signature. Am I compelled to carry out this additional work before I can expect payment? "YOUNG BUILDER."

[It would appear, from the form of receipt given by the vendor to the purchaser for the deposit of £100 paid by the latter, also, the conduct of the purchaser in entering into possession of the house in question, that all the essential elements of a contract are present which either party can enforce. Both are entitled to bring an action for specific performance of the contract as against the other, the action being in the nature of an equitable relief given by the Court in such cases of breach of contract. Bearing the above in mind, "Young Builder" is certainly not compelled to carry out the additional work, which, it is stated, will cost £25; but if he himself wishes to enforce the contract specifically, the only remedy open to him, he must be prepared to prove that the additional work was not included in or contemplated by the contract above referred to, and that he has in fact performed all conditions precedent which are expressed or can be implied from the terms of the contract.]

Condensation in Basement.

SIR,—The basement of a block of flats has a special Italian floor of sawdust and some mineral composition; it is very cold to the touch. When there is a drop in the temperature the air of the interior condenses and gives the appearance of damp. All the walls are discoloured. The tenant says the remedy is to take up the Italian floor and relay with wood, but that is not to be entertained. It has been suggested that asbestos should be laid on the floors and on the walls, but this, again, is an expensive job, and as this condensation trouble only occurs at intervals, when the temperature drops, we want, if possible, some cheaper remedy.

READER.

Combined Drains.

SIR,—The drains of a new building (passed by the local sanitary authorities) are connected to old ones running through an adjoining owner's property. Has the adjoining freeholder power to cut these off? Can the local authority insist on a new connection to the sewer irrespective of the fact that the old combined connection has been proved sound and, in fact, passed?

"S.F.T. CROYDON."

Quantities.

[REPLY TO C. H., SEPTEMBER 18.]

If the contractor fails to agree with the of works or the accredited person representing the Rural District Council on the quantities of materials, works, or costs, and the final agreement as agreed by the quantity surveyors, matters will be settled by the Rural District Council's surveyor or engineer, whose decision will be final.

G. W.

Water in Basement.

[REPLY TO "BUILDER'S ASSISTANT," SEPTEMBER 18.]

SIR,—A method of dealing with this trouble is as follows:—On the "bottom" which receives the flow, lay sheets of corrugated lapping them in the usual way, but with a gap of about two inches left between the ends. Cover these sheets with further sheets, time covering the space at the ends. These should be laid to fall towards a sump hole, which should if possible be outside the basement. Rising water will thus be carried along the corrugations to the sump hole, which can be pumped down by means of a pump. Concrete slabs now be laid over the corrugated sheets, when set, can be covered with a bitumen or rendering. Whatever impervious material is used it should be carried up the walls a foot or so higher than the water is likely to rise at the angle at the junction of the wall and floor should be covered. I have recently got over a very difficult job in this manner with a rendering of waterproofed cement. If further trouble is experienced I shall be glad to provide a sketch showing the method described.

ARTHUR WILSON

Preservation of Bath Stone.

[REPLY TO "VOX," SEPTEMBER 18.]

The Bath stone should be thoroughly "dragged" and all decayed stone removed should then be treated with two coats of "Fluate." This will leave the stone with a perfectly hard surface. The treatment can be applied at any time, but preferably when the stone is perfectly dry.

"MASON"

Paving Materials.

SIR,—In connection with the construction of pavements for a residential road it is suggested, for economic reasons, that the usual flagstone paving and granite curb and channel should be substituted by tarmac paving with reinforced concrete kerbs and channels. I should be obliged if any of your readers could give authoritative answers to the following questions:—

1. What would be the finished cost per run of constructing on a clay soil an 8 ft. pavement consisting of 2 in. flag stones 6 ft. of width set in cement and sand, hogging 6 in. thick for the remaining 2 ft.
2. What would be the finished cost per run of constructing on a clay soil an 8 ft. pavement consisting of clinker ash 3 in. after rolling and tarmac 3 in. thick after rolling.
3. What would be the finished cost per run of constructing on clay soil a granite curb 12 in. by 6 in. with granite channel 6 in. by 6 in.
4. What would be the finished cost per run of constructing on clay soil a pavement of reinforced concrete curb and channel of dimensions as to constitute a satisfactory substitute for the granite curb and channel mentioned in question 3?
5. Are concrete curbs and channels essential to any extent, and are they satisfactory for residential roads of 18 ft. carriageway with a longitudinal fall of 1 in 80?

"BET"

Fungus on Timber Floor.

SIR,—Would one of your readers favour with a good recipe for stopping the growth of fungus on a timber floor? The floor in question is a ground floor, laid solid on concrete with a pitch and tar layer.

"PUZZ"

IRONWORK AND ARCHITECTURE

By HECTOR CORFIATO, S.A.D.G.

in developing may have all the re-
necessary to modern life; they may
with regard to economics and busi-
they may become more monumental;
y certainly, by changing, lose that
charm which attracts artists and which
no more, except in some little old
hidden away from the main commercial
In olden times each town had its own
aspect—soul, one might say—given
grade, arts and crafts of its inhabitants.
h of an inn, a lantern or a queer door-
a weather-vane, or a suspended clock,
d attention and charmed the eye. To
modern requirements, towns become more
and monotonous.

an industry has banished from our life
of wrought-iron, which from time im-
l has been closely associated with
ure. In the past wealth meant de-
ant of Arts. Are economical reasons
o suppress this art which has been
ing for so many years?

the earliest days of civilisation, the art
work has been greatly appreciated.
es held in pious respect the memory of
ain, son of Ramech, who, 3,000 years
er era, initiated them into the mys-
the forge, and we know that, about
ars ago, an officer of Thothmes the
ought from Syria an iron vase with
andles as a precious object of great
The ancients did not hesitate to make
e Vulcan, the iron-smith. Homer says
the period of the Trojan wars iron
delicately worked, were hidden with
ong the treasures of kings. The Per-
most worshipped Djemshied, son of
bras, who taught the inhabitants of
to conquer the resistant metal. "He
ron," said the Shah Namel, "with
ity strength he gives to iron the shapes
lets, armour and lances." In fact,
te work, where every delicate shape is
n by a violent act; where fineness of
th is a result of a brutal blow of the
e ironwork retains something beautiful,
y and noble.

ered in ancient times, the art of iron-
nserved throughout the mediæval ages
ation, and this is easily explained when
e beautiful grilles of the chapels in our
e, and the splendid straps which we
ire at the doors of many a cathedral,

and which, in the past the people in their simple
admiration said were made by mysterious and
evil forces. The Renaissance followed in the
traces of the mediæval ages, and after a de-
cadent period, the art of ironwork resumed its
progress, and nowadays some specimens equal,
if not surpass, the most beautiful examples
which our ancestors have bequeathed to us.

During the last 40 years iron has taken a
most important part in the art of building, that
is to say, architecture, which is the living and
stable expression of the surroundings in which
we live, as every civilised period bears the
stamp of its age. Technique and logic guide
us, and artistic sentiment adds the necessary
personality worthy of an artist. Thus, we can-
not design in a happy way any work in iron,
unless we have the necessary knowledge of the
technique of iron.

If the general laws which rule a composition
are the same for all works, technical qualities
come into force in the means of expression, in
all materials. A bridge built in iron has not
the same aspect as one built in stone.

Without doubt, the scale determined by the
height of man is an important factor in every
composition, but for each material the propor-
tions of dimensions vary. For instance, a
column in cast iron has not the same propor-
tions as a column in stone. With metal, ex-
pression is determined by the laws of contrast,
the parts being in solids and voids, and if a
piece of wrought iron has ornaments joined by
welding, it will have a different appearance
from a piece of iron which has been beaten and
pierced.

Every architect who undertakes a design
should have the necessary technical knowledge
in order to produce something perfect and use-
ful. One has only to notice how difficult it has
been to find a proper style in iron architecture.
No tradition binds us, but as it happens often
that an architect has no great engineering
training, and engineers know often nothing
about architecture, we come across works which
lack the most rudimental architectural beauty.
As example, we may mention the noted bridge
of Hamburg. It is purely the conception of
an engineer. It is an exaggeration of the
system of girders of equal resistance. Better
examples are to be found in England and
abroad. Stone has given definite architectural
shapes. We have not yet succeeded in giving
its proper expression to iron architecture, very
probably because it is difficult to have the cour-
age of artistic initiative. Logic plays in com-
position a most important rôle, but it should
accompany the artistic emotion, without which
no production is perfect.

One has to go back to the eleventh century for
the earliest ironworks having an architectural
and æsthetic character. These are the straps
which were used to assemble the planks of the
doors of that period. In Europe before that
date, the only example of metal doors known
to have existed, is still to be found in a church
at Aix-la-Chapelle, and this is not in iron. In
the beginning the straps were without ornamen-
tation, but the ironsmiths of the twelfth and
thirteenth century noticed that if the straps
were divided into several branches, they gave
to the doors much more solidity, because the
wood was in contact with the iron on a bigger
surface, and the straps were more resistant to
the weight of the door. They started de-
veloping the straps by making them in the
shape of a crescent, as we can see on the doors
of the cathedral of Puy. Later, by welding
and twisting they created beautiful scrolls, rich
and complicated, of which we have an example
at Notre Dame de Paris. Even these beautiful
straps did not satisfy the mediæval ironsmiths.

The process of stamping and welding was
very difficult and expensive. They adopted the
process of dividing a piece of iron into different
branches, and each branch produced smaller
ones, thus covering the whole door with a rich
ornamentation which was in harmony with the

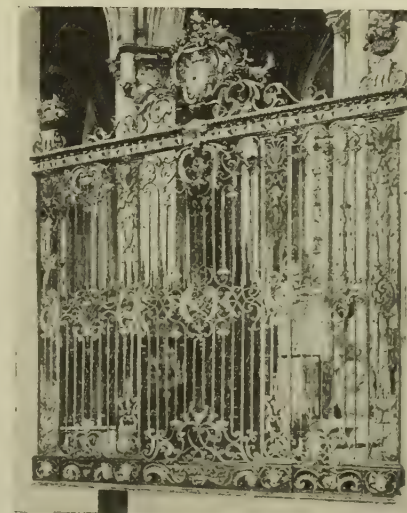
decoration of the Gothic architecture, then at
the zenith of its beauty. Later, for economy,
iron sheets were used, and with the develop-
ment of woodwork, the art of strap-making died
out.

Important ironworks were unknown in the
mediæval ages. The price of wrought iron was
so high that it was used more often for in-
teriors. Exterior iron grilles for enclosing
large open spaces were not used until the
seventeenth century; nevertheless we find ex-
terior works of small importance; for in-
stance, interlaced grilles which were used for
protecting windows of small dimensions, iron
spikes, and some small iron doors. We see
by that what a mistake architects and designers
make when for important exterior grilles they
take as models fragments of interior grilles of
too small importance to lend themselves for big
compositions. Very probably one of the oldest
grilles is to be found at the Cathedral of Puy.
It is of the beginning of the twelfth century.
The design consists of vertical bars, well
spaced, connected by welded scrolls of flat iron,
and each motif is joined to the bar by a sort
of tie, bound round while hot, and welded. It
is a beautiful work, real lace in iron, which
does not screen the architecture of the cloisters
behind. A work of similar character is to be
found at San Vicente Avila, in Spain. The
system of welding was in use until the fifteenth
century, and one of the most beautiful wrought-
iron works in existence is at the Abbey of
Ourscamp. As during the twelfth and thir-
teenth centuries the development of ironwork
did not allow but bars of small section, and
short in length, the designer adopted the kind
of decoration we have just mentioned. There
we have the technique of iron obliging the
artist to design in a certain way. The assem-
bling of rectangular panels has produced in
Italy some interesting examples.

We have the grille of the Rinuccini Chapel at
Santa Croce, in Florence. Each panel is com-
posed of six motifs which are fixed to the
frames by small rivets. At the Palace of
Sienna we have a fine example of moulded iron
beaten and pierced, and the pulpit of the
Cathedral of Avila is one of the same category
of work. The Spaniards often used the vertical
bars diagonally, and in those of rectangular
section the small side in elevation. It gives
more resistance to the grille, and from the
artistic point of view produces contrasts of light
and shade. Grilles which show the widest
dimension in elevation are contrary to logic, have
a heavy appearance, and do not look resistant;
for instance, the one at Chiostro Verde in
Florence. In Spain veritable architectural
monuments in wrought iron were executed.
Some of the finest specimens are the grilles of



Twelfth-Century Grille, Cathedral
of Puy.



Interior Grille, Cathedral of Notre
Dame, Amiens.

the Cathedral at Zamorra; the grilles of a bishop's tomb at the Cathedral of Salamanca and the grille which is to be found in the Cathedral of Toledo. Another beautiful example of interior wrought iron is the grille of the tomb of Maximilian at Innsbruck. The Renaissance having given birth to a new and rich era, art was subsequently transformed. This transformation, combined with the progress in the building art, deprived the iron craftsman of the opportunity of producing. But even if exterior ironworks had changed, those of the interior were slightly modified. Ironwork lost in heaviness but gained in elegance and richness. For the vigorously worked iron of the past, the sixteenth century substituted embossed iron particularly for iron ornaments. We must proceed as far as Tiju in order to find big schemes for grilles, etc. In 1640 in France the first important grilles surrounding big open spaces were erected.

It is easily understood that such works were useless before that date, as all the noble residences were built according to mediæval principles, and were isolated by moats in order to avoid easy approach. Only after this custom had died out were large exterior grilles and railings designed. We have just mentioned that after the mediæval age the technique of iron began to change. From the fifteenth century, in France, as in Spain, it became the fashion to imitate stone shapes with iron. The principal lines were always in wrought iron, but the ornamentation was often in iron beaten and embossed with a hammer, or even in wrought iron. By welding it was possible to execute magnificent works of iron in one piece. But this was very heavy, and later on fixed ornaments in beaten iron were used. All the qualities of the metal were employed in order to obtain artistic effects. From the seventeenth century, the procedure of beating iron in thin sheets, and shaping it with a hammer after cutting it out, became general. Thus were obtained ornaments broadly treated in their modelling and with good effects of light and shade. For the works imitating stone shapes, often the frame was composed of pilasters, effectively treated with contrasts of solid and void. Often the frames had cornices and frequently, too, were surmounted by cartouches. At Rouen, in the church of St. Ouen, we have a very beautiful example of this kind of work of a decorative ensemble, and all the stone shapes are not heavy looking. Here in England many examples are to be found, and this style of design has been kept until the present day. St. Paul's magnificent interior grilles with gilded pilasters are fine examples of work of that kind. Among other grilles executed in a classical design is one in the Cathedral of Amiens, dating from the eighteenth century. We remark the effect of horizontal decoration which breaks the monotony of the vertical lines.

(To be continued.)

Southport School of Art.

The annual exhibition of students' work of the Southport School of Art is now being held at the Atkinson Art Gallery, Southport. The architectural section forms an outstanding exhibit. This department was re-organised after the war on the appointment of Mr. H. P. Huggill, A.R.C.A., A.R.E., as Headmaster of the School of Art. In 1923, Mr. Gordon Hemm, formerly of the Liverpool University School of Architecture, was appointed to take charge of the architectural classes. The exhibition shows the fruits of two years' serious work, and the results are very promising, considering that the majority of the students are in their early pupillage days. Architectural design and history of architecture comprise the main part of the curriculum, with a special class for measured drawings during the summer months. The courses are particularly suitable for students preparing for the R.I.B.A. intermediate and final examinations. A special afternoon class has been arranged for the preparation of the testimonies of study, &c.

THE LABOUR PARTY CONFERENCE

THE proceedings at the Conference of the Labour Party at Liverpool form a marked contrast with the proceedings of the Trade Unions Congress at Scarborough. Whilst the dominating note at the Trade Unions Congress was class warfare and the overturning of the existing order of things by revolution, and M. Tomsy was loudly cheered when he spoke of the Russian method of "relieving bankers, factory owners and landowners of responsibility," the dominating note at the Labour Party Conference has been the furtherance of the objects the Party stands for by constitutional methods. Thus the President, Mr. C. T. Cramp, in his presidential address, although he spoke of class conflict, which he explained as "the clash of interests between classes produced by the development of modern capitalism," went on to say that the fundamental task of the Party was a creative one. "We are engaged in a positive effort to bring the co-operative commonwealth into being, and we appeal for the support of all classes in the work of transforming social and economic institutions by Parliamentary methods. It is quite impossible to reconcile the constructive activities of the Labour Ministers in the field of legislation and administration with the traditional doctrine of the class struggle; but it is possible to interpret the whole work of the Labour Government from the point of view I have indicated, namely, that our conflict is not with other classes, but with social and economic circumstances."

Mr. Ernest Bevin put the difference between the constitutional view and the Communist view neatly when he said, speaking of the resolution excluding the Communist Party from affiliation with the Labour Party, if he thought for a moment that the resolution was put down because the Communists took an advanced line he would be against the Executive, but the Communists could not conscientiously reconcile the Communist basis with the basis of evolutionary democracy that the Labour Party represented.

No greater contrast can be imagined than the statesmanlike tone of the speeches delivered at Liverpool, with their grave warnings against revolutionary methods, and those delivered at Scarborough, with the incitement they offered to follow the Russian lead and to plunge into revolutionary methods to attain an end which was not disclosed, but which can be imagined when the true position of Russia is considered.

The lesson to be learned from the proceedings at these two Congresses is not, however, only one to be taken to heart by the Communists but by the nation at large. The policy adumbrated by Mr. Purcell and Mr. Smales must be fought tooth and nail. On imperfect evidence they urge the nation to rush into civil strife to attain nothing but misery; but if the Labour Party by constitutional methods can and do persuade the nation that the policy they represent is desirable and will attain the results they claim, and by proof the majority become convinced, then the will of that majority must be accepted and a peaceful revolution as regards the industrial system of this country will take place. In the one case force is alone to be opposed to reason, but in the latter it is the reasoning that has to be the force, and that force cannot be withstood by anything but argument.

It is characteristic of the British nation that they can argue vital questions without engendering ill feeling, and thus even the vital changes in the industrial system which the Labour Party have at heart should be weighed and discussed in the spirit which pervaded the proceedings at Liverpool, with mutual respect on both sides. The Labour Party have a great opportunity, but they are also in a position of great difficulty, for the Trade Unions are closely connected with the Labour Party, and the proceedings at Scarborough

certainly lend support to the view expressed in Russia, and hinted at here there is a movement on foot to induce Trade Unions to forward the revolutionary methods which have been tried in Russia. Again we can quote Mr. Cramp, whose address is reported as saying: "The challenge this policy of ours do not come to us because they have found an easier path for the peoples to tread on the long weary journey to peace, security and happiness. The road upon which they would lead the international proletariat ends in shambles; the peace they would achieve by their policy of world revolution and dictatorship is a peace of utter desolation and universal ruin." This sentence places the matter in a nutshell—revolution in this country leads not to freedom but to dictatorship. All Parties should combine to retain the freedom possessed in such a marked degree in this country, and the path to reform lies along that road indicated by the vast majority in Liverpool—constitutional action. As Mr. Cramp said, the Labour Party are in a position of difficulty but they have a great opportunity. They have greater influence with the Trade Unions than any other Party, and the Trade Unions are necessary to them if their constitutional policy is to have any chance of success. It is therefore essential that they should bring into the Trade Unions the constitutional principles so clearly expressed at Liverpool—purge the Unions from the Communist taints which have affected what we believe to be but a very small minority in the Unions. Thus they will forward the policy and as a united Party be able to stand on the lines which no one can gain on. A constitutional effort to persuade the nation to accept the industrial system they stand for.

The system called capitalistic, but which is really founded on individual enterprise, has made this nation what it is and is the system prevailing in the majority of countries; it is a tried system with its merits as well as its defects understood. The Socialistic system, which is still untried, and the onus of proof lies on those who advise its adoption, but it is entitled to take every constitutional measure to convince the country that they are right. What is damaging the country at present is the accentuating the evils we are suffering from, an inheritance from the War, is the feverish unrest engendered by those who always upon times of national distress and disaster as affording them an opportunity to promulgate revolutionary doctrines, and whose end is a disordered society.

Wooden Houses for London.

Colonel Levita and the Housing Committee of the London County Council are investigating various systems of timber houses, following a report of their architect, Mr. Topham Jones, advising that London, in the development of its cottage estates, should adopt the principle that some of the houses should be constructed in wood prepared on mass production methods.

Cathedral Glass.

Messrs. Pilkington Bros., Ltd., glass manufacturers, of St. Helens and Doncaster recently sent us a very artistic brochure describing and illustrating their Cathedral Glass. The method by which this is made—by melting the molten glass into sheets on an iron table gives a far better surface, softer colour and a larger range of tints. There are three varieties of the glass: non-formal, formal and formal patterns which are less transparent and still less transparent. Besides this is a special ornamental wire glass—where this has the wire accurately embedded between the two surfaces, and is almost invisible by the pattern.

THE BUILDING TRADE.

HINTS TO BUILDERS

By J. H. BARNES, F.I.O.B.

WHEN a builder is instructed to commence work he must be careful to see that usual preliminaries are observed. If the thing is to be erected in London it may be necessary for the site to be cleared of any existing buildings before rebuilding can commence.

Certifying Old Buildings.

Where such old buildings are demolished it may be necessary, under section 13 of the London Building Act, 1894, if the street is less than 40 ft. wide, to have the old building certified by the District Surveyor, the first course being to submit plans of the building, having the distance from some prominent projection on the opposite side of the street noted on the drawing. The District Surveyor will then attend and check these plans and return one copy of the plans to the builder. For these services the fee is payable under the London Building Act, 1894, and Schedule, together with the increases fixed by the London Council under various Acts, totalling 37½ per cent., will be 17s. 9d. per building. The plans required are usually prepared by the architect, who sometimes arranges the whole matter with the District Surveyor, and instructs the builder to pay the fees. Should that be the method adopted in connection with the contract, it would be well for the builder to take a record of the frontage line of the old buildings demolished so that he may be quite certain that the new building is erected on similar lines, in instances where some misapprehension has been made and the new building has been erected in advance of the old frontage line, which has necessitated considerable alteration in the work. The builder should take particular care to see that the frontage line is approved both by the architect and local authorities before the building has proceeded very far.

Notices to District Surveyor.

Before any building work is commenced, the builder must be given to the District Surveyor drawings submitted to him for his approval. The latter is usually arranged by the architect, and all that is necessary for the builder to do is to give the formal notice that he is about to carry out the works, which he should need to describe. On completion of the work the District Surveyor is entitled to charge a fee in accordance with the Third Schedule of the London Building Act, 1894, and the increases since granted by the London City Council.

Under the 1905 Amendment Act, it is necessary to submit the plans to the L.C.C. for their consideration of the means of fire-escapes in case of fire, and after their inspection of the drawings it is usual for the L.C.C. to issue a list of requisitions defining the requirements which will be in respect of the particular building. This duty is usually arranged by the architect who supplies the number of drawings required to the L.C.C. The District Surveyor is entitled to charge for his services, as defined by the Act. In the building is completed the L.C.C. send a representative to inspect the building and if all their requisitions relating to fire in case of fire, etc., have been complied with they will in due course issue a certificate to that effect, the fee for which is 5s. In certain circumstances it may be necessary for applications to be made to the L.C.C. for various consents, but the builder or architect would usually be notified of this when preliminary applications have been made.

Cutting away Chimney Stacks.

Where there are chimney stacks (built in connection with party walls) that require to

be cut away and demolished, it is first necessary to obtain a certificate from the District Surveyor that they may be cut away. For these services the District Surveyor is empowered to charge a fee of 10s., plus the increases before mentioned. Such certificates are a great safeguard to the builder, and application for them should not be forgotten.

Notices respecting Alterations.

For alterations to old buildings, in addition to the usual notices being given to the District Surveyor, notices should be given of intention to run flues of new stoves into old flues, cut new door openings in old walls, and similar works enumerated in the London Building Act, 1894, etc., and for which the statutory fees must be paid.

Vaults under Pavement.

In the event of any vaults being required under the public way, or pavement lights being required to light the basement of the proposed building, it would be necessary to make application to the local authorities and submit drawings showing what is required. It will not be necessary to obtain permission for pavement lights or vaults if they already existed in the old building, and applications would only apply to any new lights or vaults required. The local authorities of London have the surface rights of the footway vested in them under the Metropolis Management Act. Whether they possess the fee simple of the footway may be another story.

Buildings outside London.

For buildings to be erected outside the London area the local building regulations must be complied with and the required notices served on the proper authorities. In most cases a copy of the drawings of the proposed building must be submitted, drawn to some specified scale and showing drainage, damp-proof course and other details, and probably a block plan would be required showing the frontage line and general position of site. The builder should see that sufficient drawings are submitted to suit the requirements of local authorities, both in London and elsewhere, and having satisfied himself on that head, can calmly await the leisure of the powers that be to notify the approval or otherwise of the building scheme submitted. A builder should make sure that all necessary particulars are supplied in his form of application, as it is rather annoying, after waiting some months to obtain permission to carry out building work, to have an application rejected because the detailed information required has not been supplied.

Hoardings.

Where a hoarding is required to be erected in any street in connection with building operations, a licence so to do must first be obtained from the local authorities, and the necessary fees paid. These vary in accordance with the district. The City of London publish a list of their charges for hoarding licences, but most of the authorities outside the City charge a nominal fee per month, sometimes only half-a-crown. The local authorities will not allow any portion of the street to be enclosed without permission, otherwise all sorts of people would enclose a part of the street for various reasons, and sooner or later someone might claim a right by user to a portion of the highway. The authorities usually require a certain sum of money deposited to be used to reinstate paving, etc., if required, before they will issue a licence. The amount of money required as a deposit is based upon the area of pavement enclosed, as it is possible that that portion of the foot-

way may need relaying when the building operations have been finished.

Advertisements on Hoardings.

These are usually considered to be a wonderful source of profit to the builder, but are, in fact, quite the reverse.

Rating Hoardings.

The local authorities usually levy their general rates for a hoarding upon which advertisements are affixed, and, in addition, an "advertising rate" is sometimes "made," and the Inland Revenue will most likely issue a demand for income tax. These matters should be calculated when considering the question of letting the hoarding for advertisements. The advertising contractor will usually stipulate that he is allowed to raise the hoarding to some considerable height at his own expense. Such a hoarding will be likely to block out the light from the ground floor and greatly hamper the builder in his operations and cause a lot of unnecessary expense, so that a builder will be better off without any high advertisement hoarding being allowed around his sphere of operations, notwithstanding any small payment he may receive for such user, which would soon be lost in payment of artificial light and other increased expenses because of such high hoarding. The right of affixing advertisements to a hoarding is sometimes reserved by the building owner, and if this is so the builder should see that the person who so uses the hoarding pays the charges in connection therewith.

Licence for Raking Shores.

If raking shores are required to be fixed, during the course of building operations on the public highway, a licence for such shores will be required from the local authorities, similar to the licence required for hoarding, and the necessary fee must be paid. It is sometimes possible to arrange for the raking shores to be enclosed by the general hoarding (if one is in existence), in which case no special licence would be required. Raking shores usually project further on to the footway than the local authorities will allow the hoarding to extend, and so a licence for shores may be needed. When the fee charged for a licence is likely to be a considerable sum, say, £10, the builder should consider whether or not it would be possible to substitute some other method, on the lines of more recent building practice, to secure the necessary support for the building without raking shores, and thus save the large fee necessary.

Party Wall Notice.

Under the London Building Act, 1894, it is necessary to give notice to the joint owner of party walls that some work is contemplated to be done in connection with such structure, and the situation of the building, the nature of the proposed work, together with the name of the surveyor appointed to act in the matter, should be set forth clearly. The notice may be given by the building owner to the adjoining owner by delivering it to him personally, or sending it by post in a registered letter. It will be found in the above-mentioned Act that the term "party structure" includes party walls, partition floors, and all other structures separating buildings, stories or rooms, as defined by the Act.

Building within 10 ft. of Adjoining Building.

If it is intended to build within 10 ft. of and at a lower level than an adjoining owner's building, it is necessary under the Building Act to give notice to the adjoining owner somewhat on the lines mentioned above, and the notice should give some description of the work contemplated. In both of the above matters the building owner should seek the advice of some competent person who has had experience in dealing with such work.

THE SMALL DWELLINGS ACQUISITION ACT

A CORRESPONDENT writes to us that, being a person of small means desirous of building a small bungalow, he applied to the rural district council near a populous area for a loan under the Small Dwellings Acquisition Act, and in reply received a circular which stated that a loan could only be granted to an applicant where the value of the house to be erected would not exceed £600, and that the applicant must have been a resident for at least two years.

The bungalow he proposed to erect would somewhat exceed the sum named, and as he was also a non-resident, our correspondent says he concluded the Act was not applicable to his case. Subsequently, however, having read the article on the Small Dwellings Acquisition Act which appeared in our issue of August 21 last, he renewed his application, apparently citing the extension of the Small Dwellings Act by section 22 of the Housing Act, 1923, but received a reply that the Act of 1923 was only an enabling Act, and the scheme of the council stood as stated in the circular originally sent.

We can only take the facts as stated by our correspondent, and they require some explanation, for the local authority could only make an advance under the Small Dwellings Act, where a house was to be erected under that Act as amended by the Housing Act of 1923. Therefore it would appear they had adopted that Act, at any rate to some extent; but on the facts as stated the case seems deserving of some notice.

In the circular of the Ministry of Health special attention is called to the facilities now offered by the Small Dwellings Acquisition Act as amended "so as to enable loans to be made within much wider limits to persons who desire to purchase a house for their own occupation. It is to be observed that the Small Dwellings Act itself is only permissive. "A local authority may, subject to the provisions of this Act, advance money," but the local authority, as is shown by the circular, have adopted that Act. The Legislature by section 22 of the Housing Act has extended the operation of that Act, and if the local authority act under the original Act at all, surely the enlarged provisions should be applied in the administration of the original Act. Section 22 of the Housing Act, 1923, commences "The Small Dwellings Acquisition Act shall have effect subject to the following amendments," and these words seem to indicate that the Act must be administered as amended. The Housing Act also repealed a portion of section 1 of the Small Dwellings Act, and it is quite certain that that Act cannot be administered as regards the portion which is no longer law.

The amount fixed for an advance may lie within the discretion of the local authority, but the Legislature has twice since the Small Dwellings Act was passed raised the maximum limit showing the intention of the Act, and in the case we are considering there is the other question of residence. Our correspondent states that the circular made it a condition that the applicant must have been a resident "for at least two years," but we are unable to see where this condition is imposed even in the Small Dwellings Act as unamended. The words of section 1 subsection (1) are "to a resident in any house within the area," but section 7 even relaxes this condition as to residence, enabling an advance to be made to a person "who intends to reside in a house, as if he were a resident, if he undertakes to begin his residence therein within such period, not exceeding six months from the date of the advance as the local authority may fix."

Section 22 of the Housing Act, 1923, paragraph (a) relaxes the qualification as to residence as follows: "An advance under that Act" (the Small Dwellings Act) "may be made to a person intending to construct a house, and in such case the limitation of that Act requiring that the person to whom the advance is made

must be resident in the house shall be construed as requiring that the person should be a person intending to reside in the house when constructed." We can express no opinion on the merits of this particular case on an *ex parte* statement, but the Legislature and the Government are clearly desirous to afford facilities to persons seeking to build houses, and the Small Dwellings Act as amended has proved a most useful measure, and that is why we drew attention to its provision in our article of August 21. It is of the greatest importance, therefore, that its usefulness should not be limited by the imposition of any unnecessary conditions or that it should be administered in its unamended form.

WEMBLEY HOUSING CONFERENCE

A CONFERENCE was held last week at Wembley for the purpose of giving representatives of local authorities an opportunity of inspecting the exhibit of new housing methods and building materials.

Sir Kingsley Wood, Parliamentary Secretary to the Ministry of Health, in opening the meeting, expressed his regrets that Mr. Neville Chamberlain was unable to attend, and thanked Sir Lawrence Weaver and the Advisory Committee for their help in organising the exhibition. The housing progress made recently, he continued, was very satisfactory and in his opinion the corner had been turned; in addition to providing for the normal increase of population we were making up the deficiency. In alluding to the new apprenticeship scheme, he expressed the opinion that much might be achieved, although results must necessarily be slow. But, for all this progress, no one could minimise the fact that there was still a great deal to do—the slum problem still remained, and to solve this difficulty the rate of building must be accelerated. At present the vast majority of people were too conservative; only 10 per cent. of the houses now being built were constructed under new methods, and it was to "speed things up" that the conference was called. The Ministry was endeavouring to do what it could in the matter and the House of Commons had recently voted over £25,000 to be used for research work in new types of construction. The ultimate judge of new methods in the country must be the public, and the public should have the opportunity of inspecting new methods in order to decide for itself.

Mr. Raymond Unwin, Chief Architect to the Ministry of Health, then gave a brief survey of the various systems of construction on view. As could be seen from Sir Kingsley Wood's report, the need for adopting these methods was independent of whether the houses were better than those of the usual brick construction or the next best substitute. Those present, he said, should examine the houses with a view to their fulfilling the main requirements: they must be weatherproof, temperature-proof, stable and enduring. They must provide internal surfaces strong enough to resist wear and tear, and offer the least possible harbourage for vermin. Mr. Unwin then went on to describe the various systems in detail. A class of house departing less drastically from the ordinary building materials, but depending on arrangements for economising labour, was represented by the Dennis Wild Company's house. The essential feature of this was that a light steel frame was first erected to carry the roof and the first floor; the roof was first completed and the construction of the house proceeded with under shelter. The walls of the lower part were constructed of concrete blocks, &c., and the upper of wood framing lined with breeze blocks on the inside and tiles on the outside. By this system the demand on the brick-laying craft was reduced to 25 per cent. or 30 per cent. Concrete construction afforded the largest class of new methods, and was divided into many sub-classes. There were systems—of which Messrs. John Laing's "Easiform" house was representative—in which concrete was

poured into a mould formed by shuttering; system almost eliminated skilled work. Universal Housing Company's exhibit showed an interesting variation of this method of work; this consisted of using asbestos shuttering which remained adhering to the concrete as a permanent facing, resisting the weather outside and affording a fair face for decoration internally. The sheets were fixed to a skeleton steel frame which remained embedded in the concrete as a reinforcement. Messrs. F. Boot & Sons exhibited a house erected on the pier and panel system, of which a large number had been successfully erected in this country. The Triangular Block Co. exhibited an ingenious arrangement for providing a dense exterior concrete with a more porous interior. Mr. Unwin also touched upon a method of getting aerated concrete by mixing with the cement an effervescent chemical, thus producing a material of high insulating power. The Concrete Company had arrived at the same result by using an aggregate of even size (with no larger than 10 among it) and mixing with it a cream of cement; the coated particles of aggregate came together at all their salient points, leaving a large percentage of air voids. These last methods were of special interest because they introduced a new principle in the making of concrete. Several new methods had been adopted in the Tibenham cottage, of which Messrs. Colcutt and Hamp were the architects. The frame was of genuine oak half-timber construction. Corrugated asbestos and concrete sheets were set in grooves in the centre of the wall and the panels infilled flush with the concrete outside and clinker concrete in the middle. There remained to be discovered for this method other methods a cementing material with sufficient power to adhere equally to wood and concrete. The Minister had, however, arranged that the Department of Scientific and Industrial Research for an increase on the work on building construction problems, which it was hoped might help to solve this and other building difficulties. Visitors from the Dominions and other lands were often surprised that we made so little use of the wood house to supplement our overtaxed building industry; but failed to realise that we had a comparatively abundant supply of brick and concrete material in this country, and that nearly all our building timbers had to be imported. In conclusion Mr. Unwin drew attention to the proof which this exhibition offered—that new methods of construction do not involve, and offer no excuse for, bad planning and unpleasant design. Concrete was not a cause of cramped rooms, sun aspects, or ill-proportioned elevations; if such faults occurred with the new methods of construction they were due to want of care in thought and not to want of adaptability of material.

The representatives present were then conducted round the exhibition by members of the Advisory Committee.

Steel Houses in Demand.

The Scottish Board of Health are inviting tenders for the erection of 1,000 steel houses or houses of similar type.

Mersey Tunnel Scheme.

Mr. Basil Mott, C.B., of Westminster, Mr. J. A. Brodie, Liverpool City Engineer, were at the first meeting of the Joint Mersey Tunnel Committee at Liverpool appointed engineers for the £50,000,000 Mersey tunnel scheme.

Flintshire County Council have decided to join the conference of local authorities, proposed by Holywell Rural District Council, to discuss the scheme to build a rail and road embankment five miles in length, across the Dee estuary at an estimated cost of £6,000,000. It was suggested that the debris of the Mersey tunnel excavations should be used for the embankment.

NEW BUILDINGS IN LONDON.

Battersea.—Plans are being prepared for further extensions to the Sir Walter St. John's Schools in Battersea High-street, S.W.11, by Mr. Victor Wilkins, F.R.I.B.A., 12, York Building, Adelphi, W.C.2. The cost is estimated at £12,150. These buildings are additional to those now being erected to the designs of Mr. A. H. Ryan Tenison, F.R.I.B.A., 21, St. Peter-street, S.W.1.

Bayswater.—The premises at the corner of Queen's-road and Porchester-gardens, W.2, occupied by Messrs. W. Abbott & Son, of Ludgate-hill, E.C.4, boot manufacturers, are to be modernised and new display fronts installed. Messrs. Courtney Pope & Co., Ltd., contractors, Seven Sisters-road, N.15.

Bower-street.—It is proposed to convert large premises in Bower-street, E., into a hostel for boys for the Council of Toynbee Hall, of Commercial-road, E. The work—to cost £9,000—will be supervised by Messrs. Culpin & Bowers, 27A, Bush-lane, E.C.4.

Catford.—Mr. Arthur J. Glock, M.I.Struct.E., 34, Victoria-street, S.W.1, has under construction over 120 houses on an estate in Southend-lane and Blacklands-road, Southend Village, and large numbers of additional houses are to be put in hand shortly.

Edgware-road.—Messrs. Patman & Fotheringham, Ltd., 15, Park-street, N.1, have secured the contract for a large block of flats and shops in Edgware-road, on the site of Nos. 45-49. Messrs. George A. Lansdown & Brown, architects, 9, Regent-street, W.1. Total cost, about £35,000.

Edmonton.—The Grove Court Garage, Ltd., proposes to build a garage to accommodate under shelter about 150 cars, together with a number of lock-up garages. Mr. Albert Monk, builder, Lower Edmonton, N.9.

Golders Green.—The London Cremation Co., Ltd., 52, New Cavendish-street, W.1, propose to enlarge the Golders Green Crematorium, N.W. Mr. Alfred B. Yeates, F.R.I.B.A., architect, 18, Maddox-street, W.1.

Gower-street.—London Schools of Hygiene and Tropical Medicine are to be erected on a site in Gower-street, Malet-street, and Keppel-street, W.C. Mr. P. Morley Horder, F.R.I.B.A., architect, 5, Arlington-street, S.W.1. Over £500,000 is to be spent on the site, building and equipment.

Gracechurch-street.—A large office building is to be erected on a site at the corner of Gracechurch-street and Lombard-street, E.C.3. Messrs. J. Campbell Jones, Son & Smithers, architects, 9, Dowgate-hill, Cannon-street, E.C.

Grays.—A large terminal garage and repair workshop is to be erected in Argent-street for the National Omnibus and Transport Co., Ltd., of London. Mr. Harold Cane, architect, 9, Victoria-street, S.W.1.

Greenwich.—The Dreadnought Seamen's Hospital is to be extended by the building of a nurses' home, pathological department, &c. Sir Edwin Cooper, F.R.I.B.A., architect, 4, Verulam-buildings, Gray's Inn, W.C.

Hackney.—A site in Mare-street and Ellingford-road, E., has been purchased by the Temperance Billiard Halls, Ltd., of Wandsworth-street, S.E.8, for the erection of a new billiard hall.

Hendon.—It is proposed to build a nurses' and carry out alterations to the existing nurses' home at Colindale Hospital, Colindale-avenue, N.W.9, for the Metropolitan Asylums Board. Messrs. Edwards Construction Co., Ltd., contractors, 86A, High-street, Eltham, S.E.

Holborn.—Alterations and improvements are being made to the premises in Holborn, W.C., of Messrs. A. W. Gamage, Ltd. Messrs. Holman & Goodsham, architects, 6, King's Bench-walk, Temple, E.C.4. New shop fronts are being inserted by Messrs. Harris & Sheldon, Ltd., Birmingham.

Houndsditch.—The warehouse and offices at Nos. 25-27, Houndsditch, E.C.1, and extending back to Nos. 30-34, Creechchurch-lane, are to be rebuilt by Messrs. Griggs & Son, 100, Victoria-street, S.W.1. Messrs. Lewis Solomon & Son, architects, 133, Moore-street, E.C.2.

Hounslow.—It is proposed to build a public-house known as the Sutton Hotel, in Sutton-lane, for Messrs. Fuller, Smith & Turner, brewers. Mr. Nowell Parr, architect, 42, Cranley-gardens, South Kensington, W.

Huntly-street.—Excavation for foundations on the site at the junction of Huntly-street and Pancras-street, W.C.1, is in progress in connection with the new Royal Ear Hospital to be erected there, to the designs of Messrs Edmund Wimperis & Simpson, 61, South Molton-street, W.1. Messrs. Higgs & Hill, Ltd., builders Crown Works, South Lambeth-road, S.W.

Kingsway, W.C.—A new story is to be added to the Kodak building. Sir John Burnet, R.A., architect.

Lambeth.—New shops and flats are being erected in New Cut to plans prepared by Mr. H. A. Wright, 35, Pentonville-road, N.1. Messrs. Allan & Son, builders, 80, Chapel-street, N.1.

Leicester-street.—An extension of the showrooms of Messrs. Stagg & Mantle, Ltd., is to be built in Leicester-street, W.1. Messrs. Hall, Beddall & Co., Ltd., contractors, Waterloo Bridge, S.E.1. Mr. E. H. Abbott, architect, 6, Warwick-court, Holborn, W.C.

Leyton.—A new school is to be built in Sybourn-street, E., to accommodate 300 children, at a cost of £10,000. Mr. E. J. Coxhead, builder, 45, Bulwer-road, E.11. Messrs. Newman & Jacques, architects, 61, West Ham-lane, E.15.

Maida Vale.—A large block of self-contained flats is to be erected on a site in Maida Vale, N.W., by the Central London Building Co., 24, Grove End-road, N.W.8. Steelwork by the Aston Construction Co., Ltd., Eagle Wharf-road, Hoxton, N.

Marylebone-road.—Funds are being raised for the £30,000 required to reconstruct the Western Ophthalmic Hospital, in Marylebone-road, N.W.1. Messrs. Young & Hall, architects, 17, Southampton-street, W.C.1.

Paddington.—Rebuilding and extensions are being carried out at 161 & 163, Harrow-road, W., for the Buscot and North Berks Dairy Co. Messrs. Higgs & Hill, Crown Works, South Lambeth-road, S.W., are the contractors. Steelwork by Messrs. Young & Co., 6, Queen Anne's-gate, S.W.1. Messrs. Williams & Cox, F.R.I.B.A., 34, Henrietta-street, W.C., are the architects.

Praed-street.—A large block of corner shop premises at the junction of Praed-street and London-street, W.2, has been acquired by Messrs. R. E. Jones, Ltd., caterers, of London and South Wales. Extensive alterations and new shop fronts and fittings are involved.

St. John's Wood.—It is proposed to build a large petrol service station together with a number of lock-up garages on a site in Park-road, N.W.8. The promoters are Messrs. Petrol Service Stations, Ltd., Regent House, Kingsway, W.C.2.

Shirley-street.—Mr. G. N. Kent, Lic.R.I.B.A., 521, Barking-road, E.13, is the architect for the building of a new factory in Shirley-street, E.15, for Messrs. Coombs Bros. & Sons, Ltd., 37, Rathbone-street, E.6.

Soho.—A block of offices is being erected at No. 8-10, Little Dean-street, W.1. Messrs. Townsends (Builders), Ltd., of 81, Dean-street, W.1, contractors. Constructional steelwork by Messrs. Young & Co., 6, Queen Anne's Gate, S.W.1. Metal casements by Messrs. Crittall & Co., Ltd., of Baintree. Messrs. Woodward & Son, 15, Great James-street, W.C.1, architects.

South Kensington.—It is understood that a further stage towards the completion of the new Science Museum, at South Kensington, W., will shortly be undertaken. Mr. R. J. Allison, Chief Architect to H.M. Office of Works, Storey's Gate, S.W.1.

South Kensington.—Plans have been prepared by Mr. Matthew J. Dawson, architect, 11, Newcourt, Lincoln's Inn, W.C., for three shops, with three upper floors to be used as flats.

Stepney.—Building operations have begun upon extensions of the London Jewish Hospital, which will involve approximately £30,000. Messrs. Josephs, architects, 2, Paul's Bakehouse-court, E.C.4.

Stoke Newington.—The L.C.C. propose to build a central school at Stoke Newington, to accommodate 400 scholars. Mr. G. Topham Forrest, F.R.I.B.A., architect to the L.C.C., County Hall, S.E.1.

Strand.—Messrs. Kodak, Ltd., Kingsway, W.C.2, have purchased the premises at No. 56, Strand, W.C.2., for branch showrooms. New display fronts and fittings are to be installed.

Strand.—Messrs. Bovis, Ltd., 43, Upper Berkeley-street, W.1, have started work upon the modernisation and extension of the Howard Hotel in Norfolk-street, W.C., for the Howard Hotel, Ltd. Messrs. W. & E. Hunt, F.R.I.B.A., architects, 30, Norfolk-street, W.C.2.

Surbiton.—An extensive development scheme is being carried out on the Surbiton Hill estate by Messrs. Thorogood Bros., & Sons, 55, Bond-road, Tolworth.

Sutton.—Plans for an arcade of shops, including a hall, &c., have been prepared by Mr. Harold Bailey, 32, Bedford-row, W.C., for a local firm.

Teddington.—Plans have been prepared by Mr. John Armitage, 42, Clarence-road, Teddington, for a new hospital to cost £13,000. Tenders are shortly to be asked.

Tooting.—A block of shops and showrooms is to be erected in Upper Tooting-road, S.W., for Messrs. E. Mortimer, Ltd. Messrs. Birdwood & Mitchell, architects, 80, George-street, Portman-square, W.

Tottenham.—The foundation stone has been laid of the new hall for the parish of St. Hilda, Tottenham. Professor C. H. Reilly, F.R.I.B.A., architect, Liverpool University. Messrs. H. Knight & Son, builders, 16, Bruce-grove N.17.

Trafalgar-square.—An additional block is to be erected at the National Gallery to accommodate the collection of pictures bequeathed to the nation by the late Dr. Ludwig Mond. This will occupy the site of the old St. George's Barracks between the National Gallery and the National Portrait Gallery, and will be supervised by H.M. Office of Works, Storey's Gate, S.W.1. It is intended to begin building next year.

Upper Baker-street.—A large block of shops and flats is projected in Upper Baker-street, W., opposite Baker-street Station. Messrs. Ernest Yates & Co., architects, 37, New Bond-street, W.1.

Wembley.—A new hotel, to be called the "Century Hotel," together with tennis courts and gardens, is to be erected on a site in South Forty Farm. Messrs. F. J. Fisher & Son, architects, 38, Bloomsbury-square, W.C.1, acting for Mr. Ernest Cloke.

Business Premises, Liverpool.

New premises are to be erected for Old Calabar, Ltd., at Fazakerley, Liverpool. Mr. Max Clarke, F.R.I.B.A., is the architect.

A New Type of Door Handle and Lock.

A San Francisco mechanic, W. R. Schlage, has invented a new type of door lock, the main feature of which is a button on the inside of the knob. To lock the door it is only necessary to press the button, and unlocking is performed by simply turning the knob. There are no screws in either escutcheon plate or knob, and therefore the knob cannot be tampered with. Although the Schlage Co. has been in existence for a matter of only two years, we understand that the demand for their locks has been so great that the firm were 10,000 orders behind hand, but since building a new factory occupying 2½ acres in San Francisco, they are able to turn out 20,000 locks per month. The Presto Lock Co., whose showrooms are at Sentinel House, Southampton-row, W.C.1, have secured the sole selling rights for England, Scotland, Wales and Ireland, carrying a stock of the twenty different original designs and the five types of locks. They state that in a short period they have had very satisfactory reports and comments from architects. The lock can be installed in twenty minutes, and although a strictly utilitarian fitment is of a dignified appearance.

BUILDING TRADE
FRICTION

WE understand that Mr. W. H. Nicholls, the President of the Council of the National Allied Building Trade Employers, has resigned, and the committee of the employers which carried through the recent negotiations with what remains of the operatives' federation has also resigned upon the refusal of the employers to ratify the agreement recommended for acceptance. In addition, the London building trade employers are reported to be contemplating withdrawal from the national organisation.

It will be recalled that the bricklayers, who, like the plasterers (says the *Times*), enjoy a favoured position, broke away from the operatives' federation last spring, in order to be unhampered in the pressing of their demand for payment for time lost through inclemency of weather or other circumstances not within the operatives' control. The plasterers seceded with them. The defection of these craftsmen seriously weakened the operatives' federation, which was no longer able to speak on behalf of two unions that, by themselves, could bring the building industry to a standstill. Nevertheless, the employers proceeded to negotiate with the operatives' federation a new agreement, which provided for the revival of the Joint Industrial Council. Only when it came to the ratification of the agreement by the constituent bodies was it made apparent that the employers' committee did not possess the confidence of the various employers' organisations. The employers take the view that an effective agreement cannot be made with the operatives' federation so long as the bricklayers and the plasterers dissociate themselves from it.

On the question of wet time payment there is some possibility of the bricklayers being induced to reconsider their policy, but the plasterers are as firmly resolved as ever to act alone. The Bricklayers' Union has issued a statement containing two important points. The first is that the secession of that union from the operatives' federation was due "simply and solely" to the determination to force the question of "wet time" to an issue. The second is that, "if the present crisis in the building industry is to be overcome and peace is to be maintained, the principle of payment for wet time put forward by the operatives must be adopted." The union contends that the cost of a common scheme of payment for "wet time" would not amount to more than 6d. weekly for each operative.

TRADE NEWS

Messrs. F. D. Huntington, Ltd., building contractors, announce that to meet their expanding requirements they have now moved into larger premises at Broadway Chambers, Hammersmith, W.6.

A Useful Lantern.

For builders, contractors, surveyors, engineers and others who by the nature of their business are at times compelled to work out of doors after dark, a lamp which will yield steady and brilliant illumination and that cannot be blown or put out by wind or rain is indispensable. It is claimed that the Tilley (patent) paraffin vapour lantern fully satisfies the conditions. The first claim made on behalf of the Tilley lantern is that it is thoroughly safe and gives a 300 c.p. light for six hours at a cost of one penny. Another point is its portability, and it can be put down on the bench or any other convenient place with perfect safety. One filling is sufficient for ten hours' light, so the lantern needs little attention. It is claimed that it is easy to light and that, when once lighted, wind and weather cannot extinguish it. A special point is made of the simplicity of construction of the lantern, and as it is made throughout of solid brass, there is nothing to rust, corrode or go wrong.

RATES OF WAGES IN THE BUILDING TRADE

every endeavour is made to ensure accuracy, but we cannot be responsible for error.

	Masons.	Bricklayers.	C'pters. Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Accrington	1/8	1/8	1/3	1/8	1/8	1/8	1/8	1/3 1/2
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barry	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3 1/2
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3 1/2
Bedford	1/9	1/9	1/8 1/2	1/9	1/9	1/9	1/8 1/2	1/4
Birkenhead	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bolton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3 1/2
Bournemouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bradford	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Brentwood	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Bridgwater	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Brighton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Burnley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Burton-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bury	1/8	1/8	1/6	1/6	1/6	1/6	1/6	1/3 1/2
Cambridge	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Cardiff	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Chatham	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Chelmsford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Cheltenham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Colchester	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Crewe	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
E. Glam.(Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Eastbourne	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Folkestone	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/1 1/2
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Grantham	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Grays	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Grimby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Great Yarmouth	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Guilford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hallifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hartlepool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hastings	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/1 1/2
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Ipswich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Lancaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leamington Spa	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Lichfield	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Lincoln	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Liverpool	1/9	1/9	1/8 1/2	1/9	1/9	1/9	1/8 1/2	1/3 1/2
Llanelli	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
London (12 m. radius)	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/4
London (12-15 m. radius)	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/3 1/2
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Maidstone	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Newport Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Norwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Oakham	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Rochester	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Rugby	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
St. Albans	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Scarborough	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/1 1/2
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Shrewsbury	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Southend-on-Sea	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stroud	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Swansea	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Taunton	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Tunbridge Wells	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Wakelield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Wigan	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Windsor	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Wolverhampton	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Worcester	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2

(For rates of wages in the Building Trade in Scotland, see page 547)

CONTRACTS, COMPETITIONS, &c.

Some contracts still open, but not included in this List, see previous issues. Those with an asterisk inserted in this number. Certain conditions beyond those given in the following information used in some cases, such as that advertisers do not bind themselves to accept the lowest or any other than a fair wages clause shall be observed; that no allowance will be made for tenders; and deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

Date given at the commencement of each paragraph is the latest date when the tender, or the names of persons willing to submit tenders, may be sent in; the name and address at the end is the person from whom particulars of quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

OCTOBER 12.—Belgium.—CEMETERIES.—Construction of cemeteries in Belgium. The Secretary, Department, Imperial War Graves Commission, 10, Whitehall, London, W.1. Deposit £10 10s.

OCTOBER 12.—Buxton.—PAINTING.—Internal painting and decorating of the large assembly hall at the Buxton Hotel, for the T.C. F. Langley, Borough Engineer, Buxton. Deposit £1.

OCTOBER 12.—Chelmsford.—ADDITIONS.—To the Chelmsford Institution, Wood-street, for the B.G. E. Foster, F.R.I.B.A., architects, Warwick, Chelmsford Hill.

OCTOBER 12.—Dublin.—IMPROVEMENTS.—At City National School, Dublin. O'Callaghan & Webb, Frederick-street.

OCTOBER 12.—Dublin.—PAINTING.—Certain painting and works incidental thereto at the undermentioned barracks:—Island Bridge Barracks, Dublin; Barracks, Cork; Renmore Barracks, Galway; Barracks, Templemore, Felix Cronin, General. Quartermaster-General, Portobello, Dublin. Deposit £1 1s.

OCTOBER 12.—East Molesey.—HOUSES.—Erection of houses at Spreighdon-road, West Molesey, for the West Molesey U.D.C. Council Offices, St. Paul, East Molesey. Deposit £1 1s.

OCTOBER 12.—Forehoe.—COTTAGES.—Three pairs of cottages at Costessey and Hingham, for the R.D.C. Mr. J. Smith, Clerk, Vicar-street, Wymond, Forehoe. Deposit £1.

OCTOBER 12.—Hucknall.—HOUSES.—Ten non-parlour houses and ten parlour type houses, for the E. W. Bostock, Chartered Architect, Engineer, Hucknall. Deposit £1 1s.

OCTOBER 12.—Lanark (Middle Ward).—HOUSES.—To be erected at Station-road, Low Blantyre, for the P. C. Smith, Housing and Town-Planning Committee, District Offices, Hamilton.

OCTOBER 12.—Londonderry.—PAINTING.—Internal work at the Custom House, for the Government, Northern Ireland. Secretary, Ministry of Public Works, Donegall-square, West, Belfast.

OCTOBER 12.—Long Crendon.—HOUSES.—Five cottages, Oakley, Brill, for the B.D.C. A. J. Webb, Long Crendon, Long Crendon, Thame.

OCTOBER 12.—Middlesbrough.—ALTERATIONS, &c.—To premises and erection of a new Sorting Station, Middlesbrough. Contracts Branch, H.M.O.W., Middlesbrough, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

OCTOBER 12.—Middlesex.—STORES' DEPOT.—Erection of Stores' Depot, stabling, &c., for the U.D.C. H. R. Metcalfe, U.D.C. Council Offices, Northwood, Middlesex. Deposit £2 2s.

OCTOBER 12.—Pontefract.—COTTAGES.—Six cottages, for the W. R. Wilkinson & Co., Ltd., Pontefract, architects and surveyors.

OCTOBER 12.—Pontypool.—ALTERATIONS AND ADDITIONS.—Alterations and additions to the Post Office, Pontypool. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

OCTOBER 12.—Reading.—CONVENIENCES.—Public conveniences on the Fairground, Great Knollys, for the C.B. Borough Surveyor.

OCTOBER 12.—Uxbridge.—ADDITIONS.—Additions to the Isolation Hospital, Yeading-lane, for the Joint Hospital Board, W. L. Eves, Uxbridge, architect, 54, High-street.

OCTOBER 12.—Uxbridge.—REDECORATION.—Redecoration of certain of houses, for the U.D.C. W. L. Eves, Uxbridge, architect, 54, High-street.

OCTOBER 12.—Adwick-le-Street.—PROVISION OF low-pressure boiler and extensions to heating at Adwick-le-Street—Park Council School, for the West Riding E.C. Education Department, Wakefield.

OCTOBER 12.—Belfast.—BUILDING.—New potting shed for infectious diseases hospital at Purdysburn, Belfast. City Surveyor.

OCTOBER 12.—Bottle.—BUILDING.—Setting back walls at 4 to 20, Bullen's-terrace, for the Borough Engineer.

OCTOBER 12.—Edmonton.—ELECTRIC LIGHTING.—Lighting and power installation at the Enfield side-crescent, Enfield, for the B.G. E. South-square, Gray's Inn, London, W.C.1.

OCTOBER 12.—Halesworth.—REPEATER STATION.—Erection of a Telephone Repeater Station at Halesworth, for the H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

OCTOBER 12.—Harrow.—PUBLIC CONVENIENCE.—Erection of a public convenience for both sexes at Harrow, for the U.D.C. J. Percy, Engineer and Surveyor, Council Offices, Harrow. Deposit £1.

OCTOBER 12.—Kent.—SCHOOL.—Erection of Crayke, Kent, for the E.C. County Council, Kent. Architect (Mr. W. H. Robinson, F.R.I.B.A.), Sessions House, Maidstone. Deposit £2 2s. (cheques payable to the Kent Education Board and crossed "National Provincial Bank, Ltd., London").

OCTOBER 12.—Limerick.—RESIDENCE.—For the Officer Commanding New Barracks, Limerick, for the Commissioners of Public Works. J. J. Healy, Secretary Oifig Oibreach Publi (Office of Public Works), Baile Atha Cliath (Dublin). Deposit £1.

OCTOBER 12.—Liverpool.—ALTERATIONS.—To Prescott Pumping Station, for the Corporation. Water Engineer, Alexandra-buildings, 55, Dale-street. Deposit £1 1s.

OCTOBER 12.—London, E.C.2.—SUBWAY.—Construction of a subway 12 ft. in diameter and about 750 ft. in length on the east side of St. Martin's-le-Grand and the south side of Gresham-street, in the City of London, for the Corporation. City Engineer's Office, Guildhall, E.C.2. between the hours of 10 a.m. to 1 p.m., and 2 p.m. to 5 p.m. Deposit £2 2s.

OCTOBER 12.—London, S.E.13.—ALTERATIONS AND ADDITIONS.—Alterations and additions at the Woolwich Arsenal and Town Social Club. The Secretary, on personal application between the hours of 11 a.m. and 2.30 p.m., Mount Pleasant, Plumstead, S.E.13.

OCTOBER 12.—Marks Tey.—REPEATER STATION.—Erection of a Telephone Repeater Station at Marks Tey. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

OCTOBER 12.—Owston.—SCHOOL.—New school for 1,040 children at Owston, Skellow, near Doncaster, for the West Riding E.C. Education Department, County Hall, Wakefield.

OCTOBER 12.—South Shields.—WIRING.—Electrical wiring installation in 356 houses, for the C.B. S. G. Stanton, Borough Engineer. Deposit £1 1s.

OCTOBER 12.—Stockfield-on-Tyne.—CHURCH.—New church at Stockfield-on-Tyne. J. Potts & Son, architects and surveyors, 57, John-street, Sunderland.

OCTOBER 12.—West Derby.—PAINTING.—Internal painting to certain bedrooms, sanitary towers, corridors, staircases, &c., at nurses' home, at the Walton Institution, for the B.G. E. B. Bailey, L.R.I.B.A., 9, Cook-street, Liverpool.

OCTOBER 12.—West Riding.—BUILDING.—For (1) additional cloakroom accommodation at Ousefield Council School; (2) installation of a low-pressure heating apparatus at Grindleton-lane Ends Council school; and (3) erection of a new school at Askern Sutton-road for the C.C. Education Department, County Hall, Wakefield.

OCTOBER 12.—West Riding.—HEATING.—Installation of low pressure heating apparatus at Ferry Fryston, Airedale new school, for the E.C. Education Department, County Hall, Wakefield.

OCTOBER 12.—Belfast.—ALTERATIONS.—For (1) alterations to Roslyn-school, (2) alterations to Euston-street (old) school, (3) electric lighting, Malone square, for the C.B. Education Architect, College-square.

OCTOBER 12.—Belfast.—PAINTING.—Painting work at Falls-road public baths, for the C.B. City Surveyor.

OCTOBER 12.—Liverpool.—BUILDING.—New plant-house, Botanic Gardens, Edge-lane, for the T.C. Land Steward and Surveyor.

OCTOBER 12.—Llanelli.—REMODELLING LIBRARY.—Remodelling of the existing library and such portions of the Llanelli Athenaeum and Llanelli Nevill Memorial as are involved in accordance with 1909 R.I.B.A. Conditions of Contract, &c., for the Borough Council. H. A. Gold, M.C., A.R.I.B.A., 14, Bedford-row, London, W.C.1. Deposit £3 3s.

OCTOBER 12.—London, S.W.6.—FLATS.—Erection of three blocks of flats comprising 36 dwellings in Wyfold-road, Fulham, for the Fulham B.C. A. F. Holden, Borough Engineer, Town Hall, Fulham. Deposit £2 2s.

OCTOBER 12.—Lestock Hall.—ALTERATIONS.—At the Hospital, Alfred C. M. Lillie, L.R.I.B.A., architect, Bamber Bridge, Preston.

OCTOBER 12.—Milngavie.—HOUSES.—Forty houses at Lennox-avenue, for the T.C. Frank A. B. Preston, architect, 6, Buchanan-street. Deposit £1 1s.

OCTOBER 12.—Port Talbot.—PAINTING.—Painting the exterior of the following schools: (a) Eastern Infants' School, Talbach, Port Talbot; (b) Cwmavon Schools, for the T.C. Moses Thomas, Education Officer, Aberavon.

OCTOBER 12.—Bristol.—FLATS.—Erection of a block of flats at Eugene-street, St. James, Bristol, for the Housing Committee of the City Council. Housing Dept., 51, Prince-street. Deposit £1.

OCTOBER 12.—Gloucester.—POLICE STATION.—Erection of a police station at Pucklechurch, near Bristol, for the Standing Joint Committee of the Gloucestershire County Council. E. S. Sinnott, County Surveyor, Shire Hall, Gloucester. Deposit £2 2s.

OCTOBER 12.—Leeds.—CONVENIENCES.—Urinals, &c., on the undermentioned sites:—Junction of Marsh-lane and East-street, York-road Circus, junction of Cherry-row and Mushroom-street, junction of Roundhay-road and North-street, junction of York-road and Bridle-path, junction of Woodhouse-lane and Cookridge-street, for the T.C. W. T. Lancashire, City Engineer.

OCTOBER 12.—Manchester.—FENCING.—Supply and erection of wrought-iron fencing and gates at Fog-lane Park, Didsbury, Manchester, for the T.C. City Engineer. Deposit £2 2s.

OCTOBER 12.—Newport.—FLATS.—Ten flats, Maindee Police Station, for the T.C. Borough Architect.

OCTOBER 12.—Preston.—PAVILION.—At Frenchwood Recreation Ground, for the C.B. Borough Surveyor.

OCTOBER 15.—Waltham.—SCHOOL.—School at Peaks-lane, Waltham, near Grimsby, for the Hollant E.C. Scorer & Gamble, architects, Bank-street Chambers, Lincoln. Deposit £2 2s.

OCTOBER 16.—Lancs.—TELEPHONE EXCHANGE.—Erection and completion of a new Telephone Exchange at Churchtown, Lancs, for the Commissioners of H.M.O.W. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners).

OCTOBER 16.—Manchester.—CONVENIENCES.—At Broadhurst Park and Grey-street Recreation Ground, for the T.C. City Architect. Deposit 10s. 6d.

OCTOBER 16.—Norwich.—PAVILION.—Erection of a new two-story pavilion for 16 cubicles, with operation ward and additions to the nurses' quarters, at the Isolation Hospital, Bowthorpe-road, for the Corporation. J. S. Bullough, A.M.Inst.C.E., City Engineer, Guildhall, Norwich. Deposit £5.

OCTOBER 17.—Barnet.—HOUSES.—Erection and drainage, &c., of 181 houses (126 parlour and 55 non-parlour), on the Wellhouse estate, for the U.D.C. Surveyor, Council Offices, Wood-street, Barnet, Herts. Deposit £3 3s.

OCTOBER 17.—Pontyminster.—ROOM.—Manual instruction room at the Pontyminster Council school, Pontyminster, Mon. for the Monmouthshire E.C. Mr. John Bain, F.R.I.B.A., County Hall, Newport. Deposit £1 1s.

OCTOBER 17.—Portsmouth.—SCHOOL.—Erection of a new public elementary school in Meon-road, Southsea, for the Education Committee. Adrien J. Sharp, Town Hall, Portsmouth. Deposit £3 3s.

OCTOBER 17.—Stafford.—HOUSES.—Erection of thirty houses of the non-parlour type on the Littleworth housing estate, for the Corporation. W. Plant, A.M.Inst.C.E., Borough Engineer, Borough Hall. Deposit £1 1s.

OCTOBER 18.—Oxford.—Offers will be received, by way of ground rent, for 75 years' building leases, of plots with 20 ft. frontages to St. Aldate's-street. Town Clerk's Office, Town Hall.

OCTOBER 19.—Finedon.—HOUSES.—Twenty houses, &c., for the U.D.C. A. E. Lloyd, surveyor.

OCTOBER 19.—Plymouth.—HOUSES.—Two blocks of houses, containing 24 flats, at Pottery Quay, for the C.B. J. Wibberley, Borough Engineer and Surveyor. Deposit £2 2s.

OCTOBER 19.—Southend-on-Sea.—CONVENIENCES.—Public conveniences and works incidental thereto at Chalkwell Park, for the C.B. R. H. Dyer, Borough Engineer. Deposit £2.

OCTOBER 19.—Thame, Oxon.—HOUSES.—Erection of 32 houses on the East-street housing site, for the U.D.C. J. T. Robinson, Council's Architect, Town Hall, Thame. Deposit £2 2s.

OCTOBER 20.—Blackrock.—HOUSES.—Six one-story and six two-story houses at Gretto-avenue, Bootstown, for the U.D.C. J. J. Robinson, architect, 8, Merriam-square, Dublin. Deposit £1 1s.

OCTOBER 20.—Kerry.—STATIONS.—Stations for the Garda Siochana at Derreen, co. Kerry, and for the restoration of Lough George ex-R.I.C. Barrack, co. Galway, for the Commissioners of Public Works. J. J. Healy, Oifig Oibreach Publi (Office of Public Works), Baile Atha Cliath (Dublin). Deposit £1 each.

OCTOBER 20.—Macclesfield.—DWELLINGS.—Six houses at Chelford, on site alongside the road leading from Chelford to Alderley Edge; six houses at Snelson, on site alongside the road leading from Chelford post office to Peover; 22 houses at Sutton, on site along east side of main road from Macclesfield to Leek, south of the canal, for the R.D.C. Geo. Clayton, architect, 4, Wellington-street, Stockport.

OCTOBER 20.—Roxburghshire.—CONCRETE BRIDGE.—Erection of reinforced concrete bridges over the River Jed for the Roxburghshire County Road Board, the Jedburgh District Committee, and Jedburgh Town Council. J. & A. Leslie & Reid, C.E., 72A, George-street, Edinburgh. Deposit £5.

OCTOBER 20.—Sheffield.—ALTERATIONS.—To the nurses' home at the Firvale Hospital, Sheffield, to provide additional bedroom accommodation, for the B.G. J. E. Whitehead, architect, 34, Goddard Hall-road. Deposit £5 5s.

OCTOBER 20.—Thurcroft.—EXTENSIONS.—To the Council school, for the West Riding E.C. The Education Department, County Hall, Wakefield.

OCTOBER 21.—Great Wakering.—HOUSES.—Twenty workmen's dwelling houses at Great Wakering, for the Rochford R.D.C. Mr. A. C. Madge, Surveyor of the Council, Rayleigh.

OCTOBER 21.—Linthwaite.—HOUSES.—Twenty scullery type houses on the housing estate at Cowersley, for the U.D.C. J. Ainley, architect, 55, New-street, Huddersfield.

OCTOBER 21.—Welwyn, Herts.—HOUSES.—Erection of a further 38 houses on the London-road housing site, for the Welwyn R.D.C. H. G. Cherry, 7, Buckingham-street, Adelphi, W.C.2. Deposit £3 3s.

OCTOBER 21.—York.—ADDITIONS.—Alterations and additions to the existing engine house and offices at the electricity generating station, for the T.C. F. W. Spurr, City Engineer. Deposit £2 2s.

OCTOBER 23.—Ardrossan.—HOUSES.—Houses of three apartments each, flatted and semi-detached, at the Seton-street site, for the T.C. J. C. Hunter, architect, Harbour Buildings. Deposit 10s. 6d.

OCTOBER 24.—Chapel-en-le-Frith.—HOUSES.—Four non-parlour type houses at Batham Gate, near Buxton for the R.D.C. T. Dinsdale, Inspector and Surveyor, Buxton. Deposit £2 2s.

OCTOBER 24.—Llanidloes.—HOUSE.—Church house at Llanidloes. R. A. Ford, architect and surveyor.

OCTOBER 26.—Clones.—OFFICES.—Offices, on site pits, &c., in reinforced concrete, at Clones Station, for the Great Northern Railway (Ireland), Co. J. B. Stephens, Secretary, Amiens-street Station, Dublin. Deposit £2 2s.

OCTOBER 26.—Exmouth.—HOUSES.—Fifty houses in Marpool Park, for the U.D.C. Samuel Hutton, engineer and surveyor, architect. Deposit £1 1s.

OCTOBER 26.—London.—COTTAGES.—283 cottages, six blocks of three story flats, nine lock-up shops with nine dwellings over, and other incidental work, at the White Hart-lane estate, Lordship-lane, Tottenham, for the L.C.C. Architect to the Council, the County Hall (Room No. 3), Westminster Bridge, S.E.1. Deposit £2.

OCTOBER 26.—Rochester, Kent.—HOUSES, DRAINAGE AND SITE WORKS.—Erection of 66 houses (32 parlour and 34 non-parlour) on the Maidstone-road, Rochester, for the Corporation. William Law, A.M.I.C.E., City Surveyor, Guildhall, Rochester. Deposit £3 3s.

OCTOBER 27.—Hford.—LIBRARY BUILDING, &c.—Erection and completion of library building, together with Town Hall basement under, and extension of Town Hall offices, at Oakfield-road, for the U.D.C. H. Shaw, M.Inst.C.E., Engineer and Surveyor, Town Hall, Hford. Deposit £5 5s.

***OCTOBER 27.—London, E.2.—BUILDING ADDITIONS.**—Erection and completion of an additional story to the Administrative Block (Nurses' Home) at the Bethnal Green Hospital, Cambridge-road, Bethnal Green, E.2, for the Guardians. C. Faulkner Jones, Clerk to the Guardians, Guardians' Offices, Bishop's-road, E.2. Deposit £3 3s.

***OCTOBER 27.—Shrewsbury.—ALTERATIONS AND EXTENSIONS.**—Alterations and extensions to the P.O. Engineer's Office, Castle Foregate, Shrewsbury, for the Commissioners of H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, Westminster, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

OCTOBER 28.—London, E.8.—BUILDING WORKS.—Building works, being the erection and completion of two electricity sub-stations, one at Gainsborough-road, Hackney, and one at Holly-street, Hackney, for the Hackney Metropolitan B.C. Borough Electrical Engineer, 306, Mare-street, Hackney, E.8. Deposit £2 2s.

***OCTOBER 28.—London, S.W.—FOUNDATIONS.**—Construction of foundations for the new Whale Room at the Natural History Museum, South Kensington, S.W., for the Commissioners H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

***OCTOBER 29.—Teddington.—LABORATORY.**—New Physics Building at the National Physical Laboratory, Teddington, for the Commissioners of H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, Westminster, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

OCTOBER 30.—Dublin.—RESTORATION.—Of the Western Block of the Custom House, for the Commissioners of Public Works. J. J. Healy, Secretary, Oifig Oibreach Puiblí (Office of Public Works), Baile Atha Cliath. Deposit £5.

***NOVEMBER 2.—St. Albans.—COTTAGES.**—Erection of the second 50 cottages at the Camp housing site, for the Corporation. G. T. Negus, City Engineer and Surveyor, 96, Victoria-street, St. Albans. Deposit £1 1s.

***NOVEMBER 9.—London, S.E.—DWELLINGS.**—Erection of a block of dwellings on the Dickens estate, Bermondsey, in brick, also alternative tenders for construction in reinforced concrete, for the L.C.C. Architect to the Council, The County Hall (Room No. 3), Westminster Bridge, S.E.1. Deposit £2 to the Cashier.

NO DATE.—Lanark (Lower Ward).—HOUSES.—Twenty houses at Auchinloch and twelve houses at Carmunnock, for the D.C. Jas. A. McCallum, District Clerk, 15, West George-street, Glasgow.

NO DATE.—St. Columb Minor.—RECONSTRUCTION.—Of the Congregational Church at Newquay, Cornwall, and for the erection and completion of a new vicarage at St. Columb Minor. J. Ennor, architect, 61, Tower-road, Newquay.

NO DATE.—Tirphil.—HOUSES.—Repairs to 30 houses at Tirphil. O. P. Bevan, architect, Station-road, Bargoed.

MATERIALS. etc.

OCTOBER 12.—Bristol.—MATERIALS.—Cement (Portland), iron castings, wrought iron and steel, iron piping, lead, gun metal castings, and paints, oils and colours, for the Port Authority. T. A. Peace, Engineer Chief, Engineer's Office, Avonmouth Dock.

OCTOBER 12.—Bromley.—MATERIALS.—Broken granite, Kent ragstone, and Chert or Sevenoaks stone, flints and footpath gravel, and tarred ragstone, for the R.D.C. L. O. Wall, Clerk of the Council.

OCTOBER 13.—Aberdeen.—PIPES.—Two and three-quarter miles of 9 in. and 7 in. diameter lined cast-iron pipes, for the T.C. George Mitchell, Water Engineer. Deposit £2.

OCTOBER 13.—Leeds.—KERB.—15,000 lin. yards of straight, and 500 lin. yards of circular granite kerb, for the T.C. E. W. Cockerlyne, Highways and Permanent Way Engineer, 1, Swinegate.

OCTOBER 14.—Edinburgh.—FENCE.—Supply and erection of an iron or steel unclimbable fence, 6 ft. 6 ins. high, at Seafield-road, Portobello (770 lin. yds. or thereabouts), for the T.C. Hugh Engineer.

OCTOBER 14.—Edmonton.—FENCING.—1,000 yds. of wrought iron fencing and gates, for the U.D.C. Mr. C. Brown, engineer and surveyor.

OCTOBER 15.—London.—GIRDERS.—Girders required for the Jelium Bridge, for the India Store Department. Director-General, 11, Belvedere-road, S.E.1.

OCTOBER 16.—London.—PAINTS.—Paints for the Bombay, Baroda and Central India Railway Co. S. G. Young, Secretary, 91, Petty-France, S.W.1.

OCTOBER 16.—Lydenburg (South Africa).—PIPES.—Steel pipes, specials, valves, &c., for the T.C. Department of Overseas Trade, 35, Old Queen-street, London, S.W.1.

OCTOBER 16.—Southampton.—PIPES.—2,950 tons of cast-iron socket and spigot pipes and special castings, 9 in., 10 in., and 15 in. in diameter, for the T.C. Waterworks Engineer's Office, 21, Shirley-road, Southampton.

OCTOBER 19.—Glasgow.—MATERIALS.—Plumbers' materials, bath, electric fittings, bricks, tiles, lime,

cement, oils, paints, and various other materials, for the P.C. M. A. Reynard, Inspector and Clerk, 266, George-street.

OCTOBER 20.—London.—GIRDERS.—Girder bridges, comprising 120 spans, and 52 flange plates for girders, for the Madras and Southern Mahratta Railway Co. Directors, 25, Buckingham Palace-road, S.W.1.

OCTOBER 22.—London.—GIRDERS.—402 tons of steel girders and other iron and steel work, for the G.W.R. Engineer, Paddington Station, W.2. Deposit £2 2s.

ENGINEERING. IRON AND STEEL.

OCTOBER 12.—Stratford-upon-Avon.—RESERVOIR.—Pumping station and the construction of a balancing reservoir at Warwick-road, for the Corporation. F. W. Jones, Borough Surveyor and Water Engineer. Deposit £3 3s.

OCTOBER 14.—Oldham.—CULVERT.—Construction of 50 lineal yards of 7 ft. diameter culvert and 320 lineal yards of 3 ft. concrete tube storm overflow culvert, together with all necessary subsidiary works, at the sewage works, Slacks Valley, Chadderton, for the C.B. Borough Engineer.

OCTOBER 15.—Cape Province.—STEELWORK.—Structural steelwork for Palmiet River Bridge, Cape Province, for the South African Railways Committee, Department of Overseas Trade, 35, Old Queen-street, London, S.W.1.

OCTOBER 17.—Glasgow.—ENGINEERING.—Raising the height of three piers at Loch Katrine, together with sundry accessory and supplementary works, for the T.C. J. R. Sutherland, Engineer and Manager, Water Department, 50, John-street. Deposit £2 2s.

OCTOBER 19.—Uxbridge.—RESERVOIR.—Reinforced concrete reservoir work for the construction of a reinforced concrete reservoir, for the U.D.C. Indented Bar Concrete Engineering Co., Ltd. Deposit £2 2s.

OCTOBER 21.—Nottingham.—EMBANKMENT.—Construction of an earth embankment and a bridge over the L.M. & S. Ry. forming part of a new road between Castle-boulevard and Gregory-street, for the T.C. T. Wallis Gordon, City Engineer and Surveyor. Deposit £2.

OCTOBER 22.—Bilston.—RESERVOIR.—Concrete service reservoir, of about 850,000 gallons capacity, at Goldthorn-hill, for the U.D.C. H. Lapworth, 15, Victoria-street, Westminster. Deposit £3.

OCTOBER 24.—Whittingham (near Preston).—HEATING.—Proposed centralised low-pressure hot-water heating, new calorifiers, pumps, steam and condenser services for the main building, and centralised hot-water system and boiler plant for the old annexe, for the County Mental Hospital Committee. C. Hutton Wright, Consulting Engineer, Dale Cottage, Spital, Cheshire. Deposit £1.

OCTOBER 30.—London.—STEELWORK.—Steelwork for bridges, for the South India Railway Co. Robert White & Partners, consulting engineers, 3, Victoria-street, S.W.1.

ROAD, SEWERAGE, AND WATER WORKS.

OCTOBER 12.—Barnes.—RESURFACING.—Resurfacing a portion of Lower Richmond-road, Mortlake, for the U.D.C. Surveyor, The Council House, High-street, Mortlake, S.W.14.

OCTOBER 12.—Barnes.—RESURFACING.—Resurfacing a portion of Lonsdale-road, for the U.D.C. Surveyor, The Council House, High-street, Mortlake, S.W.14.

OCTOBER 12.—East Riding.—RECONSTRUCTION.—Widening, strengthening and resurfacing the trunk road, Hull-Selby road, and for carrying out certain improvements and diversions in connection therewith, and all works incidental thereto, from a point south of the Selby-York road to Barby Landing (near Selby) on the Selby-York road to Booth Ferry-road Junction, near Barnhill-lane (Howden), approximately 6½ miles, for the C.C. County Surveyor, County Hall, Beverley. Deposit £5 5s.

OCTOBER 12.—Kirkcaldy.—SEWERAGE.—Street and sewerage works to be executed at housing site at Thornton, for the D.C. W. Williamson, F.R.I.B.A., architect. Deposit £1 1s.

OCTOBER 12.—Letchworth.—EXTENSIONS.—To the main drainage system, for the U.D.C. H. Humphreys & Sons, Consulting Engineers, 28, Victoria-street, Westminster. Deposit £2 2s.

OCTOBER 12.—Manchester.—DRAINAGE.—Draining, paving (grit setts), flagging (artificial flags), &c., Church-street, Cheetham, from Humber-street to a point 104½ yds. distant in a northerly direction; draining, paving (with concrete), flagging (artificial flags), &c., Tintern-street, Rusholme, from Platt-lane to a point 23½ yds. distant in a northerly direction, for the T.C. P. M. Heath, Town Clerk. Deposit £1 1s.

OCTOBER 12.—Manchester.—SEWER.—Construction of a 12 in. diameter pipe sewer and manholes in Deansgate and Castle-street, Knot-mill, for the T.C. P. M. Heath, Town Clerk. Deposit £1 1s.

OCTOBER 12.—Newbiggin-by-the-Sea.—FOOTPATH.—Laying 900 yds. cement footpath, &c., for the U.D.C. R. Appleby, surveyor. Deposit £1.

OCTOBER 12.—Romford.—MAKING-UP.—Of Elm-grove, Sylvan-avenue, and Woodland-avenue, Hornchurch, the total length being about 1,500 yds., for the R.D.C. W. J. Grant, Surveyor, 16A, South-street.

OCTOBER 12.—Selby.—SEWERS.—Sewers at Selby for the U.D.C. B. McG. Gray.

OCTOBER 12.—Skegby.—SEWERS.—Construction of about 4,765 yards of stoneware and iron pipe sewers varying in size from 7 in. to 12 in. diameter, with manholes and all appurtenant works, and the erection of detritus pits, Dorr-lund tanks, mud drying beds, and other sundry works, for the R.D.C. W. H. Radford & Son, Chartered Civil Engineers, Albion Chambers, King-street, Nottingham. Deposit £3 3s.

OCTOBER 12.—Whitley and Monkseaton.——1, Beverley Park; 2, Percy-gardens; 3, between Gladstone-avenue and Ilfrcombe; 4, passage between the above back street and combe-gardens; 5, back street between back street and Countess-avenue; 6, Briar-ay, Ashfield-grove (parts footway only); 7, between Bideford-gardens and Cliftonville; 8, back street Clovelly-gardens; 9, Ventno (part of footway only), for the U.D.C. A. J. surveyor. Deposit £1 1s.

OCTOBER 12.—Woodford.—PAVING.—Crep paving, including reinforced concrete for sewer and surface water drainage, kerbing, chipping in crossings, &c., in High-road, South V and works of creosoted deal paving, including reinforced concrete foundation, surface water kerbing, channelling, paving in crossings, Knighton, Woodford Wells, for the U.D.C. A. Ward, Surveyor to the Council. Deposit £2 2s.

OCTOBER 13.—Epsom.—SEWER.—Construction about 900 yds. of stoneware sewers of 12 in. together with manholes and other appurtenances for the R.D.C. John Taylor & Sons, engineer House, Westminster, S.W.1. Deposit £5.

OCTOBER 13.—Harrow-on-the-Hill.—WIDENING AND RECONSTRUCTION OF EASTCOTE LANE.—Including the construction of a new concrete and brick road, for the U.D.C. J. Percy Bennetts, Eng. Surveyor. Deposit £1.

OCTOBER 13.—Leeds.—PAVING.—Paving macadamising, flagging, and laying of tar-paths in Welburn-drive, Welburn-avenue, road (part), Norman-street, Firth-mound, Firth-road, Grovehill-drive (part), also for flagging, paving of channels, and concrete Chapeltown-road improvement, also for kerb flagging at the Jack-lane improvement, for Highways and Permanent Way Engineer, 1, 8 Deposit £1 1s.

OCTOBER 13.—Manchester.—PAVING.—Laying granited rock asphalt paving at the Tramway Slade-lane, for the T.C. H. Mattinson, general and chief engineer, Corporation Tramways, dilly.

OCTOBER 14.—Babhy.—SEWER.—1,140 lin. 9 in. diameter stoneware pipe sewers, 540 lin. 5 in. diameter stoneware pipe sewers, and 500 lin. yds. of 5 in. iron rising main and 1,770 of 2 in. air main, together with manholes chamber, storage tank, two ventilators, alter disposal works, new rotary filter, &c., at the Glenfield, for the R.D.C. A. Stevens, engine town-avenue, Glen Parva. Deposit £2 2s.

OCTOBER 14.—Carshalton.—MAKING-UP.—Of field-road, for the U.D.C. W. Willis Gale, Deposit £2.

OCTOBER 14.—Coedely.—PLAYGROUND.—Erection and lay-out of children's playground, including erection of shelters, boundary walls, fence, incidental works, for the Ely Valley Miners' Committee. R. S. Griffiths & Partners, architects, Tonymandy. Deposit £2 2s.

OCTOBER 14.—London.—MAINS.—For 42 in., 36 in. and 30 in. diameter cast-iron from Abbey-road, Hampstead, to Myddleton Clerkenwell, for the M.W.B. H. E. Still Engineer. Deposit £10.

OCTOBER 14.—London.—PAVING.—Providing laying creosoted deal blocks, on a new construction, in portions of St. Mark's-road and Palace terrace, for the Kensington B.C. Borough and Surveyor.

OCTOBER 15.—Cranbrook.—SEWERAGE.—Construction of a filter bed, humus tank and dosing tank and the erection of a chestnut spile fence at ley, sewage disposal work, for the R.D.C. Bailey, Sanitary Surveyor, Penryn.

OCTOBER 15.—Great Ouseburn.—SEWERS.—Construction of about 6,000 lin. yds. of pipe sewer in size from 9 in. to 18 in. diameter, together with manholes and other works, in the parish of the R.D.C. E. J. Silcock, engineer, New-street, Westminster, S.W.1. Deposit £5.

OCTOBER 15.—Lichfield.—SEWER.—Construction of Church-street, Whittington, of a sewer extension consisting of about 340 yds. of 6 in. stoneware pipes, together with branch connection drains, &c. and other incidental works, for the R.D.C. Bailey, Sanitary Surveyor, Penryn.

OCTOBER 15.—Southwell.—PIPES.—Providing laying of about 300 yds. of 9 in. stoneware together with the construction of the necessary holes, in Lower Kirklington-road, for the Sands & Walker, Milton Chambers, Nottingham.

OCTOBER 15.—Toines.—WIDENING.—On the highway to Venn Cross-road, Ugborough, for the F. K. Windeatt, Clerk to the Council. Deposit £1.

OCTOBER 16.—Castle Donington.—MAIN.—Laying and laying about 1,900 yards of 3 in. cast-iron main at Kegworth, for the R.D.C. G. & F. E. engineers, Bank Chambers, Loughborough. Deposit £5 5s.

OCTOBER 16.—Kiveton Park.—SEWERAGE.—Construction of about 6,000 lin. yds. of 12 in., 9 in. and 6 in. earthenware pipe sewers, with storage tank, reconstruction of pump well, section tanks, percolating filters, humus tanks, Wales and Harthill, for the R.D.C. D. Balfour civil engineers, 3, St. Nicholas Buildings, New Tyne. Deposit £5.

OCTOBER 16.—Rushcliffe.—SEWER.—533 yd and 6 in. sewer and manholes from Watnal the Hospital site, Hucknall, for the Hospital Committee. E. W. Bostock, Architect to the Council Offices, Watnal-road, Hucknall.

OCTOBER 17.—Stretford.—PAVING.—Paving granite setts, &c., part of Warwick-road North U.D.C. E. Worrall, Surveyor. Deposit £2 2s.

OCTOBER 17.—Warmsworth.—ASPHALT.—Laying asphalt of the Doncaster and Thinsley main Warmsworth, for the West Riding C.C. We Surveyor, County Hall, Wakefield. Deposit £2 2s.

* See also our List of Contracts, Competitions, etc.

BLACKWELL.—The R.D.C. decided to make application to the Public Works Loan Board for advances amounting to over £50,000, for the erection of houses, the making of roads, &c.

BOLTON.—The Housing Committee have approved the granting of subsidy in respect of 66 houses to be erected in various parts of the Borough.—The E.C. are negotiating for land at Tonge Moor for a site for the erection of school premises and for a playing field.

—The B.E. have approved a scheme for altering the Haugh School, and the question of providing a science room at Church-road School is under consideration.—The T.C. passed plans: Leigh Bros., Ltd., for amended plan streets and levels, Abington-road; 15 houses, Abington-road; eight houses, New Barnstreet, two houses and shops, Chorley Old-road.

BRAFORD.—The T.C. has decided to erect a central garage.

BRAINTREE.—The Essex E.C. recommend the installation of electric lighting, at £373, at the County High School.

BRIGG.—The R.D.C. has received from the M.H. subsidy for a further 50 houses.

BRIGHTLINGSEA.—Essex E.C. are acquiring a site at York-road for a special subjects centre.

BRIGTON.—The M.H. held an inquiry into the application of the Sewers Board for sanction to a loan of £80,900 for the reconstruction of the outfall at Portobello.

BRISTOL.—The T.C. has approved the contracts for additional houses numbering 198, and recommending application for sanction to borrow the sum of £114,567 to cover the cost of the works.—The Council has further decided to carry out a series of road widening and improvement schemes at a total cost of £180,000.

CANVEY ISLAND.—The Essex C.C. are to erect four classrooms, cloakrooms, &c., at the school, at an estimated cost of £3,735.

CHELMSFORD.—The T.C. has received sanction from the M.H. for approval to erect 250 additional houses on the Boarded Barns estate. The Housing Committee recommended that alternative tenders for 100, 150, and 250 houses respectively be invited.

CONWAY.—The R.D.C. has accepted a tender for the erection of 24 houses for the working-classes at Llandudno Junction. The amount of the tender is £12,540.

COVENTRY.—The T.C. passed plans: 10 houses, Sunningdale-avenue for T. W. Roulston; market, concert hall, lock-up shops, &c., Foleshill-road, for W. H. Grant; 22 houses for S. H. Brown.

CRAYFORD.—The Kent E.C. are being asked to provide a new elementary school for the district.

CROYDON.—The C.B. has approved the appointment of Mr. H. Carter Pegg, F.R.I.B.A., as architect for the elementary school to be erected on the Long-lane site.—The C.B. has received sanction from the M.H. to borrow £2,700 for the construction of a public convenience in Portland-road.—The M.H. has sanctioned the borrowing of £8,954 for the erection of a block of flats, and sewers, &c., on the Cherry Orchard-road.—The C.B. recommended that application be made to the M.H. for approval to the raising of a loan of £7,682 for the erection of 12 cottages.—Plans passed: F. C. Mitchell, dance hall, London-road, Norbury, Norbury Cinema; A. E. Stent, 11 houses, Gonville-road; Thomas & Sons, 28 houses, Norbury-hill; E. G. Bax, nine houses, Waddon Court-road; F. W. Rees, 22 garages, Westbourne-road; Scratchley Bros., 14 garages, Avondale-road; C. Ball, 10 houses, Ross-road; C. Ridge, 16 garages, Selhurst-road; The Corporation, 112 houses, Waddon Estate, Waddon; A. Voss, 12 garages and store, 14, Beulah-road; Excel Construction Co., 40 houses, Cecil-road.

DAGENHAM.—The Essex E.C. recommend the purchase of sites at £875 and £1,350, for the fourth and fifth schools to be erected.

DARLINGTON.—The T.C. has approved the following recommendations: (1) That all the 100 houses proposed to be erected be erected on the land belonging to the Corporation abutting on Geneva-road; (2) that the Borough Surveyor prepare plans and estimates for submission to the M.H.; (3) that approximately seventy-five of such houses be of the two bedroom type and 25 of the three bedroom type.

DEVON.—The C.C. Finance Committee submitted schemes of work and estimates: Accommodation for staff, purchase and conversion of premises, £4,200; erection of four cottages for agricultural labourers at the Mental Hospital, £1,786; new school at Dalwood and teacher's house, £3,628; additional accommodation at Ilfracombe Secondary Schools, £3,019; new school at Sourton, Bosley Cross, £2,728; alterations, new cloakrooms, &c., at Fursham Hill Council school, Brixham, £1,365; additional wing at St. Budeaux, Crownhill elementary school, £1,531. The E.C. have decided upon the provision of a new school at Kentisbury. Repairs are to be carried out at the Dartmouth secondary school, at a cost of £260. Various repair work is to be undertaken at the Teignmouth secondary school, at a cost of £233. The Committee are considering the erection of permanent buildings to replace wooden structures at Hawkmoor sanatorium. The C.C. are in communication with the managers of the Western Counties Institution, Starcross, regarding the proposed extension of that institution. The offices of the agricultural education department at Richmond-road, Exeter, are to be repaired, at a cost of about £200.

DEWSBURY.—The Borough Engineer submitted plans showing the proposed re-construction of the Ravens-thorpe Sewage Works, at an estimated cost of £69,347, and the C.B. approved them and resolved to submit them to the M.H. for their observations. The Council approved the principle of acquiring a site in Thornhill, of approximately 10 acres, for the erection of houses. The Council approved recommendations involving the discontinuance of the destructor and the provision of certain plant, buildings to accommodate such plant, and an incinerator. The estimated cost of the buildings is £4,000.

DORMANSTOWN.—A scheme is being prepared for the erection of a church for members of the Anglican Faith at an estimated cost of about £10,000.

DUBLIN.—The City Commissioners have decided to take a lease of Linenhall Barracks for the purpose of erecting thereon dwellings of a temporary nature for housing. The area consists of about 2½ acres, and will afford space for about 70 dwellings.

DUDLEY.—The T.C. has made application to the M.H. for sanction to the borrowing of £22,567, for the erection of 50 houses.

DUKINFIELD.—Plans have been prepared by the Borough Surveyor for the proposed Domestic Science Centre, to be erected on land adjacent to the Technical School.

EASTBOURNE.—The Corporation are seeking sanction to borrow £4,880 for the purchase of land at the Crumblies for a housing site. Sanction is to be sought for a loan of £2,780 for a Corporation depot at Bedfordwell. Sub-station buildings are to be erected at Hampton Park, at a cost of £600. The Borough Engineer has prepared detailed plans for the erection of the motor bus garage extension. The Watch Committee are to consider the question of the establishment of a municipal garage.

EAST HAM.—The B.C. passed plans: 34 lock-up garages, rear Broadway Cinema, High-street South, for F. W. Buen; 23 lock-up garages, Katherine-road, for R. C. Turner Gordon; 22 houses, Ranciffe and Ascot-roads, for the East Ham Broadway Cinema Co., Ltd.; 52 houses, 167-207 and 184-244, Kempton-road, for H. Evans Jones.

EDLINGTON.—At a cost of £2,400 the West Riding E.C. Sub-Committee propose to erect junior mining centres.

ESSEX.—The C.C. recommend the reconstruction of the Causeway bridge at an estimated cost of £5,199.

FARNHAM.—The R.D.C. has decided to erect 24 houses on a site at Ash.

FARNWORTH.—The Council are purchasing Wash-lane Gate House, which stands upon 27 acres of land, as a site for 250 houses.

FINEDON.—The M.H. has sanctioned the erection of 48 houses by the U.D.C.

FLEETWOOD.—The architect has been instructed to prepare and submit amended plans for the completion of the whole of the Bath's scheme.

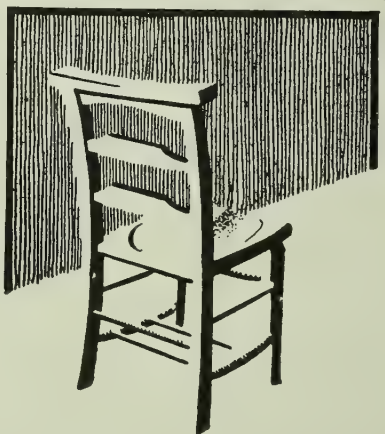
FYLDE.—The B.G. has appointed Mr. F. Harrison, architect, to prepare a scheme for additional accommodation at their institution at Wesham.

GLASGOW.—The Housing Committee have approved the lay-out of land at Maryhill for the erection of 248 houses.—Approval has been given for a scheme for 612 houses at Knightswood Farm estate.—It has been arranged to build 188 houses on the Wellmeadow estate, Pollokshaws.—Eleven shops are to be erected on the Knightswood estate and seven on the Tollcross estate.—The Giffnock Building Co. have a scheme for the erection of 31 terrace houses at Busby-road, Giffnock.—Messrs. Mactaggart & Mickel, Ltd., are to build 30 houses at King's Park, Mount Florida.—Messrs. John Adam & Co. are to erect 64 terrace houses in Shawmoss-road.—At the Kelvin Hall Committee the City Engineer submitted a lay-out plan for a new hall to be erected at Bunhouse, and the committee again considered the offer and designs by Sir William Arol & Co., Ltd., and now recommended that this offer to build a new Kelvin Hall at a cost of £162,115 be accepted.

GLOUCESTER.—The R.D.C. has received sanction from the M.H. to the erection of 50 houses.

GODALMING.—The Surrey C.C. has purchased a site for the proposed secondary school.

CHAIRS FOR ALL PURPOSES STRONG & INEXPENSIVE.



GEO. M. HAMMER & CO. LTD.
CROWN WORKS, ST. JAMES'S ROAD,
BERMONDSEY, LONDON, S.E. 16.

GRAYS.—The Essex C.C. recommend the fence the new playing field at Grays Palmer's End School, at £750.—The C.C. also propose to build crete wall with iron railings at the Arthur-street C school. The cost is estimated at £675.

GREAT BURSTAD.—Three additional classrooms being proposed as extensions to the Council school, the Essex C.C., at an estimated cost of £3,937.

GULDFORD.—The T.C. has approved the lay-out of their new 96-acre estate on Aldershot-road, which it is proposed to build 800 houses.

HALIFAX.—The M.H. has held an inquiry into application of the T.C. for sanction to borrow £ for the Bradshaw sewerage scheme.

HANWELL.—The U.D.C. has purchased land Hopefield estate at a cost of £2,200, and the Surveyor has been instructed to prepare plans for the erection of houses thereon.

HARROGATE.—The West Riding Higher Education Sub-Committee recommended the erection of a secondary school. The plans have been approved by the Governors, and the estimated cost is £75,000. Funds are being raised for the erection of a tower to St. Peter's Church. The scheme will cost about £40,000.

HARWICH.—The Essex E.C. recommend the expenditure to the County High School, at an estimate of £376.

HASTINGS.—The Corporation are seeking a site housing scheme at West St. Leonards. Consents have been obtained to borrow £50,000 on further accommodation in connection with the construction of the Rock Pavilion. The motor parking station at Fish Market is to be covered in at a cost of £1,140.

HAVANT.—In connection with the scheme of War Memorial Committee for the provision of a hospital which will cost £6,000, it is now being suggested that it would be advisable to provide hospital accommodation by adding a wing to the Emsworth Hospital.

HAYES.—The U.D.C. passed plans: 10 buildings, Clayton-road, for Wakefield & Co.

HOLLINGWOOD.—An offer of a site of five acres of land for a new school at Hollingwood, Staveley, has been approved by the Sites and Buildings Committee of the Derbyshire E.C., and the architect (Mr. G. H. Widdowes) has been authorised to prepare a report on the question of accommodation in the district.

HOLYWOOD.—The U.D.C. has passed plans for 10 houses.

HORNSEY.—The Joint Hospital Committee recommend a scheme for extension at the hospital, at a cost of £30,000. The M.H. has sanctioned the provision of a further 229 houses on the Muswell Hill estate. E.C. are to prepare plans for reconstructing Crouch school. Mr. Pegg, architect, has prepared a lay-out site site at Coldfall for the erection of a school.

HORSHAM.—The R.D.C. has arranged to erect houses at Southwater, Colgate and Crawley.

HULL.—The T.C. passed plans: T. R. Bax, 25 houses, New-street, Chanterlands-avenue, Caley, 20 houses, North-road; H. Sanderson, 19 houses, Westbourne-avenue; H. Gray, 9 houses, Marlane; W. H. Loveridge, 29 houses, Chanterlands-avenue; E. Mowforth, 10 houses, Ormonde-avenue; R. Ashton, 9 houses, Southcoates-lane; H. S. 29 houses, New-street, Marine-street; C. H. S. 10 houses, Kelvin-street; J. Emerson, 9 houses, N. road; W. H. Beal (amended), 16 houses, Godwin-avenue.

ILFRACOMBE.—Devon C.C. are to raise a loan of £9,000 for the erection of a police station.

ILKLEY.—The West Riding E.C. has received sanction from the B.E. to the acquisition of the site for proposed new girls' secondary school at Ilkley.

JARROW.—The T.C. has decided, on the recommendation of the M.H., to proceed with a scheme to convert premises at the junction of Grange-road and Wall-street into a Maternity and Child Welfare Centre.

KENDAL.—The T.C. passed plans: Reinforced concrete factory for Somervell Bros., Ltd. (architect, Messrs. Carby Hall & Sons, Leeds); 12 cottages, "Sandylands," Appleby-road, for M. C. Shaw, architect.

KINGSTON.—The E.C. has approved plans for buildings at the Grammar School.

LANGDON HILLS.—At an estimated cost of £1, the Essex E.C. recommend the purchase of a site for the new school.

LEEDS.—The Corporation has approved of ten for the erection of the proposed municipal wash-house at Stocks Hill, Holbeck, and it is intended that scheme shall be proceeded with as soon as the Council gives its final sanction to it. The scheme is estimated to cost about £18,000.

LEICESTER.—Further contracts have been entered into by the T.C. for the erection of the remainder of the 500 houses at a cost of £465 per house for a parlour type of houses, and £515 for the parlour type.

LEITCHWORTH.—The Anti-Vivisection Society, Old Bond-street, W.I., proposed to build a humane slaughter-house and abattoir on a site of about 2 acres. Plans have been before the Council, the architect being Mr. R. Stephen Ayling, Bedford House, Baker-street, W.I.

LEYTON.—The Essex C.C. recommend the purchase of £2,950 of a site for the proposed secondary school for boys.

LINCOLN.—The B.G. decided that plans and estimates be prepared for building a further vagrant ward.

LIVERPOOL.—Old Calabar Limited have in contemplation the erection of New Premises at Fazakerley, Liverpool, for which Mr. Max Clarke, F.R.I.B.A., Bedford Row, London, W.C., has been appointed Architect.

LONDON (BERMONDSEY).—The B.C. has received sanction of the M.H. for the clearance of the Salisbury street area, and for cottages to be erected on the site.

LONDON (HOLBORN).—The cost is estimated at £2,000 for the restoration of St. Sepulchre's Church spire.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.			Per 1,000 Delivered at London Goods Stations.		
	£ s. d.			£ s. d.	
Best Stocks	4 3 6				
Second Hand Stocks	3 18 6				
Flettons, at	£ s. d.			£ s. d.	
King's Cross	2 13 3	Best Blue			
Do. grooved for		Pressed Staffs	9 5 0		
plaster	2 15 3	Do. Bullnose	9 15 0		
Do. Bullnose	3 8 3	Blue Wire Cuts	7 5 0		
Best Stourbridge Fire brick—					
2½ in.	8 11 0	3 in.	10 3 0		
GLAZED BRICKS—					
Best White		D'ble Str'ch'	30 0 0		
Ivory, and		D'ble Headers	27 0 0		
Salt Glazed		One Side and			
Stretchers	21 10 0	two Ends	31 0 0		
Headers	21 0 0	Two Sides and			
Quoins, Bull-		one End	32 0 0		
nose and 4 in		Splays and			
Flats	28 0 0	Squints	29 10 0		
Second Quality, £1 per 1,000 less than best.					
and buff, £2 extra over white.					
Other colours, Hard					
Glaze, £5 10s. extra over white.					

BREEZE CONCRETE SLABS.

Delivered London			Delivered London		
	£ s. d.			£ s. d.	
2 in. per yd. super	1 11	3 in. per yd. super	2 9		
2½ in. "	2 4	4 in. "	3 6		
THAMES BALLAST					
Pit Sand	10 6	per yd.			
Thames Sand	13 9	"			
Best Washed Sand	14 6	"			
1 in. Shingle for Ferro-	12 9	"			
Concrete	14 0	"			
1 in. Broken Brick	14 0	"			
Pan Breeze	7 6	"			
Per ton delivered in London area in full van loads.					
Best Portland Cement. British					
Standard Specification, Test £2 18 0 to £3 3 6					
51s. alongside at Vauxhall in 80-ton lots.					
Ferrocrete per ton extra on above	0 10 0				
Super Cement (Waterproof)	4 8 0				
Roman Cement	8 15 0				
Parian Cement	5 15 0				
Keene's Cement, White	5 15 0				
" Pink	5 10 0				
Plaster, Coarse, Pink	3 0 0				
" White	3 12 6				
" Fine	5 12 0				
Sirapite, Coarse	3 9 0				
" Finish	3 17 0				
Grey Stone Lime	2 11 9				
Chalk Lime	2 11 9				
Best Ground Blue Lias Lime	2 4 6				
Hair	32 0 0				
Granite Chippings	1 12 0				
NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carried. pd.					
Stourbridge Fireclay in sacks 35s. 0d. per ton at rly. dpt.					

STONE.

BATH STONE—delivered in railway trucks at			s. d.		
Westbourne Park, Paddington, G.W.R., or					
South Lambeth, G.W.R., per ft. cube			2	9½	
Do. do. delivered in railway trucks at Nine					
Elms, L. & S.W.R., per ft. cube			2	11½	
PORLAND STONE—					
Brown Whitbed, in random blocks of 20 ft.					
average, delivered in railway trucks at					
Nine Elms, L. & S.W.R., South Lambeth					
Station, G.W.R., and Westbourne Park,					
Paddington, G.W.R., per ft. cube			4	4	
Do. do. delivered on road wagons at above					
stations, per ft. cube			4	5	
White basebed, 3d. per ft. cube extra					
NOTE.—1d. per ft. cube extra for every foot over 20 ft. average, and ½d. beyond 30 ft.					
HORTON-WOOD STONE—					
Delivered at any Goods Station, London.					
Small random blocks, up to 10 ft. cube. P. ft. cb.			7	0	
Random blocks from 10 ft. and over			17	0	
Sawn two sides			27	0	
Sawn three or four sides			32	0	
YORK STONE, BLUE—Robin Hood Quality.					
Delivered at any Goods Station, London.					
6 in. sawn two sides landings to sizes (under			5	6	
30 ft. super.) Per ft. super			6	0	
6 in. rubbed two sides, ditto			2	3½	
3 in. sawn two sides slabs (random sizes)			2	1½	
2 in. to 2½ in. sawn one side slabs (random			1	6½	
sizes)			1	4	
1½ in. to 2 in. ditto, ditto					
HARD YORK—					
Delivered at any Goods Station, London.					
Scattered random blocks			6	3	
6 in. sawn two sides landing to sizes (under					
40 ft. super.) Per ft. super			5	1½	
6 in. rubbed two sides ditto			6	1½	
4 in. sawn two sides slabs (random sizes)			2	10	
3 in. ditto ditto			2	1½	
2 in. self-faced random flags			9	0	

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£32 0	3 × 6	£23 0
4 × 9	28 0	3 × 11	28 0
4 × 8	26 0	2 × 11	28 0
4 × 7	25 0	3 × 9	25 0
3 × 8	24 0	2 × 9	25 0
3 × 7	23 0	3 × 4½	23 0
2½ × 7	22 0	3 × 4	23 0
PLANED BOARDS.			
1 × 11	£32 0	1 × 9	£30 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
¾	21/-	1½	32/6
1	23/-	1½	37/6
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.	Inches.	per sq.
1	25/-	1½	16/6
1½	32/6	1	20/-
1½	37/6	1	25/-

BATTENS.

Inches.	s. d.	per 100 ft.
¾ × 2	2	6 per 100 ft.

SAWN LATHS.

Per bundle	1" AND UP THICK.	per 100 ft.
Dry Austrian Wainscoat, per	0 16	0 to 0 13 0

ft. cube

Dry American and/or Japanese Figured Oak, ft. cube

0 15 0

Dry American and/or Japanese Plain Oak, ft. cube

0 11 0 to 0 13 0

Dry sq. edged Honduras Mahogany, ft. cube

0 16 0 to 0 13 0

Dry Log cut Honduras Mahogany, ft. cube

0 18 0 to 1 1 0

Dry Cuba Mahogany, ft. cube

1 4 0 to 1 10 0

Dry Teak, ft. cube

0 13 0 to 0 15 0

Dry American Whitewood, ft. cube

0 11 0 to 0 14 0

Best Scotch glue, per cwt.

4 10 0 to —

Liquid Glue, per cwt.

4 7 0 to 5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

24 by 12	£ s. d.	18 by 10	£ s. d.
24 by 12	37 12 6	18 by 9	21 2 6
22 by 12	34 0 0	18 by 8	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

Best machine-made tiles from Broseley or Staffordshire district		Per 1,000 f.o.r. London.	
	£ s. d.		£ s. d.
Ditto hand-made ditto	5 12 6		
Ornamental ditto	5 17 6		
Hip and valley tiles (per dozen)	0 9 6		
Machine-made	0 9 0		

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—		£ s. d.
R.S. Joists, cut and fitted		13 10 0
Plain Compound Girders		15 10 0
Stanchions		17 10 0
In Roof Work		20 10 0

MILD STEEL ROUNDS.

Diameter.	£ s. d.	Diameter.	£ s. d.
1 in.	12 10 0	2½ in.	11 5 0
1½ in.	11 10 0	3 in.	11 0 0

WROUGHT-IRON TUBES AND FITTINGS—

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

Tubes.		Fittings.		Flanges.	
Sizes	1" to 6"	1" to 6"	1" to 6"	1" to 6"	1" to 6"
Black Gas	55%	47½%	50%	57½%	60%
Blue Water	50%	42½%	45%	52½%	55%
Red Steam	45%	37½%	40%	47½%	50%
Galv'd Gas	40%	37½%	40%	47½%	50%
" Water	33½%	32½%	35%	42½%	45%
" Steam	27½%	27½%	30%	37½%	40%
C.I. HALF-ROUND GUTTERS—London Prices, ex Works.					
Per yd. in 6 ft. lengths.		Gutters.	Angles and Nozzles.	Stop Ends.	
3 in.	1/2	1/2	11/2	3/4	
3½ in.	1/4	1/4	1 1/4	3/4	
4 in.	1/5	1/5	1 1/2	3/4	
4½ in.	1/6	1/6	1 3/4	3/4	
5 in.	1/9	1/9	1 5/8	3/4	
O.G. GUTTERS.					
3 in.	1/7	1/7	1 3/8	3/4	
3½ in.	1/8	1/8	1 1/4	3/4	
4 in.	1/10	1/10	1 1/2	3/4	
5 in.	2/3	2/3	1 5/8	3/4	

RAIN-WATER PIPES, &c.

Bends, stock Branches, angles, stock angles.		Pipe, angles, stock angles.	
Per yd. in 6 fts.	Pipe.	1/4	1/4
2 in. plain	1/4	1/4	1/4
2½ in.	1/11	1/4	2/0
3 in.	2/4	1/8	2/6
3½ in.	2/10	2/4	2/10
4 in.	3/3	2/4	3/6

L.C.C. COATED SOIL PIPES—London Prices, ex Works.

Bends, stock Branches, Pipe, angles, stock angles.		Pipe, angles, stock angles.	
2 in. per yd. in 6 fts. plain	2 11	2 11	2 9
2½ in.	3 5	2 6	3 5
3 in.	4 1	2 9	4 0
3½ in.	4 5	3 5	4 8
4 in.	4 11	3 9	5 5

L.C.C. COATED DRAIN PIPES—London Prices ex Works.

Bends, stock Branches, Pipe, angles, stock angles.		Pipe, angles, stock angles.	
3 in. per yd. in 9 ft. lengths	4 3	5 9	7 8
4 in.	6 3	6 11	9 6
5 in.	7 10	12 0	16 3
6 in.	9 6	15 0	20 9

Gasken for jointing 38/6 per cwt.

IRON—

Common Bars

£10 0 to 14 10 0

Staffordshire Crown Bars—

good merchant quality 14 5 0 to 15 5 0

Staffordshire		"Marked		£ s. d.	£ s. d.
Bars	16 10 0	16 10 0	16 10 0	16 10 0	16 10 0
Mild Steel Bars	11 0 0	11 0 0	11 0 0	11 0 0	11 0 0
Steel Bars, Ferro-Concrete	11 0 0	11 0 0	11 0 0	11 0 0	11 0 0
quality, basis price	16 0 0	16 0 0	16 0 0	16 0 0	16 0 0
Hoop iron, basis price	31 0 0	31 0 0	31 0 0	31 0 0	31 0 0
Galvanised	13 10 0	13 10 0	13 10 0	13 10 0	13 10 0
Soft Steel Sheets, Black—	14 10 0	14 10 0	14 10 0	14 10 0	14 10 0
Ordinary sizes to 20 g.	14 10 0	14 10 0	14 10 0	14 10 0	14 10 0
" " 24 g.	16 10 0	16 10 0	16 10 0	16 10 0	16 10 0
" " 26 g.	17 10 0	17 10 0	17 10 0	17 10 0	17 10 0
Sheets Flat Best Soft Steel, C.I. & C.A. quality—	19 10 0	19 10 0	19 10 0	19 10 0	19 10 0
Ordinary sizes, 6 ft. by	21 10 0	21 10 0	21 10 0	21 10 0	21 1

GLASS.

Per Ft.		Per F ^t .
---------	--	----------------------

ENGLISH ROLLED PLATE IN CRATES OF STOCK
SIZES Per Ft.

Benaglia

Per gallon.

VARNISHES, &c.		£	s.	d.
ak Varnish	Outside	0	14	0
ine ditto	ditto	0	13	0
ine Copal	ditto	0	13	0
ale Copal	ditto	1	0	0
ale Copal Carriage	ditto	1	4	0
est Ditto	ditto	1	12	0
oor Varnish	Inside	0	13	0
ine Pale Paper	ditto	0	15	0
ine Copal Cabinet	ditto	1	2	8
ine Copal Flatting	ditto	1	0	8
ard Drying Oak	ditto	0	13	0
ine Hard Drying Oak	ditto	0	19	0
ine Copal Varnish	ditto	1	0	0
ale ditto	ditto	1	2	0
est ditto	ditto	1	12	0
est Japan Green Size		0	12	6
est Japan Black		0	13	0
and Mahogany Stain (water).		0	2	0
ruswick Black.		0	7	6
erin Black		0	14	0
notting (patent)		1	3	0
rench and Brash Polish		0	17	6
iquid Dryers in Turbine		0	9	4
upers (quick Drame)		0	9	4

Haddington.—**EXTENSION.**—The Dean of Guild Court has decided, at an estimated cost of £4,000, to extend the Western District Fever Hospital, which includes the erection of two pavilions, one for scarlet fever and diphtheria cases, and the other for isolation cases.

The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 340

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.			
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	s. d.	11 0
Add if in clay	" "	" "	1 0
Add for every additional depth of 6 ft.	" "	" "	0 6
Planking and strutting to trenches	per foot super	" "	0 5
Do. to sides of excavation, including shoring	" "	" "	1 0
CONCRETOR.			
Portland cement concrete in foundation 1 to 6	per yard cube	s. d.	32 0
Add if in underpinning in short lengths	" "	" "	7 0
Add if in floors 6 in. thick	" "	" "	3 3
Add if in beams	" "	" "	3 9
Add if aggregate 1: 2: 4	" "	" "	10 0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	" "	" "	2 6
BRICKLAYER.			
Reduced brickwork in lime mortar and Fletton bricks	per rod	£ s. d.	30 0 0
Add if in stocks	" "	" "	7 10 0
Add if in Staffordshire blues	" "	" "	22 0 0
Add if in Portland cement and sand	" "	" "	1 10 0
FACINGS.			
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	s. d.	0 0 1½
POINTING.			
Neat flat struck or weathered joint	" "	s. d.	0 0 3
ARCHES.			
Extra only to the price of ordinary brickwork:—			
Fair external in half brick rings	" "	s. d.	0 0 10
Axed in stocks	" "	" "	0 1 9
Rubbed and gauged jointed in putty camber or segmental	" "	" "	0 6 0
SUNDRIES.			
Damp course in double course of slates breaking joint and bedded in Portland cement	" "	s. d.	0 1 0
Setting ordinary register grates and stoves	each	" "	1 0 0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	" "	" "	4 15 0
ASPHALTER.			
Half-inch horizontal damp course	per yard sup.	s. d.	4 3
Three-quarter-inch vertical damp course	" "	" "	8 6
¾ inch on flats in two thicknesses	" "	" "	6 3
Angle fillet	per foot run	" "	0 3
Skirting and fillet 6 in. high	" "	" "	1 2
MASON.			
York stone templates fixed	per foot cube	s. d.	13 0
York stone sills fixed	" "	" "	22 0
Bath stone and all labour fixed	" "	" "	10 6
Portland stone fixed	" "	" "	20 0
SLATER.			
Welsh 16 in. x 8 in. 3 in. lap, including nails	per square	s. d.	72 9
Do. 20 in. x 10 in. Do. Do.	" "	" "	80 9
Do. 24 in. x 12 in. Do. Do.	" "	" "	80 0
CARPENTER AND JOINER.			
Fir framed in plates	per foot cube	s. d.	5 0
Do. joists	" "	" "	5 6
Do. roofs, floors and partitions	" "	" "	6 0
Do. trusses	" "	" "	8 6
Deal rough close boarding	per sq.	35/6 40/- 45/-	72/-
Flat centering for concrete floor, including struts or hangers	" "	" "	50 0
Do. to beams	per ft. sup.	" "	1 0
Centres for arches	" "	" "	1 6
Gutter boards and bearers	" "	" "	1 0
FLOORING.			
Deal-edges shot	per sq.	44/6 53/- 60/6	65/-
Do. tongued and grooved	" "	49/- 57/6	65/-
Do. matchings	" "	45/- 51/-	
Moulded skirting, including backings and grounds	per ft. sup.	1/6 1/9 2/0	2/6
SASHES AND FRAMES.			
One-and-a-half moulded sashes or casements	per foot super	s. d.	1 10
Two Do. Do.	" "	" "	2 1
Add for fitting and fixing	" "	" "	0 3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares double hung, double hung with pulleys, lines and weights, average size	" "	" "	3 9
DOORS.			
Two-panel square framed	per ft. sup.	1½ 2 2	2/6
Four-panel Do.	" "	2/5 2/8 2/11	2/1
Two-panel moulded both sides	" "	2/8 2/11 3/2	3/2
Four-panel Do. Do.	" "	2/11 3/2 3/5	3/5

CARPENTER AND JOINER—continued.			
FRAMES.			
Deal wrot moulded and rebated	per foot cube	1" 1½" 1¾"	14 0
Plain deal jamb linings framed	per ft. sup.	1/7 1/8 1/9	1/1
Deal shelves and bearers	" "	1/4 1/6 1/9	1/9
Add if cross tongued	" "	2d. 2d. 2d.	2d.
STAIRCASES.			
Deal treads and risers in and including rough brackets	" "	1" 1½" 1¾" 2" 2½"	2½"
Deal strings wrot on both sides and framed	" "	2/1 2/4 2/9 — —	—
Housings for steps and risers	each	1" 1½" 1¾" 2" 2½"	2½"
Deal balusters, 1 in. x 1½ in.	per ft. run	2/1 2/4 2/9 — —	—
Mahogany handrail; average 3 in. x 3 in.	" "	" "	11 10
Add if ramped	" "	" "	23 9
Add if wreathed	" "	" "	23 9
FIXING ONLY IRONMONGERY (INCLUDING SCREWS).			
6 in. barrel bolts	8d.	Rim locks	2/-
Sash fasteners	11d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting in to floor and	19/
Casement stays	1/2	Cupboard locks	1/5
Cupboard locks	1/5	making good	19/
FOUNDER AND SMITH.			
Rolled steel joists	per cwt.	s. d.	18 3
Plain compound girders	" "	" "	19 0
Do. stanchions	" "	" "	21 9
In roof work	" "	" "	27 6
RAIN-WATER GOODS.			
Half-round plain rebated joints	ft. run	3" 4" 5" 6"	0 2
Ogee Do. Do.	" "	1/6 1/9 2/- 2/6	2 3
Rain-water pipes with ears	" "	1/9 2/7	2 3
Extra for shoes and bends	each	4/4 5/11	4 4
Do. stopped ends	" "	1/11 2/4½ 3/7	4 4
Do. nozzles for inlets	" "	2/2 2/7 3/10	4 4
PLUMBER.			
Milled lead and laying in flashings and gutters	per cwt.	s. d.	67 6
Do. Do. in flats	" "	" "	66 6
Extra labour and solder in coated cesspools	each	" "	6 6
Weld joint	per ft. run	" "	0 0
Soldered seam	" "	" "	1 0
Copper nailing	" "	" "	0 0
Drawn lead waste	per ft. run	1½" 2" 2½" 3" 3½"	4/0
Do. service	" "	1/2 1/9 2/0 3/4 4/0	4/0
Do. soil	" "	1/8 2/2 2/7 3/10	4/0
Bends in lead pipe	each	" "	3/3
Soldered stop ends	" "	1/2 1/8 2/1 2/10 3/8	3/8
Red lead joints	" "	11d. 1/- 1/3 1/11 2/4	4/1
Wiped soldered joints	" "	2/10 3/6 4/- 4/11 5/6	5/6
Lead traps and cleaning screws	" "	" "	14/7 19/6
Bib cocks and joints	" "	6/4 9/7 15/4 41/-	41/-
Stop cocks and joints	" "	15/4 17/2 25/8 64/-	64/-
PLASTERER.			
Render, float and set in lime and hair	per yard sup.	s. d.	3 4
Do. Do. Strapite	" "	" "	7 7
Do. Do. Keen's	" "	" "	1 1
Add sawn lathing	" "	" "	1 1
Add metal lathing	" "	" "	2 2
Portland cement screed	" "	" "	3 3
Do. plain face	" "	" "	0 1
Mouldings in plaster	per l girth	" "	0 1
One-and-a-half granolithic pavings	per yard sup.	" "	6 8
GLAZIER.			
21 oz. sheet plain	per foot sup.	s. d.	0 8
26 oz. Do.	" "	" "	1 0
Obscured sheet	" "	" "	1 1
½ in. rolled plate	" "	" "	0 9
½ in. rough rolled or cast plate	" "	" "	0 10
½ in. wired cast plate	" "	" "	1 4
PAINTER.			
Preparing and distempering, 2 coats	per yard sup.	s. d.	0 9
Knottling and priming	" "	" "	0 9
Plain painting 1 coat	" "	" "	1 1
Do. 2 coats	" "	" "	1 1
Do. 3 coats	" "	" "	2 2
Do. 4 coats	" "	" "	2 2
Graining	" "	" "	1 1
Varnishing twice	" "	" "	0 0
Sizing	" "	" "	0 0
Flatting	" "	" "	0 0
Enamel	" "	" "	1 1
Wax polishing	per foot sup.	" "	0 0
French polishing	" "	" "	1 1
Preparing for and hanging paper	per piece 2½ in.	" "	4 1

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and 10% for Fire Insurance. The whole of the information given on this page is copyright. Prices include both materials and labour.

TENDERS

Locations for insertion under this heading should be sent to "The Editor," and must reach him not later than Tuesday evening.

Accepted. † Denotes provisionally accepted. * Recommended for acceptance. ** Accepted subject to modification.

CK-LE-STREET.—Internal wiring for electric of Council houses, for the U.D.C. Mr. W. M. Consulting engineer, Independent-buildings,

Electric Manufacturing Co., London £6,174 6 6
Shires, Doncaster 4,480 15 0
as, Rotherham 4,137 0 0
& Stevenson, Sheffield 3,604 6 0
giggibottom, Idle 3,535 2 0
ghwell Electrical Contracting Co. 3,144 18 0
obinson & Co., Doncaster 3,127 12 2
ohnson, Wallasey 2,997 3 0
shire Electric Wiring & Motor Co., Sheffield 2,971 10 8
ding & Colliery Supply Co., Doncaster 2,772 0 0

—Temporary class-rooms at the Girls' School, for the T.C.:—
Amery & Son £898

—Decorative work at the ladies' convenience,rove, for the T.C.:—
ry & Son £248

NGHAM.—Conversions to the water carriage for the U.D.C.:—
McNeill, Haverton Hill £1,260 15

ENHEAD.—Conversion of exhauster house Works as a mess room, for T.C.:—
Davies, Birkenhead £202

ENHEAD.—Public urinal on a site fronting d:—
ood, Lloyd & Co., Birkenhead £200

ENSHAW.—Twenty-two houses on the Old-ising site, for the U.D.C.:—
o s—Grayston Bros., Adwalton, near Morley.
ers—E. Fearley & Sons, Ltd., Bradford.
rs—Hepworth & Son, Cleckheaton.
ers—S. Iredale & Son, Gomersal.
sher—H. Rush, Bradford.
ter—R. Robinson, Bradford.

NGARW, GLAM.—Additions to the Tymeinoir School, for the Glamorganshire E.C. Mr. D. S. F.R.I.B.A., County Architect, Cardiff:—
kin, Cardiff £2,992 12 6

TWOOD.—Erection of house for medicalndent at Asylum, for Essex C.C.:—
l. Arnold, Chelmsford £2,860

RTON.—Reconstruction of boiler house at ad, for T.C.:—
d & Cox £1,780

TERFIELD.—Showrooms for the Electricity ee in Stephenson-place:—
e & Sons, Chesterfield.

VICK.—New central school, for the U.D.C.* hills, engineer:—
llman, Ltd. £36,359

as Carmichael (Contractors), Ltd. 35,851
sdson & Sons, Ltd. 35,569
er Jones & Sons, Ltd. 35,550
oberts & Co., Ltd. 35,523
am Moss & Sons, Ltd. 34,214
rey & Co., Ltd. 33,267
ros. 33,336
llom & Sons, Ltd. 32,317
eer's Estimate 33,000

ESTER.—Ten houses on the Crab Tree for the R.D.C.:—
ly £6,047
g 4,925
win's 4,920

ORD.—Fifty houses at Watling-street, for
s Wild, Ltd.

ON.—Foundation work in connection with lation of No. 5 turbo-alternator set, for
Lind & Co. £3,465

ON.—Twelve cottages, for the C.B.:—
ntent, Warlingham £7,682

EY.—Fifty additional houses on Cradley for the T.C.:—
oper & Sons, Blackheath £22,567

STOWN.—Chancel to the Emmanuel Church ve. Plans by Mr. W. Brierley, of York:—
er & Winstanley, Wigan.

—Reconstruction of Causeway Bridge, in es of Aveley and West Thurrock, for the
Arnold, Chelmsford.

RBURGH.—Three blocks of houses at the ea, for the T.C.:—
John G. Corbett £1,720 0 0
er—R. Tindall & Sons 737 12 6
James Reid 330 17 11
er—W. McDonald 537 5 0
ers—Hall & Son, *Alex-
ander Mair, and *Andrew
M Kay (one block each) 500 0 0

HULL.—V.D. Centre in Mill-street, for the T.C.:—
†A. E. Jones (Hull), Ltd. £5,675

HULL.—Alterations and additions to the running depot, Liverpool-street, for the Corporation:—
H. Arnold & Son, Ltd., Doncaster £20,780
G. Houlton & Son, Hull 19,500
A. J. Darneley & Son, Hull 19,167
Kettellwell, Son & Co., Ltd., Hull 17,592
***W. & J. Sykes, Middlesbrough** 15,620

IRELAND.—Contracts accepted by the Com-missioners of Public Works for August:—

Hibernian Military School (roofing, slating, &c.)—
G. W. Scott & Co., Ltd., Dublin.
McKee Barracks (electric lighting)—
Hadens Engineering Co., Ltd., Dublin.
Botanic Gardens, Glasnevin (painting work)—
A. P. Watkinson, Dublin.
Carna ex-R.I.C. Barracks, Co. Galway (restoration)—
J. W. Mongan, Carna, Co. Galway.
Duleek ex-R.I.C. Barracks, Co. Meath (restoration)—
Murphy Bros., Termonfeckin, Drogheda.
Dundrum ex-R.I.C. Barracks, Co. Dublin (restora-tion)—
M. O. Brien, Cabinteely.
Granard ex-R.I.C. Barracks, Co. Longford (restora-tion)—
E. Hetherington, Aughacordrinan, Aughmaciffe, Co. Longford.
Lennybrien ex-R.I.C. Barracks, Co. Waterford (restora-tion)—
Myles Baillie, Lowergrange, Waterford.
Custom House, Dublin (restoration of south block)—
J. & P. Good, Ltd., Dublin.
Dail Chamber, Dublin (erection of screen, swing doors, &c.)—
T. R. Scott & Co., Dublin.
Phoenix Park, Buildings (painting)—
J. H. Clark, Dublin.

KEIGHLEY.—Electric wiring of 50 houses on the Broomhill estate, for the T.C.:—
***Ideal Electric Supply Co., Ltd., Keighley** £253

KENDAL.—Pump-house, for the T.C.:—
Waller—
***J. Hine & Son** £406 1 11

KENDAL.—Eight additional houses at Castle-grove, for the T.C.:—
Waller, &c.—
***S. Downham & Son** £2,179 8 2

Joiner—
***S. & R. Park** 1,048 0 0
Plasterer—
***J. Steel & Co.** 310 19 6

Plumber—
***Thomas Garnett** 354 8 8
Painter and Glazier—
***W. Woodburn** 147 13 0

Slater—
***Dawber, Townsley & Co., Ltd.** 334 0 0

KNOSTROP.—Four recorder houses at the sewage works, for the Leeds Corporation:—
***H. Arnold & Sons, Ltd.**

LANCASTER.—Twenty-six houses, for T.C.:—
***J. Parkinson & Sons, Lancaster** £11,295

LEICESTER.—Lavatories at Rushey Fields, for T.C.:—
***Chitham & Co., Ltd.** £273 5 10

LIVERPOOL.—Internal painting, &c., at the City Hospital East, for the T.C. Land Steward and Surveyor:—
†J. H. Taylor, Ltd., Liverpool £419 14

LIVERPOOL.—Painting the Palmhouse at Sefton Park, for the T.C.:—
†S. Hill & Co. £475

LIVERPOOL.—Painting greenhouses at the Botanic Gardens, for the T.C.:—
†J. H. Taylor, Liverpool £351 17

LIVERPOOL.—Adaptation of 30, Clarence-street, for the purposes of the Oulton Secondary School, for the T.C.:—
†Brown & Backhouse £838

LLANELLY.—Buildings at the Gwendraeth Valley Secondary School, Drefach, for the Carmarthenshire E.C. Mr. W. Vincent Morgan, A.R.I.B.A., architect, County Offices, Carmarthen:—
Brown, Thomas & John, Ltd. £35,500
Llanelly 34,090
G. Mercer & Sons, Ltd., Llanelly 32,950
John Evans, Burry Port 32,850
D. Howells, Sons & Co., Llandeibie 31,500
Williams & Davies, Caerphilly 31,264
Lewis Davies, Penygroes, Llanelly 28,795
***Charles Thomas & Co., Llandilo**

LONDON.—Erection of three additional blocks on the Fisherton-street housing site, for Marylebone B.C.:—
***Walker & Slater** £48,968

LONDON.—Thirty houses on the White Hart-lane estate, for the Wood Green U.D.C. Engineer and Surveyor:—
***Rowley Bros., Tottenham.**

LONDON.—Pavilion in the Town Hall grounds, for the Wood Green U.D.C. Engineer and Surveyor:—
***R. J. Truscott, London.**

LONDON.—Flats in Virginia-place, for the Ken-sington B.C. Mr. L. Rome Guthrie, architect:—
(A) Two new four-story blocks, 38 flats—
T. W. Heath, Ltd. £21,960
Rice & Son 19,900
B. Colley & Sons, Ltd. 19,279
Hill & Gurr 18,165
Holiday & Greenwood 18,047
A. Roberts & Co., Ltd. 18,011
***Hidden & Co.** 17,340

(B) One new four-story block, 19 flats—
T. W. Heath, Ltd. 19,510
B. Colley & Sons, Ltd. 17,721
Rice & Son 17,530
Holiday & Greenwood 17,230
Hill & Gurr 16,827
A. Roberts & Co., Ltd. 16,409
†Hidden & Co. 16,085

(C) Two new three-story blocks, 28 flats—
T. W. Heath, Ltd. 17,310
Rice & Son 15,900
B. Colley & Sons, Ltd. 15,279
A. Roberts & Co., Ltd. 14,611
Hill & Gurr 14,463
Holiday & Greenwood 14,407
†Hidden & Co. 13,970

(D) One new three-story block, 14 flats—
T. W. Heath, Ltd. 17,260
B. Colley & Sons, Ltd. 15,702
Rice & Son 15,530
Holiday & Greenwood 15,410
Hill & Gurr 14,976
A. Roberts & Co., Ltd. 14,709
†Hidden & Co. 14,400

MARKET BOSWORTH.—Central council school for the Leicestershire E.C. Mr. E. G. Fowler, architect and surveyor:—
Chitham & Co., Leicester £5,596 0
T. Barker & Sons, Loughborough 5,150 0
***Orton & Co., Coalville** 5,097 10

NEWPORT.—For (a) Additions to Llanarth-street works; (b) extension to switchgear annexe at East Power Station; (c) static sub-station in Fields-road; (d) disconnecting chamber in St. Julian-road, for the T.C.:—
†(a) J. Charles & Son £1,534 7 2
†(b) King & Co. 1,217 11 2
†(c) King & Co. 666 1 0
†(d) J. H. Williams 376 5 4

NEWPORT.—For (a) Adaptation of a hut at Somerton, and (b) alterations to Spring-gardens schools, for the T.C.:—
†(a) F. C. Parfitt £1,254
†(b) A. Lovelock 940

NORTHAMPTON.—Demonstration pair of non-parlour houses of steel construction of the "Atholl" type, for the C.B.:—
†Northampton Foundry Co., Ltd. (each) £450

NORTHAMPTON.—Repairs to 118 houses on the Harlestone-road site, for the C.B.:—
†A. E. Bellham £3,473 14 6

NORTHAMPTON.—For repairs to (a) 92 houses, and (b) 30 houses, on the Far Cotton site, for the C.B.:—
†(a) W. B. Parbery £993 10
†(b) F. Brawn 184 10

NORTHAMPTON.—Repairs to houses on the Abington site, for the C.B.:—
†W. Hodgson (11) £102 7 6
†W. B. Parbery (18) 224 0 0
†A. G. Cowling (19 and 4 shops) 227 0 0
†F. Brawn (22) 235 0 0
†W. B. Parbery (12) 117 0 0

NORTHAMPTON.—Unclimbable iron fencing, 6 ft' in height, for the C.B.:—
†W. Hayward & Sons, Wolverhampton £240

OAKTHORPE.—Junior Mining and Manual Train ing Centre, for the Leicestershire E.C. Mr. E. G. Fowler, architect and surveyor:—
F. C. Jones, Swadlincote £1,975 10 0
G. Hart, Measham 1,947 0 0
O. Chapman, Appleby Magna 1,857 19 1
***Orton & Co., Coalville** 1,810 12 6

OLDHAM.—Pavilion at Alexandra Park, for T.C.:—
***Whitworth & Whittaker & Co., Ltd.**

ORSETT.—Reinforced concrete wall fence at Grays Arthur School, for Essex E.C.:—
†W. Simms, Stepney £1,875

RAMSBOTTOM.—Installation of electric light at the Technical School, for the Council:—
***T. Kay.**

RAWMARSH.—For (a) 19 houses; (b) 22; (c) 21; (d) 19; (e) 19, for the U.D.C.:—
***†(a) R. Allt & Co., Parkgate.**
***†(b) Thomason & Co., Rotherham.**
***†(c) A. J. Pugh, Rawmarsh.**
***†(d) J. A. Jacques, Rawmarsh.**
***†(e) G. Ramsden, Rawmarsh.**

RICHMOND, SURREY.—Bungalow, Sudbury-lane for Mr. R. J. Nicholson. Mr. C. H. Goater, architect, Trowbridge:—
***Joyce & Son, Twickenham.**

SALFORD.—Structural alterations and extensions at the Broughton High School for Girls, for the E.C.:—
†A. Fenton, Manchester £8,040

SALFORD.—Low-pressure hot-water apparatus at "Summer Hill" School, for the E.C.:—
†G. Dawson & Sons, Salford £131 17

SCARBOROUGH.—Eleven houses on Seamer-road, for the T.C. Mr. H. W. Smith, Borough Engineer:—
***Raine Hallatt & Co., Scar-borough** £6,034 17 6

SHIPLEY.—Electric light installation at Smallpox Hospital, for U.D.C.:—
†G. Binns £178 10 5

SHIPLEY.—Heating apparatus at Smallpox Hos-pital, for U.D.C.:—
†Wigglesworth & Crossley £147 10

SHIPLEY.—Convenience in Stead-street, for U.D.C. :—

Mason's, excavator and drainage work—
‡Wm. Mitchell £764

SKIPTON.—Widening of the West Approach to the Holme Canal bridge, for the West Riding C.C. Mr. H. R. Hepworth, A.M.I.C.E., West Riding Surveyor :—

T. Swan & Co., Stockton-on-Tees	£1,441	8	9
H. Arnold & Son, Doncaster ..	1,046	19	9
W. V. Patrick, Grassington ..	923	19	0
A. Graham & Sons, Huddersfield	837	13	4
T. Duckett, Skipton	821	5	11
E. C. Briggs, Horsforth	820	14	6
*G. Cumberland, Bentham	678	6	0

SOUTH SHIELDS.—New art school, for the E.C. :—

*Humphreys, Ltd., Manchester £3,135
(Subject to B.E.)

STONE.—Parlour-type houses, for the U.D.C. :—
‡E. Lowers & Co. £580
(Subject to M.H. approval.)

TIPTON.—Central school, for the U.D.C. :—
*Mark Round & Son, Dudley £29,846

TIRYBERTH, GLAM.—Elementary school, for the Glamorganshire E.C. Mr. D. Pugh-Jones, F.R.I.B.A., County Architect, Cardiff :—

*T. James, Ystrad Mynach, Glam £15,189 19 2

TWICKENHAM.—Installation of heating apparatus St. Mary's School, for the Governors :—

‡Thames Bank (Blackfriars) Iron Co., Ltd.

WALTON-LE-DALE.—Eight houses in Aspenden-street, Bamber Bridge, for the R.D.C. :—

*Geo. Woods & Sons, Walton-le-Dale.

WALTON-ON-NAZE.—For three blocks of houses on the Kirby-road site, for the U.D.C. :—

‡F. E. Feltham (one block)	£2,562
‡E. Hobern (two blocks)	5,908

WANDSWORTH.—For (a) 169 non-parlour type houses on the Furzedown estate, and (b) 40 similar type houses on the Southfields estate, for the B.C. :—

‡(a) E. Clarke	£91,840
‡(b) E. Clarke	23,427

(Subject to L.C.C. approval.)

WANDSWORTH.—Painting the first-class swimming bath, for the B.C. :—

‡R. S. Ronald £188 10

WANDSWORTH.—Yardman's cottage and office at Ashlone-road Depot, and the yardman's cottage and office at Tooting Depot, for the B.C. :—

‡Triangular Construction Co., Ltd. £295

WANDSWORTH.—Certain re-decorations at 49-127 (odd) Swaby-road, on the Magdalen-park estate, for the B.C. :—

W. Withers

WATH.—Registrar's office in Burman-road, for the Corporation :—

*A. E. Tabor £167

WELWYN.—Station at Welwyn Garden City, for the L. & N.E. Ry. Co. :—

*H. Arnold & Son, Ltd., Doncaster.

WEMBLEY.—Fifty houses for U.D.C. :—

*H. E. Skull.

WILLESDEN.—Demonstration concrete houses, for U.D.C. :—

*Thomas & Edge	pair	£1,128
*E. M. Roberts	"	940

WIMBLEDON.—Flooring at the Latimer-road public bath, for T.C. :—

‡A. Monk £600

WOKING.—Repairs at Council offices, for U.D.C. :—

*Tarrant £342 10

WOLVERHAMPTON.—Construction of aeration tanks and contingent works in connection with the installation of the activated sludge plant at the outfall works, for the C.B. :—

*W. Withers, Bilton £23,368

WORCESTER.—Erection of houses, for the T.C. :—

Waverley-street, four pairs of houses—	
Charles Kimber	£875 per pair
‡A. Deakin & Sons	750 "
Rowley Hill-street, 48 houses—	
J. & A. Brazier, Ltd.	£20,215
‡A. Deakin & Sons	16,000
Goodrest site, seven pairs of parlour type houses—	
Ed. Woodward	£1,108 per pair
‡A. Deakin & Sons	750 "

J. J. ETRIDGE, J^r. Ltd

SLATING AND TILING

SLATE MERCHANTS
CONTRACTORS.

Inspections and Reports made on
OLD OR FAULTY ROOFS
in any part of the country.

Telephone: Bishopsgate 1944/5, or write,

Bethnal Green Slate Works,
BETHNAL GREEN, LONDON, E.

WORTHINGTON.—Junior council school, Leicestershire E.C. Mr. E. G. Fowler, architect :—

F. C. Jones, Swadincote	£28,375 10
J. Freer, Barrow-on-Soar	3,165 "
T. Baker & Sons, Loughborough ..	3,100 "
W. Moss & Son, Coalville	2,929 "
*Orton & Co., Coalville	2,899 10

YORK.—Boundary wall to the Gas Co premises at Monk Bridge, for the T.C. :—

*W. Birch & Sons, Ltd.

HIGH-CLASS FLOORING

of every description in

WOOD BLOCKS. PARQUET
SEASONED T. & G. WAINSCOT
TEAK AND MAPLE.
FACTORY AND ROADWAY PA

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASANT

WANDSWORTH, S.W.18.
(Phones: Putney 1700 A)

School & Hospital St

MAKERS OF

WRIGHT'S IMPROVED and also SHORLAND
WARM AIR VENTILATING PATTERNS

GEO. WRIGHT
19, Newman St., Oxford St., London,
Burton Weir Works, Rotherham.

FITZPATRICK & S

Masons and Paviers,

455, OLD FORD ROAD, BOW

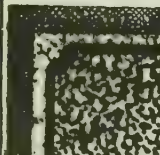
Phone: EAST 4808.

Granite Setts and Kerb (redressed and
hand), York Paving Spur Stones,
Chippings, and Granolithic and Sett Pav

Telegrams: 'Frolic, Liverpool' Phone 221

E. B. BURGESS & S
8, CASTLE ST., LIVERPOOL
WOOD BLOCK FLOOR
AND PARQUETRY

OGILVIE & CO.,
Telephone Glasgow
Many years
with the late
W. H. Lusk
of Bunkhill
Mildmay Works, Mildmay Avenue, Islington
EXPERTS IN HIGH-CLASS JOINERY
ALTERATIONS AND DECORATIONS.



**TERRAZZO & MOSAIC
PAVINGS**

Post or 'Phone (Park 1885)
details of requirements to
**TURPIN'S PARQUET
FLOORING CO.,**
25, NOTTING HILL GATE
LONDON, W.11.

J. GLIKSTEN & SON

LIMITED

Specialities in
**SEASONED
HARDWOODS**

**MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.**

REGISTERED OFFICE AND WHARF
**CARPENTERS RD.
STRATFORD
LONDON E.15**

Telephone : EAST 3771 (5 lines)	Telegrams GLIKSTEN 'PHONE LONDON
---------------------------------------	--



GRANITE AND MARBLE

We supply all classes of
polished Granite and Italian
Marble Memorials.

Specialists in Carvings and
Statuary, War Memorials,
etc.

All enquiries promptly attended to.

**WM. EDWARDS
& SON,**
Pittodrie St., Aberdeen

HOWELL J. WILLIAMS

Builders Ltd.

*High-Class Building
and
Joinery Work*

11/17, BERMONDSEY STREET,
LONDON BRIDGE, S.E.1

Telephone.
HOP 202

Builders of very many well-known Banks, Office
and Business premises. Our works especially
convenient for City Building and fittings.

THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

XXXIX.—No. 4,315

OCTOBER 16, 1925

OXFORD

THE Property and Estates Committee of the Oxford City Council are now advertising for bids for building leases on the site that is being cleared below Christ Church to the east of St. Aldate's. The question of building on this site, which no doubt will be considered by architects and others who took part in the discussion of the R.I.B.A. last year, will probably come before the City Council. The issue raised is of general interest in connection with town planning and development.

In autumn the City Council unanimously decided to draw up a town planning scheme for Oxford. This covers an area of a total approximate acreage of 19,004 acres. Oxford City Borough, the rural districts of Abingdon, Headington and Woodstock have all agreed to join in this scheme, thus ensuring uniformity in the approaches and surroundings of the city. Further, Oxford City itself has given a lead to the rest of England in obtaining the sanction of the Ministry of Health to town plan an area that is already built upon. The sanction of the Ministry will commend itself to all who realise the necessity of protecting historical buildings and colleges from possible vandalism. Already the ugliness of a building of brick, actually a warehouse, but in appearance like the front of a cinema theatre, is a disfigurement to Carfax, the picturesque centre of Oxford, where the High-street, St. Aldate's and the Corn Market meet. Such structures show the urgent need of a town-planning scheme which has, hitherto, only been carried through owing to the enthusiasm of individuals.

The scheme first deals with a number of roads and streets which are to be widened. The majority of these are to be widened to 60 ft., but the Woodstock-road, the main route from Birmingham and the North of England, will taper from 70 ft. The Botley-road, the main approach from the South of England, was widened to 60 ft. last year, but Major General Wytham Abbey, who had so much to do with the development of Johannesburg in South Africa, bought land and gave it to the City in order that this road might be widened to 60 ft. This generous gift has brought home to many people in Oxford the necessity to look to the future in view of the rapidly increasing motor traffic, not only of tourist cars, but of commercial vehicles.

Under the scheme no building, except in the case of shops and industrial buildings, is to be erected nearer to the road than 20 ft. Other building lines are prescribed. Of special interest to architects are the proposals to zone certain areas. Districts round Summertown, to the south of Wytham road, and to the south of Folly Bridge, as far as Hinksey, are to be reserved for dwelling-houses and other residential buildings, to the average number of 14 to the acre. Industries likely to injure the amenity of the areas are to be excluded.

Industrial buildings have to be built in a large area of land from North Hinksey to the west of the railway station, or to Cowley. It is of interest that one industry in this area is already so prosperous that no less than £25,000 a year is being paid in wages.

There are to be definite restrictions on the heights of buildings in Oxford. It is proposed under the scheme that no building or industrial buildings shall be erected to a height greater than 60 ft., exclusive of chimneys, towers or spires. In streets of a width less than 40 ft. no building shall be erected to a height greater than the distance from the centre of the road to the front wall of the building. There is a special area, practically the centre of the city, to which special restrictions will be applied. It has an approximate acreage of 1,212 acres. Here are only to be University special buildings, shops and

business premises. It is specifically laid down that, except in the case of public buildings, no building situated in this area shall be so erected, re-erected or altered as to occupy more than 75 per cent. of the site. No advertisements will be allowed to be displayed in such a position or manner as to injure the amenity of this area. No night signs having the appearance of moving or intermittent illumination, and no roof signs or sky signs are to be allowed. The character and height of the buildings are to be such as to preserve the existing character of the locality, and to harmonise with its existing features.

This, briefly, is the scheme. All those who appreciate good town planning will congratulate the Chairman of the Town Planning Committee and Mr. J. E. Wilkes, the City Engineer, on working out such an admirable plan, and also the Town Council upon their wisdom in passing it early in September without a division. But will they carry out in the letter the spirit of the plan? The question of St. Aldate's is becoming acute. In spite of the fact that it is the main road from Southampton, Bournemouth, and the South of England to the North of England, it was decided ten years ago only to widen it to 50 ft. This month the slum property on the west is being pulled down. In spite of the increase of motor traffic and the improvement in ideas of civic art, the Council have decided to retain the old idea of a 50 ft. road. From the business point of view it would seem to be obvious that a road widening scheme of ten years ago is likely to be inadequate for modern needs, but on this point the Town Council, influenced no doubt by a very hard working Property and Estates Committee, has decided to make no change.

Even more astonishing is the decision to allow somewhat second-rate shops to be erected in the front of St. Aldate's, and small cottage property to be built behind. There can now be seen views of Cardinal Wolsey's Hall at Christ Church that have never been visible during this generation.

There are many persons in Oxford who consider that it would be wise both economically and æsthetically to develop this site, now being cleared, very much on the same lines as Edinburgh developed Princes-street and the gardens opposite. The key of the situation appears to be Christ Church, which has power over certain land in the district,

Fortunately, during the last few days there are signs that the governing body of the college will decide to forego a possible revenue of £700 a year from shops, and convert the ground now covered with ugly stables into lawns with memorial gates opening out into St. Aldate's, and so will reveal to everyone who approaches Oxford from the south the sweep of Christ Church, Corpus, Merton, and Magdalen Tower in the distance. In such a case we hope that the disfiguring brewing house of the college, and the top story of the unsightly laboratory will also be cleared so as not to obstruct the view.

Given such a generous example, the City Council will surely reconsider their former decision. Traffic considerations demand the widening of the road to 90 ft. The cleared area of only one and a half acres on the present Ministry's standard will only give space for eighteen cottages, and these would be better placed across Folly Bridge. To allow building leases for 75 years for shops, as proposed, will condemn St. Aldate's to be a mean street until A.D. 2000. We cannot believe that the Oxford City Fathers will allow this opportunity of leaving the area now being cleared an open space for ever to be lost. Local patriotism, hard-headed business, shrewd foresight, and an appreciation of the beauty of river, meadows, and architecture demand that they should seize the chance that will be within their grasp this autumn.

NOTES.

The Preservation of Ancient Buildings of Old Buildings. THE Society for the Preservation of Ancient Buildings is fortunate in having so forcible and persistent an advocate of its claims as the Earl of Crawford. His strong appeal to a gathering entertained by the Lord Mayor of Manchester last Friday in the Town Hall can hardly fail of good results. He pointed out that in proportion to its size and importance Manchester was amongst the least fortunate cities in the country in its existing heritage of interesting old buildings and memorials of the past, and that it was therefore all the more incumbent on its citizens to treasure what of ancient value remains to them. The Society had certainly done more than its share towards securing the preservation of Platt Hall and Bramhall Hall, the safety of which he hoped was now assured. As a welcome evidence of revolution in public sentiment, he instanced the case of Norwich, which had a committee established to consider the plans of all old buildings in the borough in connection with any proposed changes, to consider the proposed erection of new buildings adjacent to old which might destroy their charm, and to protect natural beauty spots.

WE note that notwithstanding the laxity with **Loss of Old Cottages.** which building regulations are regarded by many authorities, owing to the supreme import-

ance of providing more cottage homes, there are still signs of needless condemnation of many decent old cottages which are sometimes better from a sanitary point of view than those which have been condemned. We fear that many nice old thatched cottages are condemned when a comparatively trifling outlay would render them entirely satisfactory for a long time to come.

WHEN one thinks of the **Cathedral injury to our cathedrals Memorials.** resulting from unsuitable memorials through the last half century, we are inclined to agree with the correspondent in a contemporary who would forbid any more monuments except for the commemoration of some event of individual or national importance. Yet this does not altogether meet the need, and we can think of the most unsuitable military memorial which blocks up the west wall in Rochester Cathedral, to take one instance out of many. It would not be easy to agree as to what is of national importance, contemporary values not being always confirmed by posterity. The Prime Minister of but a short period ago may not be even a memory a hundred years hence. As the writer tells us, "Probably in 30 years hence people will be more concerned with the qualities of the memorial than with those of the man." This statement is of much application to the present time, when in the majority of cases there is not even a mention of the artist at all, the function and its little prerogatives absorbing all the interest.

If the artistry of the memorial were regarded there would be fewer of and they would be better done. Is not even some relationship apparent between the virtue of the memorial and the spirit that promotes it? Really, however, only come by the advancement of public taste, and not sure that the formation of committees to guide it can help much, though it is a sign of the disease.

WE have in recent **Committees of Public Taste.** seen the growth of committees of public taste, and reference to advisory being directed to secure that unsuitable memorials and other additions shall be subject to the same criticism may easily be carried through. With respect, however, to manifestly intentions the desire for such action is usually one difficult to attain. An architect is called in to effect additions or alterations in a building; the plans made for his clients are based on—in the case of churches—to the Diocesan Committees to advise. In recent instances we do not think assistance has been at all helpful. One can imagine a responsible architect feeling an objection to this interference between him and his client. Or take, for example, within our knowledge, of the case for a stained-glass window of a known artist. The advice tendered is much more directed to establishing ideas which our better intelligence in these matters is superseding. As being a vulgar and conventional use and there is not much to choose, and we are in danger of oscillating between the two. Between the rather orthodox persuasions of advisory committees and the ordinary persons we may regard as the clients, the difference often does not seem much difference. We are not so ready to decry ordinary intelligence as to believe that it is a better for the community to be spoiled by committees of taste, and in this I think many artists will agree.

Architect and Builder.

WE are informed that the purchase plans for the park of Gunnersbury Park have now passed, after months of negotiation. The park is 200 acres in extent, and under the present scheme it is intended to set apart 130 acres for building purposes. The Ministry, we are told, have placed no restriction on the type of building to be erected on any particular portion of the park coming in the building scheme, "purchasers are at liberty to use the land in any way they wish." It is to this sentence that we desire to call attention. It is not proper to regard much of the present building of domestic houses in the Ealing district as less than deplorable, though an exception may be seen here and there, especially where an architect has directed the building, and our object here is to appeal to builders to regard the importance



"The Spinners": Figure over the entrance of Vigo House, Regent-street.
MR. W. REID DICK, A.R.A., Sculptor.



ma, Whitwell Church, Isle of Wight. By Miss Dowson. the Church Congress Exhibition, Eastbourne. See p. 555).

the aid of good architects, lest beautiful spot should suffer the disadvantage arising from some of the local proceeding. We appeal first to the public spirit, but also to the advantage that lies in a more traditional type of building.

THOSE who have passed down the newly widened Berkeley-street lately may well feel that a pleasant new fare has been provided for whilst the extremely plain type building which is being erected the north end seems to echo the low estate of the street. The treatment of "Devonshire House" strong contrast to the reticence neighbours.

THERE is a good deal to be said in support of the proposals. test for putting a definite restriction on memorials in medials so that only those who large claim on the remembrance of al public should be so honoured.

If the erection of memorials in our churches were so arranged as to form part of a comprehensive scheme of decoration or constructive adornment, such as arcades or new windows, there might be some reason for including gifts which memorialised people of lesser fame, but the multiplication of isolated panels is a real deterioration of interiors

THE building developments **Carshalton.** in recent years in suburban areas, while it has been of a remarkable character judged by its extent, has unfortunately generally lacked forethought and judgment, with results which are well known, the natural and historical interest of the district frequently being ruthlessly sacrificed through ignorance and indifference. Where, on the other hand, those responsible for the well-being of a growing area are conscious of the value to the community of the careful preservation of its natural and historical possessions, we find the growth of a civic spirit which is doing much to educate the general community against this indifference and neglect. A village which is growing with some rapidity but which, thanks to the wisdom and forethought of the Urban District Council and others, neglects no opportunity of preserving the picturesque charm of the neighbourhood, while not forgetting the growing needs of the community, is Carshalton. The Council at the close of 1924, having in

National Federation of Building Trade Employers. ONE of the most interesting appointments in the building industry of recent years is that of Sir J. Walker Smith to be managing director of the National Federation of Building Trade Employers. Sir Walker Smith's resignation from the position of Director of Housing at the Ministry of Health took effect on September 30. He will bring to the Federation a well-trained administrative brain, for he has had wide experience as City Engineer at Edinburgh with the Scottish Board of Health, and since 1919 at Whitehall, where he has served on all the most important committees connected with building.

Afforestation. WE are glad to note that Lord Ullswater, presiding at the annual dinner of the English Arboricultural Society recently, had something to say not only on the duty of the State and the large Corporations to carry out schemes of afforestation, but to restrain the depredations of timber speculators who purchase estates, denude them of all marketable timber, and then sell the devastated and ruined areas for what they will bring. Many fine estates, we know, have been ruined in this way, and while the State and municipal bodies are being urged to carry out works of arboriculture, something should be done to prevent such reckless destruction.



From the Church Congress Exhibition.

Ivory Panel: "Crowning of the Virgin."

FRENCH, CIRCA 1300.

GENERAL NEWS

Professional Announcements.

Mr. William Harvey's postal address is "Dallinga," Lower-road, Great Bookham, Leatherhead, Surrey, instead of Fetcham as formerly.

Messrs. Bethell, Swannell & Durnford, architects and surveyors, have removed to Adam House, 16A, John-street, Adelphi, W.C.2.

Waterloo Bridge.

At Tuesday's meeting of the L.C.C. it was announced that Sir Edwin Lutyens had been asked to prepare a design showing how a width between the existing parapets of the bridge sufficient for four lines of vehicular traffic could best be obtained, provision being made elsewhere by corbelling out part of the footways (or otherwise) for foot passengers; and to report on the artistic effect of any such alteration. The report is now under consideration by the Improvements Sub-Committee.

Several American institutes and societies have written to the London County Council protesting against the demolition of Waterloo Bridge.

Harrington House.

Harrington House, Craig's-court, is now on the market; it is the last of the Early Georgian town mansions with gardens to the river that once stretched from Whitehall Palace to the Temple.

Bristol's Town-Planning Scheme.]

Mr. E. W. Savory recently gave an address to members of the Bristol Civic League on "Town Planning and the Proposed Scheme for Bristol." After giving an outline of the Town-Planning Acts, Mr. Savory said the preparation of a town-planning scheme did not imply an intention to cover the whole of the land in question with buildings, or to make an elaborate housing scheme; nor did it necessarily involve the local authority in immediate expenditure on works of any kind. Its object was to provide that development, if and when it took place, should be in accordance with a plan which had been prepared in the interests of the community as a whole, industrial and commercial as well as residential. The plan should fix in broad outline the areas to be used for industry, business, and residence, the principal roads and open spaces, the number of buildings to the acre, and similar matters. The object aimed at could only be achieved if the plan adopted met with general support from all classes, and it was therefore important that local authorities should consult from the outset every interest affected.

Lancashire Road Scheme.

Liverpool City Council have approved of the scheme to construct a new £2,750,000 motor road, 26 miles long, between Liverpool and East Lancashire and to contribute a sum not exceeding £362,000 towards the cost.

Leeds University: An Appeal.

The University of Leeds is appealing for funds for the purposes of structural expansion and increased equipment. Contributions may be forwarded addressed to the Hon. Rupert Beckett, Treasurer of the University of Leeds.

Obituary.

The death has occurred at his residence, "Coomroye," Topsham-road, Exeter, of Mr. James Jerman, F.R.I.B.A., aged seventy-seven, one of Exeter's best-known architects. For nearly half-a-century Mr. Jerman played a prominent part in the public affairs of Exeter. He was architect to the Exeter School Board, later acting in a consultative capacity to the Exeter Education Committee. Exeter School, Maynard's School, and the Modern School for Girls, Pennsylvania-road, were other examples of his work. He was also the architect for the extension of St. Luke's Diocesan Training College for Teachers, and for the extension of the College Chapel, and was a prominent member of the Devon and Exeter Architectural Society.

Mr. Charles Web Gilbert, the sculptor, has died in Melbourne at the age of fifty-six. Mr. Gilbert exhibited at the Royal Academy, at

Liverpool, and many other galleries in Europe and Australia. A lieutenant in the Australian Imperial Forces, he was commissioned by the Commonwealth Government to execute models of battlefields fought over by the Australian troops. He also executed the Australian War Memorial at Mont St. Quentin, a replica of which is to go to the Australian War Museum.

MEETINGS

FRIDAY, October 16.

Glasgow Architectural Craftsmen's Society.—Professor C. Gourlay on "Roman Architecture." At the Royal Technical College, 7.45 p.m.

FRIDAY AND SATURDAY, October 16 and 17.

National Federation of House Builders.—Half-yearly Meeting at Blackpool.

WEDNESDAY, October 21.

Liverpool Architectural Society.—Sir R. Paget on "Fashion or Invention in Architectural Design." At 13, Harrington-street.

THURSDAY, October 22.

Chadwick Public Lectures.—Sir L. Weaver on "The Cottage Problem (Rural and Suburban)—Recent Developments." At the Town Hall, Croydon. 8 p.m.

Stepney Public Lectures.—Mr. W. J. Roffey on "A Ramble about Old London." At 236, Cable-street, E.1. 8 p.m.

Institution of Electrical Engineers.—Presidential Address by Mr. R. A. Chattock. Savoy-place, W.C.2. 6 p.m.



From the Church Congress Exhibition.

Churchwarden's Processional Staff,
Liverpool Cathedral.

EXECUTED BY THE ARTIFICERS' GUILD.

COMPETITION NEWS

Art Gallery and Museum, Birkenhead

Birkenhead County Borough Council competitive designs for a new Art Gallery and Museum to be erected within this town. Competitors must have been resident in the town for at least twenty miles of Birkenhead during the whole period up to January 1, 1923. Three premiums offered, namely, £250, £175, and £125. Robert Lorimer, A.R.A., R.S.A., F.R.I.B.A., the assessor. Conditions of competition to be obtained on application, with a copy of the site plan, plan of the subsoil, &c., of the site, and photographs of the site, and a plan of the site can be obtained on application, with a deposit of two guineas, to the Curator, Central Library, Birkenhead, to whom designs should be sent by January 30, 1926.

Reconstruction of the Mosque of Cairo.

Members of the Royal Institute of Architects considering taking part in this competition should strongly recommended to consult the Secretary, R.I.B.A., before deciding to compete.

Manchester Town Hall.

The Town Hall Extension Special Committee has recommended that the sum of £250,000 included in next year's estimates to be paid by the Council, as premiums, assessor's fees, &c., and expenses in connection with the proposed competition for designs for the Town Hall extension.

Competitions Open.

Particulars published in "Builder."	
Newcastle Fire and Police Station. Premiums: £500, £300, £100. Mr. P. S. Worthington, F.R.I.B.A., Assessor.	June 12 ..
Town Hall, &c., Pretoria. Open to architects residing in South Africa or Registered under Architects' Act, of 1909, Transvaal. Assessor to be appointed by R.I.B.A. Premiums: £250, £150, £100.	— ..
Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply particulars, 35, Old Queen-street, S.W.1 ..	April 24 ..
New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool ..	Aug 7 ..
Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London	Aug. 14 ..
Plan for construction of Conference Hall, for League of Nations, Geneva. International Competition, Sir John Burnet being British representative on Jury of Assessors. 100,000 Swiss francs to be divided among architects submitting best plans. Programmes will be deposited in due course with R.I.B.A., 9, Conduit-street, where intending competitors should apply. Single copies from Secretary-General, League of Nations, Geneva, on payment of 20 Swiss francs.	Jan. 2 ..
Labour-saving House, Moor Park Estate, to be built at a cost not exceeding £1,500 (including builder's profit and cost of making up garden and fencing, but excluding cost of site). Designs invited from builders, but if architects are employed builders will be responsible for their fees. Premiums: £100, £50, £25. Apply Moor Park, Ltd., Moor Park, Herts.	Oct. 2 ..
* Technical School to be erected at Cookstown, Co. Tyrone, for Technical Instruction Committee. Apply Mr. R. C. Burke, Technical School, Cookstown.	Oct. 2 ..
* Portstewart Golf Club.	— ..

* Competitions when "warned" or vetoed by the Council are starred.



Design for "A Monument and Lighthouse at the Mersey Bar." (Fifth-year work, six-hour sketch.)

By MR. T. T. WILLS (Liverpool University School of Architecture).

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

Another Manchester Corporation Competition.

SIR,—The Manchester Art Gallery Competition is to be shortly followed by another Corporation competition. The former contained two conditions originally suggested in *The Builder*, which should be repeated in the coming competition: (1) "The successful competitor will be required to provide a perspective to fully illustrate his building" (that saves competitors a great deal of work); (2) "plans to be 16 ft. to the inch" (the scale of elevations must, of course, be left to the assessors—it would save great labour if they were also 16 ft. to the inch).

The Art Gallery Competition contained the condition: "A design shall be excluded from the competition if any of the conditions are disregarded." Should this condition be repeated in the coming Manchester competition, the City Council, the Art Gallery Committee, and the Town Clerk will be placed in an extremely awkward position.

As all readers of *The Builder* know, a coach and four was driven through the Art Gallery Competition conditions; they were successfully ignored on most vital points, and all competitors who strictly complied with the conditions had their work wasted. The City Council has established a most objectionable precedent. Clearly they must insist on their precedent being followed in all coming Manchester Corporation competitions. The Town Clerk, the legal adviser of the City Council, has not protested against this condition being flouted. He cannot advise the Art Gallery Committee one way and the Libraries Committee directly the opposite way.

The Art Gallery Committee will also insist that their reading of the condition (that it may be successfully ignored), must be upheld; otherwise their award would be vitiated and illegal. The Libraries Committee are now engaged in preparing minute instructions and conditions as to their requirements for what is to be the most up-to-date library in the country; they will naturally desire to insist on their requirements being complied with. They will, therefore, place themselves in direct opposition to the City Council, the Art Gallery Committee, and the Town Clerk; all these three will assert that they have established the precedent that the most precise conditions do not hold good in Manchester.

The City Council must necessarily support the Art Gallery Committee. The Libraries Committee should have to give way, but will they? The Art Gallery Committee cannot take legal proceedings in defence of their competition award as their competition expenditure is limited to £2,500, every penny of which has been either spent or ear-marked for specific purposes. Neither the City Council nor the auditors would allow that amount to be exceeded.

Should the Libraries Committee succeed in inducing the City Council to throw the Art Gallery Committee and their reading of the vital condition overboard, the recent competition result would have to be reconsidered. As the condition cannot be read two ways, it must hold good for both committees, or it may be ignored in both cases. The Town Clerk will have to advise what the words mean; one of the two committees will have to give way.

Manchester.

T. SINGTON.

A Trade Training Experiment.

SIR,—I was interested to read the note headed "A Trade Training Experiment" which appeared in your issue of October 2. The substance of this experiment appears to be exactly parallel to the present syllabus of the Junior Building School at the Northern Polytechnic. The boys who attend this school

and enter at the age of 13, spend the workshop period in each term of their first year in a different shop, and thus have knowledge of three trades, e.g., plumbing, bricklaying, carpentry and joinery, and at the beginning of their second year choose one trade which they follow for the rest of their course. In addition to this work they receive training in theoretical subjects connected with building, as it is found that a large proportion of these boys achieve responsible positions at an early age. Incidentally it is felt that the system in itself is largely responsible for the rapid progress which many of them make.

T. P. BENNETT.

Northern Polytechnic.

Rough-casting Somerset Church Towers.

SIR,—Many of your readers will know that we have some of the noblest church towers in Europe in the county of Somerset. During a recent sketching trip through the Cheddar valley my attention was drawn to a tower that had recently been rough-casted. The church is chiefly famous for its Saxon font, and a modern classical north aisle stuck on to the fourteenth-century nave. I think this is about the limit, especially as there are no fewer than three church towers in this valley that have been properly pointed with cement.

EDWARD VALE.

Weston-super-Mare.

Tendering.

SIR,—Having recently tendered for quite a number of contracts for various councils, I have been surprised that they have not even deigned to notify me that I was unsuccessful.

This in itself is discourteous, but I think has a genuine grievance when going to trouble and expense of tendering for public works if one is not informed of the names of successful competitors.

A great factor in the reducing of house costs is the competition amongst small builders and it would be as well if the Ministry of Housing were to compel Councils calling for tenders to undertake to publish full particulars of successful tender.

Quite recently I spoke to a builder who knew had tendered for some houses for which I also had submitted a tender, and his opinion like mine, was that in this particular house tender there had been some very mysterious work at the Council meeting, and neither of us has been able to glean the slightest information as to the cost of the successful tender. Both of us are equally confident that the one who secured the tender were unable with the immense overhead charges to do the work at a lower figure than we, if they execute the work as specified.

"BUILDER"

Architects' Indemnity Insurance.

Owing to the increasing growth of the "Architects' Indemnity Policy" insurance, a company, under the title of Architects' and Professional Indemnity Agencies, Ltd., has formed to act as agents for this insurance. The new company will furnish preliminary legal advice in cases of difficulty where a claim is likely to arise (the policy itself covers legal charges in respect of all claims actually formulated), and will be prepared to act for architects on general questions relating to insurance.



From the Church Congress Exhibition.

Altar Cross and Vases of Silver, Jewelled and Enamelled.

Designed by Mr. EDWARD SPENCER: Executed by the Artificers' Guild

THE PRESERVATION OF ST. PAUL'S CATHEDRAL AND OTHER BUILDINGS

Sir,—In a review of my book, "The Preservation of St. Paul's Cathedral and Other Famous Buildings," which appeared in *The Builder*, September 25, Mr. W. A. Forsyth, R.I.B.A., objects to the use of reinforcement repair work and, in illustration of his point of view, suggests that "Westminster Hall could have been repaired in oak, and whereas much original work might be lost, the design and the wonderful conception of carpentry would have been retained. Much of the latter has been displaced to accommodate heavy and costly steel reinforcement, the stability of which is uncertain owing to its accessibility for painting and for other protective measures." Having worked and died in Westminster Hall during a great part of the progress of the recent admirable repairs devised and executed by H.M. Office of Works, I find myself unable to agree both with Mr. Forsyth's statement and with his suggestion. Westminster Hall roof was in too serious a state of decay to have been repaired in oak alone, and an attempt to repair by splicing would have meant the use of vast quantities of metal in bolts and fishplates and at a mechanical disadvantage. Repair of this sort would have overweighted and disarranged the old roof.

Mr. Forsyth is prepared for the fact that much original work might be lost, and perhaps he means that he would favour a better reconstruction of the roof, for that is at least repair in oak would imply if fishplates were to be avoided. His desire is that "both the design and the wonderful conception in carpentry" should be retained. Can it be said that H.M. Office of Works has failed to retain that, is possible, since the actual original timber, with all their genuine mouldings and carvings, have been held in position without any obvious or apparent intrusion of new work? The protest against the destruction of old buildings in the interest of so-called restoration and to show that an alternative and far better method of repair might be put into practice were my objects in writing my book; Mr. Forsyth clings to the old and discredited way of "restoration" that deprived the world of so much original ancient art during the Victorian period.

By repudiating the use of reinforcement and the opportunity it affords of retaining the valuable ancient work by inconspicuous means, Mr. Forsyth ranges himself with those who would "pull down old to build up new" and "let it be restoration." An attempt to rebuild Westminster Hall roof in a manner to retain the design and the wonderful conception in carpentry must presuppose exact knowledge of both of these things, and this knowledge is lacking. My own researches into the life of the design of the roof and the intention of its creators have produced results which have appealed to friendly critics as interesting and suggestive, but these results are still only matters of conjecture, and, as such, flatly contradict the conjectures of former writers. The reconstruction of the roof that might be attempted in order to recapture "the wonderful conception in carpentry" would have been made in accordance with some person's ideas on the subject, and priceless original work would be destroyed in order to exploit it. Surely it is far better that the original design should be retained at Westminster and an interpretation of the wonderful conception in carpentry should be exhibited as a possible model of loose blocks of oak at the Victoria Museum at South Kensington. If my book does no good, it at least does no harm. No ancient work has been destroyed to make room for it. The late Lord Grimston's well-intentioned and altogether successful restoration of St. Alban's Abbey to its original design has proved for all time the error of sacrificing "much original work"

in the hope of recapturing "a wonderful conception."

In objecting that H.M. Office of Works reinforces "whole structures as well as portions only," Mr. Forsyth implies that partial and fragmentary reinforcement would be less objectionable to him than a properly thought-out and consistently applied scheme, and it should be pointed out that for reinforcement to be efficient in connecting masses of old masonry and restraining their dangerous tendencies to overturn in opposite directions, it must be continuous from bearing to bearing and from a sufficient anchor-hold in one mass to another sufficient anchor-hold in the other. From the earliest times reinforcement has been used in repair work, but it has too often been of a fragmentary description, and I do not, as Mr. Forsyth seems to think, claim that the "application" of reinforcement is itself "scientific." The science of conservation covers the diagnosis of causes of decay in the ancient building and the discovery of appropriate means of restraining their action. The design and calculation in detail of these measures and their "application" are but parts, though important parts, of the conservator's profession.

Mr. Forsyth is much exercised as to the prospect of decay by rusting in the reinforcing members, and asserts that I have "slurred over" this important matter. He quotes, however, two of my recommendations to the effect that "reinforcement should be kept out of contact with the air," and that when this is impracticable that it should be in "non-corrosive metal"; so that it is rather difficult to see in what the alleged slurring over consists. As a matter of fact, the protection of reinforcement is referred to again and again in my book. But the endurance of adequately protected reinforcement has been demonstrated beyond a doubt, not only by recent tests, but by the continued stability of old buildings in which it forms an essential part of the structure. Byzantine and Saracenic works often depend upon bow strings of tensile reinforcement, in wood, iron, or bronze, across the spans of their arches, and would have fallen long ago but for these tension members. Aisle vaults with exposed tie-bars at Westminster Abbey and Canterbury Cathedral are instanced in my book in illustration of the nature of arch pressures and their results. Exposed tie-bars are, however, to be avoided in repair work wherever possible.

Not only does Mr. Forsyth fear that rusting will take place in reinforcement buried in concrete beams even when it is further protected by a covering of solid masonry, but he inquires "to what extent will an ancient building like St. Paul's, or a ruin like Tintern Abbey, be wrecked, first in locating and then in approaching and removing the buried ferro-concrete reinforcement?" But why should anyone bother to approach and remove buried ferro-concrete that is also difficult to locate? If it has failed, as Mr. Forsyth imagines, its presence will be revealed to any competent surveyor investigating the symptoms of that failure; and if it has not failed, no competent surveyor will need to locate or in any way tamper with it.

Referring to old iron "reinforcement" at St. Paul's Cathedral, he remarks: "It should be remembered in this connection that the Surveyor to the Fabric has for years been engaged in removing rusted wrought-iron and repairing the damage thus caused to masonry." By all means let it be remembered, but it is also proper to remember that these bars and cramps have been removed from exposed positions where rust was inevitable, and that for such positions I have advised the use of non-corrosive metal if tensile reinforcement is absolutely necessary. Many of these objectionable iron bars at St. Paul's have been inserted

carelessly in repairs to the structure and are examples of the reckless misuse of material. Of Wren's own successful use of reinforcement in the "great chain" of the dome, Mr. Forsyth says nothing. No one has "wrecked" the building in "locating" or "removing" this important part of the structure, which has functioned adequately during more than two hundred years.

Repair by means of reinforcement is not the untried affair, "untested by time," that Mr. Forsyth professes to think it. Mediæval buildings bowing out in response to the pressures of their arches and vaulting have been satisfactorily stitched together even in the pre-Renaissance period, and in the Near East buildings exist where damage occasioned by earthquake has been restrained by similar means.

It is not always safest, as Mr. Forsyth suggests, "to repair old buildings as far as possible with the same materials of which they are built." The result of applying such a theory at Westminster Hall has been briefly outlined above. Experience shows that it means in practice the disfigurement of the monument to which it is applied. Either the building is pulled down and rebuilt, or its design is obscured and disguised with additional works, piers, buttresses, patches, and the blockings up of openings that ruin the appearance of the work. Anticipating some such criticism, I included in my book an imaginary account of the works that would have to be executed at St. Paul's if the conservator were to limit himself to the use of lime-built masonry alone. "Limitation to the use of lime mortar would mean erecting new additions of stonework about Wren's piers, and the insertion of pressure arches across the building under the great arches to restrain their inward bend. It would also mean blocking up the adjoining spans of the aisle arcades to improve the buttress action of the building in upholding the main piers against the thrusts of the arches and pendentives." It need hardly be said that repairs of this nature would be highly objectionable in that they would intrude upon and disfigure the proportions of Wren's work and altogether spoil his design, quite apart from their practical advantages or disadvantages as engineering works.

In criticising my proposals for a possible comprehensive scheme of repair at St. Paul's Cathedral, Mr. Forsyth makes no mention of the most vital of all—the suggestion that the eight principal piers should be re-cored in a similar manner to those of Jedburgh Abbey. Instead of crediting me with the suggestion he advances a similar proposition as if it were his own contribution to the subject. "Nothing" (he says) "but a replacement of the weak core by a reliable substitute will suffice, and it must be done before any fantastic remedy in reinforcement is considered." Now, it is one thing to theorise that what was done at Jedburgh may be done again, and quite another thing to apply similar methods to a far larger, more complex, and more heavily loaded structure like St. Paul's. The works at Jedburgh demanded extraordinary vigilance and precaution even after an excellent system of centering and shoring had been constructed. At St. Paul's still greater difficulties have to be overcome both in the re-coring operations and in the preliminary shoring and needling. The scheme of reinforcement that Mr. Forsyth characterises as fantastic I have deliberately put forward as one way of contributing to the efficacy of the temporary centres and shoring during the progress of the re-coring work. To criticise it apart from the proposed re-coring is both unfair and absurd, for the connection between my reinforcement scheme and the re-coring is set forth quite clearly on page 68 of my book. My suggested reinforcement is also designed to restrain outward movements occasioned by the pressures of the terribly overloaded main arches and pendentives, but this primary source of danger is ignored alike by Mr. Forsyth and the St. Paul's Commission.

WILLIAM HARVEY.

THE CHURCH CONGRESS, EASTBOURNE

THE EXHIBITION AND LOAN COLLECTION.

FOR the first time in its history Eastbourne has been chosen for the Church Congress, held during the last week. Twice before has it met in the Diocese—both times at Brighton—the first as far back as 1874 and the last in 1901. The Pavilion at Devonshire Park was secured for the purposes of the exhibition, and it was in close proximity to the Congress Meeting Hall.

Eastbourne is a comparatively modern town. Less than one hundred years ago the old Parish Church of St. Mary sufficed for the whole of the parish. Since then all the many existing churches had been erected, and amongst them may be mentioned St. Saviour's, by George E. Street, R.A., erected in 1866, and the recent ones of St. Michael's and All Angels', and St. George's, both of rather recent date, by G. C. S. Streatfield. These and other very fine modern churches were very much used and appreciated during the meeting of the Congress.

An exceedingly attractive feature of the Exhibition has always been the fine Loan Collection, generally drawn largely from the Diocese in which the Congress is held. This year there is no exception to the rule. It has been brought together by the well-known Sussex antiquary, the Rev. A. A. Evans, of East Dean, Eastbourne, and he is to be heartily congratulated upon the result of his endeavour. In a way it has been rather strictly limited to the county of Sussex, and this is well. It is much easier to judge of the craftsmanship of a district by seeing the local types gathered together and being able to compare them than "running afiel" for "alien" varieties. It should be a display of local treasures, and outside work should be avoided. From this point of view this Loan Exhibition illustrating Sussex craftsmanship is a great success, and the delightful collection of chalices and other rare pieces of church plate, as well as early illuminated manuscripts and rare printed books, fine pewter plate, needlework (much very early), fine ivories, enamels, oak carvings, as well as very beautiful Nottingham alabaster panels, all help to form a very complete treasure of splendid things. One special collection of monumental brass rubbings, loaned by Mr. H. E. Firth Franks of Rye, all excellently "done" and well mounted on linen, form an effective decoration for the walls.

Among some of the most interesting objects loaned are many mediæval panels belonging to the Nottingham group of alabaster workers, a craft which reached great popularity in England during the fifteenth century. Much alabaster work on the Continent was also executed by these

English carvers and new examples are very often being discovered and recorded. The material used by these Nottingham workers came from the Chellaston quarries in Derbyshire. Although the output must have been very great indeed, yet, if they are examined very carefully, each seems to possess a very individual beauty, and the colourings generally are splendid.

The panel of "The Betrayal" is a particularly fine one. The whole group was loaned by Dr. Philip Nelson, of Liverpool. A study of the very fine collections now at the Victoria and Albert and the British Museums will easily illustrate to what a very wonderful level this rather late English Gothic craftsmanship reaches, both in regard to design and execution as well as colouring.

Generally, there are a great number of rare and early objects shown, of all types and workmanship, which are more or less accidentally brought into the district—many of them are often of foreign origin—and on the whole the gathering and displaying of such treasures is to be defended. Very many beautiful things would hardly ever be seen, did not these exhibitions take place, and records of them might never be made. Perhaps at Eastbourne this year there are fewer than at Oxford last year; but that is natural, the two centres are so very different.

One of the best things in the whole exhibition is the small ivory panel—one of a pair, a diptych, found in the ruins of Hastings Castle. The subject is "The Crowning of the Virgin," and is of the finest French craftsmanship, *circa* 1300. It belongs to the Sussex Archaeological Society, Lewes. Other early ivory carvings by French, Italian and Spanish craftsmen are also exhibited, but there is no English ivory work loaned.

The enamels are few, and here, again, all are French. One particularly beautiful bronze panel—perhaps a book cover—evidently of Limoges work of the early thirteenth century, is exhibited. It was found in Rottingdean Parish Churchyard about 1770; unfortunately the whole of the enamelling has been lost. It also is lent by the Sussex Archaeological Society. The two splendid seals shown by the Corporation of Pevensey are stated to be the oldest of any of the Cinque Ports. Their general design, with the centre well filled with high relief models of early ships, is very ample and generous—even quite noble as compared to many such seals of the later periods of craftsmanship. There are two magnificent cases of English Church plate, chiefly of fine chalices, drawn from all over the county of Sussex, and some are gathered even so far away as Wales and its borders as well as Devon and Cornwall. The earliest example shown is a chalice and paten of a class known as a "Mortuary Chalice and Paten." It was found at the restoration of East Dean Church, Eastbourne, about 1885, buried with the priest in the chancel. It is of pewter and dates from the thirteenth century. It is extremely simple in form, with a wide and low bowl.

No other mediæval ones are loaned at all; at Oxford last year there were several. It is remarkable how thoroughly these beautiful examples of our Gothic art must have been destroyed throughout the county, but there are shown some extremely interesting Elizabethan ones; quite a distinct type. They are supposed to have been made at Chichester or Arundel by a local silversmith, and it seems quite possible. Their design is rather unusual. The bowl is "funnel" shaped—not unlike a type of late wine glass—the stem is straight, with an enriched band midway and with a slightly domed foot. Those loaned from the churches of Itchenor, Chichester and Selsey are very similar. The date is about 1568. The height is about 7 in. There is shown a very charming one belonging to the church at Lynchemere, Haslemere. It is evidently by the same craftsman and is only 4½ in. high. It has a simple tapering stem, a slightly domed foot, quite plain, and the bowl is enriched with a band of interlaced engraving in the panels of which is inscribed in rude lettering, "For them of

Lensmere Parise." Both the Itchenor and Selsey chalices have very richly decorated

Others very different in design and execution to the above are those loaned by the church of Bethos-y-Crwyn, Clun, Salop, and Wrexham, Wrexham. The former is an extremely beautiful decorated cup of the date 1662. A design in high repoussé is worked in the divisions of the bowl and repeated, inverted, the flowery stem on the spreading foot is a delightful piece of work. The hall is of London. Its height is 5½ in.

The second one comes from Dorset; apparently it is not a local type. The bowl is straight-sided and tapers. The stem tapers from base right to the bowl. Its date is *circa* 1600. The design on both bowl and stem is similar. It is based on the daisy, and part has two tiers of petals—plain and gilded, counter changed. It is a very interesting and unique example, perhaps intended originally as an ordinary drinking cup. All the others are of very exceptional shape. Besides these there are shown a number of Elizabethan chalices of the more ordinary form, some of which are very beautiful and a few unusually plain and dainty, both in shape and moulding as well as in decoration. The one from the church of East Hoathly, having the hall-mark for the year 1567, is one of the finest of this type.

Others are from Sackville College, Grinstead (dated 1560), and Ogwell Church, Newton Abbot, Devon (dated 1576). The wonderful alms dish, also from this church, apparently has only recently been recognised as a very remarkable and rare example of English silversmith's work. It has no mark, and it is not quite easy to tell its date, but it is certainly to be either late sixteenth or early seventeenth century. It is to be hoped it will be loaned for a time to the Victoria and Albert Museum, where it could be studied and compared with the similar pieces of work in this important collection.

Two particularly beautiful chalices of a different type are loaned by the church of Penhurst (dated 1610). The other is from Waldron Church, and is dated 1638. They have very slender baluster stems and illustrate a rare and unusual form.

Another chalice unlike any of the others exhibited is by the Dean of Battle. It is described as a "Silver Communion Cup, high; diameter of bowl, 4½ in.; and of foot, 4½ in." The bowl is straight-sided and slightly spreading at the lip. The stem is equally divided by a knob. ⅝ in. in width. Its date is 1552. This is a strange cup, and is much like the shape of the large ones used in our churches of the eighteenth century. There are very many more very beautiful things shown that could be described, but the above will give some little idea of the very many treasures brought together.

In the Loan Collection are exhibited several examples of modern craftsmanship. Many of them are unworthy of being shown with the very fine and choice English silver work of the sixteenth and seventeenth centuries, and a very great pity more discretion is not shown when such exhibits are offered. They should be at once rejected.

In the case containing the pair of silver-gilt maces belonging to the Corporation of Rye, dated 1767-8, and the splendid maces of a century earlier, owned by the Corporation, is a very fine modern one loaned by the Provost and Churchwardens of St. Andrew's Cathedral, Aberdeen. This interesting mace has a fine staff of mahogany, tapering and twisted, giving a splendid grip. It is in lantern form, having six columns surmounted with a jewelled canopy, crowning which is a silver figure of St. Andrew bearing his Cross.

In the front niche between the columns is a silver figure of Christ as the Good Shepherd, and the niche directly behind it has the figure of "The Life," very beautifully modelled and chased. The whole is richly jewelled, with amethysts, pearls and diamonds being discreetly used and very well set. The mace was designed by Mr. E.



Alabaster Panel: "Christ before Pilate," Nottingham. Fifteenth Century.



Silver Altar Cross.

and made by MR OMAR RAMSDEN,
the High Altar of Rochester Cathedral.

, and the work executed by the Arti-
ficers' Guild. If modern work is loaned at all
it should be equal to work of this very high
class.

A group of two-handled vessels, usually
"porringers," are shown. These, it is
said, were originally intended for "home"
use, and eventually were dedicated to the use
of the church. They are from the churches at
Bishop's Cleeve, Steyning, St. Nicholas,
and Friar's Gate, Chichester, now
in the Museum. The later one is dated 1703—late
18th century.

A remarkable maple wood chalice has been
made by T. Sutton, Esq., of Eastbourne; it
is finely turned on a well-designed baluster
4 feet high. It is engraved with the figures
of a lion and unicorn, an ostrich with a horse-
man's beak, and a hart with collar and
running around the body of the cup
around the foot and underneath, are
engraved lines, signed "Richard Allin
xxii of October, 1610." It would be
interesting to know to what church this

An ordinary section of the General Exhibi-
tion, the outstanding displays are by two
young metal workers. Stained glass, metal
needlework, woodwork are all shown, as
some monumental work, but hardly any
is for notice. It is unfortunate that
displays of uninteresting work should take
up so much space after year with very little effort to
improve them.

There are few figures shown for our churches
at all worthy of a place in them. The statue of
"Our Lady of Whitwell," Whitwell Church,
Isle of Wight, is delightfully treated from the
design point of view, as well as highly coloured
and gilded—as such figures should be. It
was placed in the church soon after the war
in memory of a fallen soldier. It is 4.6½ in.
high, and the enlarged plate showing the
Heads illustrates well the delightful design
and modelling of the artist. No doubt the
colour greatly enhances even this. The smaller
figure was made for a niche over the porch of
a church in Kent. It is now placed in the
church at Hartfield, Sussex, and a replica is at
the convent at Emsworth. Both are by Miss
Dowson, of Hartfield, and well illustrate figures
modelled and coloured in a way often lacking
in many.

The high level always maintained by Mr.
Edward Spencer and the craftsmen of the
Artificers' Guild is always a pleasure to draw
attention to. The influence of their work must
be very great. Already a description has been
given of the mace for St. Andrew's Cathedral,
Aberdeen. Two other very interesting maces
of recent date should be noted. They are for
the Cathedral at Liverpool, and are fine
examples of their kind. Both are for proces-
sional purposes and both are surmounted with
the Pelican. They are of silver, enamelled, with
finely-foliated designs beautifully chased. The
small one is in the form of a cross, as will be seen
in the plate.

The altar cross for Lancing School Chapel is
unusual rather in its proportioning; the figure
is small and the arms of the cross with their
emblems seem a little overpowering. Still, the
whole design depends on the position it
has been designed for. There it might look
perfect with its surroundings. The fine silver-
gilt and jewelled chalice for St. Andrew's Church,
Eastbourne, is noble in its proportion, and the
beautifully-jewelled metal at the base of the
stem and the pierced foliated knob are worthy
of note. It is a very fine example of what is
becoming nearly a traditional modern treatment.

The altar cross, candlesticks and vases for the
Cathedral of Nagpur, India, show again quite
a recent treatment. The cross is very well
designed, its enamels and jewels being well
placed. It is in strange contrast to the design
of the cross for Lancing previously described.
The latter is mediæval in nearly all its points of
interest. The one for Nagpur can be only
recognised of a very recent date.

The fine censer of silver inlaid with precious
stones is very architectural in character, such
as a censer needs to be—strong and rigid in out-
line. The whole is extremely good and well-
balanced. Both the designer and craftsman
have attained their object completely. The
brass ewer with the bands of enamelled enrich-
ment has been made for Hexham Abbey, and
follows a traditional mediæval style. It has
been very successfully executed. All these fine
pieces are from the workshop of the Artificers'
Guild. Mr. Omar Ramsden and his craftsmen
have also been extremely busy executing fine
things.

The hand-wrought and chiselled gold chalice
and paten made for Beda College, Rome, is
extremely simple in treatment, as becomes the
metal used for its execution. The chalice is
of rather unusual proportion, the stem being
short and flowing gracefully into a wide base.
The knob is very daintily enriched with a
foliated design in very low relief. The paten
is quite plain. The set of silver ornaments for
the Chapel of Sidney Sussex College, Cambridge,
are very pleasing in the reticence of their design.
The chalice and candlesticks are excellent.
They are perhaps for the small side lady chapel,
and the architectural treatment around by Mr.
Thomas H. Lyon, the architect, governs as it
should their detail. The processional cross in
hand-wrought and repoussé silver for Bath
Abbey Church is unusually elaborate for such
an object. The silver repoussé alms dish with
the figure of St. Peter in the centre and with
the emblems of the Apostles is for St. Peter's
Church, Herne Hill. Among the other fine

pieces are the jewelled pax in hand-wrought
and chiselled gold and silver for the Chapel of
the Middlesex Hospital, and the very fine silver
altar cross for the high altar of Rochester
Cathedral, which is distinctly Renaissance in
character.

The lesson, if any, that can be learned from
this annual Congress is that the artist and
craftsman interested in Church craft work
could, if they would, have a most remarkable
influence over things that are always being
placed in our splendid cathedrals and churches.
They have the opportunity of appearing annually
before a multitude of men and women all anxious
to be shown beautiful work and also desirous
of being advised how to obtain it. If these
men would only really attempt to show what
is being done, and what can be done, the result
would be remarkable, and rarely would be
deplored the placing of "unpleasing things"
into our sanctuaries.

Cannot something be done next year at South-
port to remedy this very great failure? The
Church Crafts League, the Arts and Crafts
Exhibition Society, the Art Workers' Guilds,
the Guilds of the Scribes and Illuminators,
Needleworkers, Glassworkers, naming only a
few, should combine and show these anxious
donors what can be done. To teach an appre-
ciation of good work in all the crafts is their
duty. Here they have an opportunity.

Two other bodies may join in—the Society
for the Protection of Ancient Buildings should
be in evidence to help, and surely the Advisory
Committee in the Diocese should be in evidence
backed by the Central Committee.

This is a programme of easy achievement
if just a little organisation is attempted.

The Honan Scholarship.

The subject for the Honan Travelling Scholar-
ship, 1926 (value, £50 for one year, open to
members of the Liverpool Architectural Society,
Incorporated, under the age of thirty), is the
Terminal Station and Garage of a Motor Bus
Company. Designs marked "Honan Scholar-
ship" are to be delivered at the Society's
Rooms, 13, Harrington-street, on Thursday,
December 31, 1925. The winner of the Scholar-
ship will be announced on "Honan Night,"
Wednesday, January 27, 1926. Candidates for
the 1926 Scholarship must have been Associates
or Students of the Society on December 31, 1925.
Full particulars of the Scholarship may be
obtained from Mr. Ernest Gee, Hon. Secretary.

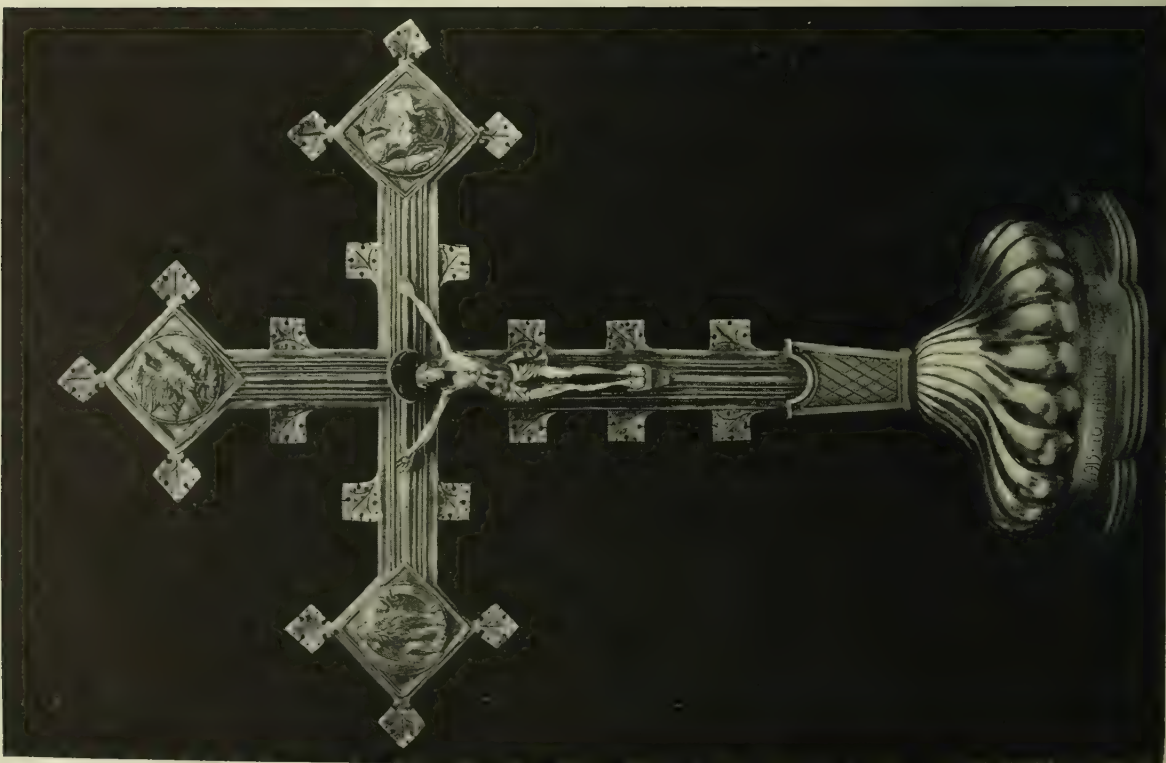


Madonna, Hatfield Church, Sussex.

By Miss Dowson.



From the Church Congress Exhibition.
Processional Cross in hand-wrought and repoussé silver for Bath Abbey Church. Designed and executed by Mrs. Owen P. Jones.



From the Church Congress Exhibition.
Altar Cross for Lancing School Chapel.



Oxford Regional Town Planning Scheme.

MR. J. E. WILKES, A.M.Inst.C.E., Oxford City Engineer.

LEADING CONTENTS. PAGE

OXFORD 551
NOTES 552
GENERAL NEWS 554
COMPETITION NEWS 554
CORRESPONDENCE 556
THE PRESERVATION OF ST. PAUL'S CATHEDRAL
AND OTHER BUILDINGS..... 557
THE CHURCH CONGRESS, EASTBOURNE.... 558
IRONWORK AND ARCHITECTURE.—II 569
ARCHITECTS' AND BUILDERS' INQUIRY
BUREAU 572
THE BUILDING TRADE 573
A NEW MASS PRODUCTION MATERIAL..... 574
LABOUR AND HOUSING 574
NEW BUILDINGS IN LONDON..... 575
BRITISH STANDARD SPECIFICATION FOR
PORTLAND CEMENT 576
CONTRACTS, COMPETITIONS, ETC..... 577

ILLUSTRATIONS

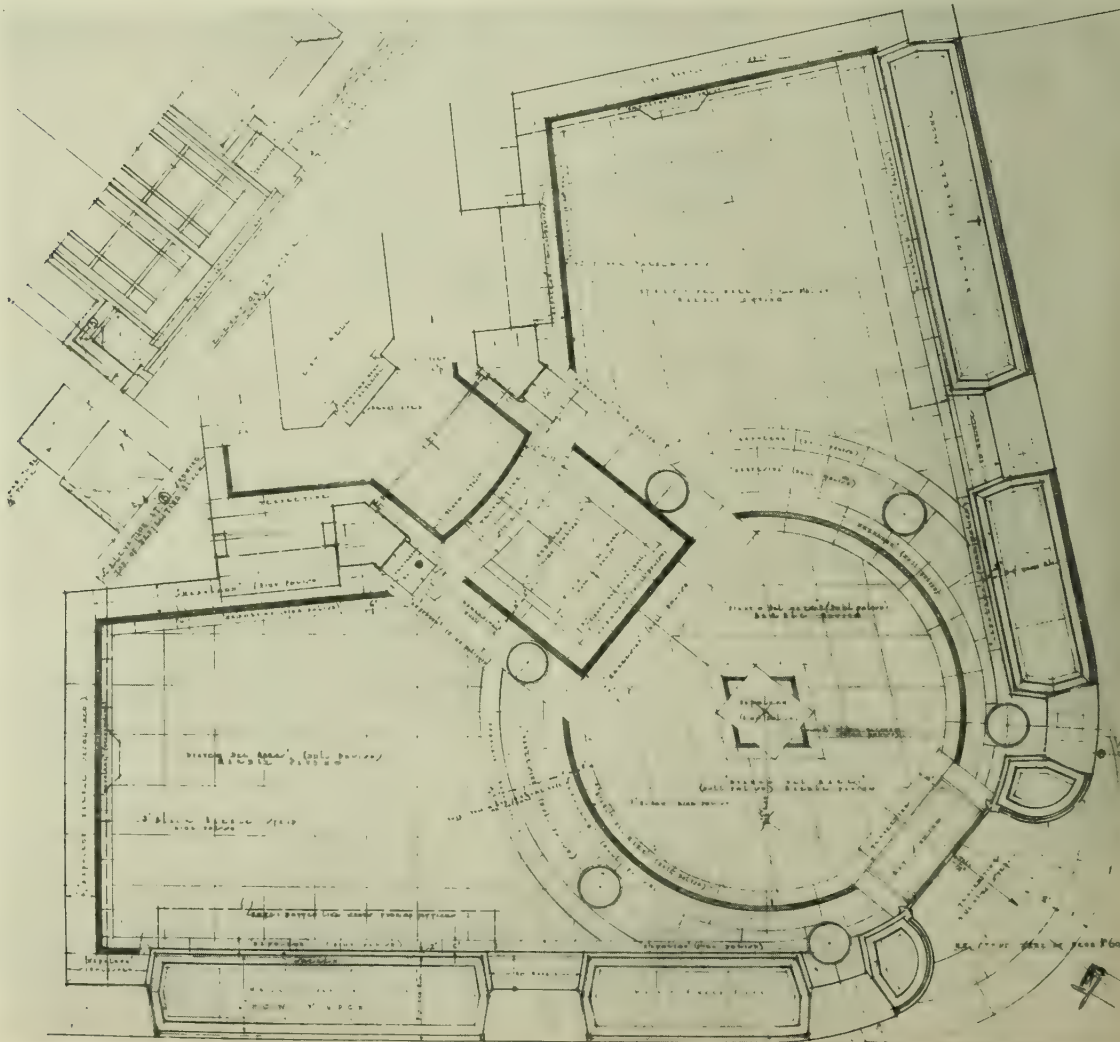
Vigo House, Regent-street.

We publish this week some photographic illustrations and working drawings of Vigo House, Regent-street, which is now on the point of completion from the designs of Sir John Burnet & Partners (Sir John Burnet, R.A., R.S.A., Mr. Thomas S. Tait, A.R.I.B.A., and Mr. David Raeside). The façades are executed in Portland stone, with entrance doorway and base of building in polished black marble and green Swedish granite. The main entrance doors with flanking lamp standards, and also shop windows, are carried out in polished

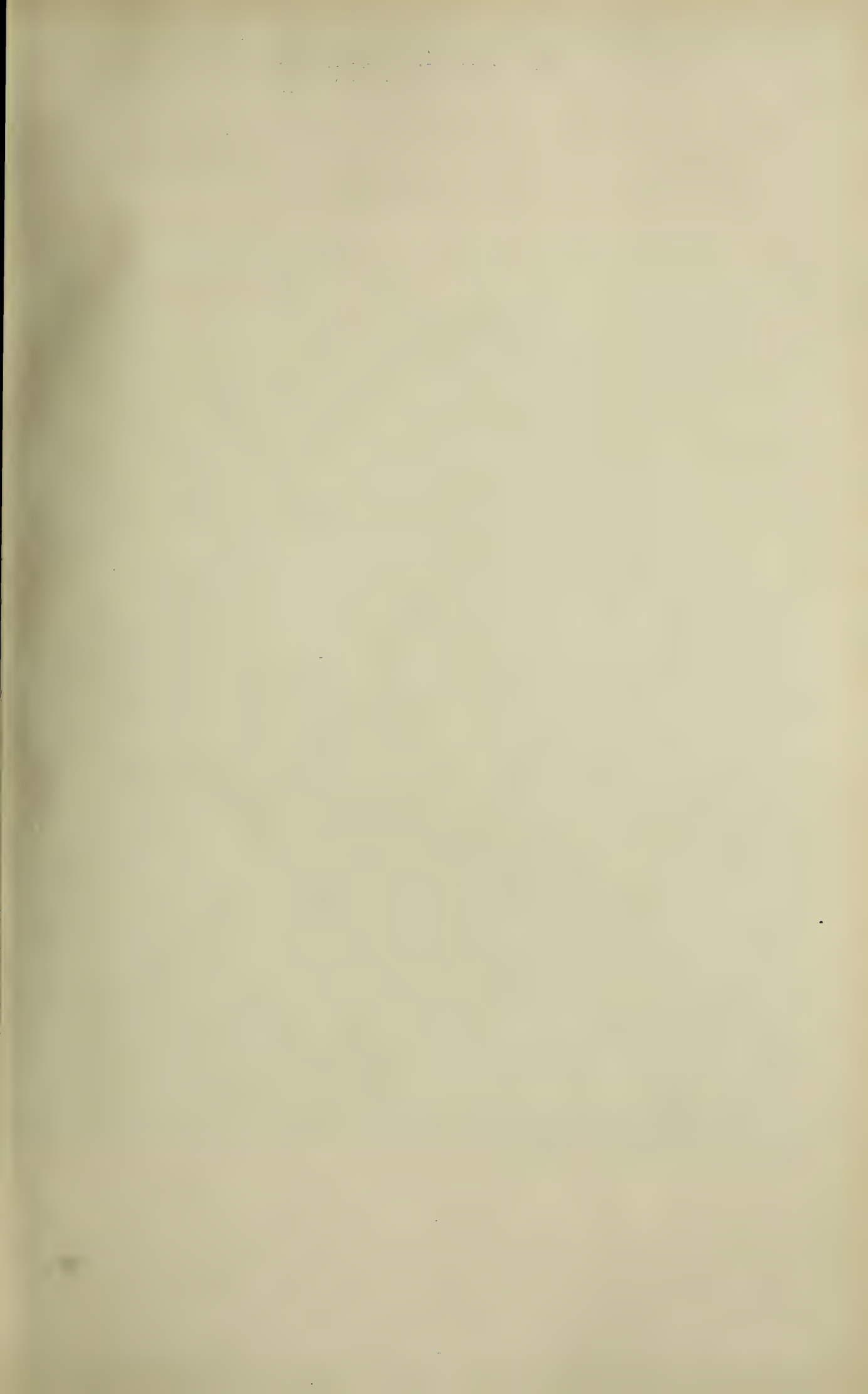
bronze. The stone sculptured standing figures, representing "Art" and "Industry," and the seated figure, "The Spinner," are the work of Mr. William Reid Dick, A.R.A. The bronze shield, representing the Pattle of Vigo, was modelled by Mr. George Alexander. The entrance hall, paved with Bianco del Maré marble, with bands of Napoleon and black marble, has a domed ceiling decorated with the Signs of the Zodiac, executed direct on the plaster work by Miss Peggy Hodge, A.R.C.A., who also designed the circular panels in the staircase windows. The internal woodwork throughout has been carried out in polished Ancona walnut, with wall dadoes in Japanese gold paper. The shop window enclosures, designed in simple panels without mouldings, are executed in polished burr walnut, with ebony bands. The shop window blinds bear decorative designs, representing the "Dexter" fox head, designed and executed by Mr. Harry Rowntree. The electric light fittings in polished bronze, together with furniture, carpets, &c., have all been specially designed by the architects to be in harmony with the general treatment of the building.

The general contractors were Messrs. Trollope & Colls, Ltd., and Messrs. P. & W. Anderson, Ltd., and the sub-contractors were as follows: Messrs. Young, Austen & Young, heating and ventilation; R. A. Skelton & Co., steelwork; Tyler & Freeman, electric light installation (inter-communication phones, Ericsson British L.M. Manufacturing Co., Ltd.; sanction phones. Synchronome clocks, Synchronome Co., Ltd.); Crittall Manufacturing Co., Ltd., and Crittall Freeman Bronze, Ltd., windows, external bronze work; Baillie & Telfer, embossed glass;

George Rome & Co. (London), Ltd., plan work; Samuel Elliott & Sons (Reading), Ltd., main staircase in teak, entrance to Vigo (chairs, and all interior hardwood joinery, such as doors, frames, &c.; Malcolm MacLeod & Co., Ltd., granolithic finishings to staircase; T. Ward, oak handrail on lift enclosure; Wills & Sons, Ltd., fire escape ladder; Diesels & Co., Ltd., structural floors, roof and cladding; Fenning & Co., Ltd., marble and granite work; Waygood-Otis, Ltd., lifts; Carter & Co. (London), Ltd., terrazzo work; Shanks & Co., Ltd., sanitary fittings; United Stone Works, Ltd., Portland stone from own quarries, dressed to Sir John Burnet's details, delivered to site and fixed and cleaned down; Gas Light & Coke Co., gas supply; Potter Rax Gate Co., Ltd., grille to Vigo Chambers staircase; Birmingham Guild, Ltd., bronze work; Art Metal Equipment Co., Ltd., steel roller shutter; Pollard & Co., Ltd., sun blinds; George Parnall & Co., shop fittings (including Taylorac, Ltd.); Jos. F. Elner, window block flooring; Sturtevant Engineering Co., Ltd., vacuum cleaning plant; Lamson Pneumatic Tube Co., Ltd., pneumatic cash tubes; Office Telephone Service, phones, time recorders; W. & C. Pantin, spiral chute; Woodward Safe Co., Ltd., safe; Sellars (London), Ltd., bronzing to metal work; Figgott Brothers Co., Ltd., flagstaffs; G. C. Cuthbert & Co., copper electro glazing; Jas. Gibbons, Ltd., door furniture; J. A. King & Co., Ltd., reinforced concrete lantern lights and pavement lights; Jas. Shoolbred, Ltd., carpets and curtains; Wm. Angus & Co., office furniture; E. Kahn & Co., Ltd., chairs. Mr. Dobson, the clerk of works, and Mr. H. W. Crouch, the manager.



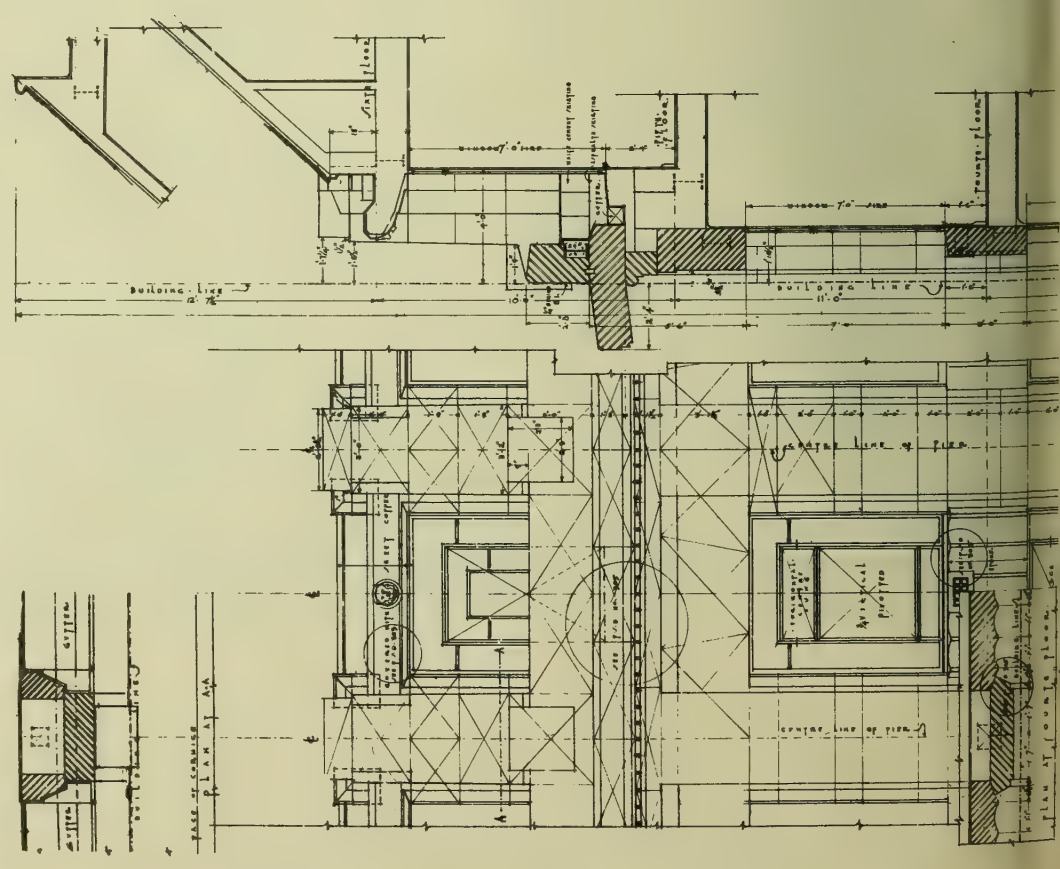
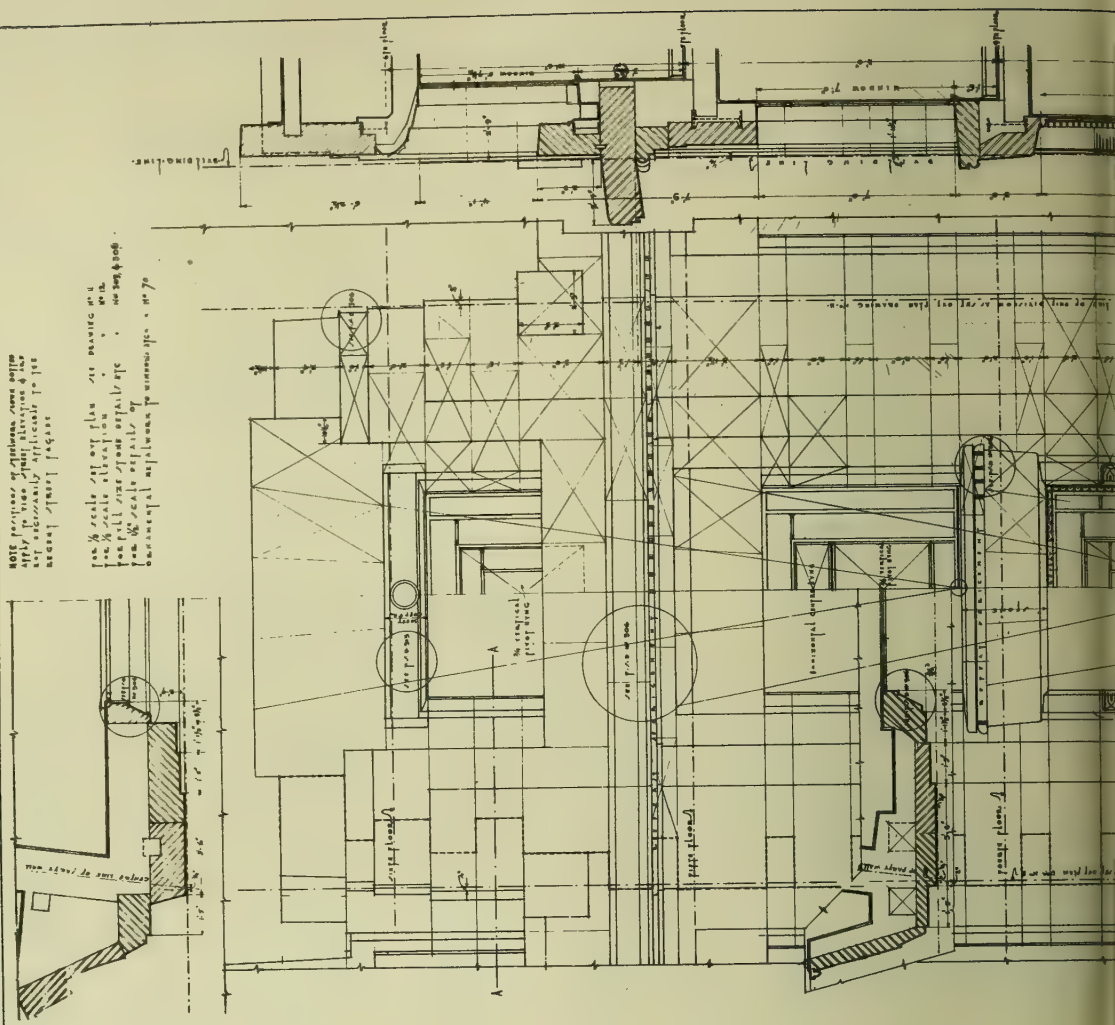
Vigo House, Regent-street: Plan of Corner Shop. SIR JOHN BURNET & PARTNERS, Architects.

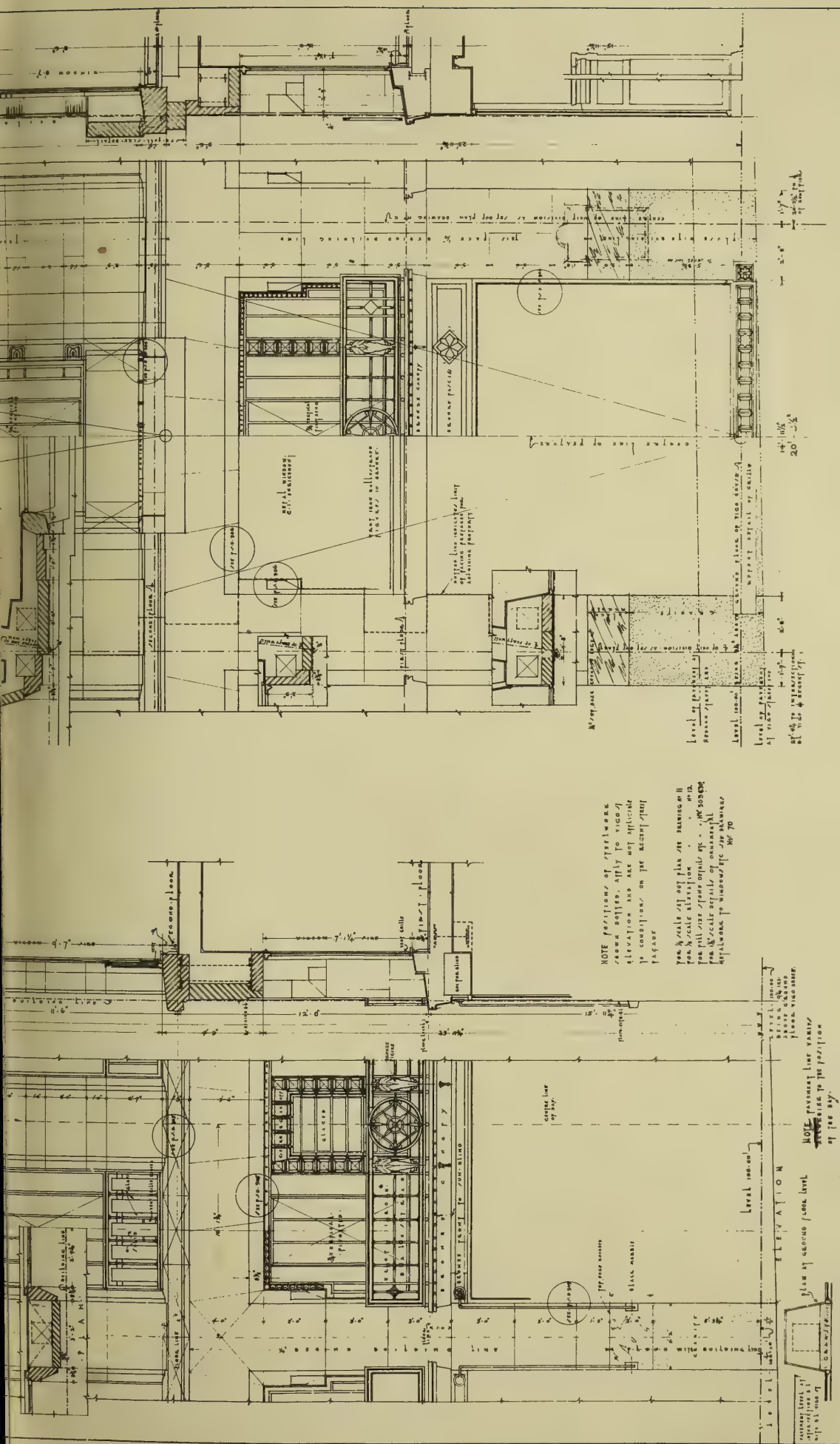




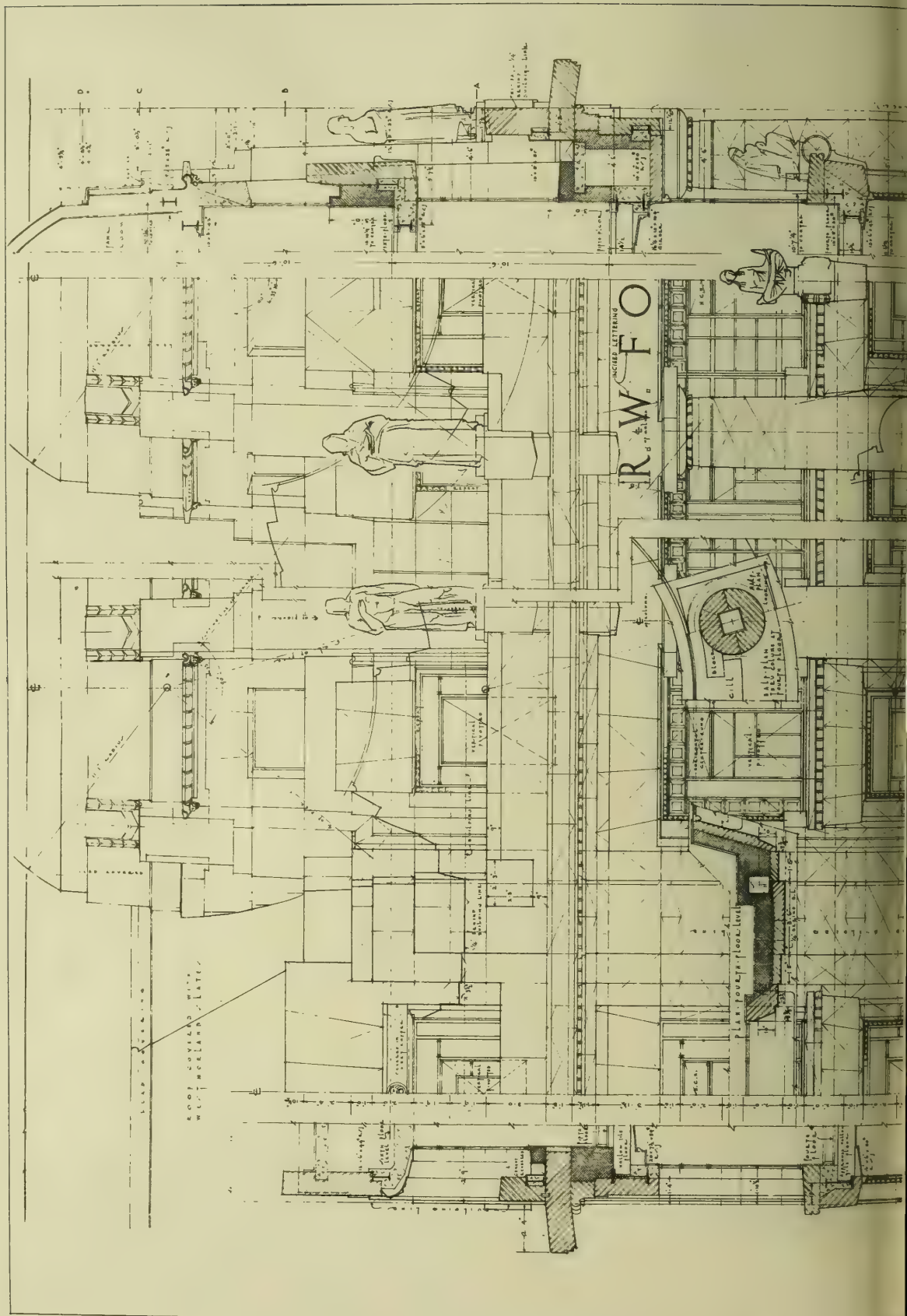
Vigo House, Regent-street, London.

SIR JOHN BURNET & PARTNERS, Architects.





VIGO HOUSE, REGENT STREET, LONDON. SIR JOHN BURNET & PARTNERS, ARCHITECTS.

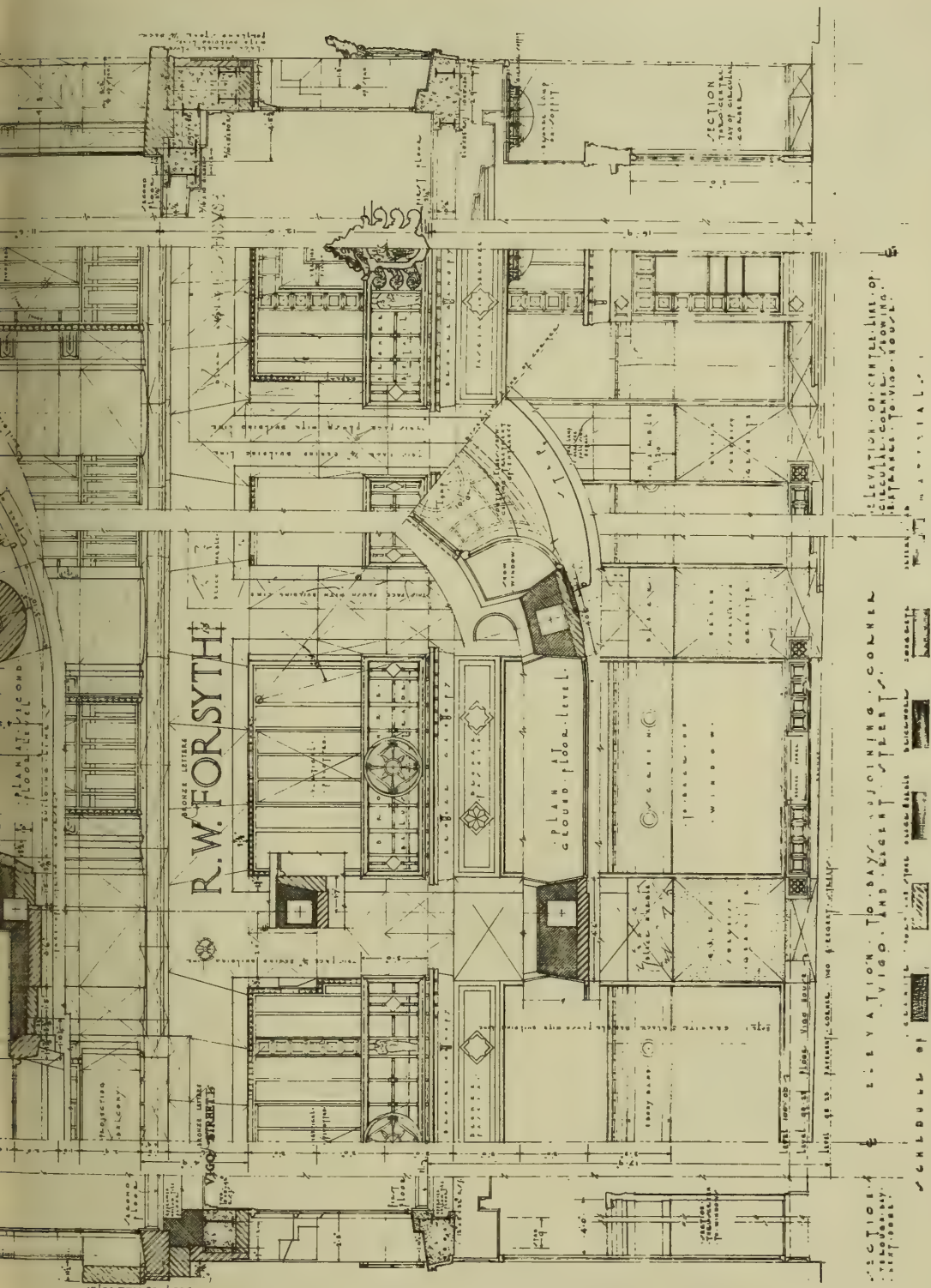


R.W.F.O.

ARCHITECTURE

PLAN FOURTEEN

ROOF COVERED WITH
WATER-PROOFING



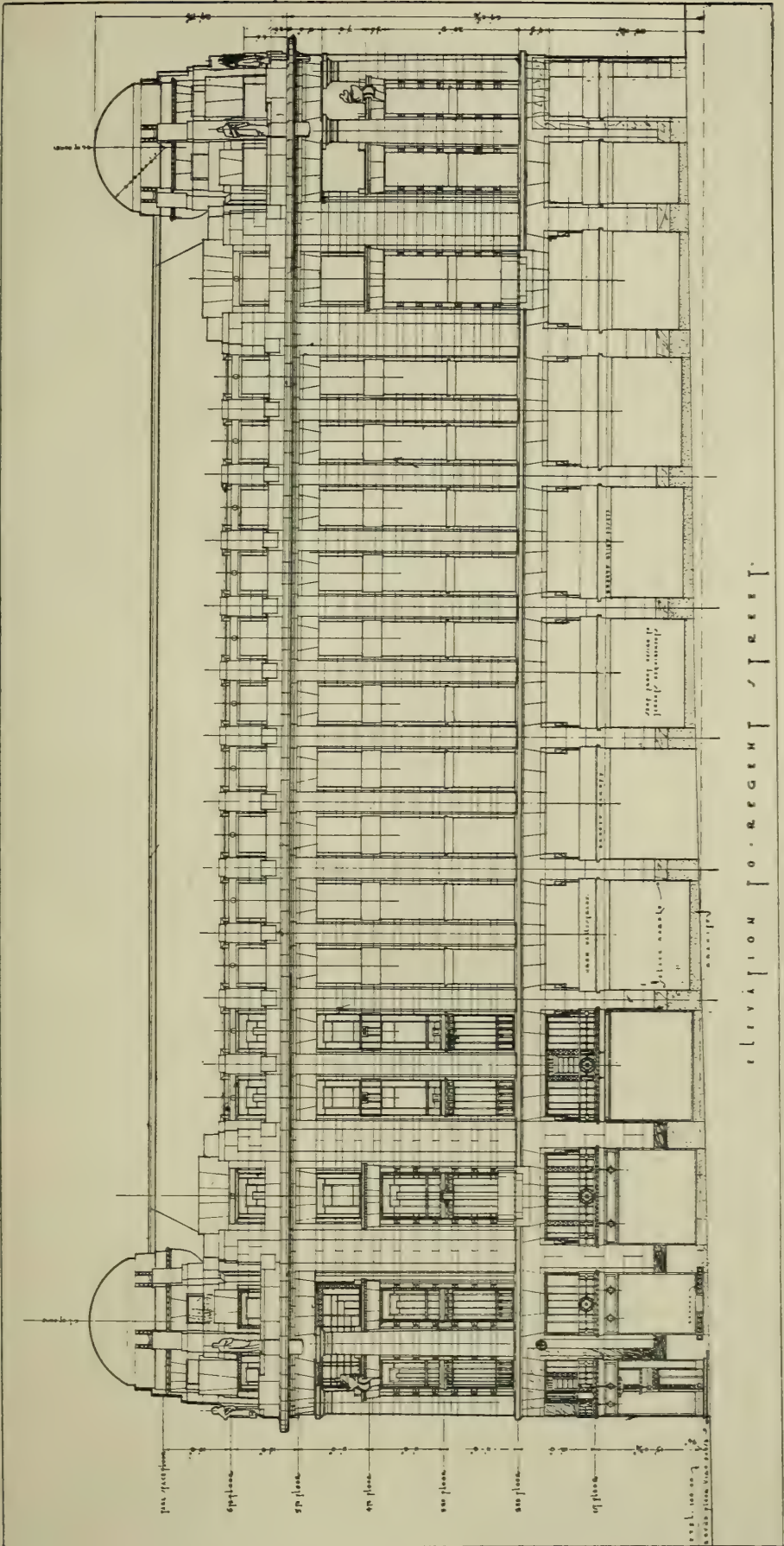
SECTION & ELEVATION TO DAYS JOINING CORNER
VIGO AND REGENT STREET.
SCHEDULE OF MATERIALS

VIGO HOUSE, REGENT STREET, LONDON. SIR JOHN BURNET & PARTNERS, ARCHITECTS.



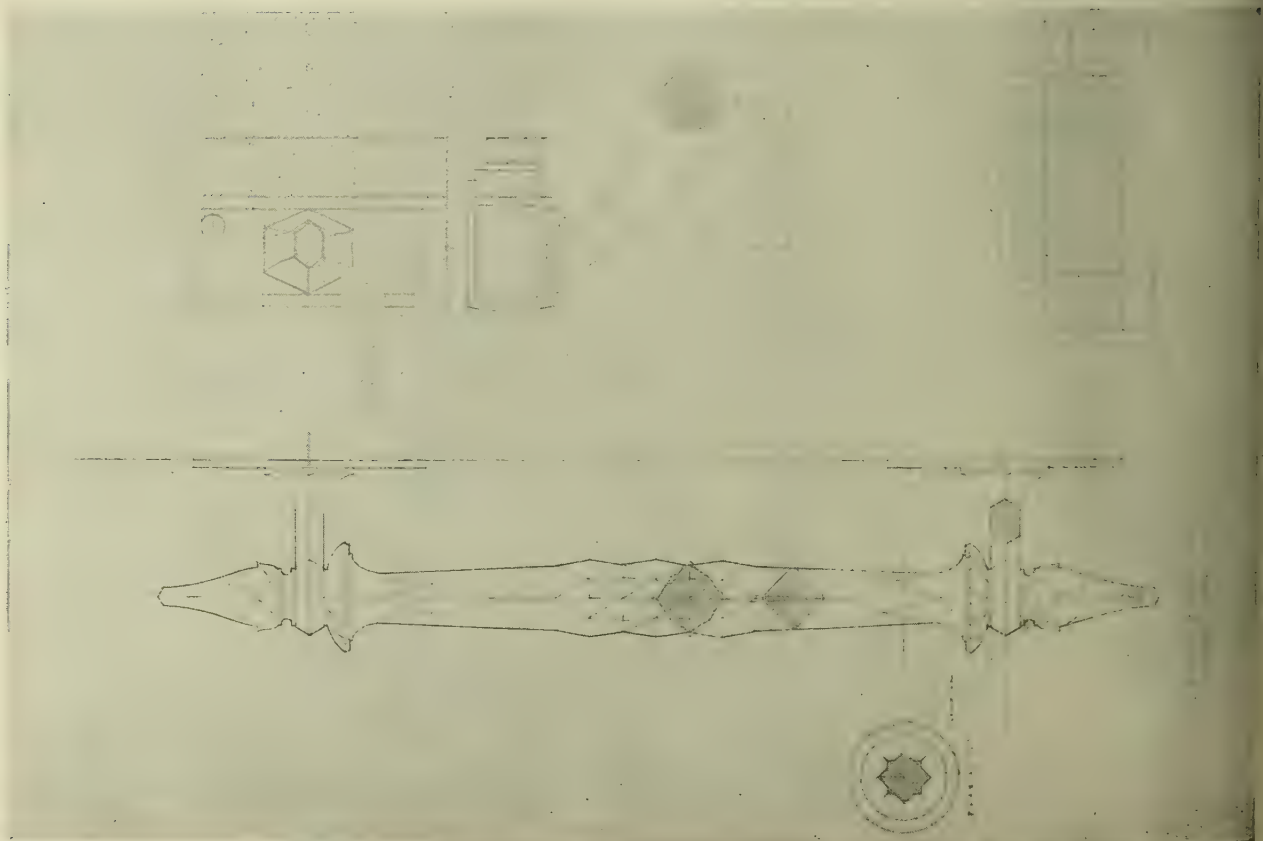
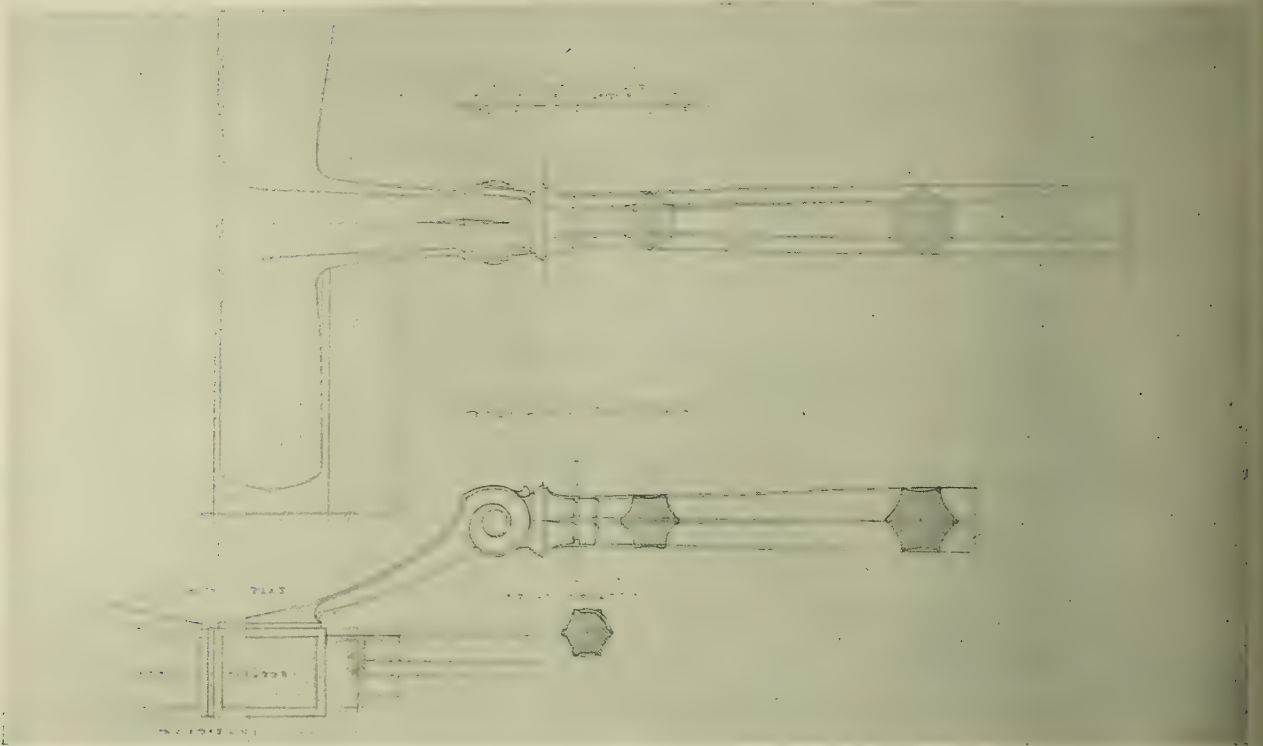
Vigo House, Regent Street, London : Interior of Corner Shop.

SIR JOHN BURNET & PARTNERS, Architects.



Vigo House, Regent-street, London : Elevation to Regent-street.

SIR JOHN BURNET & PARTNERS, Architects.

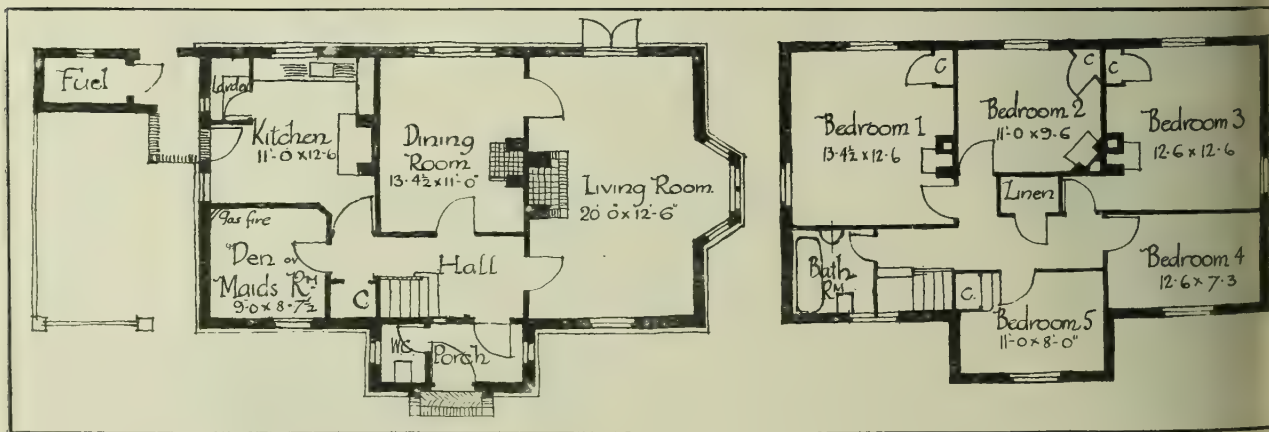




Sir Banister Fletcher, F.R.B.A.
1 Kings Bench Walk, Temple, E.C.

PROPOSED NEW PARISH CHURCH AT FRINTON-ON-SEA, ESSEX.

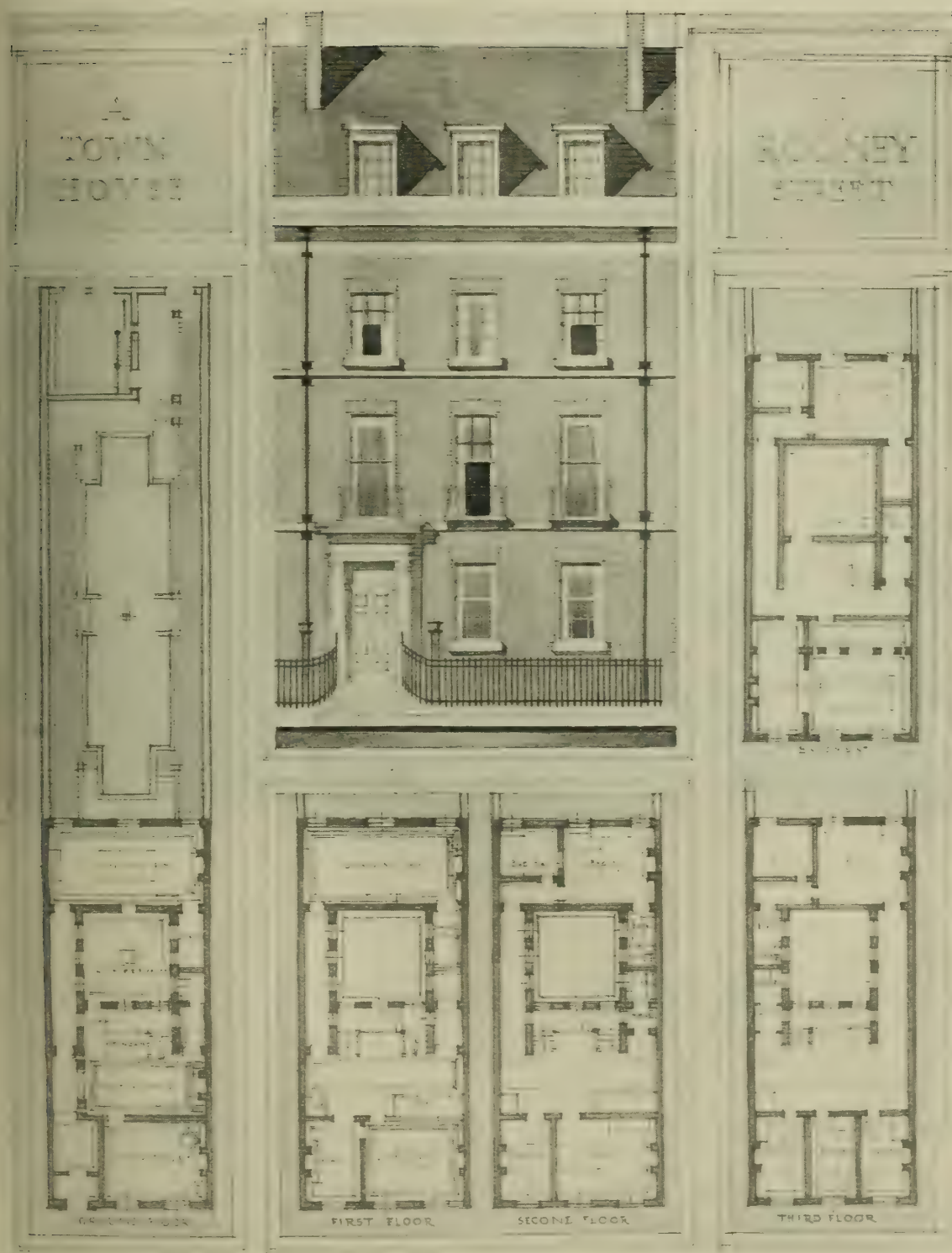
S. Woodward del 1920



PLANS.

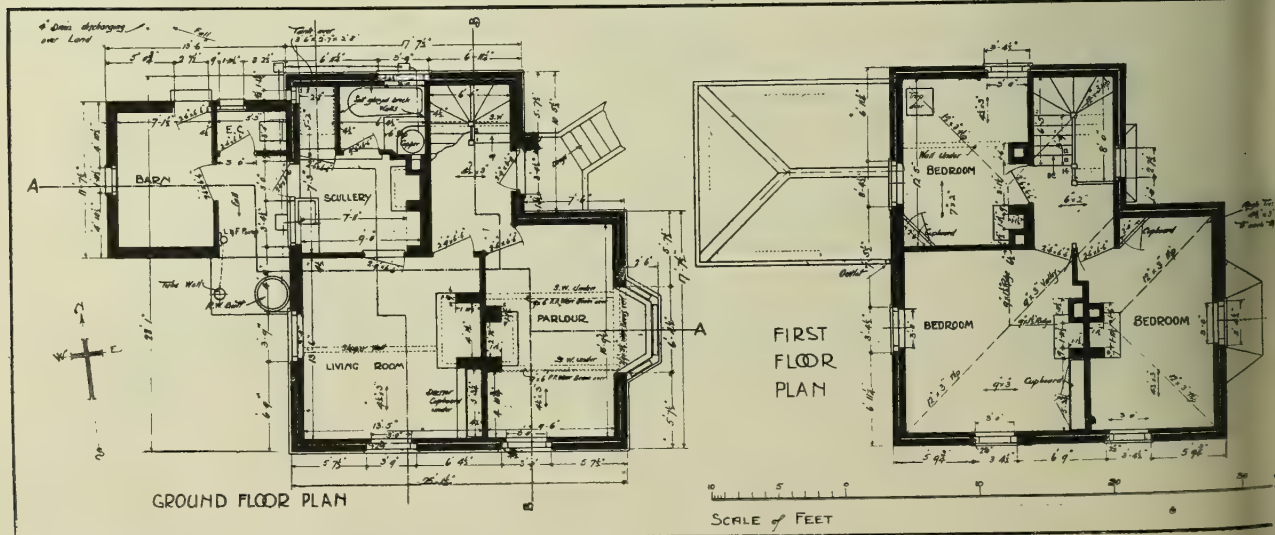
A House in Guessens Road, Welwyn Garden City.

MESSRS. LOUIS DE SOISSONS AND ARTHUR WM. KENYON, F.F.R.I.B.A., Architects.



A House in Rodney-street, Liverpool.

Measured and Drawn by MR. T. C. HAYNES. (Third-year work, Liverpool University School of Architecture.)



Lodge, Little Wymondley, Hitchin.

MR. W. SCOTTER OWEN, A.R.I.B.A., Architect.

IRONWORK AND ARCHITECTURE—II.

By HECTOR CORFIATO, S.A.D.G.

tainly the finest works of the eighteenth century are the grilles of Place Stanislas, at Nancy, by Lamour. The way in which the bars and voids have been distributed is most beautiful. The lines of construction are apparent, and weakness is avoided by the rich decoration which breaks the height of the bars. The principles of composition have long been known in Germany and this country. There



GRILLE AT NANCY, BY LAMOUR.



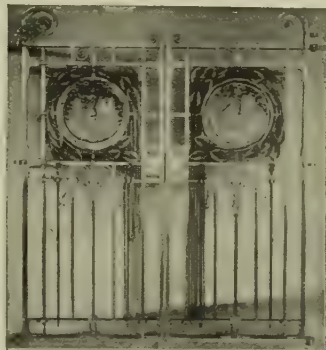
GRILLE OF THE HOTEL DIEU, CHARTRES.

need to call attention to the beautiful work to be found here in England. All architects and lovers of architecture know the principles which surround us, and to realise this we have only to visit St. Paul's, the Law Courts, Hampton Court, and many other places. But a point to be remarked is that the principles of composition are the same in every country. The conditions of a country, its climate and the national sentiment will certainly influence the work, but the principles of design do not vary. The specimen reproduced below has been designed on very simple lines. We can note how the ironwork is connected with the stone and the principal lines are continuous. The lower horizontal break runs with



SEVENTEENTH-CENTURY GATE AT TOURS.

the mouldings of the pedestal, and is necessary in order to give strength and greater resisting force to the grille. In the Paris Bank grille we have the same principles of design, and the simplicity of the grille stands out by contrast with the rich frame. All this seems easy, but one only realises the difficulties when applying these elementary principles. A curious grille at Avila, in Spain, very simple in its expression, has a singular aspect, produced by the twisting of the upper portion of the bars, while all the richness is reserved for the top. The rules which guide one when designing a grille are the same which must be borne in mind when composing a balustrade, a balcony, or anything else in iron. In a balcony all the pressure is in the direction of the hand-rail, therefore it is necessary for its resistance to have the strongest section of iron in the vertical bars, which can be spaced every 3 or 4 ft. It is in Spain where the most ancient balconies exist. At Salamanca one can find small balconies of Arabic influence which are real chefs-d'œuvre. Often balconies had a big projection in order to give a good outlook on the street, as we can find at the Palais Strozzi in Florence. In France, after adopting complicated fillings, more simple lines prevailed. The same ideas guided the author of the beautiful and simple interior grille which gives access from a vestibule to a staircase (see p. 570). When we decorate an elevation with balconies in wrought iron, we have the advan-



GRILLE WITH MOULDED GLASS PANELS.

tage of not cutting the architectural lines of the building, as we should do if we use stone balconies. At the same time, we have the contrast of the dark colour of the iron against the light stone or brick background. On going into the history of wrought ironwork we learn a lesson. We see that a work of art worthy of the name is never out of place in an atmosphere other than that of its style.

Thus, in the church of St. Ouen at Rouen, which is of the fourteenth century, there are interior grilles of the eighteenth century, and the same thing occurs in the cathedral of Toledo, which is of the thirteenth century, the grilles being of the sixteenth century. This is because no matter what the programme, the composition is independent of the style. Styles change, but the principles of design do not vary. Of course, we do not mean that in a perfumer's shop we can put the replica of a grille designed for a cathedral. This has been done in a West End shop. No work of art is perfect unless it completely suits its purpose. The modern period is marked by different standards of work. Naturally the beginning of each new era is an experimental period, but an artist creates always whether he lives in the twelfth or the twentieth century. From Germany and Austria came the first attempts of modern design. They were rather extravagant and heavy looking. In France, after the international exhibition in 1900, the



GRILLE FOR THE ENTRANCE OF A BANK, PARIS.

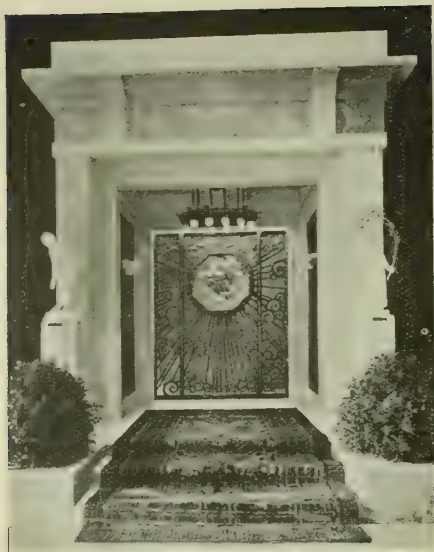
art of wrought iron progressed steadily, and here are reproduced some timid examples, which make one realise the progress which has been made. Copper has been used to enhance the decoration of interior grilles, thus providing a brilliant note. Moulded glass has been employed as a very suitable background for wrought iron. Programmes of designs which have never been executed before have been introduced by the necessities of modern life. A beautiful marquise or a lift-gate adds to the decoration of a building's exterior or interior.

In modern treatment of ironwork the source of inspiration is everywhere in nature where a suitable model can be found.

In a certain communion rail all the ornamentation is symbolical, corn and grapes delicately handled indicating the purpose of the grille. By the same author is another modern grille where the treatment of acanthus leaves gives the impression of straps, thus showing how a mediæval motif can give inspiration to a design of our days. The revival of an old technique often results in a similarity between works of the present and the past, as, for instance, an ironwork protecting the hall windows of a school at Frauenfeld (Switzerland) which resembles in detail a delightful wrought-iron gate of the seventeenth century at Farleigh, Hungerford, Somerset. When discussing wrought ironwork, one must not forget to mention a great artist, who, extracting all profit from the lessons of the past, gave to the art of wrought iron a new life. The artist who really created a personal style is Mr. Brandt.



STAIRCASE, PALAIS DE JUSTICE, PARIS.



INTERIOR DECORATIVE GRILLE.

The design of a staircase for a theatre in Nancy is a striking example of modern wrought iron. Original and remarkable for its new treatment, the principles which govern it are very old. But often, too, effects can be obtained by the opposition of dark wrought iron-work against a suitable background, evidence of which we have in a portion of this interior staircase, the oblique lines contrasting vividly with the vertical joints in the background. In interior grilles mediæval works are suitable examples if appropriately treated. Scrolls are a very old motif, but they can always find their way into modern design. In recent years public attention has been drawn to the different uses of interior decorations in wrought iron. These works deserve to be admired. They are the accompaniment of architecture and contribute to the general effect, and the architect should have a very sure judgment when designing an ensemble. Among all crafts wrought iron is certainly the one where an artist can show most of his individuality.

There are many ways of designing a modern chandelier. It depends on its destination—whether for a drawing-room, dining-room, hall, etc. Other interior fittings can be appropriately treated in wrought iron, including mirrors, screens for radiators, fenders, etc.



MIRROR FRAME IN WROUGHT IRON.

The wave of modernism in design has even penetrated to the old Ecole des Beaux Arts in Paris, and in one of the recent programmes given to the students on a grille for a museum it was stipulated that the design should be entirely modern. No one must think that modern design consists of demolishing the classic, as modern art is its natural continuation.

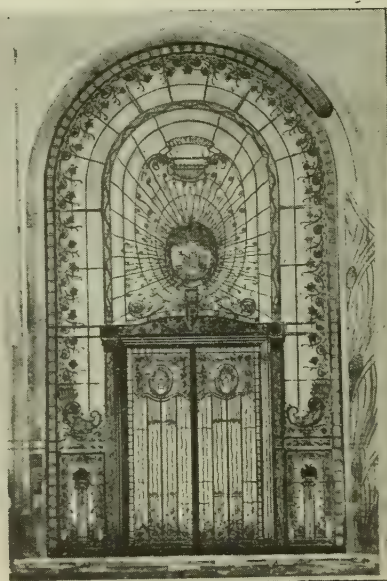
The students of the Ecole des Beaux Arts have shown that they were able to treat very happily the programme given, which consisted of a grille, 21 ft. wide and 36 ft. high, with small service entrances, and the large one to be used by the public. In the first design the doors are of distinctly different proportions with very solid frames. All the attention is drawn to the lower part, while the upper portion consists of decoration without projections. In the second the same subject has been treated differently, the door being heavy with six motifs as its chief enhancement. In the third a certain monotony would have existed without the upper three motifs. It is interesting to consider some sides of the problem which presents itself to those who have to deal with the charms of architecture. We know how iron is worked, how it is found,



SCHOOL SUBJECT FOR A MODERN WROUGHT IRON GRILLE, ECOLE DES BEAUX ARTS.

must be known to most designers), but it be remembered that scrolls are a characteristic element and that their execution requires much experience. Touching the composition of grilles we can divide them into two types: exterior, which enclose a garden or space, or protect a window, and interior, which are used as partitions in a room allowing light to pass through. The conditions of two types of grilles are quite different. exterior grille must be first of all resistant and often, in order to give an impression of greater strength, the bars are of larger section than necessary.

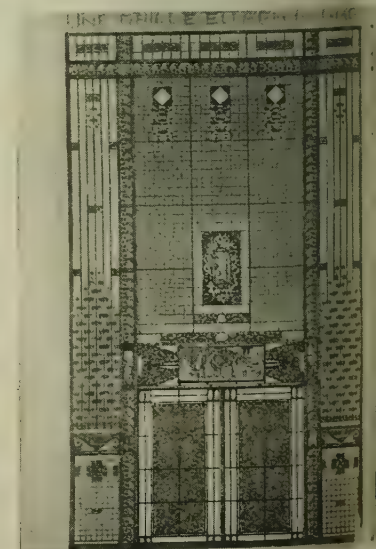
Exterior grilles accompany the general texture, and we have much freedom in decoration. As they can be seen from a distance it is the general effect which is important. They must be simple so that when one takes a lateral view of the design it will not be confused. Their proportions play a big part. On examining the most beautiful examples one sees that the decoration is reserved for the principal part, that is to say, the entrance, while the monotony of the railings is broken by a motif repeated with regularity. It is no need to attach great importance to small details as in order to be protected



SCHOOL SUBJECT FOR A MODERN WROUGHT IRON GRILLE, ECOLE DES BEAUX ARTS.

and how it is treated. It would be useless to give all the details, but we must retain this. We can give any shape to iron when red-hot, and we can weld it. From these properties all the theory of wrought iron is derived. They impose themselves on those who first tried to utilise iron as a factor of safety. Welding is the most important of the operations. Iron, which cannot be melted like copper, silver, or lead, can be welded at a temperature of 1,200 or 1,400 degrees Centigrade. Welding well executed is invisible, the two pieces making one, and one can obtain thereby most beautiful effects. With modern perfections all difficulties can be surmounted so that one can produce specimens which no master of the past would ever have dreamt of attempting.

Stamping has often been used. It is a kind of seal where the desired ornament is engraved in hollow. The bar of iron brought to the nearest shape of the design is heated and then put on the seal, and with violent blows of the hammer, is inserted into it. Often a double stamp is used to execute certain ornaments. Most of the wonderful old straps known have been executed in this way. We shall not attempt to explain all the practical sides of a piece of wrought iron (which



SCHOOL SUBJECT FOR A MODERN WROUGHT IRON GRILLE, ECOLE DES BEAUX ARTS.

iron must be covered with oil paint, and coats of paint take away all finesse in ornamentation. Therefore it is preferable to treat the ornament in a broad way. On the other hand, interior grilles are to be seen from short distance. They form part of the interior decoration. Seen from very close and most always in full view, the decoration must be delicate. Being protected from the exterior air they do not need to be painted. On the contrary, they can be polished, the strokes of the hammer adding to their enhancement.

Remembering this in mind, the architect or designer who has to solve a problem of this sort must try to find the true and logical expression of the positive conception, and the ideal composition which depends on the richness of imagination. A large variety of solutions may be reached when examining the problem of a grille.

An exterior grille might—

Enclose a garden or yard; it should be simple, and composed of doors and repeated life.

Be the outer screen of a courtyard of a private residence; it should be composed of a gateway for carriages and a small one for pedestrians.

Take the place of a door.

Be used to protect windows situated near the ground; the bars should then be very close together to prevent people seeing in from the side.

Interior grilles might—

Protect a chapel in a church; they should be high.

Be a partition to show a space reserved for some high officials.

Be grilles for a lift.

Or be a low rail where people could lean, a communion rail, a rail in a museum surrounding precious objects, and so on.

Hence several solutions offer themselves which can vary, this depending on the purpose of the work, the programme, and the scale of execution. Naturally the construction of a grille will change according to its destination, it is preferable to leave apparent the lines of construction. The study of a staircase or a strade would present as many points to be considered.

To conclude, one should be original: first understand the problem well and solve it by reasoning, and by using in the right way the material at hand.

The conditions which determine a style vary with the progress of life.

The architect only reflects the life of his period. The past teaches us a lesson, and gives us inspiration, and when designing let us not forget what Keats said:

"A thing of beauty is a joy for ever."

SCHOOL PROSPECTUSES

ROYAL COLLEGE OF ART.

The Royal College of Art, South Kensington, is maintained to give to advanced students an opportunity to equip themselves for the practice of art, in drawing, painting, engraving, sculpture, and design for architecture, decoration, handicraft, and manufactures, and to give professional training to those students who, after completing the ordinary College course, desire to prepare themselves primarily for teaching in Art Schools.

Besides the main schools the College provides classes in writing and illumination, the history of art, and the methods of teaching, and workshops for the practice of the crafts of stained glass, pottery, embroidery, furniture-decoration (including wood carving and gesso work), and metalwork and enamelling.

Inquiries from intending students should be addressed to the Registrar, Royal College of Art, South Kensington, S.W.7; the prospectus, price 6d., may be obtained from any bookseller.

NORTHERN POLYTECHNIC.

The Northern Polytechnic is one of the schools recognised by the R.I.B.A.; exemption from the R.I.B.A. Intermediate Examination is granted to students who complete the full three years' day course in the school (or the five years' evening course), and obtain a first or second class pass in the school examination. The course of study comprises architecture and art, construction, science, and hygiene.

Prospective students should write to the Polytechnic, Holloway, N. 7, for particulars.

LEYTON TECHNICAL INSTITUTE.

The Essex County Council Technical Institute at Leyton has sent us the prospectus for the coming session, containing the programme of the Architectural and Building Trades Department. The classes are held in the evening and provide an opportunity to all for acquisition of a comprehensive knowledge of these subjects; quantity surveying is also dealt with exhaustively. A staff of highly qualified teachers is employed. Intending students should write for particulars of syllabus, fees, &c.

MUNICIPAL SCHOOL OF ARTS AND CRAFTS, SOUTHBEND-ON-SEA.

The prospectus of the Southend-on-Sea Municipal School of Arts and Crafts for the coming session is to hand. The school affords instruction in all branches of drawing, painting, modelling, design, and its practical application to handicraft, architecture, figure drawing, Composition, &c., and this is adapted to the special requirements of students desirous of following a course to enable them to produce high-class decorative work as handicraftsmen, or as a preparation for Art teaching. The architectural section of the school has been augmented by a fourth year course for advanced students, and an additional wing has been built for the purpose of demonstrations in the uses of building materials. A comprehensive syllabus has been drawn up in order to equip students for employment as junior assistants, and for the Intermediate and Final examinations of the R.I.B.A., and the examinations of the other professional bodies.

The Committee, desiring that financial considerations may not hinder advancement, have provided a moderate scale of fees, which together with a scheme for scholarships and free studentships, gives to those possessed of industry and ability an opportunity to acquire sound training under favourable conditions.

Rome Prize.

Mr. E. I. Halliday, of Liverpool, has been awarded the Prix de Rome for painting. Mr. Halliday received his artistic training at the Liverpool City School of Art before proceeding to the Royal College of Art.



WROUGHT IRON GATE, L'AGE D'OR.

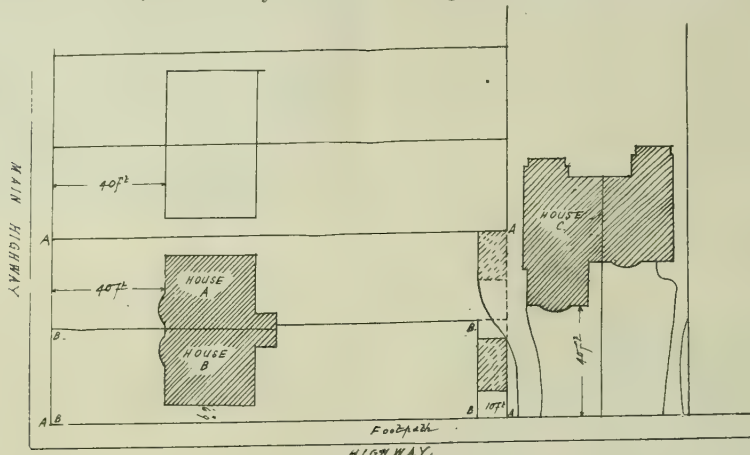
ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting?—Ed.

Plans and Local Authority.

SIR,—The six houses shown on the accompanying sketch have recently been erected near the junction of a secondary street with a main street. The Corporation insisted on the houses being set back 40 ft. from the street, but passed plan of house on site B, which is only 6 ft. 9 in.



from the secondary street. Mr. A. purchased the whole of site A, and sold to Mr. B. site B, reserving 10 ft. of land at the end of site B as a back entrance to his garden and to a garage. The owner of house C also requires a garage, and Mr. A. is willing to fall in with the arrangement shown on plan, provided Mr. C. can get the plans passed. This the Corporation have refused to do, insisting on both the garages being set back 40 ft. What is the legal position; seeing that the Corporation have passed Plan B, 6 ft. 9 in. from the road, can they insist on every other building being 40 ft. back? As soon as funds will allow the owner of house B intends putting up a building at the back of his garden. Can he be precluded from so doing? The 10 ft. at the end of Mr. B's garden was retained by Mr. A. through the goodwill of Mr. B. and might be considered as part of his garden.

"HOUSE C."

[A local authority can only object to plans submitted for approval if they infringe some statute or by-law, and in any case the authority must approve or disapprove such plans within a month after submission. By Section 3 of the Public Health (Buildings in Streets) Act, 1888, it is not lawful in any urban district, without the written consent of the urban authority, to erect or bring forward any house or building, in any street, or any part of such houses or building, beyond the front main wall of the house or building on either side thereof in the same street. A house at the corner of two streets may be in both streets for the purposes of this enactment.]

Though no buildings on either side of the four houses shown on the plan in the "main street," or of the two houses shown in the "secondary street" are indicated, in view of above the Corporation was no doubt entitled to enforce the houses being set back 40 ft. as shown, and to waive the right to enforce their powers in respect to the house "B," hence the setting back 6 ft. 9 in. only on the return of the said house in the "secondary street."

Now there is no question but that the proposed garage is a "building" and subject to the by-laws in force in the locality, and that in view of the powers indicated above, the Corporation can disapprove any plan submitted for bringing forward any building in front of the house "C," inasmuch as this house is on one of the sides of the proposed garages in the same street at the rear of houses "A" and "B." Our correspondent should make representations to the local

authority, with a view to a compromise, because of what has been permitted in the case of the house "C"; but, if he fails to do so, he has no legal remedy, and both garages must be set back 40 ft. The whole matter is for the local authority to determine.]

Lath and Plaster Repairs.

SIR,—What is considered to be a fair charge per square yard for cutting out old lath and plaster work to walls and ceilings, repairing laths and making good with lime and hair and finishing in Sirapite plaster? I have dealings with various builders and find their

prices vary so considerably for similar work that I should be glad to know what prices are being paid generally.

A MANAGER OF OLD HOUSE PROPERTY.

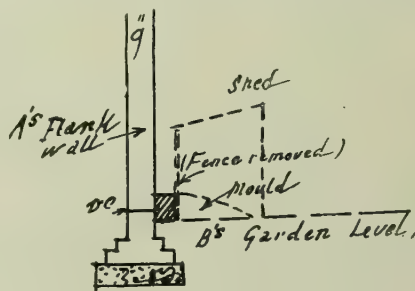
Treatment of Dairy Floors.

SIR,—I should be glad if you could give me any information regarding a really satisfactory method of laying a dairy floor. Part of the floor in which I am interested at the moment was treated about two years ago with asphalt in two-coat work. The floor now is beginning to peel and water is getting in between the coats. The dairy is a large one dealing with some hundreds of churns a day so the wear on the floor is very heavy. Would a very fine gravel concrete laid with steel netting be a more satisfactory method?

"DAIRIES."

Boundary Wall Questions.

SIR,—"A" has a house at the end of one side of a *cul-de-sac*. "B's" garden runs down to "A's" flank (not party) wall with a shed at one end about 7 in. away from wall; this shed has a roof sloping backwards, throwing all its water on to the wall. Originally a fence separated the garden from "A's" property by a space of 6 in.; the fence has rotted, has been removed, and the garden mould allowed



to pile up against the wall, as hatched. The result is that "A's" wall is damp. "B" has given permission of access to his premises for the purpose of putting a vertical damp course, which has been done, but only partly behind the shed, which "B" refuses to have moved; he also insists upon piling up his mould against the wall. Has he any right to do this? and can he be made to remedy the damage behind his shed and to reform its wrongly-constructed roof?

"OLD READER."

EXHIBITION NOTES

THE R.I.B.A. GALLERIES.

There has been a good deal of appreciation on the exhibition of Mr. R. Hallward's paintings and drawings and at the R.I.B.A. Galleries. The admiration in which the exhibits were displayed provides a sympathetic environment for work of essentially poetic and idealistic. Carto country figured largely on the walls, and that there was displayed in the design interest and value much beyond what usually finds in this kind of work—it is to be really interested in such designs. of war memorials in the French cathedral Lieut.-Col. Lafontaine and Mr. Hallward one to realise the quality of this excellent. Nine of these memorials have already been.

An interesting part of the exhibition is fifteen panels of painted glass erected in the middle room in the form of a peepshow. The panels have a highly decorative value, and are used very effectively in almost every place.

The pictures—which, after all, formed part of Mr. Hallward's exhibition—are essentially decorative kind, and many of them have an arresting quality of form and colour, though the sobriety of treatment generally doubtless fail to gain a very popular. Many admirable drawings in black and white attest the artist's power of design. The exhibition must have left an impression of endeavour and much successful achievement on all who were qualified to judge of art from a high standard.

WATERCOLOURS BY MR. STEWART R.S.W., F.S.A. (Scot.).

Mr. Stewart Orr shows a collection of water-colours of Iona and the Isle of Arran in the galleries of Mr. Wishart Brown, 136, St. Vincent Street, Glasgow. He depicts these two islands under all conditions, and his sunny, transparent handling catches the spirit of these places in a convincing manner. In his sketches, the Cathedral does not bulk as a ground object, but in the four sketches of figures in the middle distance it is depicted in a understanding and truthful manner. His architectural training has saved him from common mistakes which artists usually fall into in treating architectural subjects. As a painter of mountain scenery, stretches of sand, streams, breaking waves and woodlands, gained a place among Scottish water-colourists as an exponent of the spirit of the rugged grand. His show is well worth a visit.

MEDIAEVAL AND RENAISSANCE ARCHITECTURE

At the Central School of Arts and on the 7th inst., Sir Banister Fletcher, V.P.R.I.B.A., gave a lecture on the comparative Analysis of Gothic and Renaissance Styles in Europe, in respect of plans, openings, roofs, columns, mouldings and ornament, as well as the general principles of medieval and religious or other motives pervading two great styles. The lecturer contrasted differences and emphasised the beauty of strength inherent in both. Renaissance was large in scale and few in its parts, as in the figure, and consequently of many parts larger structures. A series of lantern prepared the audience for the detailed exposure of Renaissance architecture which is to be in the succeeding lectures.

Nottingham Housing Scheme.

The Nottingham City Council has decided to erect 1,000 houses of the "Crane" type on Wollaton Park estate, at a total cost of £500,000.

THE BUILDING TRADE.

HINTS TO BUILDERS

By J. H. BARNES, F.I.O.B.

is usually stipulated that the builder provide a competent foreman who is to be on the work for the whole of his time, and, of course, the work is of sufficient importance to justify such a course. The foreman is expected to be something of an "Admirable Crichton," and it is usually assumed that by skill, painstaking care and that he is able to carry out the works from scrappy drawings, diverse instructions and intermittent supplies of materials. It is impossible to indicate the extent of a foreman's duty. While any such list would be somewhat overwhelming, it should be in the mind that after all even a foreman can only do one job at a time.

It is not intended that the following notes be taken to be in the correct order, as the progress and possibilities of each building job will call for effort in different directions. One of the most important matters in connection with building is the selection of a foreman and the general organisation of the work.

A foreman should be a man who has risen from the ranks, and has risen because of his outstanding qualities of skill, loyalty, and devotion to his duty. Builders prefer their foremen to have been carpenters, others prefer bricklayers, etc., though each trade may have its advantages for some particular job, for all-round work it does not seem to matter very much in what branch of the building trade a man has received general training; it is in himself that counts. All foremen should have passed some technical training in one or other of the building schools. It is essential for him to know the craft side of the trade, and in addition he must be a good organiser of men and filled with the desire to do his best to produce the work as efficiently as possible, and possess that great asset—the power of getting on with

these days one hears a good deal about the importance of organisation, and as far as the foreman is concerned it should mean personal organisation and supervision of the work in all its details during progress. He must order the materials required for the job through the architect's office and, if needs be, press for them to get them. The order in which they are delivered, and the unloading and stacking of them, require a great deal of common sense to avoid unnecessary handling, but one often finds that the materials come in in the wrong order or unequal quantities, such as a large consignment of bricks and very little of the other materials, and all the arrangements for the convenient disposition of materials may be complicated with, which may necessitate the use of materials already stacked on the site at the expense of rehandling the materials to be avoided so far as possible.

A foreman is required to keep records connected with all day or extra works, check all materials delivered to the site, take the time, and generally be responsible for the manifold details of construction and processes of the work. On a large job the foreman will have competent assistants in each department, and many ways be relieved of the general management of a building in course of erection; but on a job of medium size a foreman will have to perform diverse duties to attend to, and he should not expect the foreman to do clerical work.

An elaborate system of costing is required to be kept up by the firm, the foreman should not be expected to spend much of his time on such work, as otherwise the progress of the job must suffer. The foreman should be

the producer of the work and not relegated to the position of junior clerk.

The direction and general control of the workmen will be a never-ending task to call forth all his best powers, and good results will only be obtained by careful consideration of the work, anticipation of difficulties, and a resolve to have everything cut and dried before the men are put on to the work, as nothing so retards the output as indecision, unpreparedness, or alteration of the work during progress. The foreman is sometimes placed in the position that he is awaiting some particulars or instruction relating to the work, and until these are received he is handicapped because the sphere of his operations is circumscribed.

One often hears it said: "What does it matter whether you fix the window opening 6 in. farther north or south?" and while these and similar questions are being debated many pounds are being wasted because the general flow of the work is impeded. In no other industry do so many pettifoggish alterations and variations occur during the progress of contract work.

The builder should make a point of frequently visiting the works and conferring with the foreman, and firmly dealing with any matters which are delaying the work, as a contract is usually arranged on the supposition that it is a "straight-away" job; but if the job becomes one that can be carried on only in some trades intermittently, then the contractual conditions may be completely altered and a serious position arise.

A foreman is expected to be able to find sufficient skilled workmen to carry out the work, and in these times this is a matter of some difficulty, as however good the workmen may be, when their particular work on the contract is finished they must leave the job, and the builder should try as far as possible to transfer the various trades, as they finish their part of the building, to other contracts, and so arrange constant employment for suitable men who would form a nucleus of a staff which can be relied on to give a reasonable output and deal with any urgent job which may be given to the firm. Instructions given to a foreman on the job by the architect should, wherever necessary, be notified to the office, so that the builder is acquainted with them, particularly if they involve any variations or alterations, as the contract usually stipulates that instructions given to the foreman are deemed to be given to the contractor.

If the architect proposes to make a small alteration on one of the detailed drawings, he should be asked to initial it for the purpose of record, although most architects adopt this course without being asked to do so. The foreman should arrange for work to be finished in the builder's or other workshops before sending on to the building, as it is much cheaper for work such as joinery and ironwork and many other trades to be completed on the bench or in the maker's works than to have them sent on the job in an unfinished state and get special trades to finish the article in position.

This may seem somewhat obvious, but the foreman is sometimes placed in a difficult position for want of some material or manufactured article, and it is a question which is better—whether to stop that portion of the job and send away the men, or endeavour to get the article or fitting in question, even if unfinished, so as to allow the general works to proceed, even if it may mean increased expense for dealing with unfinished fittings at a later date. It is not always expedient to ask which is the cheapest method of carrying out any particular portion of the work, as one must take cog-

nisation of the whole of the works and the question must be settled in relation to the whole job. The whole of the materials must, of course, be ordered in sufficient time to enable them to be prepared and delivered; but it often occurs that instructions are not received in time to allow materials to be prepared as mentioned above. The foreman must make up his mind whether to leave down a portion of the work and carry out what work he can in odds and ends of places at greatly enhanced cost, or send the workmen away. The latter may seem to be a somewhat bold step to take, but it does emphasise the point that the foreman is waiting for instructions or materials, and the possibility of a profit being made on the job is receding.

The foreman should be supplied with a diary and be instructed to keep a note of all matters delaying the work and the time lost thereby, and of the occasions when the job is stopped by stress of weather, and periodically forward a copy of the record to the office. He should also keep a note of the occasions on which the architect or the employer visits the work, together with the instructions he may then receive. The position of the foreman in relation to the specialist firms and sub-contractors is sometimes a very difficult one, as the firms in question usually receive their instructions direct from the architect.

The leading specialists or sub-contractors for building work may be relied upon to know their business, and will consequently send their representative to meet the foreman to make arrangements for the disposition of materials and men, but some other firms may commence to send their stuff on the job, and without "advice" or sending any men to unload, and the foreman is placed in the position that he must get his own men to do the unloading or send the goods away. These and similar practices are likely to cause friction.

The sub-contractor or specialist will usually request the builder's foreman to give them sizes and dimensions to enable them to carry out their work, but the builder should make a rule that the firms who are doing the work should take their own sizes and be responsible for the accuracy of them. This is the only safe method to adopt, as the men who are doing the work should attend on the job to see that the proposed work will fit in with the general arrangements of the building.

From the foregoing remarks one will see the necessity of providing the foreman with a suitable office; this would probably need to be a temporary affair, but it should be warmed and lighted, and have a telephone fitted. When the foreman has the drawings and specification given to him, he should carefully compare the plans with the site of proposed building to see that they fit in, and commence to set out the building in connection with the adjoining property, if any, and define, where possible, the general building line and get some person in authority to approve this, also take the general level of the site and see how this compares with the drawings. He may then endeavour to set out the whole of the building at a certain level to "full size" or to a "large scale." In some cases it may be possible for him to set out the whole of the frontage line at one operation, but he must bear in mind that if the setting-out is done on two or three different boards at different times, there is a chance of the setting-out not exactly fitting in and creating all sorts of difficulties. The "full-size" setting-out will enable him to determine whether it is possible to carry out the drawings exactly as shown, and if he finds any difficulty in getting the drawings to fit in (as the boundaries of the site are usually difficult to determine), he would have to take the matter up with his employer, who would in due course approach the architect to obtain a decision on the question.



A NEW MASS PRODUCTION MATERIAL

FROM A CORRESPONDENT.

OFFICIALS of the Ministry of Health and of the Building Research Board are taking a keen interest in the experiments that are now being carried on in the mass production of houses in a factory at Crayford. Commander Burney, M.P. is responsible for a new material known as Factocrete. This is made of shredded wood that is first impregnated with certain chemicals in order to prevent the contraction or expansion of the wood with moisture. This is mixed with cement and other concrete materials, and also with a colouring and waterproofing material. The next stage is compression into a block by means of machinery which has been specially installed in the factory. This makes a block equivalent to sixty bricks, and work has just commenced in the manufacture of these blocks for the L.C.C. These blocks can easily be handled by two men. They can be divided with a saw, and nails can be driven in. Thus they can be placed in position in the house rapidly by unskilled labour, and are held together by grouting with no-mortar bed. This is in fact a real factory-made house, and in time it is hoped that the window frames and the staircases will be made of the same material. As the material is comparatively light, it will be possible to carry the parts of a complete house on three large lorries. The total weight of four Council houses, two parlour and two non-parlour, is estimated to be about 52 tons, as compared with 300 tons, the weight of similar brick houses. Should Mr. Neville Chamberlain's possible Bill for encouraging mass production materialise, it is probable that factories for the construction of these Burney houses will be used at certain centres. Given the suggested capitalised subsidy, it is proposed that these houses should be available for sale in town at £200 each, and in agricultural parishes at £160.

PRACTICAL MEASUREMENT OF AIR FLOW

At the autumn meeting of the Institution of Heating and Ventilating Engineers, held at Caxton Hall last week, Mr. E. Owen, B.Sc., A.C.G.I., of the National Physical Laboratory, read a paper on the measurement of air flow. The author treated the subject from an engineering standpoint, confining his attention to instruments and methods suitable to industrial use. He dealt at some length with the pitot tube, both in its usual form and with modifications, explaining the conditions to be observed in designing alternative types for use in special cases. When doubt was felt as to the actual direction of flow in a pipe, at a section near to a bend for example, it was advisable to use a disc static head which was much less sensitive to variations in direction than the ordinary types.

Dealing with manometers, the lecturer described and illustrated three types suitable for factory work. For all-round usefulness combined with accuracy and ease of observation, he advocated the Krell form of inclined tube manometer; the only disadvantage of this instrument was that it was not a fundamental standard and required calibration. Reference was also made to a tilting micro-manometer whose calibration could be calculated from a knowledge of its dimensions, and to a two-liquid gauge. The latter was of value for work where high precision was not needed, but greater accuracy was required than could be obtained from an ordinary U-tube water gauge; it was capable of giving a magnification of about 10 to 1.

The orifice plate and Venturi tube were described, attention being drawn to the facts that these instruments gave rise to considerably larger pressure differences than the pitot tube, and that they were eminently suited to the taking of continuous records of flow. The question of the discharge co-efficients of orifices was discussed at some length, reference being made to Hodgeson's work on this subject. The lecturer dealt also with the construction and use of vane anemometers, the calibration of manometers, and the testing of connections and instruments for leaks. In the latter connection he emphasised the necessity for testing all rubber leads, since even new rubber tubing sometimes showed traces of porosity.

struction and use of vane anemometers, the calibration of manometers, and the testing of connections and instruments for leaks. In the latter connection he emphasised the necessity for testing all rubber leads, since even new rubber tubing sometimes showed traces of porosity.

A MANUAL OF INDIAN TIMBERS *

UNTHINKING exploitation has so reduced the forest land in many parts of the world that the supply of timber is now considered to be small in comparison with the demand. The Indian Forest Department is setting a splendid example of intelligent cultivation of natural resources in systematising management and stimulating the experimental study of arboriculture; and the authoritative description of the trees and shrubs of India, by Mr. J. S. Gamble, M.A., possesses a high commercial value as well as great botanical interest, since, apart from the question of export, the mere supply of timber for local purposes in India is an expensive item.

The importance of Indian timbers to the Empire and the scope of the book are indicated in the Introduction, where it is stated: "The area administered by the Forest Department amounts to nearly 118,000 square miles, of which about 81,000 are reserved forests—that is, forests demarcated and legally settled as a permanent Government forest estate. The permanent forest area, it may be remarked, amounts to only 8½ per cent. of the total area of British territory—945,000 square miles. The net revenue after paying all charges is about £500,000; it should be noted that this sum does not include the value of the very large quantity of produce which is supplied free to the people." The geographical distribution of each tree described in the text is indicated by reference, by means of an initial letter, to one or other of eight principal districts. H, for instance, stands for West Himalaya, comprising the mountains of that range from the Indus to the Sardah River, on the Nepal frontier. Particulars dealt with include the character of the tree's growth; thickness, colour, and texture of bark; colour, weight, hardness, and nature of the grain of the wood; and the appearance of its pores and medullary rays.

The locality and altitude at which each class of tree is usually grown, the speed of growth, and the uses to which the timber is put are generally treated at some length.

In the case of important building timbers the values of certain technical constants are also given, the authorities for the figures being quoted, and the sizes of the experimental test pieces mentioned.

The methods of cultivation and of conversion are described where the value of the timber justifies the expense of space or where the nature of the subject demands special treatment. For boxwood, which is liable to be reduced to one-tenth of its maximum selling price if it becomes badly shaken in seasoning, the following procedure is recommended: "It should be cut down in winter, and, if possible, stored at once in airy wooden sheds, well protected from sun and rain, and not to have too much air through the sides of the shed, more especially for wood under 4 in. diameter. The boxwood also must not be piled upon the ground, but be well skidded under, so as to be kept quite free from the effects of any damp from the soil. After the trees are cut down, the longer they are left exposed the more danger is there afterwards of the wood splitting more than is absolutely necessary during the necessary seasoning. . . . In the Himalaya it has been found best, after felling the trees and sawing them into suitable

billets, to cut one side of each billet free circumference to the centre, so that if liable to split, merely enlarge this and keep the rest of the wood free clefts."

The teak tree (*Tectona grandis*) is the principal source of building timber (other than bamboo) in use for permanent structures in the East. "In Burma the teak is not green, but is girdled standing, so as to die, and it is felled and the dry timber is then transported later on. In India the wood is green, notwithstanding the defect that the side of the trunk which is in contact with the ground takes a long time to dry, the seasons unevenly, and is less useful as a durable, and when thrown into the water does not float readily."

Though appealing primarily to the interested in the conservation and management of Indian forests, the book contains a quantity of information as to local methods of conversion and uses of timber that make it an excellent reading matter.

An index of European names, vernacular names, and scientific names is included. The book is illustrated by photographs of sections enlarged to 3½ diameters.

LABOUR AND HOUSING

SOME little time was spent by the Labour Party Conference at Liverpool discussing the question of housing. Ever since the following resolution, moved by Mr. (the late First Commissioner of Works) on behalf of the Executive Committee, was carried:—

1. This Conference is of the opinion that the problem of working-class housing will be solved apart from the provision of a million houses for the purpose of meeting the existing shortage, with its accompanying overcrowding, and replacing the number of houses which are unfit for habitation.

2. It believes, moreover, that the urgent need of the provision of houses to be let within the means of the workers, and that need cannot be met by the Chamberlain under which about two-thirds of the houses erected have been built by private enterprise for sale to the more fortunately placed, neglect of the less fortunate and badly-situated section of the community.

3. It therefore urges the wholehearted adoption of the Wheatley Act by local authorities as the best means of dealing with the housing problem, and the maintenance of rent controls until an adequate number of houses is provided.

4. In order to ensure that there shall be adequate supplies of building materials at reasonable prices, this conference calls for the passage of the Building Materials (Control) Bill, which provides for the fixing of prices where they have been proved excessive, and empowers the Minister of Housing to requisition stocks and output, and call upon businesses concerned with the production and supply of building materials, where supply is unreasonably withheld.

Scientific Instruments Catalogue.

We have received from Messrs. C. Baker & Co., High Holborn, London, this quarter's catalogue of second-hand scientific instruments for sale, surveying section of which might be of interest to readers. All instruments are guaranteed to be in perfect adjustment; and attention is drawn to the fact that prices have again been reduced.

An Electrocuted Fireman.

Under the City of London Fire Insurance Act, an inquiry was held recently by Dr. Walder, concerning a fire that broke out from an underground cause at Byron House, Finsbury-street. The fireman engaged in fighting the fire was electrocuted through the metal part of his helmet coming into contact with a tube which contained a live wire. The Coroner declared that the time had arrived when the regulations of the Institute of Electrical Engineers in connection with wiring should be made compulsory.

* "A Manual of Indian Timbers: An Account of the Growth, Distribution, and Uses of the Trees and Shrubs of India and Ceylon, with Descriptions of their Wood Structure." By J. S. Gamble, M.A., O.I.E., F.R.S., F.L.S., late of the Indian Forest Department. Reprint of second edition, with some additions and corrections. (London: Sampson, Low, Marston & Co., Ltd. 1922.) Price £3 3s.

After an interval of two years the Commercial Motor Transport Exhibition opens at Olympia on October 29, for ten days, and in connection with it *The Commercial Motor* is publishing three special numbers. They will contain full reports upon the exhibits and much special information of interest to users of motor vehicles.



BRITISH STANDARD SPECIFICATION FOR PORTLAND CEMENT

THE British Engineering Standards Association has just published a new issue of the B.S. Specification for Portland cement (No. 12-1925) which was last revised in 1920. Since that time it has been found desirable to make certain changes to bring the B.S. Specification more into line with present-day requirements and to meet prevailing conditions of manufacture and testing in hot climates. In the course of the work of revision a more precise method was sought than that heretofore adopted for determining the consistency of the neat cement paste for the tensile and setting time tests. Extensive investigations were carried out, but no method was found which could be considered unquestionably more reliable, and the directions of the previous editions of the B.S. Specification have therefore been retained. The investigations are being continued in the hope that some satisfactory means may be found which can be included in a future edition of this specification.

The following are the principal alterations embodied in the 1925 edition of the specification:—(1) A summary of the tests is given at the beginning. (2) Provision has been made for testing in hot countries at temperatures up to 95 degrees Fahrenheit. In climates where the temperature runs above 95 degrees or below 58 degrees special arrangements have to be made between the vendor and the purchaser unless the ranges given in the specification can be artificially produced. (3) The cement is now required to be more finely ground, the permissible residue on a 180 by 180 sieve being 10 per cent. instead of 14 per cent. Tolerances are laid down for the number and size of wires and size of openings in sieves both for cement and for sand. The minimum size of the sieving area is now specified to be 50 square inches and the minimum depth of the sieves to be 2½ inches. (4) The maximum figure for the hydraulic modulus has been raised to 2.90 and the maximum limit for magnesia is now 4 per cent. (5) The minimum tensile breaking strength of neat cement after seven days has been increased to 600 lb. per square inch, and that of cement and sand after seven days to 325 lb. per square inch. The 28-day test on neat cement has been eliminated. (6) The amount of water for gauging cement and sand briquettes is now to be ascertained by means of a formula based upon the amount needed to produce the plastic mixture required in the tensile test for neat cement. (7) The Standard Leighton Buzzard sand is required to be of the white variety, and its loss of weight on extraction with hot hydrochloric acid is specified not to exceed 0.25 per cent. (8) The initial setting time of normal setting cement is to be not less than 30 minutes and the initial setting time of quick-setting cement not less than 5 minutes.

Copies of this publication (No. 12-1925) can be obtained from the B.E.S.A. Publications Department, 28, Victoria-street, London, S.W., price 1s. 2d. post free.

Survey of London.

The Royal Commission on Ancient and Historical Monuments announce that the second volume of the Survey of London will be ready for publication early in December. It will include the whole of the county west of the City boundaries and such boroughs to the north and south as form a convenient limit. The buildings described will comprise the Royal palaces, the Houses of Parliament, Whitehall, Lambeth Palace, two of the Inns of Court (Lincoln's Inn and Gray's Inn), Staple Inn, the Charterhouse, and many important private houses, such as Holland House, Kensington.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	C'p'ters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers.
Aberdare.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Accrington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Altrincham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Ashton-under-Lyne.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barnsley.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barrow-in-Furness.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barry.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bath.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bedford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Birkenhead.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Birmingham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bishop Auckland.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Blackburn.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Blackpool.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bolton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bournemouth.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bradford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Brentwood.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bridgewater.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Brighton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bristol.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Burnley.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Burton-on-Trent.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bury.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Cambridge.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Cardiff.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chatham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chelmsford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Cheltenham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chesterfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Colchester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Coventry.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Crews.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Darlington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Derby.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Doncaster.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Dudley.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Durham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
E. Glam.(Mon. Vall.).....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Eastbourne.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Exeter.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Folkestone.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Gloucester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Grantham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Grays.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Guisby.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Great Yarmouth.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Guildford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hallifax.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Harrogate.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hartlepool.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hastings.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hereford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Huddersfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hull.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Ipswich.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Launceston.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Leamington Spa.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Leeds.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Leicester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Lichfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Lincoln.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Liverpool.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Llanelli.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
London (12 in. radius.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
London (12-15 m. radius.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Loughborough.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Luton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Maidstone.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Manchester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Mansfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Merthyr Tydfil.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Middlesbrough.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Newcastle-on-Tyne.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Newport, Mon.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Northampton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Norwich.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Nottingham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Oakham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Oldham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Oxford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Plymouth.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Pontypriid.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Portsmouth.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Preston.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Reading.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Rochdale.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Rochester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Rugby.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
St. Albans.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
St. Helens.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Scarborough.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Sheffield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Shrewsbury.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Southampton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Southend-on-Sea.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Southport.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
South Shields.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stockport.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stockton-on-Tees.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stoke-on-Trent.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stroud.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Sunderland.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Swansea.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Swindon.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Taunton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Torquay.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Tunbridge Wells.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Wakefield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Walsall.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Warrington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
West Bromwich.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Wigan.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Windsor.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Wolverhampton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Worcester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
York.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8

(For rates of wages in the Building Trade in Scotland, see page 580)

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk advertised in this number. Certain conditions beyond those given in the following information imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, &c.

OCTOBER 19.—**Bristol**.—REPAIRS.—Painting, paper, &c., at 384, Southmead-road, Southmead; painting, &c., at Mill-lane Relief Depot, Mill-lane, Bedminster, Bristol, for the T.C. T. S. Lamb, Clerk to the Guardians, St. Peter's Hospital.

OCTOBER 19.—**Cdine**.—HOUSES.—For (1) plumbers' and glaziers' work, (2) slaters' work, (3) plasterers' work, (4) electricians' work, for the T.C. Borough Engineer and Surveyor.

OCTOBER 19.—**Dublin**.—DWELLINGS.—Eighteen dwellings and the conversion of two existing buildings to six dwellings at Keogh Barracks, for the C.B. J. Murphy, Town Clerk. Deposit £1 1s.

OCTOBER 19.—**Enniskillen**.—GARAGES.—Motor garages, for the United Co-operative Baking Society. J. J. Connelly, M.R.I.A.I., architect, Enniskillen.

OCTOBER 19.—**Finedon**.—HOUSES.—Twenty houses, for the U.D.C. A. E. Lloyd, surveyor.

OCTOBER 19.—**Glasgow**.—ELECTRIC LIGHTING.—Electric lighting work proposed at the Public Baths, Abbots Loan and Water-street, Cowcaddens, for the C. J. Lindsay, Town Clerk.

OCTOBER 19.—**Plymouth**.—HOUSES.—Two blocks of houses containing 24 flats, at Pottery Quay, for the B. J. Witherley, Borough Engineer and Surveyor. Deposit £2 2s.

OCTOBER 19.—**Southend-on-Sea**.—CONVENIENCES.—Public conveniences and works incidental thereto at Millwell Park, for the C.B. R. H. Dyer, Borough Engineer. Deposit £2.

OCTOBER 19.—**Thame, Oxon**.—HOUSES.—Erection of 32 houses on the East-street housing site, for the R.C. J. T. Robinson, Council's Architect, Town Hall, Thame. Deposit £2 2s.

OCTOBER 20.—**Belfast**.—ALTERATIONS.—To Branch No. 4, Carlisle-terrace, Crumlin-road, for the Education Architect, Education Office, College Avenue West.

OCTOBER 20.—**Blackrock**.—HOUSES.—Six one-story and six two-story houses at Gretto-avenue, Booterstown, for the U.D.C. J. J. Robinson, architect, 8, Trion-square, Dublin. Deposit £1 1s.

OCTOBER 20.—**Braintree**.—HOUSES.—Twelve houses situated, six at Blackmore-end, Wethersfield, eight at Wethersfield, eight at Terling, eight at Rayne, and six at Finchfield, for the R.D.C. E. O. Wheeler, using Surveyor, 71, Rayne-road.

OCTOBER 20.—**Carlton**.—HOUSES.—Four parlour and four living room type houses on the Standhill site, for the U.D.C. J. A. West, A.R.I.B.A., surveyor, Manor-road. Deposit £1 1s.

OCTOBER 20.—**Kerry**.—STATIONS.—Stations for the rda Siachana at Derreen, co. Kerry, and for the rda Siachana at Lough George ex-R.I.C. Barrack, co. Kerry, for the Commissioners of Public Works. J. J. O'Leary, Oifig Oibreach Publi (Office of Public Works), 11, Atha Cliath (Dublin). Deposit £1 each.

OCTOBER 20.—**Macclesfield**.—DWELLINGS.—Six houses at Chelford, on site alongside the road leading to Chelford at Alderley Edge; six houses at Snelson, site alongside the road leading from Chelford post to Peover; 22 houses at Sutton, on site along east of main road from Macclesfield to Leek, south of Chelford, for the R.D.C. Geo. Clayton, architect, 4, Kingston-street, Stockport.

OCTOBER 20.—**Roxburghshire**.—CONCRETE BRIDGE.—Erection of reinforced concrete bridges over the river Jed for the Roxburghshire County Road Board, Jedburgh District Committee, and Jedburgh Town Council. J. & A. Leslie & Reid, C.E., 72a, George-street, Edinburgh. Deposit £5.

OCTOBER 20.—**Sedgefield**.—PAINTING.—Painting and decoration of the Trimdon Grange Council Infants' School, for the Durham C.C. M. Anderson, District Engineer, District Education Office, 23, Dovecot-street, Merton-on-Tees.

OCTOBER 20.—**Sheffield**.—ALTERATIONS.—To the new home at the Firvale Hospital, Sheffield, to provide additional bedroom accommodation, for the B.G. E. Whitehead, architect, 34, Goddard Hall-road. Deposit £5 5s.

OCTOBER 20.—**Thurcroft**.—EXTENSIONS.—To the new school, for the West Riding E.C. The Education Department, County Hall, Wakefield.

OCTOBER 21.—**Chesterfield**.—CONVENIENCE.—Urinal heffield-road, in the Parish of Killmarsh, for the R.C. H. Taylor, engineer and surveyor.

OCTOBER 21.—**East Ellce**.—COTTAGES.—One pair of ages at Guanock-gate, and three pairs on the Union-bank, Sutton St. Edmund, for the R.D.C. Mossop, Jun., Clerk to the Council, Holbeach.

OCTOBER 21.—**Edinburgh**.—PAINTING.—Painter working hall at Craiglockhart Poorhouse, for the P.C. M. Mowat, Clerk, The Edinburgh Parish Council, members, Castle-terrace.

OCTOBER 21.—**Great Woking**.—HOUSES.—Twenty workmen's dwelling houses at Great Woking, the Rochford R.D.C. Mr. A. C. Madge, Surveyor for the Council, Rayleigh.

OCTOBER 21.—**Hove**.—PAINTING.—The external work and ironwork of the Hove Baths, King's Lane, for the T.C. Borough Surveyor.

OCTOBER 21.—**Inthwaite**.—HOUSES.—Twenty sculpture houses on the housing estate at Cowersley, for the U.D.C. J. Ainley, architect, 55, New-street, Ldersfield.

OCTOBER 21.—**Welwyn, Herts**.—HOUSES.—Erection of a further 38 houses on the London-road housing site, for the Welwyn R.D.C. H. G. Cherry, 7, Buckingham-street, Adelphi, W.C.2. Deposit £3 3s.

OCTOBER 21.—**Ynysybwl**.—REPAIRS.—Painting and decorating and doing sundry repairs, internally and externally, to Tabernacle Welsh Congregational Chapel and Vestries at Ynysybwl, for the Trustees and Committee. D. H. Jones, 19, Other-street, Ynysybwl. Deposit £1 1s.

OCTOBER 21.—**York**.—ADDITIONS.—Alterations and additions to the existing engine house and offices at the electricity generating station, for the T.C. F. W. Spurr, City Engineer. Deposit £2 2s.

OCTOBER 22.—**Acton**.—REPAIRS.—Internal decorations and repairs at (a) Southfield-road school, and (b) various caretakers' houses, for the E.C. Borough Engineer.

OCTOBER 22.—**Caistor**.—ADDITIONS.—Additional block to the Isolation Hospital at Osgodby, to be constructed of wood and asbestos, on brick foundation, for the R.D.C. J. P. Mason, Surveyor.

OCTOBER 22.—**Leamington Spa**.—DECORATIONS.—Decoration of certain offices in the Town Hall, for the T.C. John J. Kennan, Borough Engineer.

OCTOBER 23.—**Ardrossan**.—HOUSES.—Houses of three apartments each, flatted and semi-detached, at the Seton-street site, for the T.C. J. C. Hunter, architect, Harbour Buildings. Deposit 10s. 6d.

OCTOBER 23.—**Belfast**.—HEATING.—Installation of low-pressure hot-water heating systems at (a) the Central Telephone Exchange, Upper Queen-street, Belfast; and (b) Enniskillen Model School, County Fermanagh, for the Government of Northern Ireland. Secretary, Ministry of Finance, 15, Donegall-square West.

★OCTOBER 23.—**Eastbourne**.—EXTENSIONS.—Extensions to motor omnibus depot, Roselands, for the Motor Omnibus Committee of the Eastbourne County Borough. Borough Engineer, Town Hall, Eastbourne. Deposit £1 1s.

OCTOBER 23.—**Gainsborough**.—HOUSES.—Twelve houses, Nelson-street, for the U.D.C. S. W. Parker, Surveyor. Deposit £1.

OCTOBER 23.—**Nottingham**.—SCHOOLS.—Central Schools, Bar-lane, Old Basford, for the T.C. T. Wallis Gordon, City Engineer. Deposit £2.

★OCTOBER 24.—**Alton, Hants**.—INFIRMARY.—Erection of new Infirmary at the Alton Poor Law Institution, at Alton, for the Guardians. The Clerk, 46, High-street. Deposit £3.

OCTOBER 24.—**Chapel-en-le-Frith**.—HOUSES.—Four non-parlour type houses at Batham Gate, near Buxton for the R.D.C. T. Dinsdale, Inspector and Surveyor, Deposit £2 2s.

OCTOBER 24.—**Cherleywood**.—HOUSES.—Twenty houses on the site at Capel Hamlet, for the U.D.C. C. W. Richardson, architect, at Messrs. Swannell & Sly's Offices, Rickmansworth.

OCTOBER 24.—**Llanidloes**.—HOUSE.—Church house at Llanidloes. R. A. Ford, architect and surveyor.

OCTOBER 24.—**St. Brevard**.—ADDITIONS.—To a house at St. Brevard, for Capt. R. Hall. Parkes Lees & Roseveare, architects and surveyors, Launceston.

OCTOBER 24.—**Taibach**.—CHURCH.—New Presbyterian church at Taibach, Margam, for the Trustees. Thomas & Morgan & Partners, architects and civil engineers. 23, Gelliwastad-road, Pontypridd. Deposit £2 2s.

OCTOBER 24.—**Tanfield**.—HOUSES.—Forty-six houses at Crookgate Bank Top, Burnopfield, co. Durham, for the U.D.C. J. R. Heslop, architect. Deposit £2 2s.

OCTOBER 24.—**Thetford**.—ALTERATIONS.—Alterations and additions to the waterworks pumping station, for the T.C. Sands & Walker, engineers, Milton Chambers, Milton-street, Nottingham.

OCTOBER 26.—**Clones**.—OFFICES.—Offices, engine pits, &c., in reinforced concrete, at Clones Station, for the Great Northern Railway (Ireland), Co. J. B. Stephens, Secretary, Amiens-street Station, Dublin. Deposit £2 2s.

OCTOBER 26.—**Exmouth**.—HOUSES.—Fifty houses in Marplot Park, for the U.D.C. Samuel Hutton, engineer and surveyor, architect. Deposit £1 1s.

OCTOBER 26.—**Glamorgan**.—BUILDING.—For (1) school for 496 scholars at Dole, Llanharan; (2) school for 200 scholars at Nantgarw, Taff's Well; (3) extension to cloakroom at Tynewydd Infants' Council school, for the C.C. T. M. Franklin, Secretary of the E.C., Glamorgan County Hall, Cardiff.

OCTOBER 26.—**London**.—COTTAGES.—283 cottages, six blocks of three story flats, nine lock-up shops with nine dwellings over, and other incidental work, at the White Hart-lane estate, Lordship-lane, Tottenham, for the L.C.C. Architect to the Council, the County Hall (Room No. 3), Westminster Bridge, S.E.1. Deposit £2.

OCTOBER 26.—**Rochester, Kent**.—HOUSES, DRAINAGE AND SITE WORKS.—Erection of 66 houses (32 parlour and 34 non-parlour) on the Maidstone-road, Rochester, for the Corporation. William Law, A.M.I.C.E., City Surveyor, Guildhall, Rochester. Deposit £3 3s.

★OCTOBER 26.—**Southampton**.—CONCRETE FOUNDATIONS, &c.—Construction of mass concrete foundations and retaining walls, and including concrete piles, for an extension of the engine room at the Electricity Supply Station, for the Corporation. Borough Engineer's Office, 33-35, French-street, upon production of the Borough Treasurer's receipt of a deposit of £3 3s.

OCTOBER 26.—**Stoke-on-Trent**.—CONVERSION.—Conversion into water closets of about 70 privies and pails, in Hanford, for the T.C. Chief Sanitary Inspector, St. Peter's Chambers, Gleebe-street.

OCTOBER 26.—**Wetherby**.—HOUSES.—Twelve houses at Wetherby, four at Weeton, four at Kirkby Overblow, and two at East Keewick, for the R.D.C. A. Suttel, architect. Deposit £1 1s.

OCTOBER 26.—**Wokingham**.—DECORATIONS.—Exterior decoration of the Council's cottages, 162, on 22 sites, in various parts, for the R.D.C. Housing Manager, C. Aldridge, London Bridge Lodge, Earley, near Reading.

★OCTOBER 27.—**Barking, Essex**.—ELECTRICITY SUBSTATION.—Erection of an electricity sub-station in Axe-street, within the district, for the Barking Town U.D.C. C. J. Dawson, Council's Architect, Clock House Chambers, Barking.

OCTOBER 27.—**Ilford**.—LIBRARY BUILDING, &c.—Erection and completion of library building, together with Town Hall basement under, and extension of Town Hall offices over, at Oakfield-road, for the U.D.C. H. Shaw, M.Inst.C.E., Engineer and Surveyor, Town Hall, Ilford. Deposit £5 5s.

OCTOBER 27.—**Kilkenny**.—WIRING.—Overhead wires and fittings for public electric lighting in the city, for the T.C. L. J. Lawless, Consulting Engineer, 19, Percy-place, Dublin.

OCTOBER 27.—**London, E.2**.—BUILDING ADDITIONS.—Erection and completion of an additional story to the Administrative Block (Nurses' Home) at the Bethnal Green Hospital, Cambridge-road, Bethnal Green, E.2, for the Guardians. C. Faulkner Jones, Clerk to the Guardians, Guardians' Offices, Bishop's-road, E.2. Deposit £3 3s.

OCTOBER 27.—**Mynyddislwyn**.—HOUSES.—For (1) 30 houses at Brynawel, Crosseys; (2) road and sewer works in connection with the lay-out of the site, for the U.D.C. A. F. Webb and W. A. Griffiths, L.L.R.I.B.A., architects and surveyors, Tredegar Chambers, Blackwood, Mon. Deposit £3 3s.

OCTOBER 27.—**Near Padstow**.—REPAIRS.—Repairs and renewals to the Trevose Head Lighthouse dwellings. M. K. Smith, Secretary, Trinity House, E.C.3.

OCTOBER 27.—**Sefton**.—COTTAGES.—Six cottages in Victoria-road, Ince Blundell, and 12 in Lydiat-lane, Russell's-lane, Sefton, for the R.D.C. E. B. Bailey, architect, 9, Cook-street, Liverpool. Deposit £1 1s.

OCTOBER 27.—**Shrewsbury**.—ALTERATIONS AND EXTENSIONS.—Alterations and extensions to the P.O. Engineer's Office, Castle Foregate, Shrewsbury, for the Commissioners of H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, Westminster, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

OCTOBER 27.—**West Ashford**.—ADDITIONS.—Alterations and additions at the Poor Law Institution Infirmary, Hothfield, near Ashford, Kent, for the B.G. W. Bowles, architect, Elwick-road. Deposit £1 1s.

OCTOBER 28.—**London, E.8**.—BUILDING WORKS.—Building works, being the erection and completion of two electricity sub-stations, one at Gainsborough-road, Hackney, and one at Holly-street, Hackney, for the Hackney Metropolitan B.C. Borough Electrical Engineer, 306, Mare-street, Hackney, E.8. Deposit £2 2s.

OCTOBER 28.—**London, S.W.**.—FOUNDATIONS.—Construction of foundations for the new Whale Room at the Natural History Museum, South Kensington, S.W., for the Commissioners H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

OCTOBER 28.—**Southampton**.—HOUSES.—Twenty-two, 40 and 18 houses, respectively, on the Burgess-road housing site, for the C.B. Borough Engineer. Deposit £1 1s.

OCTOBER 29.—**Teddington**.—LABORATORY.—New Physics Building at the National Physical Laboratory, Teddington, for the Commissioners of H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, Westminster, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

OCTOBER 29.—**Warwick**.—REPAIRS.—Papering, painting, &c., at the Scattered Homes, for the B.G. C. H. Passman, Clerk to the Guardians, 48, Bedford-street, Leamington Spa.

OCTOBER 30.—**Crawley**.—EXTENSION.—To the Crawley Police Station, for the West Sussex C.C. Haydn P. Roberts, F.R.I.B.A., County Architect, Westgate, Chichester.

OCTOBER 30.—**Dublin**.—RESTORATION.—Of the Western Block of the Custom House, for the Commissioners of Public Works. J. J. Healy, Secretary, Oifig Oibreach Publi (Office of Public Works), Baile Atha Cliath. Deposit £5.

OCTOBER 30.—**Shrewsbury**.—OFFICES.—Additional offices at the rear of the County Buildings, for the Salop C.C. Forsyth & Maule, 12, Stratford-place, London W.1. Deposit £2 2s.

★OCTOBER 31.—**Faversham**.—HOUSES.—Erection of eight houses and incidental works in connection therewith, for the Corporation. S. Percy Adams, Borough Surveyor, 20, West-street, Faversham. Deposit £2.

NOVEMBER 2.—**St. Albans**.—COTTAGES.—Erection of the second 50 cottages at the Camp housing site, for the Corporation. G. T. Negus, City Engineer and Surveyor, 96, Victoria-street, St. Albans. Deposit £1 1s.

NOVEMBER 2.—**Southampton**.—BUILDING.—Electricity sub-station on the Town Quay, for the Harbour Board. E. Cooper Poole, engineer. Deposit £1.

NOVEMBER 2.—**Trimdon**.—HOUSES.—Twelve aged miners' homes at Trimdon Colliery. Hays & Gray, F.R.I.B.A., architects, Central Chambers, Wingate.

★NOVEMBER 3.—**Devonport**.—EXTENSION.—Extension of Keyham Employment Exchange, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, Westminster, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

* **NOVEMBER 4.—Brighton.**—TELEPHONE EXCHANGE.—Erection of a telephone exchange at Portslade, Brighton, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, Westminster, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

NOVEMBER 9.—Basford.—CONVERSION.—Conversion of pail closets to water closets, in the parish of Colwick, for the R.D.C. S. Maylan, engineer and surveyor. Deposit £1 1s.

NOVEMBER 9.—Clutton.—HOUSES.—Twelve houses at Clutton, for the R.D.C. W. T. Hawker, Architect, Council Houses, Temple Cloud, near Bristol. Deposit £3 3s.

NOVEMBER 9.—London.—S.E.—DWELLINGS.—Erection of a block of dwellings on the Dickens estate, Bermondsey, in brick, also alternative tenders for construction in reinforced concrete, for the L.C.C. Architect to the Council, The County Hall (Room No. 3), Westminster Bridge, S.E.1. Deposit £2 to the Cashier.

NOVEMBER 9.—Manchester.—HEATING.—Heating apparatus at the Free Trade Hall, for the T.C. City Architect. Deposit £1 1s.

NOVEMBER 10.—Bolton-upon-Dearne.—HOUSES.—Seventy dwelling-houses, together with road and surface water drainage works on sites, Beaumont-street, Goldthorpe, and Furlong-road, for the U.D.C. W. H. Adams, A.R.I.B.A., architect. Deposit £1 1s.

* **NOVEMBER 11.—Essex.**—SECONDARY SCHOOL.—Erection of a secondary school at Brentwood, for 275 pupils, for the Essex C.C. County Architect, Springfield Old Court, Chelmsford. Deposit £2 2s.

NO DATE.—Ardley.—DECORATIONS.—Internal decorations to East Ardley Council school, for the West Riding E.C. P. Beaumont, Divisional Clerk, 8, St. John's North, Wakefield.

NO DATE.—Barnsley.—BUILDINGS.—New office buildings, Peel-street, for the Yorkshire Mutual Trading Co., Ltd. C. F. Moxon, Architect, Regent-street South.

NO DATE.—Barnsley.—OFFICES.—Shops and offices, Eldon-street and The Arcade, for Benj. Harral, C. F. Moxon, architect, Regent-street South, Barnsley.

NO DATE.—Bradford.—HALL.—New Freemasons' Hall, Bradford, Ross & Briggs, architects, Eldon Chambers, 75a, Manningham-lane. Deposit £2 2s.

NO DATE.—Bridgend.—ALTERATIONS.—To premises, for W. H. Smith & Son. C. T. Ruthen & Co., Bank-buildings, Heathfield-street, Swansea. Deposit £2 2s.

NO DATE.—Kilmarnock.—REPAIRS.—Electric lighting work and painter work in connection with the erection of 60 houses at Ayr-road, Riccarton, for the T.C. W. Dunbar, Burgh Surveyor, Market Bridge.

NO DATE.—Mitcham.—HOUSES.—210 houses on a site near to Tooting Junction Station, for the U.D.C. Chart, Son & Reading, architects, Union Bank Chambers, Croydon. Deposit £2 2s.

NO DATE.—Putney.—ADDITIONS.—Alterations and additions to the Horse and Trumpet Inn, Roker-lane, for John Smith's Tadcaster Brewery Co., Ltd. Bertram Wilson, architect and surveyor, High-street, Tadcaster. Deposit £1 1s.

NO DATE.—Southend-on-Sea.—EXTENSIONS.—To the refuse destructor cells, complete with flues, boiler and incidental works in connection thereto, for the C.B. Robt. H. Dyer, Borough Engineer and Surveyor. Deposit £3.

NO DATE.—Sunderland.—SCHOOLS.—Secondary schools, &c., for boys and girls, on the Barnes estate, Durham-road, for the E.C. W. & T. R. Milburn, architects, 19, Fawcett-street. Deposit £5.

MATERIALS. etc.

OCTOBER 19.—Glasgow.—MATERIALS.—Plumbers' materials, bath, electric fittings, bricks, tiles, lime, cement, oils, paints, and various other materials, for the P.C. M. A. Reynard, Inspector and Clerk, 266, George-street.

OCTOBER 20.—London.—GIRDERS.—Girder bridges, comprising 120 spans, and 52 flange plates for girders, for the Madras and Southern Mahratta Railway Co. Directors, 25, Buckingham Palace-road, S.W.1.

OCTOBER 22.—London.—GIRDERS.—402 tons of steel girders and other iron and steel work, for the G.W.R. Engineer, Paddington Station, W. 2. Deposit £2 2s.

OCTOBER 23.—Argyll.—MATERIALS.—Ironmongery and building material, paints and oils, earthenware and glass, and timber, for the Argyll and Bute District Mental Hospital Committee. House Steward, Lochgilphead.

OCTOBER 24.—Hertford.—MATERIALS.—Manhole covers, gully grates, &c., for the T.C. Borough Surveyor and Engineer.

OCTOBER 26.—Tending.—MATERIALS.—Screened stone, tarring shingle, granite chippings, for the R.D.C. Highway Surveyor, Great Bentley, Essex.

OCTOBER 29.—Inverness.—MATERIALS.—Lime and best Portland cement, for the District Asylum Committee. R. Gilbert, Clerk to the District Board of Control, 20, Church-street.

ENGINEERING, IRON AND STEEL.

OCTOBER 19.—Dorking.—FILTERS.—For (a) materials for and construction of four percolating filters, two humus tanks, and incidental works, and (b) provision, delivery and fixing of No. 4 Rotary sprinklers, complete with valves, C.I. feed and washout pipes, and incidental works, for the U.D.C. S. S. Gettings, Surveyor. Deposit £2 2s.

OCTOBER 19.—Fairlie.—TANKS.—Construction of clear water tanks and the laying of about 1,030 yards of lap-welded steel water pipes, comprised of 7 in., 6 in., 5 in., and 4 in. internal diameters, and relative works at Fairlie, for the Ayr (Northern District) C.C. J. Gilchrist Bennett, C.E., 19, Waterloo-street, Glasgow. Deposit £1 1s.

OCTOBER 19.—Uxbridge.—RESERVOIR.—Reinforced concrete reservoir work for the construction of a reinforced concrete reservoir, for the U.D.C. Indented Bar, Concrete Engineering Co., Ltd. Deposit £2 2s.

OCTOBER 21.—Nottingham.—EMBANKMENT.—Construction of an earth embankment and a bridge over the L.M. & S. Ry. forming part of a new road between Castle-boulevard and Gregory-street, for the T.C. T. Wallis Gordon, City Engineer and Surveyor. Deposit £2.

OCTOBER 22.—Bilston.—RESERVOIR.—Concrete service reservoir, of about 850,000 gallons capacity, at Goldthorn-hill, for the U.D.C. H. Lapworth, 15, Victoria-street, Westminster. Deposit £3.

OCTOBER 23.—Skipton.—FILTERS.—Additional percolating filters at Glusburn Sewerage Works, for the R.D.C. A. Rodwell, engineer, 16, Gargrave-road.

OCTOBER 24.—Whittingham (near Preston).—HEATING.—Proposed centralised low-pressure hot-water heating, new calorifiers, pumps, steam and condenser services for the main building, and centralised hot-water system and boiler plant for the old annexe, for the County Mental Hospital Committee. C. Hutton Wright, Consulting Engineer, Dale Cottage, Spital, Cheshire. Deposit £1.

OCTOBER 30.—London.—STEELWORK.—Steelwork for bridges, for the South India Railway Co. Robert White & Partners, consulting engineers, 3, Victoria-street, S.W.1.

NOVEMBER 2.—Southampton.—REPAIRS, &c.—For (1) alterations to the electrical equipment of the twelve existing cranes to make them suitable for a new system of supply; (2) provision and laying of certain cables, disconnecting boxes, &c.; (3) switchgear; (4) provision of two crane weighing machines, for the Harbour Board. W. G. Gubbins, Clerk. Deposit £5 5s.

ROAD, SEWERAGE, AND WATER WORKS.

OCTOBER 19.—Basford.—SEWERS.—Providing and laying about 580 yds. of 9 in. Hassall's stoneware pipe sewers, together with the necessary manholes, &c., in the parish of Burton Joyce, for the U.D.C. S. Maylan, Engineer and Surveyor. Deposit £1 1s.

OCTOBER 19.—Hale.—SEWERS.—Construction of about 520 yards of stoneware sewers, 9 in. and 6 in. diameter, together with manholes, &c., for the U.D.C. T. Blagburn, Surveyor. Deposit £1 1s.

OCTOBER 19.—Ickfield.—SEWER.—Provision and laying of about 400 lin. yds. of 9 in. stoneware pipe sewer with manholes and other appurtenant works at Shortbutts-lane, for the T.C. P. A. Benn, City Surveyor. Deposit £1 1s.

OCTOBER 19.—Prescot.—ROAD.—Construction of a road from Warrington-road to Bretherton-road, for the U.D.C. F. A. Gregson, Engineer and Surveyor, 2, West-street. Deposit £2 2s.

OCTOBER 19.—Southend-on-Sea.—SEWERS.—Construction of approximately 370 yds. of 18 in. diameter 120 yds. of 15 in. diameter concrete tube sewers, and approximately 48 yds. of 24 in. to 18 in. diameter cast-iron pipe sewers in crossings under railway and incidental works in connection thereto, at New-road, Leigh, for the C.B. R. H. Dyer, Borough Engineer and Surveyor. Deposit £2.

OCTOBER 19.—Waltham Holy Cross.—SEWERS.—1,600 yards lin. of 9 in. and 6 in. sewers, with small pumping station, &c. W. C. Holloway, Engineer and Surveyor to the Council.

OCTOBER 20.—Hillsborough.—SEWERAGE.—Improvement of the sewerage system in Saintfield, for the R.D.C. A. Thompson, C.E., architect.

OCTOBER 20.—Horsham.—MANS.—Approximately 1,200 yds. of 8 in. and 350 yds. of 6 in. diameter cast-iron water main in 12 ft. lengths, and specials, together with a number of 8 in., 6 in., and 3 in. sluice valves, air valves, and screw-down pattern fire hydrants, for the U.D.C. C. G. Atkinson, Surveyor and Water Engineer.

OCTOBER 20.—Nesscliff.—WIDENING.—Road widening for a length of approximately 2,000 yards, including drainage, setting back of farm buildings and contingent works, at Nesscliff, about 8 miles from Shrewsbury, for the Salop C.C. W. H. Butler, County Surveyor, County Buildings, Shrewsbury. Deposit £5 5s.

OCTOBER 21.—Barking.—ROAD.—Construction of a bridge, with steel girders, brickwork abutments, parapets, &c., and piled foundations, to carry the East Ham and Barking by-pass arterial road over the Barking-Tilbury line of the L.M. & S.R. Co., near Ripple-road, Barking, Essex. A short length of culvert to carry the Maves Brook is also included in the work to be carried out, for the M.T. Chief Engineer, Roads Department, M.T., 7, Whitehall-gardens, S.W.1. Deposit £25.

OCTOBER 21.—Birmingham.—SEWER.—Construction of about 1,650 yds. of brick and concrete sewer, 2,200 yds. of concrete tube sewer, 56 yds. of cast iron pipe sewer, and 1,300 yds. of stoneware pipe sewer, together with manholes, bellmouths, overflow chamber, and other incidental works in private lands south of Clay-lane, Lincoln-road, including canal crossing and crossing under railway bridge, in private lands from Warwick-road to Shirley-road, crossing Gospel-lane and Lakey-lane and in Lakey-lane, for the T.C. H. H. Humphries, City Engineer and Surveyor. Deposit £2.

OCTOBER 21.—Bournemouth.—MAKING-UP.—Of Keswick road and Grasmere-road, for the C.B. F. P. Dolamore, Borough Engineer. Deposit £1 1s.

OCTOBER 21.—Glasgow.—ROAD.—Construction of section D-E (Polkemmet to Starlaw), Contract No. 4, of a new road from Glasgow to Edinburgh, for the T.C. D. A. Donald, Engineer, 271, Alexandra-parade. Deposit £3 3s.

OCTOBER 21.—Swinton and Pendlebury.—MAKING-UP.—Of private streets within the district, for the U.D.C. H. Entwistle, Engineer and Surveyor.

OCTOBER 21.—Torquay.—WIDENING.—Road widening works at Babacombe-road, between Walls-hill and Wellswood, a length of 700 yards, for the T.C. Hy. A. Garrett, Borough Surveyor. Deposit £2 2s.

OCTOBER 23.—Finchley.—SEWER.—Construction of approximately 642 yards of 21 in. diameter soil sewer to be laid between the North Circular-road and the Broughton-avenue pumping station, for the U.D.C. P. T. Harrison, Engineer and Surveyor, 9, The Hawthorns, Regent's Park-road, Finchley, N.3. Deposit £2.

OCTOBER 24.—Carmarthenshire.—WIDENING.—widening and improvement works at Glangrydy the Llandilo and Llangadock main road, for the G. Henry, County Surveyor, Llandilo. Deposit £2.

OCTOBER 26.—Guildford.—DRAINAGE.—Reconstruction of the drainage system at Broadwood Cott Wood-street, for the R.D.C. J. Anstee, Engineer Surveyor.

OCTOBER 27.—Davenport.—ROAD.—For (1) kerbs and concrete channels, approximately one mile, strengthening, grading, and re-surfacing with asphalt and tarviated granite, approximately one mile, for Birmingham-Ipswich road, for the T.C. Borough Surveyor. Deposit £3 3s.

OCTOBER 27.—Willissen.—ASPHALTING.—Execution of 5,153 yards super., or thereabouts, of compact asphalt paving 2 in. thick in Brondesbury-road, Mortimer-road, for the U.D.C. F. Wilkinson, Engineer and Surveyor, 164, Bath-street, near to the Council, Town Hall, Dyne-road, K.N.W.6.

OCTOBER 28.—Forfar.—SEWERS.—Construction of sewage tanks, pump well, &c.; alterations of sewer and other relative works, for the T.C. G. Thorne, Engineer and Surveyor, 164, Bath-street, Glasgow. Deposit £2 2s.

OCTOBER 29.—Lorn.—PIPES.—4,000 lin. yards of 4 in. diameter pipes, 900 lin. yards of 3 in. diameter pipes, for the Argyll C.C. W. MacDonald, Engineer and Surveyor's Office, Columba Buildings, Glasgow. Deposit £2 2s.

OCTOBER 30.—Barton-upon-Irwell.—SEWER.—Construction of 1,190 lineal yards of 3 ft. 3 in. dia. concrete pipe surface water sewer, to be laid in Irington-road and Flixton-road, Flixton, for the R. Engineer's Office, Council Offices, Green-lane, Liverpool. Deposit £2 2s.

NOVEMBER 2.—Beckenham.—SEWERS.—Widening and the construction of soil and surface water sewer, for the U.D.C. J. A. Angell, Surveyor, 164, Bath-street, Glasgow.

NOVEMBER 4.—Hove.—PAVING.—Making-up way, laying new paving and other works in connection therewith in Hallyburton-road, for the T.C. Borough Surveyor.

NO DATE.—Kent.—WIDENING.—Widening W gate-corner, on the Pembury to Tunbridge Wells road, for the C.C. H. T. Chapman, County Surveyor, Maldstone. Deposit £5.

Competitions.

(See Competition News, page 554.)

Auction Sales, Tenders, etc.

OCTOBER 20.—London, E.—Horne & Co. will by order of Mr. J. Grizard, at the Railway A London-street, Bethnal Green, tools, ironmongery, paints, varnishes, machinery, lorry, crane, &c. Auctioneers, Crown Court, Chancery, E.C.2.

OCTOBER 20.—London, S.E.—J. T. Skelding & Co. will sell, by order of Messrs. J. Lyons & Co., Ltd., are removing to more suitable works, Walworth, S.E., the well made and expensive modern fittings and building materials, including mahogany and walnut panelling, doors, counters, showcases, &c. Auctioneers, 48, Gresham-street, Guildhall, E.C.4.

* **OCTOBER 20.—London, S.W.**—Vereyard & Co. will sell, without reserve, at 255, Clapham-road, timber and building materials. Auctioneers, Norwood-road, London, S.E.27.

OCTOBER 20.—London, S.W.13.—F. H. Clark sell, without reserve, at Nightingale Lodge, Nightingale lane, Wandsworth Common, clearance sale of the contents of the mansion (recovered from the demolition of the mansion). Auctioneer, Railway Wharf, 1, Road, Wandsworth, S.W.18.

OCTOBER 20.—Middlesex.—Hampton & Sons sell, by order of the mortgagees, at the St. James Estate Rooms, St. James's-square, S.W.1, the estates within a 12-mile radius of Marble Arch Hill, Middlesex, the Mylesdown Estate of 48½ acres. Auctioneers, 20, St. James's-square, S.W.1.

OCTOBER 20.—Mid-Lavant, near Chichester.—Henry Butcher & Co. will sell, without reserve, the demolition, ex-Government wood distillation factory Mid-Lavant, building plant, material and stores, including approximately 60 tons rolled steel, corrugated iron, piping and tubing, bricks, tools, rope, &c. Auctioneers, 63 and 64, Chancery-lane, London, W.C.2.

OCTOBER 20 AND 21.—Surrey and Sussex.—J. C. Hibbard & Sons will sell, without reserve, by order Messrs. Box & Turner, Ltd., at the saw mills along the railway stations (Southern Railway) at Oxted, Waldron, plant and stock of sawmills, portable engine, horizontal log band saw, 5-ton steam crane, oil and dynamo lighting set, and other stores, &c. Auctioneers, 15, Newington Green, Islington, London, N.16.

* **OCTOBER 21.—Beddington, near Croydon.**—Clark will sell, without reserve, at Beddington H. Beddington, near Croydon, timbers and building effects previous to stock-taking. Auctioneer, Beddington House, near Croydon.

* **OCTOBER 22.—London, E.C.**—Hillier, Parker, & Rowden will sell, at the Mart, E.C.4, building (26, Homerton-row), also factory site (201-3-5, road, E.). 27, Maddox-street, W.1.

OCTOBER 27.—Bucks.—Hampton & Sons will with vacant possession, at the St. James's Estate Rooms, St. James's-square, S.W.1, the Elizabeth residence of freehold tenure known as 'The Graysbury, Bucks', 6½ acres. Auctioneers, 20, James's-square, S.W.1.

* **OCTOBER 27.—Market Drayton.**—Henry Butcher & Co. will sell, without reserve, arising out of demolition of the Mansion, by order of the contractor on the premises, Cloverley Hall, near Market Drayton, building material, stores, &c., including approximately 500,000 good dressed bricks and 30,000 slates. Auctioneers as above.

R 27 & following days—**Andover, Hants.**—Charles & Co. will sell, by order of the executors of the late (deceased), upon the premises, 15, London-road, the yards in Dene-street, East-street, and Siding, Andover, Hants, the whole of the trade, plant and rolling stock of a builder, decorator and undertaker, stock of timber, etc., 285, Borough High-street, London.

R 29.—**Edgware.**—Leslie Raymond will sell the site of "Portdown Lodge," Edgware (the Tube station), building materials of the late. Auctioneer, The Estate Offices, Edgware.

R 30.—**Sussex.**—Knight, Frank & Co. will sell, by direction of Mr Edward Huth, the Goldings Hotel, Hayward's Heath Station, previously disposed of privately as a whole, the whole residential sporting and building property known as the Wykehurst Park Estate (remaining portions), including the Stanley Mansion; also a private residence known as "Hazeldean," in all of about 380 acres. Auctioneers, 20, Hanover-square, W.1.

R 31.—**Hayward's Heath.**—Knight, Frank & Co. will sell, as a whole or in 46 lots by direction of Mr. Huth, Esq., at the Goldings Hotel, Hayward's Heath Station, the whole of the property known as Wykehurst Park (remaining portions), including The Stanley Mansion; also a private residence known as "Hazeldean," in all of about 380 acres. Auctioneers, 20, Hanover-square, W.1.

R 32.—**Kent.**—Hampton & Sons will sell vacant possession, at the St. James' Estate, 20, St. James'-square, S.W.1, freehold residential property between Chislehurst and Bromley, on dry gravel soil, the property known as "The Stone," Bromley, Kent, consisting of about 2 and 64 acres, also two sites of about 2 and 64 acres, respectively. Auctioneers, 20, St. James'-square, W.1.

Public Appointments.

R 19.—**Glamorgan.**—Two Quantity Surveyors required by the C.C. in the architectural department (Western Division). Mr. W. James R.I.B.A., County Architect, Midland Bank, Neath.

R 19.—**West Riding of Yorkshire.**—Architect required by the Education Committee of the Architect. Education Department, Hall, Wakefield.

R 20.—**Ramsgate.**—Clerk of Works required by the Corporation to supervise erection of a new school on the Whitehall-road. Mr. T. G. Taylor, Engineer, Albion House, Ramsgate.

R 22.—**Clacton-on-Sea.**—Temporary Architect required by the U.D.C. Geo. T. Clerk to the Council, Council Offices, Clacton-on-Sea.

R 22.—**Hemsworth, near Pontefract.**—Temporary Draughtsman required for a period of 6 months by the R.D.C. W. T. Lynam, E., Engineer and Surveyor, Union Offices, 10, near Pontefract.

R 23.—**Walthamstow.**—Clerk of Works required by the Essex C.C. E.C., to superintend the Walthamstow new secondary school for boys. Mr. F.R.I.B.A., County Architect, Old Springfield, Chelmsford.

R 24.—**St. Helens.**—Temporary Architect required for a period of 12 months by the Corporation. Arthur W. Bradley, M.Inst.C.E., and Water Engineer, Town Hall, St. Helens.

R 29.—**London.**—E.C.4.—Temporary Architect of a first-class Architectural Draughtsman department of the Engineer M.A.B. Clerk to the Victoria Embankment, E.C.4.

R 9.—**Bradford.**—Resident Clerk of Works required from January 1, 1926, to supervise the new Freemasons' Hall, Manningham-lane, Bradford. H. E. Bower, 9, St. Andrew's-place, Bradford.

R 10.—**Kent.**—Qualified Teacher of Building required by the Kent Education Committee. The Principal, Erith Technical Institute, Erith, Kent.

R 10.—**Leicester.**—Full-time Instructor in Carpentry and Joinery required at the College of Arts and Crafts in the Department of Art at the Leicester College of Arts and Crafts, Leicester.

Suffolk Sugar Factory.

Sir W. G. Armstrong, Whitworth & Co., will be the contractors for the above, Breilfield Danek Engineering Company, Ipswich, will act as consulting engineers.

South London Traffic Scheme.

Consideration is to be given by the London Advisory Committee to a scheme for the improvement of traffic facilities at the Elephant and Castle cross-roads by diverting a large proportion of traffic through other thoroughfares.

Proposed Newcastle Development Schemes.

Proposed eastward extensions to New Quay provides for the construction of four deep-water berths at an estimated cost of £1,000,000. The City Corporation Town Improvement Committee are applying to the Ministry of Transport for £577,000 towards the cost of the proposed 80 ft. roadway from City-road to the Bridge.

BOOKS.

Roof Coverings. By ERNEST G. BLAKE, M.R.S.I. (London: Chapman & Hall, Ltd.) Price 10s. 6d. net.

The importance of a wise selection in the roof covering of any structure cannot be over-estimated, and the assistance given by Mr. Blake in this new book will be appreciated by those who read the details of the numerous types of roofing which are available for modern work. The author deals with every class of covering, from the picturesque old-fashioned thatch to the latest development in asbestos cement, and in each case the advantages, disadvantages, methods of application, and general particulars are given in a thorough manner, which indicates considerable care in the preparation of the contents. Many of the types are special ones supplied by various firms under trade names, and the notes on these are necessarily based to a large extent on the makers, catalogues and advertisements. The author classifies the different coverings under the main headings of (1) organic; (2) metallic; and (3) mineral; and each of these is divided into natural and manufactured, with the exception of the metallic type, which is obviously all manufactured. We can thoroughly recommend the book to architects and builders as a useful addition to the technical library.

A. L.

Kelly's Directory of the Building Trades, 1925. Published by Kelly's Directories, Ltd. Price 50s. net.

We have received a copy of the 1925 edition of Kelly's Directory of the Building Trades. This Directory embraces England, Scotland and Wales, and the principal towns in Ireland, the Channel Islands, and the Isle of Man. In addition to the names of upwards of 20,000 builders, it gives also the names of those engaged in the allied trades and professions, such as sanitary engineers, architects, surveyors, &c., and of manufacturers and suppliers of the various articles and materials used.

The book comprises:—1, the names for each county, arranged alphabetically under the towns and villages; 2, an alphabetical classification of trades for the London Postal District, with the names of those engaged in each trade arranged in alphabetical order; 3, a similar classification of trades for the rest of England, Scotland and Wales. There is also an extensive section giving in alphabetical order the names of branded articles and specialties used in the Trade, together with the names and addresses of the manufacturers; the importance of this section need not be emphasised as everyone concerned will realise its importance.

Although there are nearly 3,000 pages, this volume is so extremely well arranged that any name, town or article can be found with the minimum amount of trouble; no builder, architect or building materials manufacturer can afford to dispense with it.

French-English and English-French Dictionary of Technical Terms and Phrases. By T. O. KETTERIDGE, F.S.A.A., A.C.I.S. London: George Routledge & Sons, Ltd. Price 50s. net.

Mr. Ketteridge is to be congratulated upon the compilation of this monumental work, and Messrs. Routledge deserve all praise for their enterprise in publishing it. To civil, mechanical, electrical and mining engineers, and to all who are in any way concerned with the sciences and industries, this dictionary, with its translation of one hundred thousand words, terms and phrases, must be an invaluable work of reference. Building is well represented so far as we have checked the references. Architecture being an art, its own special terms are not, of course, exhaustively represented, but there is quite a useful sprinkling of them.

Books Received.

ARCHITECTURAL CONSTRUCTION. Vol. I. By Walter C. Voss and Ralph Coolidge Henry. (London: Chapman & Hall.) Price £5 net.

ON THE ROAD. Two vols. (London: Ed. J. Burrow & Co., Ltd.) Price 6d. each.

NEW COMPANIES

The particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 and 118, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

C. MARKHAM & SON, LTD. (208,103). Registered August 28. 54, Lime-street, Hull. Dealers in broken brick, sand, bricks, lime, stone, gravel, &c. Nominal capital, £12,000.

JOSEPH RAWLINSON & SONS, LTD. (208,130). Registered August 29. Window-lane, Garston, Liverpool. Building contractors, and saw mill proprietors. Nominal capital, £7,000.

QUEEN BRICK CO. (1925), LTD. (208,073). Registered August 26. 56, Hamilton-square, Birkenhead. Brick and tile manufacturers, &c. Nominal capital, £7,000.

ITALIAN ASBESTOS CO., LTD. (207,966). Registered August 19. To take over the output of asbestos from the quarries in Italy. Nominal capital, £25,000.

EAST LONDON BRICKS, LTD. (207,961). Registered August 19. 3, Khedive-road, Forest Gate, E.8. Manufacturers of bricks, tiles, pipes, &c. Nominal capital, £3,030.

A CASSEL & SON (MANCHESTER), LTD. (207,887). Registered August 15. 50, Hilton-street, Higher Broughton, Lancs. Builders and contractors. Nominal capital, £1,500.

J. & E. MATTHEWS, LTD. (207,903). Registered August 15. 27, Sutton-road, Erdington, Birmingham. Builders, decorators, &c. Nominal capital, £1,000.

ADDERLEY PARK BRICK CO., LTD. (207,970). Registered August 20. Manufacturers and producers of and dealers in bricks, tiles, &c. Nominal capital, £6,000.

UNITY BUILDERS (PAIGNTON), LTD. (208,005). Registered August 21. Builders, house decorators, &c. Nominal capital, £1,000.

SURBITON DEVELOPMENT CO., LTD. (207,986). Registered August 20. Central House, 45, Kingsway, W.C.2. Builders, contractors, decorators, &c. Nominal capital, £6,000.

SCOTT & HIGBY, LTD. (208,057). Registered August 25. General builders, contractors, &c. Nominal capital, £1,100.

W. S. COTTER & CO., LTD. (208,059). Registered August 25. 22, Princess-square, Plymouth. Monumental masons, &c. Nominal capital, £2,500.

JABEZ WOOLLEY, LTD. (208,232). Registered September 4. Brick and tile maker, carried on by J. Woolley at Elland-road, Leeds. Nominal capital, £40,000.

ATHERTON BROS. (BLACKPOOL), LTD. (208,203). Registered September 2. Builders, contractors, &c. Nominal capital, £20,000.

EDWARD TAYLOR & SON (BOLTON), LTD. (208,205). Registered September 2. Hough-lane, Eagley, near Bolton. Builders and contractors, &c. Nominal capital, £5,000.

THOMAS JONES (BUILDERS), LTD. (208,364). Registered September 11. Hill-street, King's Hill, Wednesbury. Builders and contractors. Nominal capital, £7,000.

JAMES E. NORRIS & CO., LTD. (208,355). Registered September 11. Manchester-road, Chequerbent, near Bolton. Iron and steel constructional engineers. Nominal capital, £5,000.

BLUNN'S CONSTRUCTIONS, LTD. (208,287). Registered September 8. Park Works, Carver-street, Old Trafford, Manchester. Builders, constructional engineers and transport contractors. Nominal capital, £5,000.

INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS, LTD. (208,380). Registered September 12. To provide a central organisation for architects and surveyors, &c.

"CASSAC" ART STONE CO., LTD. (208,386). Registered September 14. Art stone manufacturers. Nominal capital, £1,500.

HOUSING AND TRANSPORT, LTD. (208,316). Registered September 10. 75, Victoria-street, S.W.1. House builders, transport agents, &c. Nominal capital, £100.

PROPOSED NEW BUILDINGS & OTHER WORKS*

IN these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ALDERSHOT.—The T.C. has passed plans: Fourteen semi-detached houses, for the Aldershot Building Co., in North-lane and Bellevue-road.

ALFRETON.—The U.D.C. has decided to erect sixteen more houses in Alfreton and Swanwick and sixteen in Somercotes.

ALTRINCHAM.—The U.D.C. has decided on another extension of its housing scheme on Oldfield Brow estate on Dunham Massey side of the town. The Council has now instructed its surveyor to prepare plans for another 100 houses.

ASKERN.—The West Riding E.C. recommend the erection of the Junior Mining Centres at Askern and Edlington be proceeded with, at an estimated cost in each case of £2,400 for buildings and £500 for equipment.

ASPATRIA.—The Aspatia School Managers have considered plans prepared by the County Architect of proposed alterations and addition to the schools.

AYLESBURY.—The R.D.C. has approved the scheme submitted by Messrs. Cannon, Green & Co. for the erection of at least 100 houses in the Aylesbury Rural District. The total cost is estimated at £34,241.

BACUP.—The Waterworks Committee of the T.C. has instructed the borough engineer to prepare plans and estimates for the construction of a storage reservoir at Cowpe, with a capacity of 2,000,000 gallons.

BALLYMENA.—The R.D.C. has approved plans and estimates for the erection of 175 cottages, which are estimated at £57,896.

BARNLEY.—Mr. B. Haroll has a scheme in hand for the proposed erection of shops and offices in Eldon-street and the Arcade. Plans prepared by Mr. C. F. Moxon, architect, Regent-street South.—The Yorkshire Mutual Trading Co., Ltd., propose to erect new offices on Peel-street. Plans by Mr. C. F. Moxon, architect, Regent-street South.—The directors of Barclay's Bank, Ltd., of London, have secured a prominent site on Regent-street for the proposed erection of branch bank premises.

BARROW-ON-SOAR.—The B.G.'s third scheme for extending the Board Room and other alterations was reported upon. The estimated cost is £750. The Clerk was instructed to apply for sanction to a loan from the M.H.

BINGLEY.—The West Riding E.C. recommend that extensions be carried out to the cloakroom at the Grammar School, at an estimated cost of £246.

BIRMINGHAM.—The Corporation is proposing to provide a large scheme of relief work for the unemployed during the winter. The Finance Committee approved of schemes costing £625,000.

BLACKPOOL.—The T.C. has received sanction to the borrowing of £59,000 for various improvements and other loans amounting to nearly £129,000, mostly for street improvements, the most costly of these proposed works being the widening of Talbot-road and the reconstruction of Talbot-square, at a cost of £29,242.

—The T.C. passed plans: Nine houses and thirteen garages, Sandcroft-road, for J. K. Fielding; nine houses, two shops and two garages, Park-road, and six shops and four houses, Park-road, for A. E. Murdoch; seventeen houses, Sharow-grove, for Parker & Allen.

BOURNEMOUTH.—The T.C. passed various plans, including 18 houses in Carey-road, for C. K. Habgood; house, Coronation-avenue, for W. Hayled.

BRADFORD.—The T.C. passed plans: A. Dickinson, Pendragon-lane, 12 houses; J. H. Smith, Norman-avenue and Norman-grove, 26 houses; E. A. Gadie, Buttermere-road, 20 bungalows.

BRIGHTON.—It is proposed to erect a church hall to be called "Robertson Hall."

BRISTOL.—A scheme is to be prepared, and for which Parliamentary powers are necessary, for the construction of an additional dry dock which, with equipment, will cost £350,000.—The Dock Committee propose the construction of a culvert, at a cost of £6,000, to facilitate the development of land recently acquired at Holesmouth.—A scheme has been prepared for extensions at Frenchay Park Sanatorium, at a cost of £45,800.—In connection with the acquisition of the Blaise Castle estate the Health Committee propose to convert the mansion into a convalescent home for 50 patients.

BROMLEY.—The M.H. has sanctioned loans of £11,190 and £4,761 for the erection of houses on the Griggs Cross, Orpington, and Hearn-road, St. Paul's Cray sites, for the R.D.C.

BUCKFASTLEIGH.—The U.D.C. has decided that application be made to the M.H. for sanction to borrow £10,650 for the erection of 20 houses at Glover's-park.

BURNLEY.—The Corporation has received sanction from the M.H. to borrow £299,682 for the construction of the new gas works at the Old Hall site.—The borough surveyor has submitted plans for the erection of 142 houses on the Harold-street site, estimated to cost £73,850.

BURTON-ON-TRENT.—The Corporation has received sanction for a loan of £5,300 for the erection of 10 houses in Wellington-street.

CAMBLESFORTH.—The West Riding C.C. recommend compulsory acquisition of the plot of land adjoining the school site for extension purposes.

CAMBRIDGE.—A scheme is afoot to erect on Parker's

Piece a pavilion to commemorate the achievements of Jack Hobbs.

CARRICK-ON-SUIR.—It is proposed to erect a new Technical School, at a cost of £2,000.

CADDERTON.—The U.D.C. propose the erection of a child welfare and school clinic on the site adjoining the town hall.

CHELMSFORD.—The M.H. has approved the erection of 250 additional houses on the Boarded Barns site. The total estimated cost of the houses is estimated at £119,322. Tenders are being invited.

CHESTER.—The T.C. are to make application to the M.H. for sanction to borrow the sum of £49,164 for the construction of 102 houses.

CHESTER-LE-STREET.—The Durham C.C. is to erect a new school on the south side of Bullion-lane.

CLEVEDON.—The U.D.C. has decided to make application to the M.H. for sanction to build 32 houses.

CLITHEROE.—The E.C. are considering a scheme which provides for the erection of two new schools. The surveyor has been instructed to prepare detailed plans, the selected site for the junior school being adjoining the Clitheroe cricket ground, and for the senior school adjoining Little Moor-road.

COOTEHILL.—The U.D.C. has adopted plans submitted by P. J. Brady, Ballyhaise, co. Cavan, for three room and four-room houses, to be erected at a cost of £214 and £241 respectively.

CUCKFIELD.—The R.D.C. has received sanction from the M.H. to a loan of £12,056 for the purpose of housing at Lindfield and Hurst.

DARLEY.—A new school for 150 children is to be erected by the Farnworth U.D.C.

DARLINGTON.—The T.C. passed plans: J. E. Chilton, 22 houses, Geneva-road, and bungalow, off Longfield, road; Woodside Estates, Ltd., lay-out of streets, Coniscliffe-road.

DARNALL.—The L.N.E. Railway Co. are to carry out extensive alterations to the station, at a cost of £36,000.

DARWEN.—The borough surveyor is to prepare plans and estimates for the erection of a new elementary school in Avondale-road.

DEWSBURY.—The Dewsbury and Earlsheaton Conservative Club Co. have acquired the Hoyle Head warehouse for conversion into club premises, at an estimated cost of £1,100.

DONCASTER.—The Salvation Army authorities have obtained a site in Trafford-street, at a cost of £2,400, for the proposed erection of an assembly hall, to accommodate 650 persons, and a school room capable of seating 400 children, estimated to cost £5,000.

Funds are being raised by the parishioners of Balby Parish Church for the erection of a parish hall to accommodate 500 persons.—Application is to be made for sanction to borrow £4,600 for the erection of a motor omnibus stand at North Bridge.—The Public Health Committee have instructed the borough surveyor to prepare plans and estimates of cost for the construction of an underground lavatory on the site

of the Old Red House, Station-road.—A scheme for the erection of a new infectious diseases hospital is under consideration. The site is on land off the road.

DUNGANNON.—The U.D.C. has discussed the erection of a town hall in Market-square on the site of the butter market, and have instructed the surveyor to make preliminary plans and prepare an estimate of the total cost of erection.

DUNNINGTON.—The West Riding E.C. recommend the erection of the proposed Mining and Technical Institute at £24,500.

EARLESTOWN.—Land has been acquired for Leigh Estates, Ltd., for the proposed site of erection of the public baths.

EASTLEIGH.—The U.D.C. has resolved that application be made to the M.H. to obtain sanction to a loan of £47,150, for the erection of a further 100 houses on the Winchester-road.

ECCLESFIELD.—The West Riding E.C. recommend the compulsory acquisition of the site for the proposed new Secondary School.

EDLINGTON.—The West Riding Public Health Committee recommend the expenditure of £458 in structural alterations and sewage disposal works.

FAIRBURN.—The West Riding C.C. recommend a plot of land be purchased as a site for the proposed extensions to the Council school.

FERRYBRIDGE (WEST YORKS).—The Ferry Bridge R.D.C. are to consider a scheme for the provision of a public mortuary.

FOLESHILL.—The Highways Committee report that the surveyor had submitted letter, plans, estimates from the City Engineer of Coventry for reconstruction and widening of Lythall-lane, Foleshill-road to Holbrook-lane, at an estimated cost of £33,761 2s., which includes the sum of £82 for the reconstruction of the bridge over the railway.

FRIERN BARNET.—The D.C. approved plans for Catholic chapel-of-ease, proposed to be built on Athenium-road.

GATESHEAD.—The T.C. has forwarded to the Council for approval, plans and estimates for a nurses' and four cottages at the Mental Hospital, at a cost of £18,662.—Messrs. Elders, Walker & Co., glass and paint merchants, are proposing to erect a large new warehouse in Sunderland-road.

GLASGOW.—The architect is to obtain tenders for a rearrangement of the seating accommodation in the Council chamber.—A site has been selected in Ardington district for the erection of a child centre.—A site in Finlay-drive, Dennistoun, has been acquired for the erection of an electricity sub-station.

GODALMING.—Surrey E.C. has selected a site in Shacklestead-lane for the erection of a secondary school.—The Corporation are in negotiations for sites for housing schemes.

HARROGATE.—The West Riding E.C. recommend the erection of a Secondary School, at an estimated cost of £75,000.

HASTINGS.—At a cost of £1,100 the Corporation park is to be roofed in.

HAZEL GROVE AND BRAMALL.—The Council plans: Seventy houses and six new streets, East estate, off Moss-lane, for W. H. Snow; new Bramhall Moor-lane, for G. A. W. Turner Salt; 20 houses off Offerton-lane, for Bancroft.

HELSBY.—The E.C. have under consideration provision of a proposed domestic subjects and craft centre, to be erected at an estimated cost of £2,500.

HEMSWORTH.—The Hemsworth and South Miners' Welfare Committee have selected a site for the modern hospital to be erected on a site at South Moor-lane. The architects are Garside, Kingston, of Pontefract.

HORBURY.—The U.D.C. have instructed the surveyor to prepare plans for the erection of a conveyer in High-street; sites in Highfield-road, Horbury and at Horbury Junction, are being considered suitable for the erection of public conveniences.—have been approved for the extension of stores at Horbury Bridge for Marden Bros.

ILKESTON.—The Corporation are to prepare a scheme for further houses on the southern side of the site.—Plans are to be prepared for the erection of public conveniences on land to be rented from the I.C. Company.

ILKLEY.—The B.E. has given the West Riding approval to the acquisition of the site for a girls' secondary school.

KEIGLEY.—The West Riding E.C. recommend that additional conveniences be provided at the Grammar School, at an estimated cost of £2,000.

KESWICK.—The M.H. has held an inquiry application by the Council for sanction to borrow £7,000 for improving the Council's water supply.

KILDARE.—The C.C. has decided to borrow £2,000 for giving loans to persons building constructing houses.

KINGSTOWN.—The U.D.C. has adopted a resolution for a loan of £5,000 for the purpose of erecting in the erection of twenty-five houses.

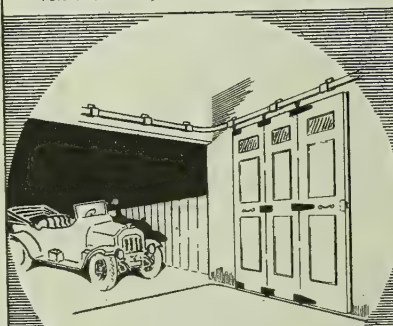
KIRKBRISTON.—The West Riding C.C. recommend that the Mental Deficiency Act Committee be authorised to expend the sum of £200 in a furnishing and equipping the Mansion, Kirkbrist, as a home for the care and treatment of defectives.

KIRKHAM.—Plans have been approved by the Council for the erection of a new institute and club at Mellor-road for the Kirkham and Wesham Men's Club.

KIVETON.—The West Riding C.C. recommend proposed widening and diversion of the Wor Attercliffe road, at South Atter, at a cost of £2,000.

KIVETON PARK.—The West Riding C.C. have received an application from the South Rotherham and

THE "HENDERSON" SYSTEM SLIDING DOOR GEAR FOR FACTORIES, GARAGES, SCHOOLS, ETC.



"TANGENT JUNIOR" FOR LIGHT DOORS.
"TANGENT SENIOR" FOR HEAVY DOORS.

WRITE FOR BOUND CATALOGUE B.24 TO:-

P.C. HENDERSON, LIMITED,

BARKING, ESSEX. PHONE, EAST HAM 247.

* See also our List of Contracts, Competitions, etc.

District Isolation Hospital Committee for a loan of £1,700 for carrying out alterations to the administrative block at the Swallownest Hotel.

EXETER.—The U.D.C. have instructed the surveyor to prepare plans for proposed houses on the Old House place site.

GLoucester.—The Corporation are carrying out a scheme for the widening and improvement of the portion of Park-road between its junction with Brant-road and Rookery-lane, which involved the widening of the existing bridge over the River Witham. A contract for the bridge work for £4,571 had been let.

GLoucester.—The M.H. has held an inquiry into application by the West Sussex C.C. for sanction to contribute £2,000 towards the cost of the immediate works of the harbour works.

LIVERPOOL.—A revised scheme for extensions to Patrick's Schools has been approved by the Council, and will be submitted to the B.E.—Science laboratories are to be provided at St. Elizabeth's School.

LONDON (BATTERSEA).—The B.C. recommend the expenditure of £450 on cleaning and decorating works on Latchmere and Town Hall housing estates.—The Council has approved the recommendation to provide a showroom and offices, in Lavender-hill, adjoining the Post Office, the Borough submitting an estimate for the total cost of the work, amounting to £855 15s. 9d.—The M.H. has approved the erection of the second block of six tenements for re-housing in connection with the Plough-road improvement scheme. The V.C.C. has sanctioned the borrowing of £10,450 for the acquisition of property and the erection of the block of tenements under the Battersea Plough-road Improvement Scheme.

LONDON (EDMONTON).—The E.C. has received sanction from the B.E. to the preliminary plans for building a new elementary school at Bush Hill Park.

LONDON (FULHAM).—The L.C.C. has acquired a site in Britannia-road for the erection of an elementary school.—Two acres in Peterborough-road are being acquired compulsorily by the L.C.C. for a housing site.

LONDON (HACKNEY).—The L.C.C. recommend the borrowing by the B.C. of £6,500 for the acquisition of land for housing purposes.

LONDON (HAMMERSMITH).—The L.C.C. has approved the erection of a convenience and transformer sub-station at the Wood-lane end of Shepherd's Bush by the B.C.

LONDON (KENSINGTON).—The L.C.C. has obtained sanction from the B.E. for a new elementary school.

LONDON (LEWISHAM).—The B.C. are to erect a convenience at Forest Hill Station.—The Council are to purchase sites at Grove Park for housing purposes.—Plans passed: G. Watt, 17 houses, Casslees; Clout & Tysoe, 78 houses, Cranston-road.

LONDON (POPULAR).—The L.C.C. recommend the borrowing by the B.C. of £19,305 for paving, repaving sewer works.

LONDON (WANDSWORTH).—The L.C.C. recommend the borrowing by the B.C. of £24,166 for paving works within the borough. The L.C.C. also recommend the borrowing of £27,187 for paving new streets.

LONDON (WESTMINSTER).—The L.C.C. recommend the borrowing by the City Council of £10,000 for the acquisition of a site for housing purposes.

LONDON (WOOLWICH).—The B.C. are to build two new side walls to the second-class swimming baths at Plumstead, at a cost of £300.—The B.C. recommend (a) that a footway tunnel be constructed through the railway embankment on the west side of Well Hall-road, that the offer of the Railway Company to carry out the work at an estimated cost of £2,000 be accepted; (b) that the necessary alterations to the existing footway, and the forming of the approaches to the subway be carried out by the B.C. at an estimated cost of £425.—The B.C. has adopted a scheme of extensions to be carried out at the Woolwich Power Station, at an estimated cost of £110,000, and the Electricity Commission has given formal consent to the work.—Plans passed: S. Browne, 19 garages, Dobell-road, Eltham; T. P. Blower, 24 houses, Pegwell-street, Plumstead; Stotesbury & Morris, 10 houses, Gerda-road, Eltham.

—The B.C. recommend that application be made to the M.H. for consent to the erection of 261 houses by direct labour.

MALTEBY.—The West Riding E.C. recommend that a Secondary School to accommodate 350 pupils be erected.—The West Riding C.C. recommend the proposed widening at the junction with the Rotherham and Barnby Moor main road, of the Bawtry and Tinsley-road, at a cost of £31,375.

MANSFIELD.—The E.C. has decided to apply for a loan for the building of a new central school at High Oakham, at a cost of £32,000. The B.E. has approved plans for the handicraft rooms and sanctioned an expenditure of £5,070 for furniture and equipment.

MIDDLETON-IN-WHARFEDALE.—The West Riding C.C. recommend that the accommodation for the staff at the Sanatorium be provided at an estimated cost of: Nurses' hostel, £14,610; medical superintendent's house, £2,867; eight houses of the parlour type, £8,351.—The C.C. also recommend that additional bath and w.c. accommodation be provided for "A," "B" and "C" blocks, in accordance with plans, at a cost of £2,723.

NEWCASTLE.—The Corporation Housing Committee has decided to purchase land for housing purposes near Morton-street, Byker.

NORMANTON.—The West Riding E.C. recommend that extensions be carried out to the Grammar School, at a cost not exceeding £20,000.

NORTHFLEET.—The U.D.C. has decided to invite tenders for the erection of 26 houses.—The Council are discussing with the A.P.C.M. matters in regard to the shore roads.

NOTTINGHAM.—The T.C. has decided that when the Red Lion-street area is cleared, no dwelling-houses shall be erected, the whole place to be devoted to commercial buildings.

OLDHAM.—The C.B. passed plans: H. Partington, 25 lock-up garages, heating chamber, at the rear of Manley-road.

OMAGH.—The U.D.C. has received sanction from the Ministry of Home Affairs approving the erection of ten houses at the Fair Green site, and sanctioned the borrowing of £5,000.

OXFORD.—The T.C. recommend the immediate development of land already purchased for houses on the Abingdon-road, and the City Engineer be instructed to prepare plans and estimates for houses of the "Easiform" type of construction.—The T.C. has recommended Mr. Castle to prepare plans for the proposed additional classroom in the girls' department of the South Oxford Council School, and have instructed the Secretary to forward the final plans to the B.E. for approval, together with the final plans (when ready) for the new Medical Clinic and Practical Instruction Centre on the site of 60, St. Aldate's.—The City Engineer reported that in future the Union-street yard only would be used as a depot for the East Ward, and that under the new arrangement it will be necessary to erect thereat an office, mess-room and store, at an estimated cost of £250.—The Council recommend that the existing convenience in St. Giles' be extended.—The Council also recommend that the City Engineer take over the Weirs-lane bridge as a public bridge, and rebuild it in concrete at an estimated cost of £150.—The Oxford C.C. are acquiring the site at 42, Castle-street for the extension of the County offices.

PONTEFRAC.—The E.C. has given notice of their intention to erect an elementary school on the Baghill housing estate.

RATHMINES.—The question of the erection of public baths has again been discussed by the Council, who decided that the surveyor be asked to submit a report on the question.

RAWMARSH.—The West Riding C.C. recommend that a site be purchased for the proposed New Middle School.

RAWTENSTALL.—The War Memorial Committee has decided in favour of a proposal for the provision of public baths, to cost about £10,000.

READING.—The C.B. resolved that application be made to the M.H. for approval to the Council affording financial assistance to private enterprise in the erection of a further 100 houses.

ROSSINGTON.—A cinema to be owned by miners is probably to be built at Rossington, near Doncaster. The scheme is to cost £8,000.

ROYSTON.—The M.H. has given approval to the erection of 16 additional houses on the Pond-street site. Plans have been submitted for the proposed sewage works.

SALFORD.—The C.B. propose to widen Eccles Old-road to 80 ft. from Broad-street to Waste-lane, at an estimated cost of £85,800.

SARFELD.—The members of the Grimsthorpe Wesleyan Reform Church are extending their Sunday school buildings, estimated to cost £2,500.—The



Rolling Shutters

The modern means of saving space

S.W.F. Rolling Shutters are in use in the finest buildings in the country—yet they are equally suited to the smallest structure. Every form of closure is benefited by their fitment. Security and space economy go hand in hand with convenience. Follow the lead of famous architects and specify S.W.F. Rolling Shutters on your plans.

Let us quote you for any required size of shutters—wood or steel laths.

Other

Specialities :

Brass, Bronze Metal, Gun Metal and White Metal Shop Fronts, Sun Blinds, Collapsible Steel Gates, Plate Glass Facias, Name Plates, Projecting Swing Signs, Gilt Lettering, etc.

S. W. FRANCIS & Co. Ltd. 64-70, Gray's Inn Rd. LONDON - W.C.1

Telephone: Holborn 160
Telegrams: "Fenestra, Holb., London."

Agents for Scotland:

RICHARD FORSYTH & CO. 121, St. Vincent Street, Glasgow

Corporation are contemplating building a large open-air swimming pool in Millhouses Park.

SHIPLEY.—The Surveyor is to prepare plans for conveniences at Northcliff playing fields. Another 100 houses are to be subsidised. Plans passed: 24 houses, Kendall-avenue, for A. Kendal & Sons; 23 houses, Norwood-avenue, for H. Chippindale.

SKELTON AND BROXTON (CLEVELAND).—The U.D.C. has approved plans submitted by the Cleveland Miners' Association for the erection of ten aged mine workers' cottage homes at Boosbeck.

SKIPTON.—The West Riding E.C. recommend extensions to the dining room at the Grammar School, at a cost of £400.

SMETHWICK.—The Housing Committee recommend that application be made for approval of the proposals for assisting private enterprise in respect of a further 100 houses and for sanction to the borrowing of £19,700 for the purpose. A tender for 202 houses on the Slatch House estate has been recommended for acceptance. The Committee recommended the erection of 482 houses in Queen's-road, Slatch House, Old Chapel and Warley-road sites during the next two years. It has been decided to erect a maternity home.

SOUTHWICK.—The U.D.C. has decided to erect another 44 houses on the Marley Potts estate.

STALYBRIDGE.—The E.C. are to recommend the T.C. to apply to the M.H. for permission to borrow the sum of £13,100 for the purpose of converting West Hill Mansion into a school for boys.

STAMFORD.—A scheme is being prepared for the erection of a new Corn Exchange with a first-class concert hall, at an estimated cost of £7,000. Plans are being prepared by F. J. Lenton, architect.

STOCKSBRIDGE.—The U.D.C. are being urged by the West Riding C.C. to provide an isolation hospital for the district.

STOKE AND WOLSTANTON.—Plans are to be prepared for the Stoke and Wolstanton B.G. in connection with the scheme to increase the hospital accommodation.

STRATFORD-ON-AVON.—The R.D.C. has appointed Mr. Boshier, of Bidford-on-Avon, as architect to their scheme of 20 houses.

SUNDERLAND.—The Corporation Building Committee has passed plans for the first section of the extensions to the Royal Infirmary.

SUTTON.—The U.D.C. decided that the 92 houses be wired for electric lighting, and instructed the Surveyor to obtain estimates for the work.

SUTTON COLDFIELD.—The Housing Committee recommended that application be made to the M.H. for sanction to borrow a further sum of £50,000 for housing purposes.

THOMASTOWN.—The extensions and improvements are to be made at a cost of £2,500 to Thomastown Public Elementary Schools, Portadown.

THORNE.—The West Riding C.C. recommend the construction of a new bridge to carry the Bawtry and Selby main road over the waterway of the Sheffield and South Yorkshire Navigation, at an estimated cost of £18,888. The C.C. also recommend the construction

of a steel swing bridge, at an estimated cost of £7,000, at Toll Bay.

THURNSCOE.—The West Riding E.C. recommend that a house be erected for the caretaker of the Thurnscoe new Council school, at a cost of not exceeding £500.

TYNEMOUTH.—Amended plans have been prepared for the extension of the Moorpark infectious diseases hospital, the M.H. having allowed the scheme to be proceeded with. The T.C. recommend that the Borough Surveyor be instructed to submit an amended scheme in connection with the following works: (1) Works to the east of the Bathing Pool of a sufficient character to defend the banks against the sea; (2) the erection of a retaining wall on the landward side of the Pool; (3) the provision of (a) stairs from Sharpness Point to the Pool, and (b) provision of dressing boxes and shelter; (c) conveniences for both sexes; and (d) a gas-heated drying closet, with the necessary boilers.

WALLSEND.—The T.C. has decided to apply to the M.H. for sanction to a loan of £12,000 for conversion of cell privies into the water carriage system.

WANDSWORTH.—The B.C. has received a letter from the M.H. saying he is prepared to sanction the borrowing of the sum of £36,500 for the provision of the public baths at Streatham. The Council recommend that tenders be invited for erecting and fitting up the new bath. The Council have had before them a scheme prepared by Mr. H. B. Elkington, A.R.B.A., for altering the coach house and outbuildings adjoining the Council's flats at 64, The Chase, and have given instructions for tenders to be invited for carrying out the alterations. Instructions have been given for tenders to be invited for external painting works to 24 houses in Buckhold-road on the Southfields housing estate. Plans passed: Belfrage, Saville & Hooper, 16 houses, Augustus-road, Southfield; R. H. Miller & Son, Ltd., 19 houses, Streatham Vale, 32 Abercain-road, 20 Cannmore-gardens, 22 Donnybrook-road, and 42 in Road No. 1 on the Streatham Vale estate, Streatham; Thomas & Westcott, 50 houses, Walrand-street, Streatham, and 15 Ribblesdale-road; W. J. Horsman, five houses, Chillerton-road, Streatham, and two Ramsdale-road; Wates, Ltd., (1) 12 houses, Streatham Vale, Streatham, (2) four shops, Streatham Vale, Streatham; H. S. Lee, Ltd., women's convenience, The Angel public-house, High-street, Roehampton; C. H. Lingfield, hall, a.c., at rear of Deerhurst Club and Institute, 2 and 4, Steerforth-street, Springfield.

WARRINGTON.—The T.C. has received sanction to borrow £30,000 for housing. The Borough Surveyor has been instructed to prepare plans for the erection of a smaller type of house on the Training College site, and the T.C. resolved that application be made for the approval of the M.H. to the granting of assistance in respect of an additional 130 houses. The Council resolved that application be made for the M.H. for sanction to borrow £2,738 in respect of the widening of Bruche Bridge, and the reconstruction of Manchester-road. Plans passed: Seven houses, Cumberland-street, for A. Wright; six houses, New-road, off Man-

chester-road, for A. Swinton; 14 semi-detached Queens-avenue, for J. Broadhurst; 22 semi-detached houses, New-street, off Wilderspool-causeway, 1 and A. Ashton.

WATSON-DEARNE.—The M.H. has approved scheme for the extensions to the Wath Wood Is. Hospital. A lay-out is being prepared of 20 a land in West Melton where the Council intend to build 250 houses. Sites have also been acquired at Sandgate and Wath Wood for the erection of a scheme is under consideration for the erection of a secondary school at Sandgate. Messrs. John, brewers, of Tadcaster, are negotiating for a site the Council's housing site where they propose a new hotel.

WEST MERSEA.—The Essex E.C. recommend installation of heating apparatus at the school, at an estimated cost of £167.

WEST RIDING.—The C.C. recommend that light be installed at the Mitchell Memorial at an estimated cost of £300.

WREYMOUTH.—The T.C. has received from the approval for the erection of 44 parlour type houses on the Westham housing site. The Minister has given formal sanction to the borrowing of £23,297 for the erection of the houses.

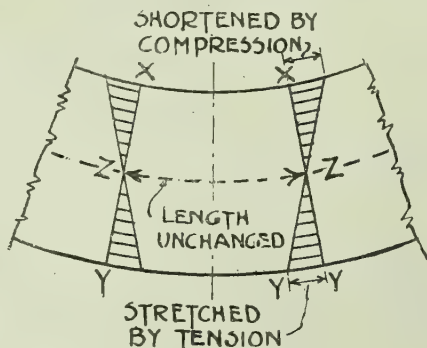
WITFIELD.—The U.D.C. has resolved to tenders for the construction of a tramway shed underground conveniences in accordance with plans, a.c., submitted by the surveyor.

WIDAN.—The Miners' Welfare Fund Committee contributed £25,000 for the extensions to the and District Mining and Technical College.

WILES-EN.—The U.D.C. has received sanction from the M.H. to the borrowing of £1,670 for the erection of public baths at Disraeli-road. The Council recommend that the Clerk be authorised to apply to the M.H. for sanction to the raising of a loan, upon the Engineer's estimates, totalling £14,820, in respect of private street improvements under: Oxgate-gardens, £4,672; Herbert-gate, £2,746; Ellesmere-road, £2,967; Dewsbury, £1,432; Hanover-road, £2,853. The M.H. approved the Council's proposal to accept the of the Calway Construction Co., for the erection of 100 concrete houses on the Brentfield estate. A loan is to be made to the M.H. for sanction to the of a loan of £15,300 in connection with the widening of High-street, Harlesden. Plans: New ward to hospital, Harlesden-road, Willes Messrs. Newberry & Greenaway, for the of the Willesden General Hospital; twelve Liddell-gardens, Kensal-rise, by Messrs. Done, & Co., for Mr. R. H. Currier; block plan of new and roads, Whitby-avenue, Park Royal, by Walter Bridges & Co., for the Indestructible Co., Ltd.; eight houses, Mount Pleasant-road, Rise, for Messrs. F. Thornton & Co.

WOODHOUSE.—The West Riding E.C. recommend that additional classroom and cloakroom accommodation be provided at the Secondary School, at an estimated cost of £2,426.

Neutral Axis



One of the 79 Diagrams from
"Elementary Guide to Reinforced Concrete."

'Elementary Guide to Reinforced Concrete'

By ALBERT LAKEMAN, L.R.I.B.A., M.I.Struct.E., etc.

Specially written for those who wish to gain a thorough knowledge of the principles of reinforced concrete design and construction. It is written on the assumption that the reader has no previous knowledge whatever of the subject. The accepted methods of design are lucidly explained in simple language, and made clear by comparison with everyday things in a manner readily understandable by the beginner. This book should be specially useful to Students, Clerks of Works, Foremen, and all who wish to gain a knowledge of reinforced concrete design and construction in the easiest way.

"The book is indeed most simply written, and I will bring it before my students."—A Professor of Architecture and Building.

PRICE

2/- from Concrete Publications, Ltd.
20, Dartmouth St., London, S.W.1

TRADE STANLEY MARK

The Largest Manufacturers of Surveying and Drawing Instruments in the World

Foremost
among
the
BEST

Latest "M 147"
Catalogue
sent Post Free
on application



Fuller Cylindrical Slide Rule, equal to a straight slide rule 500" long.

W. F. STANLEY & CO., LTD.
286, High Holborn, London, W.C.1

PRICES CURRENT OF MATERIALS

ing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

000 Alongside, in River Thames up to London Bridge.	£ s. d.
Hard Stocks	4 3 6
Delivered at London Goods Stations.	3 18 6
at £ s. d.	
Cross 2 13 3	Best Blue
ved for	Pressed Staffs 9 5 0
... 2 15 8	Do. Bullnose 9 15 0
nose ... 3 8 3	Blue Wire Cuts 7 5 0
bridge Fire brick:—	
8 11 0 3 in.	10 3 0

BRICKS—

White	D'ble Str'ch'rs 30 0 0
y, and	D'ble Headers 27 0 0
Glazed	One Side and
thers ... 21 10 0	two Ends ... 31 0 0
... 21 0 0	Two Sides and
Bull-	one End ... 32 0 0
4 in.	Squints ... 29 10 0
23 0 0	Other colours, Harl
Quality, £1 per 1,000 less than best.	Cream
£2 extra over white.	Other colours, Harl
£3 10s. extra over white.	

BREEZE CONCRETE SLABS.

Delivered London	£ s. d.
yd. super 1 11	3 in. per yd. super 2 9
2 4	4 in. " 3 6
Ballast ... 10 6	per yd.
Sand ... 13 9	
ashed Sand ... 14 6	delivered
single for Ferro-	2 miles
ete ... 12 9	radius
oken Brick ... 14 0	Padding-
... 7 6	ton.
delivered in London area in full van loads.	
land Cement. British	
ard Specification. Test £2 18 0 to £3 3 6	
onside at Vauxhall in 80-ton lots.	
te per ton extra on above.	0 10 0
Cement (Waterproof).	4 8 0
Cement.	8 15 0
Cement, White.	5 13 0
Cement, Pink.	5 10 0
Coarse, Pink.	3 0 0
White.	3 12 6
Fine.	5 12 0
Coarse.	3 9 0
Finish.	3 17 0
ne Lime.	2 11 9
ne.	2 11 9
und Blue Lias Lime.	2 4 6
appings.	32 0 0
acks are charged 1s. 9d. each and credited	1 12 0
if returned in good condition within three	
1, curr. pd.	
ge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.	

STONE.

ONE—delivered in railway trucks at	£ s. d.
urne Park, Paddington, G.W.R., or	
Lambeth, G.W.R., per ft. cube.	2 9½
delivered in railway trucks at Nine	
L. & S.W.R., per ft. cube.	2 11½
STONE—	
Whitbed, in random blocks of 20 ft.	
ge, delivered in railway trucks at	
Elms, L. & S.W.R., South Lambeth	
on, G.W.R., and Westbourne Park,	
ington, G.W.R., per ft. cube.	4 4
delivered on road wagons at above	
ns, per ft. cube.	4 5
asebed, 3d. per ft. cube extra.	
1d. per ft. cube extra for every foot over	
average, and 1d. beyond 30 ft.	
OOD STONE—	
ered at any Goods Station, London.	
on blocks, up to 10 ft. cube. P. ft. cb.	7 0
locks from 10 ft. and over	17 0
sides	27 0
2 or four sides.	32 0
NE, BLUE—Robin Hood Quality.	
red at any Goods Station, London.	£ s. d.
two sides landings to sizes (under	
per.) Per ft. super	5 6
ed two sides, ditto.	6 0
two sides slabs (random sizes)	2 3½
n. sawn one side slabs (random	
in. ditto, ditto.	1 6½
in. ditto, ditto.	1 4
red at any Goods Station, London.	
random blocks. Per ft. cube	6 3
two sides landing to sizes (under	
per.) Per ft. super	5 1½
d two sides ditto	6 1½
two sides slabs (random sizes)	2 10
ditto ditto	2 1½
aced random flags. Per yd. super	9 0

ARTIFICIAL STONE.

in London Area in full van loads, per ft.	
au, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.	

WOOD.

GOOD BUILDING DEAL.

per stan.	inches.	per stan.
23 0	3 x 6	£23 0
23 0	3 x 11	28 0
26 0	2 x 11	28 0
25 0	3 x 9	25 0
24 0	2 x 9	25 0
23 0	3 x 4	23 0
22 0	3 x 4	23 0

PLANED BOARDS.

£32 0	1 x 9	£30 0
-------	-------	-------

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
1	21/-	1½	32/6
1	23/-	1½	37/6
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.	Inches.	per sq.
1	25/-	1½	16/6
1	32/6	1½	20/-
1½	37/6	1½	25/-

BATTENS.

¾ x 2	2 6 per 100 ft.
-------	-----------------

SAWN LATHS.

Per bundle	1" AND UP THICK.	0 2 4
------------	------------------	-------

Dry Austrian Wainscoat, per	0 16 0 to 0 18 0
-----------------------------	------------------

Dry American and/or Jap-	0 15 0
--------------------------	--------

anese Figured Oak, ft. cube	0 11 0 to 0 13 0
-----------------------------	------------------

Dry American and/or Jap-	0 16 0 to 0 18 0
--------------------------	------------------

anese Plain Oak, ft. cube	0 18 0 to 1 1 0
---------------------------	-----------------

Dry Cuba Mahogany, ft. cube	1 4 0 to 1 10 0
-----------------------------	-----------------

Dry Teak, ft. cube	0 13 0 to 0 15 0
--------------------	------------------

Dry American Whitewood,	0 11 0 to 0 14 0
-------------------------	------------------

ft. cube	4 10 0 to —
----------	-------------

Best Scotch glue, per cwt.	4 7 0 to 5 10 0
----------------------------	-----------------

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£ s. d.		£ s. d.
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

	£ s. d.	Per 1,000 f.o.r. London.
Best machine-made tiles from Brosley or	£ s. d.	
Staffordshire district	5 12 6	
Ditto hand-made ditto	5 17 6	
Ornamental ditto	6 2 6	
Hip and valley tiles	0 9 6	
(per dozen)	Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—	£ s. d.
R.S. Joists, cut and fitted	13 10 0
Plain Compound Girders	15 10 0
Stanchions	17 10 0
In Roof Work	20 10 0

MILD STEEL ROUNDS.

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	12 10 0	½ in. to 1 in.	11 5 0
¾ in.	11 10 0	¾ in. to 2 ½ in.	11 0 0

WROUGHT-IRON TUBES AND FITTINGS.
(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

	Tubes.	Fittings.	Flanges.
	Sizes ½" to 6"	½" & Over	½" & Over
Black Gas	55% .47½% .50%	57½% .57½% .60%	57½% .57½% .60%
Blue Water	50% .42½% .45%	52½% .52½% .55%	52½% .52½% .55%
Red Steam	45% .37½% .40%	47½% .47½% .50%	47½% .47½% .50%
Galv'd Gas	40% .37½% .40%	47½% .47½% .50%	47½% .47½% .50%
Water	33½% .32½% .35%	42½% .42½% .45%	42½% .42½% .45%
CI. HALF-ROUND GUTTERS—London Prices, ex Works.	Per yd. in 6 ft. lengths.	Gutters.	Nozzles. Stop Ends.
3 in.	1 12½	1 12½	3 ½d.
3 ½ in.	1 14	1 10½	3 ½d.
4 in.	1 15	1 12½	3 ½d.
4 ½ in.	1 16½	1 14	4 ½d.
5 in.	1 19½	1 15½	5 ½d.
O.G. GUTTERS.			
3 in.	1 7	1 3½	3 ½d.
3 ½ in.	1 7	1 3½	3 ½d.
4 in.	1 8½	1 4	3 ½d.
4 ½ in.	1 10½	1 6½	4 ½d.
5 in.	2 3	1 9	5 ½d.

RAIN-WATER PIPES, &c.

	Pipe.	Bends, stock Branches, angles, stock angles.
Per yd. in 6 ft.		
2 in. plain	1 9½	1 2½
2 ½ in.	1 11½	1 4
3 in.	2 4½	1 8
3 ½ in.	2 10	2 10½
4 in.	3 8	2 4½
L.C.C. COATED SOIL PIPES—London Prices, ex Works.		
	Pipe.	Bends, stock Branches, angles, stock angles.
2 in. per yd. in 6 ft. plain	2 11	2 3
2 ½ in.	3 5	2 6
3 in.	4 1	2 9
3 ½ in.	4 5½	3 5
4 in.	4 11½	3 9½

L.C.C. COATED DRAIN PIPES—London Prices ex Works.

	Pipe.	Bends, stock Branches, angles, stock angles.
3 in. per yd. in 6 ft. lengths	4 3	5 9
4 in.	6 3	6 11
5 in.	7 10	12 0
6 in.	9 6	15 0
Gasken for jointing	38/6 per cwt.	

IRON—	£ s. d.	£ s. d.
Common Bars	13 10 0 to 14 10 0	
Staffordshire Crown Bars—		
good merchant quality	14 5 0	15 5 0

Staffordshire	"Marked	£ s. d.	£ s. d.
Bars	16 10 0	13 10 0	0
Mild Steel Bars	11 0 0	12 0 0	0
Steel Bars, Ferro-Concrete			
quality, basis price	11 0 0	12 0 0	0
Hoop iron, basis price	16 0 0	17 0 0	0
" Galvanised	31 0 0	32 0 0	0
Soft Steel Sheets, Black—			
Ordinary sizes, 6 ft. to 9 ft.	13 10 0	14 10 0	0
" " " 24 g.	14 10 0	15 10 0	0
" " " 26 g.	16 10 0	17 10 0	0
Sheets Flat Best Soft Steel, C.I.L. & C.A. quality—			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	19 10 0	21 10 0	0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g.			
and 24 g.	21 10 0	22 10 0	0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	23 10 0	25 10 0	0
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft.	18 10 0	19 10 0	0
Ordinary sizes, 6 ft. to 9 ft.	19 0 0	20 0 0	0
Ordinary sizes, 6 ft. to 9 ft.	22 0 0	23 0 0	0
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	22 10 0	23 10 0	0
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0	26 10 0	0
Best Soft Steel Sheets, 26 g.	26 0 0	27 0 0	0
Cut Nails, 3 in. to 6 in. (under 3 in. usual trade extras.)	19 10 0	21 0 0	0
METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.			

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	51 10 0
Pipe in coils	53 0 0
Soft Pipe	55 0 0
Compo pipe	56 0 0
NOTE—Country delivery, 30s. per ton extra; lots under 3 cwt., 3s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.	
Old lead, ex London area, at Mills. per ton	36 10 0
Do., ex country, carriage forward per ton	37 0 0

COPPER.

	£ s. d.
Seamless Copper tubes (basis)	per lb. 1 1½
Strong sheet	2 3
Thin	2 4
Copper nails	2 5
Copper wire	2 4

PLUMBERS' BRASS WORK.

Delivered in London.	
NEW RIVER PATTERN SCREW DOWN BIB COOKS FOR IRON.	
½ in. 1 in. 1½ in. 2 in.	
29/- 45/- 76/- 153/- 246/- 510/- per doz.	
NEW RIVER PATTERN SCREW DOWN STOP COOKS AND UNIONS.	
½ in. 1 in. 1½ in. 2 in.	
41/- 62/- 92/- 174/- 300/- 588/- per doz.	
NEW RIVER PATTERN SCREW DOWN MAIN FERULES.	
½ in. 1 in.	
39/- 60/- 116/- per doz.	
CAPS AND SCREWS.	
1½ in. 2 in. 3 in. 4 in.	
7/6 10/- 14/- 23/- 30/- 42/- per doz.	
DOUBLE NUT BOILER SCREWS.	
½ in. 1 in. 1½ in. 2 in.	
7/6 11/- 17/- 29/- 36/- 63/- per doz.	
BRASS SLEEVES.	
1½ in. 2 in. 3 in. 4 in.	
10/- 12/- 20/- 24/- 31/- per doz.	
NEW RIVER PATTERN CROYDON BALL VALVES, S.F.	
½ in. 1 in. 1½ in. 2 in.	
35/- 56/- 98/- 162/- 223/- per doz.	
DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING SCREW.	
1½ in. 1½ in. 2 in. 3 in.	
8 lbs. P. traps .. 33/- 41/- 56/- 101/- per doz.	
8 lbs. S. traps .. 35/- 45/- 66/- 126/-	
TIN—English Ingots, 2/6 per lb. SOLDER—Plumbers' 1/2, Timmen's 1/4, Blowpipe 1/5 per lb.	

PAINTS, &c.

	£ s. d.
Raw Linseed Oil, in pipes	per gallon 0 3 8
" " in barrels	0 3 10
Bolled " in drums	0 4 1
" " in barrels	0 4 1
Turpentine in drums	0 4 4
" in barrels	0 6 8
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)	61 15 0
GENUINE WHITE LEAD PAINT—	
" Father Thames," " Nine Elms,"	
" Park," " Supremus," " St. Paul's,"	
" Spedol," " Polacco" and other best brands (in 14 lb. tins) not less than 5 cwt. lots.	
Red Lead, Dry (packages extra)	per ton 82 15 0
Best Linseed Oil Putty	per ton 66 0 0
Filocol	per cwt. 0 15 0
Size. XD Quality	15 6 0
Size. XD Quality	15 6 0

Continued on next page.

The information given on this page has been specially compiled for THE BUILDER and is copyright. Our aim in it of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.



PRICES CURRENT OF MATERIALS (contd.)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
15 oz. fourths .. 3d.	32 oz. fourths .. 8d.		
15 " thirds .. 4d.	32 " thirds .. 10d.		
21 " fourths .. 4d.	Obscured Sheet, 15 oz. 4d.		
21 " thirds .. 5d.	" 21 " 5d.		
26 " fourths .. 6d.	Fluted 15oz. 6d., 21oz. 9d.		
26 " thirds .. 7½d.	En'led 15oz. 5d., 21 oz 7d.		

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
½ Rolled plate .. 4½d.	
¾ Rough rolled .. 5½d.	
¾ Rough rolled .. 5½d.	
Figured Rolled, Baltic, Oceanic, Arctic, Stip-polyte, and small and large Flemish white .. 6½d.	
Do, tinted .. 9d.	
Rough Sheet .. 6d.	
White Rolled Cathedral .. 5½d.	
Tinted do. .. 7½d.	

Cast Plate is same price as rough rolled.

VARNISHES, &c.

	Per gallon.
Oak Varnish .. Outside	0 14 0
Fine ditto .. ditto	0 13 0
Fine Copal .. ditto	0 18 0
Pale Copal .. ditto	1 0 0
Pale Copal Carriage .. ditto	1 4 0
Best Ditto .. ditto	1 12 0
Floor Varnish .. Inside	0 13 0
Fine Copal Cabinet .. ditto	1 2 6
Fine Copal Flattening .. ditto	1 0 6
Hard Drying Oak .. ditto	0 13 0
Fine Hard Drying Oak .. ditto	0 19 0
Fine Copal Varnish .. ditto	1 0 0
Pale ditto .. ditto	1 2 0
Best ditto .. ditto	1 12 0
Best Japan Gold Size .. ditto	0 12 6
Best Black Japan .. ditto	0 10 0
Oak and Mahogany Stain (water) .. ditto	0 12 0
Brunswick Black .. ditto	0 7 6
Berlin Black .. ditto	0 14 6
Knotting (patent) .. ditto	1 5 0
French and Brush Polish .. ditto	0 17 0
Liquid Dryers in Terebinth .. ditto	0 9 0
Cuirass Black Enamel .. ditto	0 7 0

Preserving the Amenities.

The proposed building of four red-brick houses by the Chard Rural District Council threatened to spoil the quiet charm of the stone-built village of Winsham, but Major G. F. Davies, M.P., of Leigh House, has undertaken to shoulder the burden of building the houses of the same material as the rest of the village.

Builders' Estates.

Mr. George Haigh, of Barnsley, builder and contractor, left (net personality, £1,012) £6,426.

Mr. Thomas Fuller, of Belle Vue, Doncaster, retired builder, left £7,728 (net personality, £1,677).

Mr. J. H. Weatherseed, builder, of Bohemia-road, St. Leonards-on-Sea, has left estate of the gross value of £15,126.

Mr. Isaac Robson, "Kirklands," Eaglescliffe, Durham, of Isaac Robson & Co., Ltd., engineers' and builders' merchants, Stockton-on-Tees, has left the net estate of £32,315.

Mr. Charles Almond, of Coalside, Southwick-on-Wear, engineer, has left the net estate of £16,864.

Mr. H. Cooper, plumber and decorator, of Swan-lane, Evesham, has left gross estate of £14,085.

Mr. W. Hawkins, builder, of Peterborough, has left net estate of £14,620.

Mr. A. K. Irving, builder, of Marlborough-road, Southampton, has left net estate of £5,603.

Mr. F. Marland, contractor, of Grenville-street, Ashton-under-Lyne, Lancs, has left gross estate of £20,903.

Obituary.

The death has taken place at Pantygwair, Cross Inn, of Mr. J. James, builder and contractor, in his 64th year.

The death has taken place of Mr. John William Vaughan, of Colwyn Bay, at the age of 85.

THE SCOTTISH BUILD

THE WEST HIGHLAND
SLATE INDUSTRYNEW BUILDINGS
SCOTLAND

A deputation representing the West Highland slate industry and Aberfoyle slate quarries recently waited on Captain Elliot, Parliamentary Under-Secretary for Health, and the Board of Health in the Board's offices, Edinburgh. Mr. McCowan, Mr. Lamb and Mr. McCulloch, on behalf of the deputation, made strong representations in favour of the use of Scottish slates on Scottish housing schemes. They recognised that the Board of Health had a duty to perform to the community to keep the cost of houses as low as possible. They urged, however, that the cheapest was often the dearest, and that, judged by the test of quality, there was no roof covering on the market to equal West Highland slates. They required less maintenance and even though their initial cost might be slightly higher than that of other roofing materials, this initial higher cost in a few years would be more than justified. The saving made by the use of cheaper material did not justify the closing down of the industry, the hardship which this imposed on the Highland communities, and the increased cost to the State and local authorities through the unemployment which would ensue.

Captain Elliot, in replying to the deputation, pointed out that the Board were expressly prohibited by Section 10 of the Housing Act, 1924, from imposing any condition, in approving housing schemes, which would prevent the materials required from being purchased in the cheapest market at home or abroad. The question raised others which certainly could not be decided by the Board. The Board, however, had great sympathy with the case put forward by the deputation, and had decided that, provided the all-in cost of houses for which tenders were submitted to them were such as they could approve, they would take no exception to the use of Scottish slates where these were asked for by local authorities and were included in the tenders.

Renfrew (Lower).—HOUSE.—Plans passed for the erection of a power station, Kilmacolm-road, Bridge-of-Weir, for Valley Electrical Power Co., Ltd., 53, street, Glasgow, per Mr. Donald, architect, Mansion House, Greenock.

Stanley.—HOUSES.—A site between Church and Perth-road has been obtained for the erection of three houses. The architects are Messrs. & Duncan, Perth.

Perth.—ACADEMY.—The Perthshire Council considering the question of acquiring Viewlands for the proposed new Academy.

Annan.—WATER SCHEME.—The Annan Waterworks Co. has agreed to spend £19,000 in capital connection with the Lower Annan scheme.

Renfrew.—BUILDING.—The Dean of Guild Court passed plans for the new Renfrew Housing Society. The new building of the High-street improvement scheme the estimated cost of the work is £22,000.

Glasgow.—POORHOUSE.—The District of Control has agreed, at the request of the Scottish Office, that plans for increased accommodation should be formulated and submitted to the General Board.

Edinburgh.—HOUSES.—The Housing Committee has recommended the Town Council to sanction the erection of 500 houses, new subsidy scheme recently outlined by the Prime Minister.

Airdrie.—HOUSES.—The Town Council decided to proceed with the erection of apartment cottages and 32 four-roomed houses. Messrs. John Scotland & Co. have been appointed architects. Offers have been accepted for 26 three-apartment cottages.

BUILDING TRADE WAGES IN SCOTLAND

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for any error that may occur:—

	Masons.	Brick-layers.	Car-penters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Masons' Assistants.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/3	1/7	1/8
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/8
Alexandria	1/8	1/8	1/8	1/8	1/8	1/3	—	1/8
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/8
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/8 to 1/1
Bialgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/1
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/3	1/8	1/8
Coatbridge	1/8	1/8	1/8	1/8	1/3	—	1/6½	1/3 to 1/1
Dumbarton	1/8	1/8	1/8	1/8	1/3	1/8	1/8	1/8
Dumfries	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/3	1/3	1/8
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galaahills	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Glasgow	1/8	1/8	1/8	1/8	1/8	1/3	1/3	1/3
Greenock	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Hamilton	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Hawick	1/7	1/7	1/7	1/7-1/7½	1/7	1/7	1/7	1/2
Helensburgh	1/3	1/3	1/3	1/3	1/3	1/3	1/7	1/3
Inverness	1/3	—	1/5	1/4	1/5	1/5	1/4	1/- to 1/1
Kilmarnock	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/-
Lanark	1/8	1/8	1/8	1/8	1/8	1/3	1/3	1/- to 1/1
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Motherwell	1/8	1/8	1/8	1/8	1/8	1/3	1/3	1/2
Perth	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/8
Stirling	1/3	1/3	1/8	1/8	1/8	1/3	1/3	1/3
Stirlingshire (Eastern District)	1/3-1/10	1/3-1/10	1/8	1/8	1/7	1/3	1/6½	1/3
Wishaw	1/8	1/8	1/8	1/8	1/8	1/3	1/7	1/3

The information given in this table is based on the rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for any error that may occur:—



CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep....	per yard cube	s. d.
add if in clay.....	" "	1 0
add for every additional depth of 6 ft.....	" "	0 6
banking and strutting to trenches.....	per foot super	0 5
Do. to sides of excavation, including shoring	" "	1 0

CONCRETOR.

Portland cement concrete in foundation 1 to 6.....	per yard cube	32 0
add if in underpinning in short lengths.....	" "	7 0
add if in floors 6 in. thick.....	" "	3 3
add if in beams.....	" "	3 9
add if aggregate 1:2:4.....	" "	10 0
add for hoisting not exceeding 10 ft. beyond the first 10 ft.....	" "	2 6

BRICKLAYER.

Reduced brickwork in lime mortar and Fletton bricks.....	per rod	£ s. d.
add if in stocks.....	" "	7 10 0
add if in Staffordshire blues.....	" "	22 0 0
add if in Portland cement and sand.....	" "	1 10 0

FACINGS.

extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks.....	per ft. super	0 0 14
---	---------------	--------

POINTING.

eat flat struck or weathered joint.....	" "	0 0 3
---	-----	-------

ARCHES.

extra only to the price of ordinary brickwork:—	" "	0 0 10
air external in half brick rings.....	" "	0 1 9
bedded in stocks.....	" "	0 6 0
abbed and gauged jointed in putty camber or segmental.....	" "	0 6 0

SUNDRIES.

amp course in double course of slates breaking joint and bedded in Portland cement.....	" "	0 1 0
ting ordinary register grates and stoves.....	each	1 0 0
ting kitchener, including forming flues, &c., with all necessary fire bricks.....	" "	4 15 0

ASPHALTER.

if-inch horizontal damp course.....	per yard sup.	s. d.
ree-quarter-inch vertical damp course.....	" "	8 6
sh on flats in two thicknesses.....	" "	6 3
gel fillet.....	per foot run	0 3
ting and fillet 6 in. high.....	" "	1 2

MASON.

rk stone templates fixed.....	per foot cube	13 0
rk stone sills fixed.....	" "	22 0
th stone and all labour fixed.....	" "	10 6
thland stone fixed.....	" "	20 0

SLATER.

sh 16 in. x 8 in. 3 in. lap, including nails.....	per square	72 9
o 20 in. x 10 in. Do. Do.....	" "	80 9
o 24 in. x 12 in. Do. Do.....	" "	90 0

CARPENTER AND JOINER.

framed in plates.....	per foot cube	5 0
Do. joists.....	" "	5 6
Do. roofs, floors, and partitions.....	" "	6 0
Do. trusses.....	" "	8 6

rough close boarding.....	per sq.	35/6 | 40/- | 45/- | 72/-
centering for concrete floor, including struts or hangers.....	" "	s. d.
to beams.....	per ft. sup.	1 0
res for arches.....	" "	1 6
er boards and bearers.....	" "	1 0

FLOORING.

edges shot.....	per sq.	44/6 | 53/- | 60/6
tongued and grooved.....	" "	49/- | 57/6 | 65/-
matchings.....	" "	45/- | 51/- | 65/-
ded skirting, including back- s and grounds.....	per ft. sup.	1/6 | 1/9 | 2/0 | 2/6

SASHES AND FRAMES.

and-a-half moulded sashes or casements.....	per foot super.	s. d.
Do. Do. Do.....	" "	1 10
for fitting and fixing.....	" "	2 1
cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights; average size.....	" "	0 3

DOORS.

panel square framed.....	per ft. sup.	1½" | 1½" | 2"
panel Do.....	" "	2/1 | 2/4 | 2/6
panel moulded both sides.....	" "	2/5 | 2/8 | 2/11
panel Do. Do.....	" "	2/8 | 2/11 | 3/2
panel Do. Do.....	" "	2/11 | 3/2 | 3/5

CARPENTER AND JOINER—continued.

FRAMES.

Deal wrot moulded and rebated.....	per foot cube	s. d.
Plain deal jamb linings framed.....	per ft. sup.	1" | 1½" | 1½"
Deal shelves and bearers.....	" "	1/7 | 1/8 | 1/11
Add if cross-tongued.....	" "	1/4 | 1/6 | 1/9
	2d.	2d.

STAIRCASES.

Deal treads and risers in and including rough brackets.....	1" | 1½" | 1½" | 2" | 2½"
Deal strings wrot on both sides and framed.....	2/1 | 2/4 | 2/9 | — | —
	1/8 | 2/- | 2/2 | 2/8 | —

Housings for steps and risers.....	each	s. d.
Deal balusters, 1 in. x 1½ in.....	per ft. run	0 11
Mahogany handrail: average 3 in. x 3 in.....	" "	0 9
Add if ramped.....	" "	6 0
Add if wreathed.....	" "	11 10
	" "	23 9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts.....	8½d.	Rim locks.....	2/-
Sash fasteners.....	11½d.	Mortice locks.....	4/6
Casement fasteners.....	1/5	Patent spring hinges and letting into floor and making good.....	19/-
Casement stays.....	1/2		
Cupboard locks.....	1/5		

FOUNDER AND SMITH.

Rolled steel joists.....	per cwt.	s. d.
Plain compound girders.....	" "	16 3
Do. stanchions.....	" "	19 0
In roof work.....	" "	21 9
	" "	27 6

RAIN-WATER GOODS.

	3"	4"	5"	6"
Half-round plain rebated joints.. ft. run	1/6	1/9	2/-	2/6
Ogee Do. Do.....	1/9	2/-	2/6	3/3
Rain-water pipes with ears	1/9	2/7	—	—
Extra for shoes and bends..... each	4/4	5/11	—	—
Do. stopped ends	1/11	2/4½	3/7	4/-
Do. nozzles for inlets	2/2	2/7	3/10	4/3

PLUMBER.

Milled lead and laying in flashings and gutters....	per cwt.	s. d.
Do. Do. in flats.....	" "	66 0
Extra labour and solder in coated cesspools.....	each	65 0
Welf joint.....	per ft. run	6 9
Soldered seam.....	" "	0 6
Copper nailing.....	" "	1 6
	" "	0 6

Drawn lead waste per ft. run	1½" | 1½" | 1½" | 1½" | 4"
Do. service.....	1/2 | 1/9 | 2/- | 3/4 | 4/-
Do. soil.....	1/8 | 2/2 | 2/7 | 3/10 | —
Bends in lead pipe each.....	— | — | — | — | 3/3
Soldered stop ends.....	1/2 | 1/8 | 2/1 | 2/10 | 3/6
Red lead joints.....	11d. | 1/- | 1/3 | 1/11 | 2/4
Wiped soldered joints.....	2/10 | 3/6 | 4/- | 4/11 | 6/6
Lead traps and cleaning screws.....	— | — | — | 14/7 | 19/6
Bib cocks and joints.....	6/4 | 9/7 | 15/4 | 41/- | —
Stop cocks and joints.....	15/4 | 17/2 | 25/8 | 64/- | —

PLASTERER.

Render, float and set in lime and hair.....	per yard sup.	s. d.
Do. Do. Sirapite.....	" "	2 4
Do. Do. Keen's.....	" "	2 7
Add sawn lathing.....	" "	3 7
Add metal lathing.....	" "	1 7
Portland cement screed.....	" "	2 6
Do. plain face.....	" "	2 2
Mouldings in plaster.....	per 1 girth	0 14
One-and-a-half granolithic pavings.....	per yard sup.	5 9

GLAZIER.

21 oz. sheet plain.....	per foot sup.	0 8½
26 oz. Do.....	" "	1 0
Obscured sheet.....	" "	1 1
½ in. rolled plate.....	" "	0 9
½ in. rough rolled or cast plate.....	" "	0 10½
½ in. wired cast plate.....	" "	1 4

PAINTER.

Preparing and distempering, 2 coats.....	per yard sup.	0 9
Knotting and priming.....	" "	0 7
Plain painting, 1 coat.....	" "	0 9
Do. 2 coats.....	" "	1 2
Do. 3 coats.....	" "	1 9
Do. 4 coats.....	" "	2 4
Graining.....	" "	2 3
Varnishing twice.....	" "	1 9
Sizing.....	" "	0 3
Flatting.....	" "	0 7
Enamel.....	" "	1 1
Wax polishing.....	per foot sup.	0 6
French polishing.....	" "	1 2
Preparing for and hanging paper.....	per piece, 2/- to 4/-	

*These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TRADE NEWS

Messrs. G. H. Carter, Ltd., building contractors, have removed to Clissold Works, 57-69, Green-lanes, London, N. 16. Telephone: Clissold 6921.

We learn from Messrs. The Bath Arterraft, Ltd., Lower Bristol-road, Bath, that they supplied the furniture, fittings, screen work, and panelling for the offices, board room, &c., of the Eagle, Star and British Dominions Insurance Co.'s building recently completed in Threadneedle-street, E.C., and illustrated in our issue for October 2.

Petter Oil Engines.

We understand that the Petter Oil Engine exhibit at the recent Caldas da Rainha Exhibition at Lisbon was awarded another Gold Medal.

Pelumina Cement.

With the present shortage of skilled labour in the building trades, coupled with the higher rates of pay and shorter hours worked, it is doubly essential that no time should be wasted in the execution of a contract. Hitherto waste of time has been unavoidable with a slow-maturing and hardening cement, but there is now on the market a quick-drying cement at a price very little above that of ordinary cement. Its name is Pelumina, a compound of "Pelican" and "Alumina," and it is a new product of Messrs. G. & T. Earle, Ltd., who have issued a brochure containing several graphs illustrating some comparative tests. When the test results of Pelumina are compared with the British Standard Specification requirements, it is seen that this cement attains a strength in 24 hours which fulfils these requirements at seven days. Piles constructed with Pelumina have been driven in eight days, as against the 28 days required by ordinary cement, and shuttering can be struck safely within 48 hours after placing the concrete.

Allen-Liversidge, Ltd.

Messrs. Allen-Liversidge, Ltd., are showing at Stand No. 171, Olympia, the E.C.L. cast aluminium (electric and acetylene) for commercial vehicles and the patent "self-contained" lamp, in which lamp and generator are conveniently combined in one unit. Both the E.C.L. and their own A-L lamps are suitable for use with either a generator or dissolved acetylene in cylinders. A-L "Dual-purpose" head-lamps, also on view, are designed so that each is suitable for either electric or acetylene lighting, and with the A-L Focus Head-light Attachment, whereby complete control of the focus of the lamps is maintained by the driver from his seat at the wheel. The makers claim that this device is a thoroughly practical solution of the dazzle problem, and that it is also of great use in fog. Its effect will be demonstrated on the stand.

The Truscon Floor.

The Trussed Concrete Co. claim to have combined the economy, lightness and sound-proof qualities of a timber joist floor with the strength and fireproof qualities of a solid concrete floor by reproducing the timber floor in reinforced concrete. The difference in cost is slight, but a great saving is realised in the extra life of the concrete floor and the capitalised value of the reduction of insurance premiums. The Truscon floor is not only extremely strong itself, but it imparts its strength to the entire framework of the building, because it is cast at the same time and in one piece with either the concrete casing to the steel beams or the reinforced concrete, or on the wall in the case of brick buildings. The makers claim that it is quickly and easily constructed, and affords flat ceilings of long span. These numerous merits of the Truscon hollow floor are proven by the list of buildings in which they are being used, which includes such important works as Adelaide House, Devonshire House, Messrs. Cook's new premises in Berkeley-street, and the new India Building at Liverpool. Particulars may be obtained on application to the head offices at 22, Cranley-gardens, S.W.7.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes accepted. † Denotes provisionally accepted.
‡ Denotes recommended for acceptance.
§ Denotes accepted subject to modification.

ASHTON-UNDER-LYNE.—Bank premises on Stamford-street, for the Manchester & County Bank, Ltd., King-street, Manchester. Messrs. Mills & Murgatroyd, architects, 23, Strutt-street, Manchester:—
*E. Marshall & Sons, Ltd., Cockbrook.

ASHTON-UNDER-LYNE.—Secondary school, for the Lancashire E.C. Mr. H. Littler, County Architect, Preston:—
*E. Marshall & Sons, Ltd., Cockbrook.

ASHTON-UNDER-LYNE.—Additional premises, for the Ashton Conservative Club, Stamford-street. Messrs. Eaton, Sons & Cantrell, architects:—
*E. Marshall & Sons, Ltd., Cockbrook.

AUDENSHAW.—Twelve houses on Ash-street and Sidmouth-street, site for Messrs. Nobletts, Ltd. Messrs. Burton, Percival & Lever, architects, Ashton-under-Lyne:—
*David Turner, Denton.

BANGOR.—Alterations and additions to the hospital. Mr. S. C. Hunter, Building Surveyor, Scottish Provident Buildings, Belfast. Quantities by the architects:—

J. D. Pollock, Bangor	£3,687	1	1
H. & J. Martin, Belfast	3,615	0	0
James Hogg & Sons, Ltd., Belfast	3,612	0	0
J. & R. W. Taggart, Belfast	3,600	0	0
James Miskimmin, Belfast	3,552	0	0
McAuley & McDroy, Belfast	3,477	0	0
F. B. McKee & Co., Ltd., Belfast	3,462	0	0
Thornbury Bros., Belfast	3,360	0	0
McLaughlin & Harvey, Belfast	3,348	0	0
J. & R. Thompson, Belfast	3,334	0	0
W. J. Campbell & Sons, Belfast	3,333	0	0
McRoberts & Armstrong, Belfast	3,310	0	0
Workman, Ltd., Belfast	3,300	0	0
Thomas McKee & Sons, Belfast	3,280	0	0
*Wm. Dowling, Ltd., Belfast	3,150	0	0

BARNESLEY.—Storehouse for the R.D.C., at Spring-lane:—

*Royston Builders & Contractors Co., Royston	£266	13
--	------	----

BASFORD.—Branch library at Vernon-road, for the Nottingham Corporation. Messrs. E. R. & C. L. Sutton, architects, Nottingham:—
*F. Evans & Sons, Bulwell.

BEESTON.—Twenty-three houses on the housing site, for the U.D.C.:—

*G. T. Rice	£9,789
-------------	--------

BLYTH.—Twenty houses, for the T.C.:—

†A. R. Robertson	£7,938
------------------	--------

BOURNEMOUTH.—Painting the outside of the Town Hall, for the C.B.:—
†W. Hoare & Sons..... £248 17 6

BOURNEMOUTH.—For (a) 12 blocks of houses; (b) 16 blocks of maisonnettes, for the C.B.:—
(a) Messrs. Griggs..... £1,120 per block
(b) Messrs. Conway..... 22,880

BRADFORD.—Sub-station at Eccleshill, for T.C.:—
*Frank Robinson & Sons, Thornton.

BRAINTREE.—Widening Hoppitt Bridge, for the Essex C.C.:—

*A. G. Wicks, Baintree	£3,346	10
------------------------	--------	----

BUCKFASTLEIGH.—Twenty houses at Glover's Park, for the U.D.C.:—
*Williams & Bishop, Ringwood .. £10,230 15

BURTON-ON-TRENT.—Garage at Hornington-street, for T.C.:—
*A. Holmes & Sons..... £3,756

BURY.—Twenty houses in Woodley-street, Market-street, and Morley-street, for the C.B. Mr. J. Ainsworth Settle, Borough Engineer:—
*O. Elton, Bury.

CHESTER.—102 houses on the Heath-lane site, for the T.C. City Surveyor:—
*Selwood, Lloyd & Co., Rock Ferry.. £49,164

CONSETT.—100 houses on the Grove estate, for the U.D.C.:—
*Ayton & Sons, Blackhill £38,500

CROYDON.—Sub-station in Wellesley-road, for the C.B.:—

Grace & Marsh, Ltd., Waddon	£489
E. H. Smith, Croydon	481
E. J. Saunders, Thornton Heath	470
*Truett & Steel, Ltd., Thornton Heath	460

DONCASTER.—Open-air school, for the E.C.:—
*Thomson & Dixon £16,575

DONCASTER.—One pair of steel houses, for T.C.:—

*Atholl Steel Houses, Ltd., Glasgow.

DUKINFIELD.—Twenty cottages in Zet street, Combermore-street and Spencer-street, for T.C. Mr. Gibson, architect, Ashton:—

*T. Woolley & Sons, Ashton..... £8,44

EASTLEIGH.—100 houses, for the U.D.C.:—
*J. Douglas, Southampton.. £39,757 4

EAST ELLOE.—Pair of cottages at W. Washarg on land adjoining the Council cottages, the R.D.C.:—

*J. Kendell Banham, Fleet.... per pair £85

EAST GRINSTEAD.—Thirty cottages, for R.D.C., on the Ashurstwood site (14 parlour 16 non-parlour). Mr. E. A. Chilton, A.R.I. architect, Town Hall Chambers, Uckfield:—

J. Bodle, East Grinstead	£17,42
James Waters, Forest Row	16,40
J. Booker, Horsham	15,94
*T. & H. Bartlett, Wivelsfield Green	14,91

EDLINGTON.—Wiring of Council houses, for R.D.C.:—

*Building & Colliery Supply Co., Ltd. £263 18

ELLAND.—Two blocks of non-parlour type houses for the U.D.C. Mr. E. Fisher, L.E.I.B.A., Ho. Architect; quantities by Architect:—

Excavator, mason, and bricklayer—
*J. W. & J. Readyhough, Elland (four houses)
*T. T. Akroyd, Elland (four houses).
B. Gallagher, Elland.
Marshall & Rushforth, Elland.
Herbert Graham & Sons, Huddersfield.
Carpenter and joiner—
*J. H. Naylor & Son, Halifax (eight houses).
Wm. Bottomley & Sons, Brighouse.
Vernon Parsons, Sowerby Bridge.
A. Balmforth, Elland.
— Crowther, Elland.

Plumber and glazier—
*E. Turner, Elland (eight houses).
— Sheeran, Elland

Slater—
*Ramsden, Collins & Sons, Stainland (eight houses).
Dugland Marshall, Halifax.
D. Sykes & Sons, Elland.
Benj. Sutcliffe, Grelland.

Plasterer—
*D. Sykes & Sons, Elland, (eight houses).
Benj. Sutcliffe, Grelland.
Ramsden, Stainland.

FELIXSTOWE.—Extension of the boiler-house, the sewerage works, and for new flues and new shaft, and also for the removal of the existing boilers and the provision of one new Cornish boiler, and flues at the outfall works, for the U.D.C.:—
Building work—

G. Browne	£3,356	17
E. P. Stammers	3,147	3
Parker Bros.	2,228	0
Thurman, Ltd.	1,700	0
H. J. Linzell, Ltd.	1,709	0
*Rogers Bros.	1,557	0
For boiler work and flues—		
Heenan & Froude, Ltd.	1,855	0
Meldrum Ltd.	1,223	5
*Davey, Paxman & Co.	1,107	10

FELTHAM.—Ten non-parlour type houses in bury-road, for the U.D.C. Mr. H. W. A. Carter, veyor:—

Gazes, Ltd.	£5,868	0
W. S. Heald & Sons	5,581	12
Drinkwater & Sons	5,380	0
F. J. Pateman	5,120	0
*W. A. Annett	5,090	0

FORESHILL.—Twelve houses in Green Potter's Green, Walsgrave-on-Sowe, for the R. Mr. Redgrave, architect:—

F. Porter £420 per house

FRIMLEY.—Forty-four houses on the Frimley site, for the U.D.C.:—

*G. D. Hedges, Sandhurst £19,16

GLASGOW.—Alteration at pavilion, Bell Hospital, for the T.C.:—

†J. Morrison & Sons (Glasgow), Ltd. £1,515

GLASGOW.—Excavator, mason and brick work lavatory and cloakroom block in quadrangle (municipal buildings, for T.C.:—

†John Emery & Sons..... £16,940 13 1

GLASGOW.—Heating installation at Stock street buildings, for T.C.:—

†Hugh Twaddle & Son £2,061 0

GLASGOW.—Plaster work at Hamilton Hill house, for T.C.:—

†William Walker & Sons..... £5,322 16

GODSTONE.—Twenty-four concrete houses, roads, &c., for the R.D.C.:—

*D. Weston & Co., Ltd., London.

GOOLE.—Bridge over River Ouse at Booth for the West Riding C.C.:—

*Cleveland Bridge & Engineering Co., Ltd. Darlington.

HALIFAX.—Auction Mart at the Victoria Market, for the T.C. Borough Surveyor:—

*Mason—Pickles Bros.	£738	0
*Joiner—E. Smith	176	19
*Plumber—S. S. Thompson & Sons	140	0



OGATE.—Painting wood on the outside of
tutions, for the Royal Bath Hospital and
Convalescent Home Committee :—

n Bros. & Taylor, York..... £123 10

INGS.—Boring two wells at Sedlescombe, for

ler & Co., Ltd..... £11,337 13 8

WORTH.—500 houses to be erected for the

Housing Corporation of Great

Britain, Ltd., London, per house £454

ON.—Nineteen houses at Easington-lane, for

Storey (Six)..... each £392 10

W. Sparrow (Six)..... " 392 0

Gibbons & Son (Seven)..... " 397 11

OS.—Sub-station at Alwoodley, for T.C. :—

Thompson & Son..... £430

POOL.—One hundred houses, for the Cor-

es, Southampton—

Non-parlour Type, A.N. 828.

Per House.

each end house built as pairs, blocks

4, or of 6, with bay window, but

without dormer roof..... £445

each centre house, blocks of 4, or of

6, with bay window..... 440

Non-parlour Type, A.S. 828.

each end house built as pairs, blocks

4, or of 6, with bay window, but

without dormer roof..... 450

each centre house, blocks of 4, or of

6, with projecting front gable..... 455

each end house built as pairs, blocks

4, or of 6, with bay window, but

without dormer roof..... 460

each centre house, blocks of 4, or

6, with projecting front gable..... 445

Parlour Type

each end house built as pairs, blocks

4, or of 6, with bay window, but

without dormer roof or gable..... 500

each centre house, blocks of 4, or

6, with projecting front gable..... 510

each end house built as pairs, blocks

4, or of 6, with bay window, but

without dormer roof..... 500

ON.—Erection of Willoughby House on the

estate, for the L.C.C. :—

Maddison, Ltd..... £20,522 0 0

ge Barker..... 20,312 0 0

and & Hauren and

bits, Ltd..... 19,244 0 0

omerville & Co., Ltd..... 19,029 9 9

es & Son..... 18,872 0 0

er Lawrence & Son, Ltd..... 18,100 0 0

er & Co., Ltd..... 18,094 0 0

St Monk..... 17,629 0 0

Simms..... 17,500 0 0

& T. Thorne..... 17,336 0 0

es, Ltd..... 17,270 0 0

ey Bros., Ltd..... 16,768 0 0

Fairhead & Sons, Ltd..... 16,338 0 0

All of London.

rchitect's estimate comparable with the

£16,712.

ON.—Various repairs and works, for the

day continuation school (Clapham), addi-

tory accommodation—

& Co..... £234

y continuation school (Brixton), metalwork

own & Son..... £158

ead (Hackney, S.), electric light fittings—

urst & Co..... £25 17 6

ounty (Islington, N.), minor repairs and

trell, Ltd..... £220

ool of Printing and Kindred Trades (Lam-

pool, electrical equipment—

wkins & Sons..... £318

orough (Fulham, E.), additional sanitary

ation—

land & Sons, Ltd..... £678

ce (Islington, S.), structural repairs—

W..... £459

F.—Repairs and redecorations at certain

wisham Park and at the converted flats, for

m B.C. :—

Lewisham Park. Flats.

..... £683 4 8 £240 10 6

ke..... 673 15 0

ton..... 544 5 0 289 19 6

ens & Sons..... 510 10 0 271 15 0

—Underground conveniences, Philpot-

for the Stepney B.C. :—

of Borough Engineer and Surveyor, £3,500.

ell..... £3,974 2 2

dding & Co..... 3,610 0 0

est..... 3,583 0 0

sharpin..... 3,306 0 0

Roberts & Co., Ltd..... 3,263 0 0

All of London.

—Cement store and various alterations to

ldings at the Deptford depot, for the

A Son..... £3,767

t..... 3,663

D. Leng..... 3,577

roves & Son..... 3,156

wyer, Ltd..... 3,140

ixon & Son..... 3,085

All of London.

irect's estimate comparable with the

ants to £3,159.

LONDON.—Painting and/or cleaning of the following
Council's schools and institutions, for the L.C.C. :—

Bow-creek (Poplar, S.)—

*W. J. Clemens..... £387 17 0

Brewhouse-lane (Whitechapel and

St. George's)—

*J. J. Woollaston & Co..... 562 0 0

Brixton Day Continuation (Brix-

ton)—

*Revis & Sons..... 596 0 0

Charlton Central (Greenwich)—

*Edwards Construction Co..... 747 0 0

Clapham School of Art (Clapham)—

*W. J. Marston & Son..... 341 8 6

College of Physical Education

(St. Marylebone)—

*J. Simpson & Sons, Ltd..... 475 0 0

The Fox (Kensington, S.)—

*White & Johnson..... 665 0 0

Homerton Residential, Penn.

Bucks—

*F. Perfect & Sons..... 208 0 0

King's Canadian, Bushy Park—

*Speechley & Smith..... 335 0 0

Lyham-road Baths (Brixton)—

*Revis & Sons..... 337 14 0

Mayford School, Woking

*A. E. Jones..... 354 0 0

Oak Lodge Residential Deaf

(Balham and Tooting)—

*Curd Bros..... 799 17 6

Pope-street (Woolwich, W.)—

*J. Hocking & Co..... 795 12 6

Princeton-street (Holborn)—

*T. Carr..... 839 0 0

Priory-road, M.D. (Kennington)—

*W. J. Marston & Son..... 350 0 0

Smeed-road (Bow and Bromley)—

*A. H. Inns, Ltd..... 977 0 0

Stanley Central (St. Pancras, S.E.)—

*T. Carr..... 829 0 0

All Saints' (Southwark, S.E.)—

*John Marsland & Sons, Ltd..... 439 0 0

Archbishop Tenison's (Lambeth,

N.)—

*Geo. Brittain & Sons, Ltd..... 321 10 0

Blackheath and Kidbrook (Green-

wich)—

*A. G. Shorter..... 364 18 2

Christ Church (Battersea, N.)—

*Hudson Bros. (Builders), Ltd. . . 313 0 0

Christ Church (Holborn)—

*E. A. Roome & Co., Ltd..... 386 0 0

Christ Church (Kennington)—

*W. A. King & Sons..... 548 10 0

Clapham Parochial (Clapham)—

*Triggs & Co..... 419 0 0

Holy Name R.C. (Limehouse)—

*F. C. Horswill..... 433 0 0

Holy Trinity C.E. (Hackney, C.)—

*S. Hayworth & Sons, Ltd..... 411 0 0

Jews' Free (Whitechapel and St.

George's)—

*C. Taverner & Son..... 6,580 0 0

St. John's C.E. (Battersea, S.)—

*H. S. Lee, Ltd..... 348 0 0

St. George's C.E. (Battersea, N.)—

*John Greenwood, Ltd..... 838 16 0

St. Joseph's R.C. (Rotherhithe)—

*T. Rutter & Son..... 775 0 0

St. John's (Dulwich)—

*W. A. King & Sons..... 359 0 0

St. Mark's Practising (Chelsea)—

*F. Prater & Son..... 432 0 0

St. Thomas' R.C. (Fulham, W.)—

*W. J. Kidney..... 716 0 0

St. Ann's R.C. (Greenwich)—

*Wm. Mills & Sons..... 144 10 0

St. Stephen's C.E. (Hammer-

smith, N.)—

*L. M. Cross & Co..... 304 8 0

St. George-the-Martyr (Holborn)—

*T. Sobey, Ltd..... 336 0 0

St. Peter's Italian (Holborn)—

*W. Mills & Sons..... 659 0 0

St. John's C.E. (Islington, N.)—

*Stevens & Sons..... 378 0 0

St. Mark's (Islington, N.)—

*Richard Coleman..... 339 15 0

St. Clement's C.E. (Kensington,

N.)—

*G. N. Watts, Ltd..... 510 0 0

St. Barnabas' and St. Philip's C.E.

(Kensington, S.)—

*A. Roberts & Co., Ltd..... 356 10 0

St. Stephen's C.E. (Kennington)—

*John Greenwood, Ltd..... 598 0 0

St. Saviour's C.E. (Norwood)—

*W. A. King & Son..... 218 0 0

St. Augustine's Boys' (Padding-

ton, N.)—

*W. H. Wagstaff & Sons..... 445 0 0

St. James' (Paddington, S.)—

*W. Knight..... 340 0 0

St. Gabriel's (Bow and Bromley)—

*Harris & Wardrop..... 511 0 0

St. James' R.C. (St. Marylebone)—

*Fredk. North..... 330 0 0

St. Mary's (Southwark, S.E.)—

*W. A. King & Sons..... 224 10 0

St. John's (Southwark, S.E.)—

*John Marsland & Sons, Ltd. . . 365 0 0

St. Luke's C.E. (Limehouse)—

*Turnbull & Son..... 727 0 0

St. Paul's C.E. (Whitechapel and

St. George's)—

*John Sparkes & Sons..... 450 15 0

St. Andrews C.E. (Streatham)—

*W. A. King & Sons..... 139 0 0

St. Anne's C.E. (Wandsworth, C.)—

*R. S. Ronald..... 295 0 0

St. Mary's (Putney)—

*G. W. Beattie..... 405 0 0

St. Clement Danes' (Abbey,

Westminster)—

*W. Wright & Son..... 484 0 0

St. Martin-in-the-Fields (Abbey,

Westminster)—

*Saley & Son..... 564 0 0

St. Martin's Northern (Abbey,

Westminster)—

*J. H. & W. Heal..... 585 10 0

St. Bride's and Bridewell Pre-

dicts (City of London)—

*Cole, Loasby & Co., Ltd..... 119 14 0

The Redcoat (Mile End)—

*W. Stuttle & Son..... 737 10 1

Westminster Jews' Free (St. Pan-

cras S.W.)—

*J. Kinninmont & Sons..... 545 2 0

Woolwich C.E. (Woolwich, W.)—

*Edwards Construction Co., Ltd. . . 722 6 9

MOLESEY.—Twenty-eight houses in Beauchamp-road, for the U.D.C.:-

*Wheatley & Sons, East Molesey .. £13,360

MORETON.—Elementary school, for the Cheshire E.C. Mr. W. Beswick, County Architect, Chester:-

*A. Fleming, Birkenhead..... £14,977

NEATH.—Painting the exterior and interior of the cottage homes, Brynnoch, for the B.G. Messrs. T. Gibb & E. Smith, architects, Borough Chambers:-

P. C. Gray & Sons, Neath £1,011 0

J. Wright & Sons, Neath 960 0

James Alford, Neath 909 16

Waring, Cole & Waring, Neath 898 0

*John Matthews, Neath 583 0

Short, Neath..... 439 0

NEWMARKET.—Twelve additional parlour-type houses at Laureate Paddocks, for the U.D.C.:-

*W. Barnes £6,390

NORTHLEACH.—Grammar school, for the Gloucestershire E.C. Mr. R. S. Phillips, F.R.I.B.A., County Education Architect, Shire Hall, Gloucester:-

Espley & Co., Ltd., Evesham £7,820

READING.—Sixty-seven non-parlour type houses for the C.B.:-

W. Creed & Co. £29,346

(In lieu of Block Constructional Co.)



PORTABLE PARQUET

In Oak or Oak and Walnut, also

Spring Foundation Dance Floors

Post or Phone (Park 1885)

enquiries to

TURPIN'S PARQUET

FLOORING CO.,

25, NOTTING HILL GATE,

LONDON, W 11.

Phone:
PARK 1885

J. GLIKSTEN & SON

LIMITED

Specialities in

SEASONED

HARDWOODS

MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.

REGISTERED OFFICE AND WHARF

CARPENTERS RD.
STRATFORD
LONDON E.15

Telephone:
EAST 3771
(5 lines)

Telegrams
GLIKSTEN PHONE
LONDON

ROTHERHAM.—Foundation work in connection with the erection of the Telford demonstration houses, for the C.B.:-

W. & F. Blair £259 0 0

G. A. Darnall 234 19 0

J. Gabbettas 218 3 6

*G. Saul & Sons, Ltd. 215 0 0

SOUTH SHIELDS.—Conversion of 2,000 privies, for the T.C.:-

*A. Holmes & Co. £12,000

STOCKSBRIDGE.—Thirty houses on the Shay House estate, for the U.D.C.:-

Bradbury & Sons £17,950

Battye Bros. 15,650

Mellor & Co. 15,520

D. Smith & Sons 15,417

*Mayson & Quince 15,290

STOCKTON.—1,003 conversions to the water-carriage system in West-end, Parksfield, South-west, and Central Wards:-

J. C. Watson, Stockton £7,923 14

STOCKTON.—Open-air school, for the E.C.:-

*M. Nowell, Stockton..... £7,078 3 7

THORNBURY.—Eight houses at Redwick, for the R.D.C. Mr. F. W. Davies, surveyor, High-street:-

E. Love, Redland £5,134 0 0

W. H. J. Sansum, Shirehampton 4,588 0 0

R. Dowling & Sons, Bristol 4,467 16 0

E. W. Dimsey, Berkeley 4,237 7 6

J. Pugsley & Son, Bristol 4,190 0 0

R. G. Hawkins, Thornbury 3,893 0 0

R. Pitcher & Son, Olveston 3,875 0 0

*F. Ranger, Yate, Bristol 3,800 0 0

TORQUAY.—Elementary school at Westhill, for E.C.:-

*R. E. Narracott, Torquay..... £27,036

UPTON.—Sewage disposal works and the laying of new sewers, for the Hemsworth R.D.C.:-

*A. Graham, Sons & Co. £13,701 2 7

WAKEFIELD.—Slating houses at Middlestown, for the R.D.C.:-

*H. & W. Parker, Wakefield £1,115 5

WALTHAMSTOW.—New County High school, for the Essex C.C.:-

*W. Jones & Sons, Ltd., Westminster.. £42,626

(Subject to B.E. approval.)

WARRINGTON.—Sub-stations at Thelwall, Thelwall-lane and Orford, for the C.B.:-

*W. Peake, Warrington.

WAYLAND.—For (a) two houses at Rockland All Saints, and (b) two houses at Banham, for the R.D.C.:-

* (a) W. Peeke-Vout, Caston £790

* (b) Pearson Bros., Diss 790

WEXFORD.—Twelve houses, for the Corporation:-

*O. Conner £290 per house

(In place of Allen Bros., withdrawn.)

J. J. ETRIDGE, J. Ltd

SLATING AND TILING

SLATE MERCHANTS
CONTRACTORS.

Inspections and Reports made on
OLD OR FAULTY ROOFS
in any part of the country.

Telephone: Bishopsgate 1944/5, or write,

Bethnal Green Slate Works,
BETHNAL GREEN, LONDON, E

BEST SEASONED

OAK FLOORING

AUSTRIAN
RUSSIAN
JAPANESE

PREPARATION TO ANY SECTION
CAN BE UNDERTAKEN AT ONCE

SYDNEY PRIDAY &

WAINSCOT OAK MERCHANTS (EST.)

Phone
CLISSOLD
6254
(2 lines)

OAK WHARF
RAVENSDALE F
LONDON, N.1

FITZPATRICK &

Masons and Paviors,

455, OLD FORD ROAD, BOW

Phone: **EAST 4808.**

Granite Setts and Kerb (redressed and hand), York Paving Spur Stones, Chippings, and Granolithic and Setts

School & Hospital S

MAKERS OF

WRIGHT'S IMPROVED and also SHORLAND

WARM AIR VENTILATING PATTERNS

GEO. WRIGHT

19, Newman St., Oxford St., London
Burton Weir Works, Rotherham

HIGH-CLASS

FLOORING

of every description in

WOOD BLOCKS. PARQ

SEASONED T. & G. WAINSCOT

TEAK AND MAPLE

FACTORY AND ROADWAY P

STEVENS & AD

LIMITED

VICTORIA MILL, POINT PLE

WANDSWORTH, S.W.18.

(Phones: Putney 1700)

COPPER ROOFING WITH CONICAL ROLLS

ABSOLUTELY WATERTIGHT. VERY DURABLE

ESTIMATES FREE

F. BRABY & CO. LTD 352-364 EUSTON RD. N.W.1.

AND AT DEPTFORD, LIVERPOOL, BRISTOL, GLASGOW, FALKIRK & BELFAST.

THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

XIX. No. 4,316

OCTOBER 23, 1925

THE CHURCH CONGRESS AND THE ARTS AND CRAFTS

STRANGER visiting for the first time the Exhibitions of the Church Congress would be extremely impressed in all probability with sharply contrasting activities of the two sections. On the one hand, the remarkable number of societies for the helping of all kinds and people—nearly all very individual and personal—all very excellent work, each in its own way; and, on the other hand, an extremely different activity, illustrating an aspect of the past, as now yearly seen in the remarkable Loan Exhibition of Church Plate and other treasures of a similar kind. These wondrous objects of centuries ago tell of the generosity of the donors and the skill of the craftsmen of the periods shown. It is admitted on all hands that work of the past, by being so delightfully shown and handled, is helpful to all—particularly in promoting the spirit of appreciation of these priceless treasures of our churches and the necessity for handing down to future generations all of that which has been made. By these annual displays much is being recognised and recorded that perhaps otherwise would be forgotten and easily neglected and lost.

What of our present-day activities in regard to the arts and crafts, and those particularly connected with the work of cathedrals and churches? What of the works of our painters, sculptors, gold and silver smiths, jewellers, needleworkers, scribes and illuminators? What do they take, either collectively or individually, of this great week of the Church's activities? How do they appear before anxious and appreciative clergy and laymen? "What of their hands?" What can be found in these exhibitions that will be in any way a help to them? Very little, it must be confessed. The names of those craftsmen doing really "passable" work this year are not many. Last year, at Oxford, it was better, and the Church Crafts League held an exhibition of the work of their members—textiles, hangings, metal work, glass, and finely written and illuminated manuscripts were shown, as well as drawings and models of architects' work. This year the chance has been, unfortunately, missed—and it is a very great loss.

What of architecture? Not one architect either shows his work or a photograph of his work! When it is remembered that activities are always taking place in nearly all our churches—there must be few without some scheme or schemes of repairs or improvements—and the great number of new churches and other buildings in connection with them always erected, it seems incredible that nothing has been done—nothing made to arouse some interest in this great craft! By this attitude could very soon be amended and a real opportunity made to grasp such an excellent opportunity of bringing clergy and laymen and the artist and craftsmen in closer contact. Our special correspondent in our last issue suggested a remedy. The plan proposed can be very greatly extended and in one very important and particular direction. Could not the Royal Institute of British Architects do this way? The success of their recent visits to the centres of the provincial societies has been very great. They have greatly stimulated the local interest in the art of architecture; Oxford, Newcastle, Cardiff are some centres where their influence has been greatly felt.

Could they not help in a similar way with the Congress? It could be worked through the local society governing the district in which the Congress is held, and the R.I.B.A. should be responsible for arranging it. They should gather together the church work of the local architects and craftsmen, and they could gather a collection perhaps from the closing Royal Academy—a typical selection of church work. Then the Church Crafts League could be responsible for the various Guilds of Craftsmen, and so a very well organised exhibition of fine modern work could be shown that would in time have a great influence on the new work being placed in our cathedrals and churches, now so very often ill-considered.

After all, it is the architect who must show the way. The painter and sculptor look to him for his opportunity, which has been so very often neglected. In regard to painting, when one thinks of the splendid work of the pre-Raphaelites, how sadly the opportunity was neglected by the architects of the time! Surely very special places should have been designed for such splendid paintings in the churches being built at the time.

Millais, Holman Hunt, Ford Madox Brown—commissioned to create great things—should all have painted for these new churches. How very fine the two paintings of G. F. Watts look in St. Paul's! And how much out of place these splendid pictures look in the ordinary art gallery! Yet nothing was done, and these great men tired and turned away to other channels for their inspiration. How rarely are the positions of the Stations of the Cross considered and how rarely well placed. The Cathedral at Westminster is an exception, and the sculptor had a well-set panel given him. Had it been on a splayed pier, perhaps it would have been better still. But most of these positions are ill-chosen.

It is at such a gathering as this great annual Congress that those interested in all the arts and crafts so essential to the Church should gather, with their actual work and their ideas, and then freely discussing among themselves, they should be able to inspire confidence in others and so create a great interest in all who desire to learn about and attempt to appreciate their work.

Surely, for the Institute and the provincial societies affiliated to it, to take a lead in such a movement is a duty they should not lightly set aside. The influence for good would be enormous. There are two other bodies that might quite well be associated with this annual meeting. One is the Society for the Protection of Ancient Buildings, for the Congress seems a most fitting place for propaganda for the proper repair and care of our cathedrals and churches. Lectures and addresses should be given and printed advice freely circulated, and then, the Society, the local Advisory Diocesan Committee, aided by the central body, could urge upon the local clergy the importance of doing nothing to a church or place anything whatever within it without capable advice, given through the Advisory Committee. A very great step would have been taken in this way to protect what still exists of the beauty of our churches.

At Southport next year the first opportunity would occur. It is the centre of a very active and wealthy population. Could not these ideas to stimulate and encourage an appreciation of our great arts and crafts be attempted, if only in a small way at first?

NOTES.

**Spoiling
Good
Buildings.**

THE removal of the steps in front of St. Martin-in-the-Fields, where they are supposed to impede traffic to and from Trafalgar-square, has been revived as a possibility again. We are disappointed that we should receive a word in favour of such a proposal from a correspondent whom we should have thought would not have been ignorant of the verdict passed on it by the Institute Art Committee some years ago. This Committee came to the conclusion that the removal of the steps would be an injury to the appearance of the portico, and would not be justified by the supposed benefit to traffic. Our correspondent says, "except for giving scale to a building, of what value is a flight of steps for architectural effect?" Is giving scale to a building nothing of consequence, then? How many modern buildings have this vital quality of scale? Only the other day we noted a tiny building in a street of a provincial town which was the most distinguished building in the whole thoroughfare owing to this quality of scale, and yet some people seem to think that the higher qualities of architecture are denied to cottages and small buildings. We call to mind an architect who built up a successful commercial practice having said that anyone could design a

house or cottage. Unfortunately, we saw he could not do it himself with any architectural charm. Well does a writer in the *Evening Standard* say the portico (of St. Martin's) is one of the most beautiful things we have, and that every good Londoner would defend St. Martin's by force if necessary.

**Inspiration
and
Guidance.**

AN indication of our whereabouts to-day in the practice of architecture may perhaps be gathered from the remark in a recent lecture that the architects of the present and the future would go for guidance and inspiration to—Cheltenham! A correspondent says that we can advocate the charms of country life without insulting the intelligence of the profession. We believe, however, the students of our best architectural schools will discover that there is a certain value in quietude and simplicity without finding it needful to seek inspiration at Cheltenham.

**The Royal
Artillery
Memorial.**

IT does not appear to us that criticisms of this memorial should be concerned only with the dispute between modernism and tradition, as we often mean very little by either of these terms. The field of dispute is not covered by the choice between these two, but extends to what is desirable in

such a memorial, and then the extent of the difficulty appears. war memorials are oftener mer than works of art, as is the 9-in. ho surmounting the Artillery War Memorial. We find a correspondent approving a memorial because it revives in his associations of "the stinking, shi slush of dawn," and is a lasting m of "horrible, bloody war," and h that his comrades would ask for n else. Thus the military mind is seen be artistic, nor is war in the mi some an inspiration to the cr imagination. But the failure o memorials lies chiefly in the fact th subject matter is inspired by o rather than artists, and their se what is suitable hardly include perception of the nature of art. artists have more direct say in the which such memorials should ta shall find that they contain "les the merit of a child's wooden locom

**War
Memorials
Exhibition.**

WE are informed th Trustees of the Imperial War Museum, South sington, propose hold exhibition of war memorial mode photographs, including the original of the Imperial Memorial Table French Cathedrals, executed by Reginald Hallward in collaboration Col. P. Cart de Lafontaine, on th anniversary of the Armistice, a they have already received ove photographs of memorials, and promise of many sketch models. suggested that architects who have concerned in the erection of war men might present to the Museum for p nent record, or lend a small framed graph of the particular memorial ori rials for which they have been respo. though, in order to avoid duplic architects interested should first communicate with the Museum in that they may be informed whet not the Museum already possess a r As the exhibition is to be open November 11, exhibits should read Museum not later than the 31st

**Examina-
tions and
Experience.**

IT may be remembere the Royal Institut British Architects advanced students of tecture to forego sitting for the Examination for admission as Ass on completion of certain qualific amongst these being twelve m experience in an architect's office the fourth and fifth years of the course. The Council of the In have decided to establish at their two registers, one of advanced stud recognised schools, and the other of tects willing to take such students t prescribed period. The Council that general use will be made registers, both by students and by tects; and we trust that the hope be fulfilled. Much study is essent



The Liberal Jewish Synagogue, St. John's Wood, London.
MESSRS. JOSEPH, Architects.



Church Congress Exhibition, Eastbourne.
na, Whitwell Church, Isle-of-
light: Detail of Heads.
By Miss Dowson.

wish to become successful archi-
d examination, provided that it
t encourage "cramming," is
the best preliminary test that
devised. But experience is
ble in training and furnishes in
run the only test of efficiency.

SEVERAL visits to the exhi-
d bition in Paris of Modern
ry. Decorative and Industrial
Art convinces us of the value
quality of tradition retained—
usly, no doubt—in many of
ish exhibits. We are inclined
measure back the steps we have
icism of English work, when it
juxtaposition with Continental
d it seems to us that the
of "new art" is very mis-
Design, or any other application
ates itself to the good of any
t, though adding its own per-
tribution, and such a provision
shall not show any traces of
ods is very theoretic and pro-
chievous. This is not to say
ality in design is undesirable,
more likely to reap the benefit
ourselves and growing on our
than in reaping the assumed
of progressive Continental
nts, which we confess to think
er artistry than our own.

WE confess to finding some-
t thing a little disagreeable in
the very term "new art,"
more particularly when we
hat it so often stands for.
seen some discussion recently

as to whether British manufacturers
were sufficiently in touch with "the
marked advance made by Continental
countries." We have visited Paris with-
out deriving the sense that we shall do
better in surrendering to Continental
influences than in building on our own
traditions. The Paris Exhibition authori-
ties laid it down that anything sent in
which included even traces of older
periods would not be considered as
coming within the scope of the exhibition.
This seems to us not only an impossible,
but a very undesirable condition. In the
first place, we are all influenced, un-
consciously or not, by what has come
down to us, and we doubt the possibility
of wholly diverting design from such
influences. Moreover, we do not consider
that the attempt to do so has been
attended with any such success that we
should follow in the same direction.

Paying Our Way.

In these days, when we
seem principally to be
engaged in disputing how
the profits on industry are
to be divided (when there are any) and
how industry is to be maintained at the
same time that that artificial level, "the
standard of living," is to be upheld, we
are too apt to become concentrated upon
what may be termed "local conditions"
as contrasted with our position in the
world, and may soon find ourselves to
have been living in a "fool's paradise."
If a larger view could be taken of our
industrial position in the world by all
concerned it might assist in the settlement
of our internal and eternal squabbles, and

therefore such figures as were recently
given by Lord Hunsdon in connection
with our Empire trade should be published
and emphasised as explaining the really
critical position we stand in. He said
that there were forty-three million people
in Britain who were dependent on
external resources for 75 per cent. of their
breadstuff, 60 per cent. of their meat, the
whole of their cotton, and 90 per cent. of
their wool. These things have to be paid
for by our overseas sales, and these
showed a reduction of 24½ per cent. com-
pared with 1913. These figures are
instructive, for it must be apparent to
everyone that we cannot obtain these
necessaries by simply exporting money,
but that to pay our way they must be
paid for by what we ourselves produce and
export. If these simple but hard facts
were present to the disputants in every
trade dispute surely a more reasonable
and co-operative spirit in furthering the
advance of our trade would be
exhibited.

THE private view of the
Royal Institute of Painters
in Oil Colours last week was
attended by so many that

Pictures.

the galleries were almost crowded. We
saw little to create much interest for those
who fix some reasonably high standard
on what they can admire, but we found
two or three unfamiliar names attached
to landscapes of some genuine charm.
We are confronted with an ever-increasing
output of pictorial art, but our greatest
success at present is probably amongst
picture posters.



The Liberal Jewish Synagogue, St. John's Wood, London.
MESSRS. JOSEPH, Architects.

GENERAL NEWS

Change of Address.

Mr. Herbert Kenchington, A.R.I.B.A., has removed his London office to 44, Bedford-row, W.C.1. Telephone, Chancery 7174.

Mr. Gerald Shenstone, A.R.I.B.A., has moved his office to 38, Bedford-place, W.C.1, at which address he would be glad to receive new trade catalogues. Telephone, Museum 3621.

Messrs. Broad, Babbs & Dockerill, F.F.S.I., have removed from 2, Oxford-road, Bournemouth, to Lloyds Bank Chambers, Lansdowne, Bournemouth, and would be pleased to receive samples and recent catalogues.

Housing at Tottenham : An Appointment.

Mr. E. C. P. Monson, F.R.I.B.A., F.S.I., of Finsbury-pavement House, 120, Moorgate, London, E.C.2, has been appointed architect for the remaining part of the Tottenham housing scheme. There are about 250 to 300 houses still to be erected.

The Roman Theatre of Verona.

We reproduce upon this and page 591 two interesting views of the Roman Theatre of Verona, which has been lately excavated under the direction of Professor G. Avena, director of the local art gallery. An article on the subject, by Countess Lisa Scopoli, appears in the October issue of *Architecture*, together with some further illustrations.

The Architectural Association.

The annual exhibition of Members' Holiday Sketches and Photographs will remain open until November 30.

This year's A.A. Pantomime will be performed in the Galleries of the Royal Institute of British Architects, 9, Conduit-street, W.1, at 8 p.m., on Wednesday, Thursday, Friday, and Saturday, December 16, 17, 18 and 19, and there will be a matinee on Thursday, at 2.30 p.m. Applications for tickets (3s., 5s. 9d., 8s. 6d., including tax), should be made by letter, or personally to Miss M. Hodson, 34, Bedford-square, W.C.1, or by telephone, Museum 4957. The profits will be in aid of the Architects' Benevolent Fund.

The New Waterloo Bridge.

The London County Council propose to insure the temporary Waterloo Bridge for £150,000.

We understand that Sir Edwin Lutyens, in the report which he was asked to submit to the L.C.C. upon the defective Waterloo Bridge, condemns any alteration to the existing bridge, and sets out his belief that "no matter what

the Council's decision might be, Waterloo Bridge to be maintained must eventually be rebuilt."

The Queen's Dolls' House.

The Queen's Dolls' House, which is now permanently housed at Windsor Castle, will be closed at the end of this month to allow the artists who are carrying out new features to begin their work. The house will not be reopened to the public until the spring.

Rome Scholarship in Sculpture.

Mr. Emile Jacot, of Birmingham, on the recommendation of the Faculty of Sculpture of the British School at Rome, has been awarded by the Commissioners for the Exhibition of 1851 the Rome Scholarship in Sculpture (1925). He studied at the Slade School of Art from 1919 to 1922.

House of Lords Acoustics.

The Marconiphone Company has been informed by the Office of Works that the recent amplifying experiments carried out in the House of Lords had proved entirely successful, and that negotiations had been completed for the installation of microphones and earpieces before the next sitting.

Prints of Nineteenth-Century London.

The L.C.C. has arranged for selections from the prints and drawings of London in its possession to be exhibited in one of the rooms at the County Hall, and this room is included in the itinerary for visitors to the building. A new selection of prints, illustrative of Early Nineteenth-Century London, is now on exhibition. The general public are admitted on Saturdays and Bank Holidays.

Lincoln Cathedral Repairs.

At a meeting of the Executive of the Publicity Committee of the Lincoln Cathedral Repairs Fund, at Lincoln, a report approved by Sir Francis Fox was presented. The work is proceeding, but £20,000 is still required; £54,000 has been spent so far.

Historic Inn Sold.

The Old Boar's Head Hotel, in Withy-grove, Manchester, a seventeenth-century coaching house, is to be demolished and a bank built on the site.

Proposed Hotel in Dublin.

Messrs. Mitchell, caterers, propose to build a £100,000 hotel in Grafton-street, Dublin.

Walthamstow Hospital.

Walthamstow General Hospital is appealing for £40,000 for the erection of new wards, an out-patient department, and other extensions

COMPETITION NEWS

Manchester Town Hall Extension Scheme. Manchester Town Hall Extension Committee has decided to ask the President of the R.I.B.A. to nominate assessors for the competition for the best utilisation of the extension site between Lloyd-street and Peter-street.

Public Baths and Washhouses, Whitegate. Chadderton Council proposes to design for new public baths and wash-houses to be erected at Whitegate. Premiums of £50, £25, and £10 will be offered. The R.I.B.A. has been asked to nominate an assessor.

Topsham Public Hall Competition. The promoters of this competition decided to amend the conditions in accordance with the R.I.B.A. regulations, and have the President to appoint an assessor.

Coventry and Warwickshire Hospitals Proposed New Ward Block.

The promoters of this competition decided to revise the conditions, the President of the R.I.B.A. has appointed Mr. Bateman, F.R.I.B.A. as assessor.

Competitions Open.

	Particulars published in "Builder."	
Newcastle Fire and Police Station. Premiums: £500, £300, £100. Mr. P. S. Worthington, F.R.I.B.A., Assessor.	—	June 12 ..
Town Hall, &c., Pretoria. Open to architects residing in South Africa or Registered under Architects' Act, of 1909, Transvaal. Assessor to be appointed by R.I.B.A. Premiums: £250, £150, £100.	—	— ..
Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply parties., 35, Old Queen-street, S.W.1 ..	—	April 24 ..
New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool ..	—	Aug 7 ..
Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London ..	—	Aug. 14 ..
Plan for construction of Conference Hall, for League of Nations, Geneva. International Competition, Sir John Burnet being British representative on Jury of Assessors. 100,000 Swiss francs to be divided among architects submitting best plans. Programmes will be deposited in due course with R.I.B.A., 9, Conduit-street, where intending competitors should apply. Single copies from Secretary-General, League of Nations, Geneva, on payment of 20 Swiss francs. ..	—	Jan. 2 ..

*Portstewart Golf Club	—	—
*Carnegie Hall, Dingwall	—	—
*Fleetwood Hospital	—	—
*Parish Hall, Braunton	—	—
Art Gallery and Museum, Birkenhead. Limited to competitors practising within 20 miles of Birkenhead since January 1, 1923. Premiums: £250, £175, £100. Sir Robert Lorimer, A.R.A., assessor. £25s. deposit. Apply Curator, Central Public Library, Birkenhead	—	Oct. 16 ..
Model Dwellings, Russia	—	Sept. 4 ..
* Competitions when "warned" or voted by the are starred.		

MEETINGS

MONDAY, October 26.

Architecture Club.—Third Exhibition Conduit-street. 3.30 p.m.

Architectural Association.—Mr. H. Hart-Rendel, on "Ourselves." 7 p.m.

THURSDAY, October 29.

Victoria and Albert Museum.—Mr. M. on "British Etching." 6 p.m.

Stepney Public Lectures.—Mr. W. H. on "Winchester, the Old English." At 236, Cable-street, E.1. 8 p.m.



The Roman Theatre of Verona : The " Refectory."



AN ENTRANCE.



A CORNER DETAIL.

Additions and Alterations to the Late Lord Leverhulme's Bungalow at Rivington,
MR. R. HERMON CROOK, F.R.I.B.A., Architect.

CORRESPONDENCE

The Association of Architects and Surveyors.

SIR,—The attention of the R.I.B.A. Registration Committee has been called to the recent establishment of an Association of Architects and Surveyors which is inviting architects to apply for membership as a protection against the "danger of being prevented from earning their livelihood" as a result of impending legislation.

So far as the R.I.B.A. is concerned the suggested danger does not exist. It has never been the intention of the Registration Committee to propose legislation which will in any way affect the livelihood of anyone who at the time of the passing of the Act is making his living by the practice of architecture. The interests of all those who are now connected with the profession will be specifically safeguarded. It has never been our intention to limit the benefits of a Registration Act to those who are now members of the R.I.B.A., or its Allied Societies, and the Bill which has just been drafted by the Registration Committee is perfectly clear on this point.

HARRY BARNES.

Chairman of the R.I.B.A.
Registration Committee.

Tendering.

SIR,—Having read with interest your correspondent's letter on this subject in your issue of October 16, while quite in agreement with his remark that it is discourteous on the part of authorities who receive tenders not to make known the results at least to the builders who have forwarded tenders to them, I cannot agree that the greatest factor in reducing the cost of housing is the competition amongst small builders. I am of opinion this argument would have been much stronger had "small" been omitted.

Your correspondent seems also to be under the impression that he and the friend to whom he refers are in a position to judge the whole organisation of their competitors. He talks of overhead charges. Probably the firms to which he refers as having heavy overhead charges have double the number of his supervising staff, but employ a greater number of hands than he does. If this is so, the overhead charges are no greater than his, as undoubtedly their organisation is superior. The writer has in mind an instance where a "small" builder talked to a client of the overhead charges of a building contractor, and when facts were discussed it was found that the building contractor employed approximately twenty men to one of his organising staff, whereas the small builder could not muster a better ratio than six to one.

In conclusion, the writer's opinion is that there are many ways whereby to-day's building costs could be lowered without affecting the rates of pay or even awaiting a fall in the cost of materials. Some may ask how. I must ask, however, to be excused a reply, as anyone having connection with the organisation of the building trade proper or its allied professions should be aware of the answer.

"BUILDING CONTRACTOR."

Building Trade Friction.

SIR,—Referring to the article entitled "Building Trade Friction," which appears on page 540 of your issue of October 9, I am directed to say that the statement therein to the effect that the cause of the resignation of the chairman and other members of the Negotiating Committee was the refusal of the National Federation of Building Trades Employers to ratify the agreement recommended for ratification is incorrect. The representatives of the National Federation referred to were in agreement with the decision not to ratify the revised consti-

tution unless all the craft unions of the Building Trades Operatives were signatories, and has been the consistent attitude of the National Federation towards this question.

A. G. WHITE,
General Secretary.

Hollow Floors and Roofs.

A letter from Mr. G. Topham Forrest, intending Architect to the L.C.C., setting particulars of hollow floors and roofs approved by the County Council as fire-resisting under the London Building Acts, is given on page 541.

Proposed New Parish Church, Frinton-on-Sea.

Last week we published a design, prepared by Sir Banister Fletcher, F.R.I.B.A., in invitation, for a parish church on a site at Frinton-on-Sea, to be carried out in brick and stone, in character with East Anglian traditions. It is planned on modern lines, a broad nave, to seat nearly 600 persons, flanked by narrow "gangway" aisles. The church has a semi-octagonal apse, vestries, and a chapel seating 30, with separate entrance on the south side. This chapel also forms a convenient return way for communions. Externally the nave clerestory is connected by the concave sweep of the buttresses to the aisle roof, which is carried out to the edge of the buttresses beneath. The west door gives entrance to a low-roofed vestibule, which is a broad west window of cinquecent lights in the fifteenth-century manner, divided into three sections by stout foliated mullions from which flying buttresses descend to the main buttresses below. Above this front gable with a cross worked in stone, flanking towers, which accommodate staircases to the baptistry internally, are of flint, rounded angles, and are surmounted by shingled parapets and shingled spires. Over the main arch is a bell-turret with bracketed pinnacles and roof and finial.



The Royal Artillery War Memorial, Hyde Park Corner, London.

MR. C. S. JAGGER, Sculptor. Base by MR. LIONEL PEARSON.

THE ART SCHOOL AND ARCHITECTURE

By D. N. MARTIN-KAYE, A.R.I.B.A.

THE recent volume of essays "The Touchstone of Architecture," by Sir Reginald Blomfield, and the occasional reference to the teaching of architecture in Schools of Art contained therein, lead one to wonder why it is that the status of the art school as a training ground for the future architect are so persistently ignored. It is hardly an important town in the kingdom where some sort of training in art is not given, and many of them contain spacious schools of art, and yet it is only in very few instances anything approaching comprehensive training in architecture is given. These can only be counted on one's fingers, and it is only too obvious that whilst we are bemoaning on the one hand the notorious bad taste and ignorance of the public in matters architectural, and on the other, the profession, ignore the great opportunity offered for propaganda and efficient training in architecture in many art schools. Those who remember the state of architectural education a decade or so back cannot but be amazed by the enormous strides made in this direction, in which the Board of Architectural Education and the now defunct Society of Architects have played so important a part. We are, however, falling into danger of a policy of exclusiveness, savouring suspiciously of selfishness. Having set in motion some movement "Schools of Architecture," we are still further and encasing them in a water-tight compartment called "recognition." To art schools are admitted the elite, the flower of university products, and possibly the dilettanti, and the armour of "recognition" is doled out very sparingly. The Board of Architectural Education. External provisions are made (the word itself may be best understood by the University of London simile, "Internal and External Examinations") and the privileges granted to the art school, and the conscious and subconscious benefits those schools receive, are out of proper proportion to be considered fair and equitable.

One who has the best interests of the profession at heart would wish to grumble at the position of those schools, but what one could do for is a wider policy adopted in training the country generally. It must not be forgotten that in the average art school is produced, amongst others, the amateur artist and the client of the future. In order to understand this dictum let us explore the ground a bit further. The training given in schools of art is apparently to equip would-be artists, painters and other craftsmen with a sound technical knowledge of their craft. It is outside the scope of this article to determine whether they succeed or not in this purpose, but should be borne in mind that a considerable number of students who attend schools of art become potential masters of their craft, and off, as they do, into other callings of life. Those who do succeed, adopt pursuits in art and are all subservient to the Art of Architecture and yet their ignorance of the elemental principles of architectural design is appalling. One would not perhaps find them a knowledge of the various styles, the Classical and Mediaeval mouldings and ornament, &c., but their application and the uses of architectural composition are not understood by these students, and yet it is on this knowledge of these last, that any real or appreciation of modern-day architecture is based. This alone places the teaching of architecture in an art school at a discount, and criticism. Further, more often than an important subject is dovetailed into the curriculum as a necessary nuisance to comply with the syllabus of the Board of Education. In art and is taught by a member of staff whose real legitimate province of work is metalwork or etching, &c., and for an hour a week as possible. Very rarely does one see an advertisement for a Master in

Architecture and Architectural Design, still less for a full-time employment. More often such an advertisement asks for a lecturer in building construction on a basis of two or three evenings a week. The responsibility for this lies at no particular door; it is simply a result of indifference, and lack of interest, a disregard for the necessity of good architecture as a public



The Roman Theatre of Verona: A Glimpse of the City from High Windows. (See p. 588.)

asset. Instead of being compulsory for all students, as in the Royal College of Art, it is relegated to a minor position in the average school. There are classes for painting and decorating, sculpture, and modelling, commercial design, poster work, &c., to which students can proceed direct upon entrance to the school, provided they possess sufficient aptitude for drawing, but little regard is given to *ensemble*. At what value can one assess a proficiency as a painter or decorator, if the student is ignorant of architectural settings? There surely is something more profound than a practical efficiency and knowledge of paints, varnishes, graining and marbling, &c., and the same applies to the other crafts in varying degree. In the study of these various crafts there is a lack of cohesion in the curricula of these schools and the student is often encouraged too soon to pursue his own particular bent before having mastered the psychological and general æsthetic value of art bearing on all problems connected with it.

It cannot be wondered at that the architectural training received at the smaller Schools of Art is viewed askance by the profession and, perhaps by the Board of Education. This is indeed regrettable, as with all due respect to other crafts such as metal work, etching, sculpture, and decorative art, the present day has relegated the enjoyment and employment of these arts to the connoisseur and the wealthy, and yet one and all, from the wealthy to the humblest of us, need the gifts and enlightenment that good architecture can give us. Further, in these days when the demand is perhaps more for the efficiently practical than the æsthetic, it is a pity that the former cannot be endowed with the stamp of the latter.

Furthermore, it has given rise to a certain amount of squeamishness on the part of the professional graduates, who shrink from the teaching sphere and from openings in these schools, partly on the score of the supposed loss of professional dignity in being a teacher, and partly on the score of the remuneration offered, to say nothing of the embargo imposed in many cases on private practice.

Space does not permit of a defence of the teaching profession, and if some distinctive and

wider policy were adopted by the Board of Architectural Education, together with the Board of Education, whereby an incentive was given for the employment of professional men in schools of art (those who have qualified as Associates R.I.B.A., a qualification quite recently recognised by the Board as of graduate standard) there is no reason why very different results could not be obtained and the educational programme of the profession considerably assisted. With the recent adoption of the revised Burnham scale of remuneration offered

to graduates, although it may be considered a miserable pittance by the professional man in practice, it holds out more security than that of the nomadic existence of the average assistant. The figures range from £240—£480 per annum, less 5 per cent. superannuation, with a pension.

Sir Reginald Blomfield so far back as 1912 in his lecture to the Art Masters' Society, gave it as his opinion that men who teach in Schools of Art should be allowed the opportunity of practising their arts, giving, for example, half their time to the school, and half to their private work, because only in this way can the teacher keep his art vital, and continue in touch with young and enthusiastic students. This recommendation speaks for itself, and yet how many local authorities will permit this? Very few, with most disastrous results to the efficiency of the teacher as such.

With a little adjustment and foresight, therefore, the Art School can be utilised for a good purpose, and seeing that we as a profession are realising the paramount importance of education and the provision of increased facilities for such, its possibility as a potential factor is worthy at least of consideration and a possible rapprochement with the State authorities.

If our professional educational outlook is narrow, the means for effective propaganda poor, we have only ourselves to blame if our hopes for a more cultivated public architectural taste prove barren.

Surveying from the Air.

It was stated at a recent meeting of the Royal Aeronautical Society that the cost of a survey could be reduced and the accuracy improved by using photographs taken from a height of 10,000 ft. It was estimated that a survey of the delta of the Irrawaddy, which had taken three months by this method, would have taken twenty years ordinarily.

Road Bridge over Forth.

A proposal to build a road bridge over the Forth, at Alloa, at an estimated cost of £255,000, is to be discussed by the Clackmannan County Council.

WOLVERHAMPTON OUT-PATIENTS' AND CASUALTY DEPARTMENT COMPETITION

THE awards in this competition are as follows:—

1st, Messrs. Elcock & Sutcliffe, Avenue House, 21, Northumberland-avenue, London.

2nd, Mr. W. Sydney Trent, 6, Broad-street-place, London.

3rd, Messrs. Cleland & Hayward, 5, Exchange-street, Wolverhampton.

The assessor, Mr. Thomas R. Milburn, F.R.I.B.A., in the course of his report, stated that in addition to the premiated designs there were several that were very excellent, notably Nos. 43, 12, 3, 13, 8, 30, and 1. He congratulated the Board upon the many very excellent designs received, and is of the opinion that almost every competitor presented a solution of a very difficult problem.

The architects of the winning design have placed the entrances from the existing court on the west side of the proposed out-patients' department, which gives the shortest length of exit corridor and most compact planning. The entrance for the casualty department and in-patients is placed to the east of the new out-patients' department leading to the courtyard on the south of the new out-patients' department, and at the eastern end of the main hospital corridor. The entrance and exit passage to the new out-patients' department is entirely separate and placed to the west of the new building. The whole of the ground floor of the existing out-patients' department has been cleared out, and the upper portion is supported by beams and stanchions, and a well-equipped casualty and dispensary department provided, utilising as much of the existing old walls as possible.

Accommodation Provided.

Men and women out-patients enter the waiting hall from the vestibule, in which are situated barriers controlled by a porter, whose office has accommodation for out-patient records with the necessary counters overlooking the barriers. From this vestibule access is gained to the men's and women's lavatories. The office for the almoner is situated at the

north-west corner of the new building, and a small ante-room is provided.

The isolation room is placed at the south-east corner of the proposed building, where it is off the exit corridor leading from all departments. It is also in close touch with the casualty entrance.

Staff toilets are provided for nurses and doctors at the south-east corner of the building with direct communication by the exit corridor to all departments.

In the Surgical Department two consulting rooms are placed side by side with examination cubicles opening from each consulting room. This department is kept to the north-east portion of the building so as to be in touch with the small operating room, recovery room and surgical dressing room.

In the Medical Department consulting rooms and examination cubicles are placed to the south-east of the new building, and are similar in arrangement to the Surgical Department.

The Ear, Nose and Throat Department is provided on the north side of the new building with examination stalls on each side opening out of the dark room, two of the examination stalls being arranged so that they can be entirely darkened.

The Dental Department is placed to the south of the out-patients' departments' waiting hall, and both rooms are top lighted from the north.

Another Department which may be used for purposes to be decided later on has been placed on the south side of the building within direct reach of the out-patients' waiting hall and communicating with all other departments. This department might become a future electrical treatment room or rooms, and has easy access from the main hospital corridor so that the in-patients may use it.

The V.D. Department has been placed on the lower ground floor, and is well lighted, as the whole of the main ground floor is kept at the same level as the old out-patients' department. The men are placed on the east side of

the building, and the women on the north side, with consulting rooms between the two giving easy access for both sexes. The entrances for men and women are placed on the entrance passage for the casualty and out-patients so as to ensure privacy. Direct access for both men and women patients is obtained from the out-patients' waiting hall by a separate staircase which also allows for the admission of patients who might have passed through the general consulting rooms. The position of this staircase also ensures privacy. Suitable sanitary accommodation is provided.

The dispensary has been placed so as to give access for out-patients and in-patients to a small waiting hall for the latter is at the end of the dispensary, and a larger waiting hall for the out-patients is at the east end. An office is provided for the dispenser, with lavatory accommodation and a large well-lighted storeroom. A lift is provided in the basement, with stairs to the lift and stair.

The operation room is placed at the north-east corner of the building so as to be easily accessible from the surgical consulting room and from the Ear, Nose and Throat Department. Sterilising, anaesthetic, recovery and surgical dressing rooms are provided.

The Ultra Violet Rays Treatment room is on the south front of the new building, giving immediate access from the out-patients' department and also for the in-patients from the hospital.

On the first floor on the south side of the building quarters have been provided for the patient sisters, giving one sitting room, one bedroom, one bathroom with w.c. accommodation for the sister with three spare beds for additional nursing staff.

The Casualty Department has been placed in the present out-patient block under the existing Children's Ward. The casualty patients are kept distinct from the in-patients, but all come under the supervision of the porter's office, which is situated adjacent to the covered ambulance entrance.

In conformity with the suggestions of the conditions a simple but dignified treatment has been shown on the elevations, narrow windows with wide joints being used on the elevations with bands of artificial Portland stone. The floors and ceilings are of fire-resisting construction. The flat roof will be formed of hollow tile tubes which will have a non-combustible layer of broken brick with a screed of cement, on which will be placed two layers of asphalt, making a thoroughly weatherproof and non-conducting roof. All internal walls will be furnished with Keene's cement, enamel. The floor finishings will be in terrazzo or position or granolithic flooring, as the various rooms may require. All corners will be rounded and the doors will be hardwood finished. All windows will have metal frames with suitable glazing.

Heating will be by low pressure hot water radiators connected to the mains in the basement. Ventilation will be by mechanical methods, assisted by fans in the waiting hall and in the larger rooms. Ducts for the supply of fresh air are brought in under the ground floor, and led up to emit into the rooms with extract ventilators at the level. The building will be fitted for electric light, with suitable connections for electric apparatus.

The approximate price for the whole work, including heating, electric lighting, sanitary apparatus, drainage, boundary fencing and collapsible gates, and the roof is estimated at £25,578.

Remodelling Southport Baths.

The Corporation has received sanction to borrow £33,100 to complete the scheme for the extensions at the Victoria Baths. These include remodelling the premises, providing improved accommodation for the bathers, additional slipper baths, a new entrance hall, a cafe, and the installation of an up-to-date system of filtration with 22,000 gallons of water per hour.



From the Church Congress Exhibition.

Silver Altar Ornaments for Sidney Sussex College, Cambridge.

Designed and made by MR. OMAR RAMSDEN.

READING CONTENTS. PAGE

CHURCH CONGRESS AND THE ARTS AND	
RAFTS	585
ES	586
ERAL NEWS	588
PETITION NEWS	588
ART SCHOOL AND ARCHITECTURE ..	591
VERHAMPTON OUT-PATIENTS' AND	
ASUALTY DEPARTMENT COMPETITION ..	592
RELATIONSHIP BETWEEN CONSTRUCTION	
ND DESIGN IN ARCHITECTURE ..	599
SANTA BARBARA EARTHQUAKE ..	600
ITECTS' AND BUILDERS' INQUIRY	
REAU	604
BUILDING TRADE	605
ONAL FEDERATION OF HOUSE BUILDERS	606
ON BUILDING ACTS	607
TRACTS, COMPETITIONS, ETC. ..	609
POSED NEW BUILDINGS AND OTHER	
DRKS	611

ILLUSTRATIONS

Petition Design, Royal Hospital School, Holbrook.

This scheme, by Messrs. William & T. R. Milburn, of Sunderland, comprises a residential school for 1,100 boys, with accommodation for their general education and special training in seamanship and the various technical trades. The main school buildings are placed on high ground, the central group comprising the schools, the vel. the gymnasium, bathing pond and playing hall being arranged around the parade ground, whilst the administration offices are situated in the heart of the institution. On the flank of the central group is the boys'

residential department, designed upon the detached hostel system, and comprising fourteen hostels, each accommodating eighty boys. The hospital and sanatorium and residential department are all carefully grouped and allocated to the portions of the site in which it is believed they would function to the best advantage. The buildings generally would be constructed of brickwork with stone dressings and reinforced concrete floors and roofs. Flat roofs would be covered with asphalt and pitched roofs with Cornish slates. The total estimated cost of the scheme is £758,000.

The winning design in this competition, by Messrs. Buckland & Haywood, was illustrated in our issue for May 8, 1925.

The Late Lord Leverhulme's Bungalow, Rivington.

The illustrations published in this issue show additions to the Lancashire residence of the late Right Hon. Viscount Leverhulme, which was originally designed by Mr. J. Simpson, F.R.I.B.A. (retired). The additions, which have been made to harmonise with the existing building, include a circular ballroom (44 ft. 6 in. diameter) with minstrel gallery and two alcoves. The floor is laid on "Valtor" dancing springs. The surface of the floor is oak parquet, with a centre representing the points of the compass in walnut, oak, and hard white wood. The walls are coloured dark walnut as a background for tapestries. The dome ceiling is a dark blue, upon which the stars are painted in aluminium leaf as they would correctly appear in the sky upon a date in September. The general contractors were Messrs. W. Townson & Sons, Ltd., of Bolton, and the following were the

sub-contractors:—The Trussed Concrete Steel Co., Ltd., concrete reinforcement; John Tanner & Son, fibrous plaster; Francis Morton, Junr., & Co., "Valtor" spring floor; The Art Pavements and Decorations, Ltd., and Hollis Bros., parquet and wood-block flooring. The architect was Mr. R. Hermon Crook, F.R.I.B.A.

New Jewish Synagogue, St. John's Wood.

This church has been built for the Liberal Jewish Community, which is an offshoot of the orthodox Jewish Church. The front portion of the building is a steel-framed structure, faced with Portland stone, and having fireproof galleries. The rear portion provides a classroom, hall, and meeting room for church purposes. The church accommodates between thirteen and fourteen hundred persons. The front entrance hall has a white marble terrazzo floor which is somewhat out of the ordinary owing to the introduction of lead dividers between the terrazzo, giving it the form of quadrilateral blocks of white with a black intersecting line. Further interesting features are a white stairway and granolithic floor made of "Atlas White" Portland cement and white crushed granite aggregate. The general contractors were Messrs. Bovis, Ltd., Powers, Deane & Ransome, Ltd., supplied the structural steelwork. Messrs. Carter & Co. (London), Ltd., were responsible for the terrazzo flooring in the front entrance hall, and Plastering, Ltd., of Brixton, put in the white granolithic floor and stairway described above. "Truscon" floors were supplied by the Trussed Concrete Steel Co., Ltd.

Wolverhampton Hospital Competition.

A description of the winning design in this competition, by Messrs. Elcock & Sutcliffe, is given on page 592.



Competition Design for the New Royal Hospital School, Holbrook, near Ipswich: Block Plan of Lay-out.

MESSRS. WILLIAM & T. R. MILBURN, Architects.

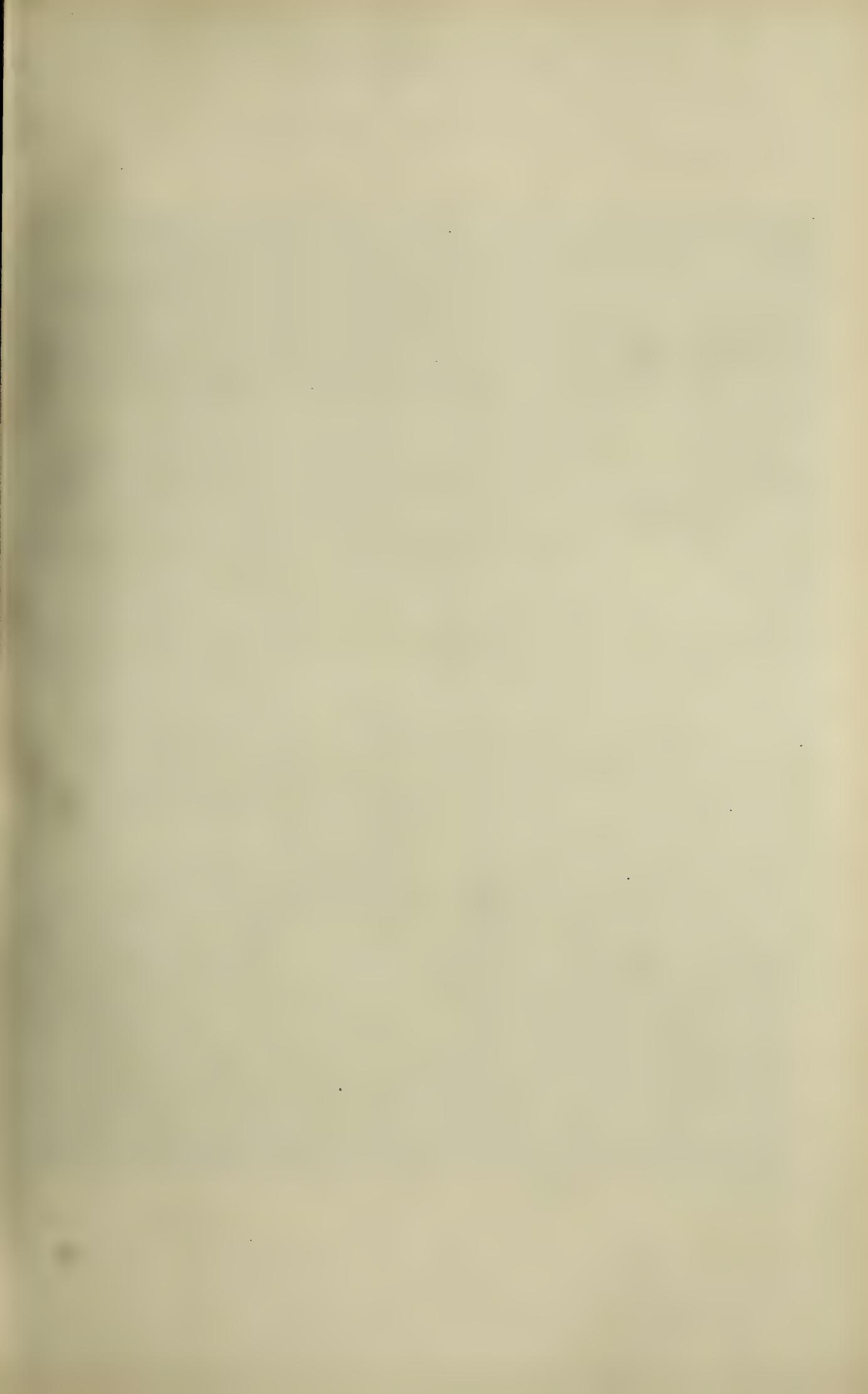


VIEW FROM ONE OF THE LAWNS.



THE NORTH ENTRANCE.

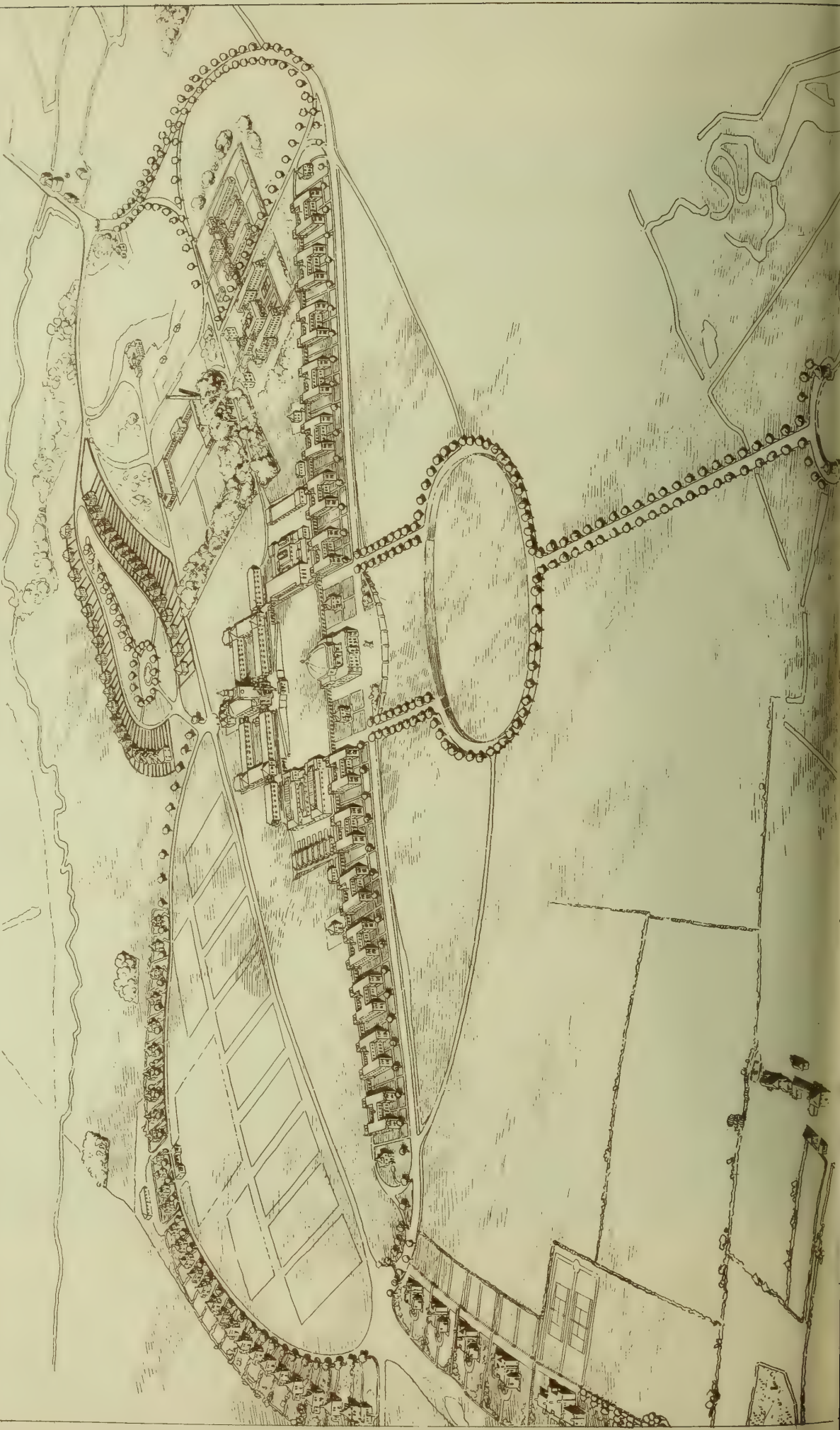
Additions and Alterations to the Late Lord Leverhulme's Bungalow at Rivington. MR. R. HEFMON CROOK, F.R.I.B.A., Architect







PROPOSED NEW ROYAL HOSPITAL SCHOOL. HOLBROOK.



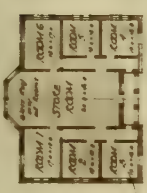
PROPOSED NEW ROYAL HOSPITAL SCHOOL. HOLBROOK

THE BUILDER, OCTOBER 23, 1925.

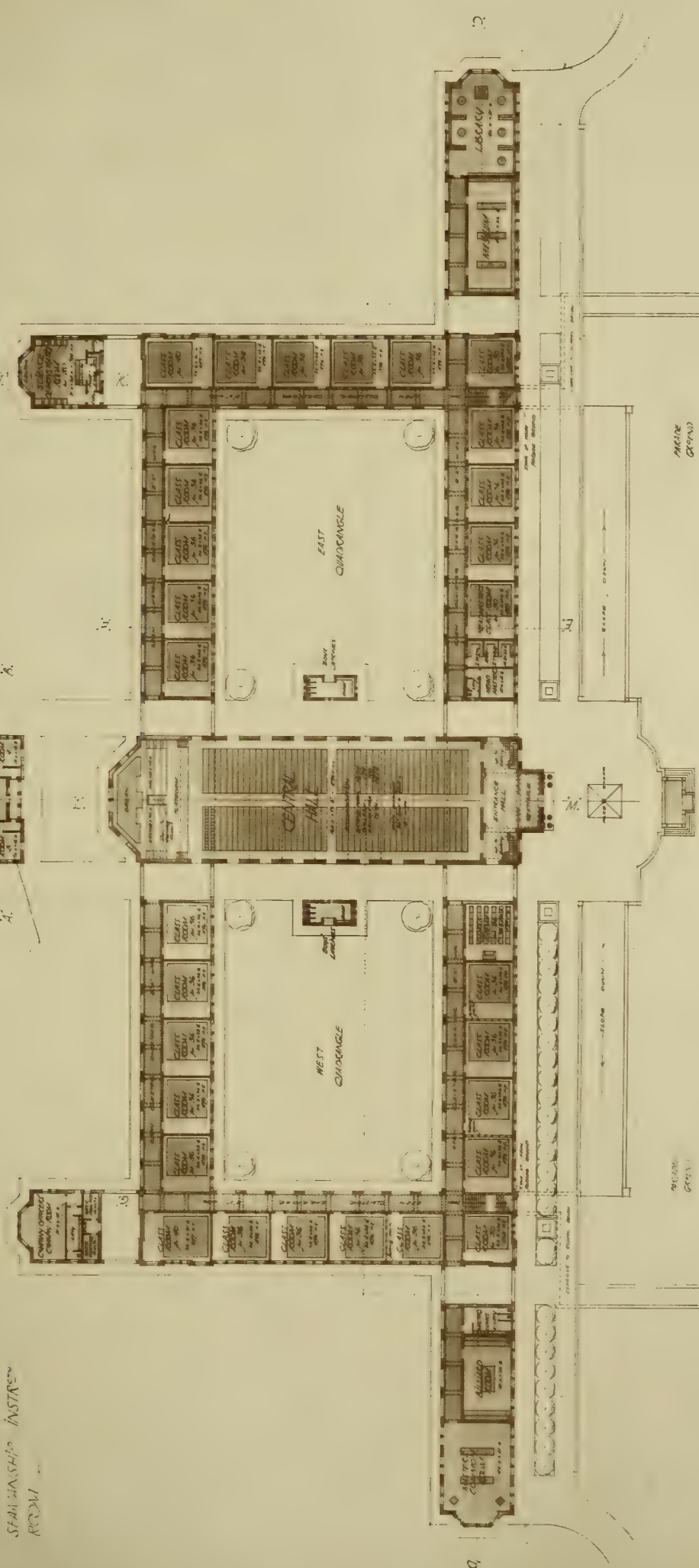
THE SCHOOLS.
SCIENCE SCHOOLS.
MUSIC HOUSE. LIBRARY.
MUSEUM. MASTERS'
COMMON ROOMS &
SEA-MANSHIP INSTN.
RECREATION

MUSIC HOUSE

SEA-MANSHIP
INSTN.
RECREATION

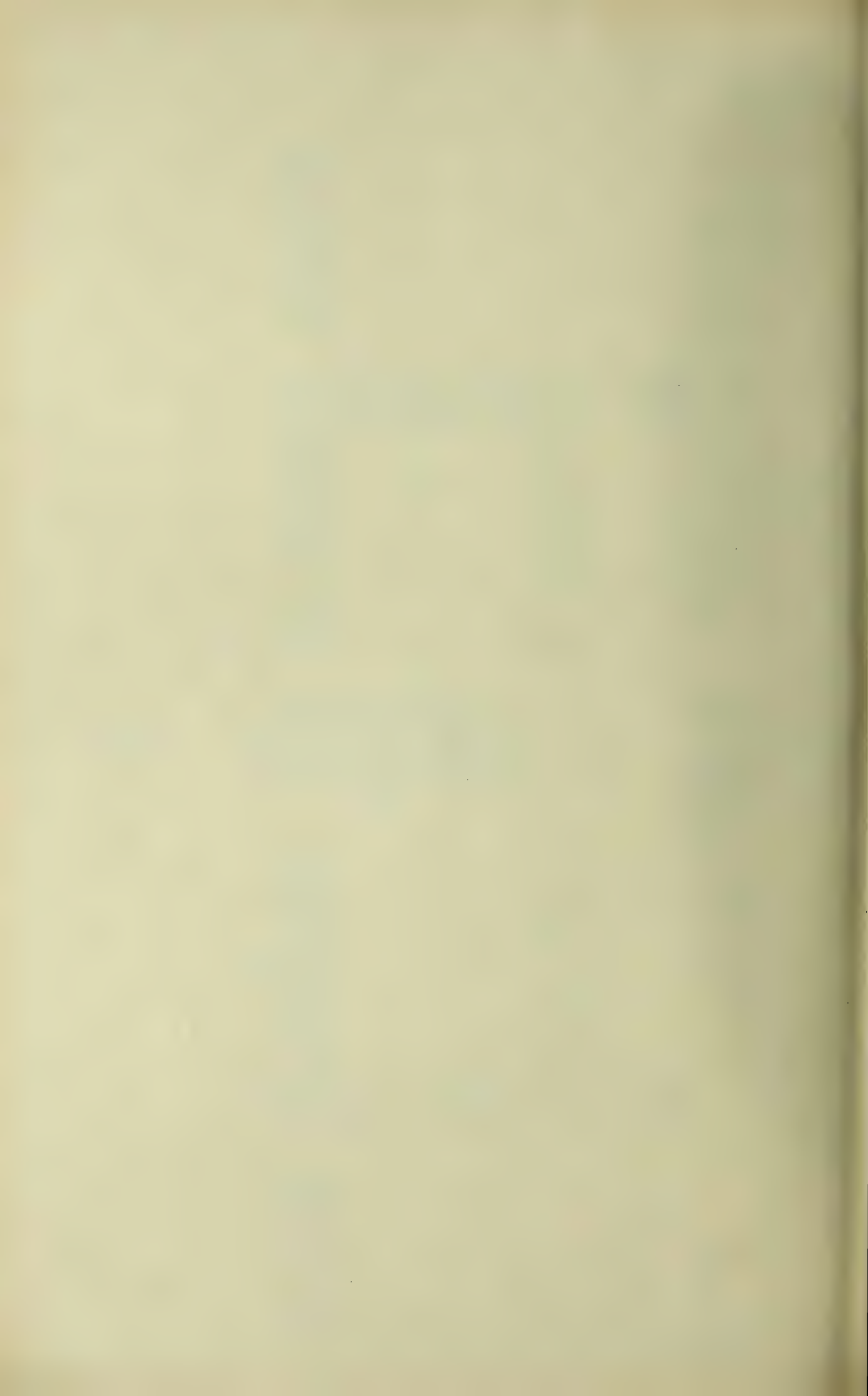


SCIENCE SCHOOLS



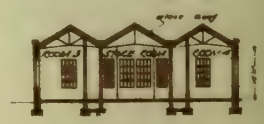
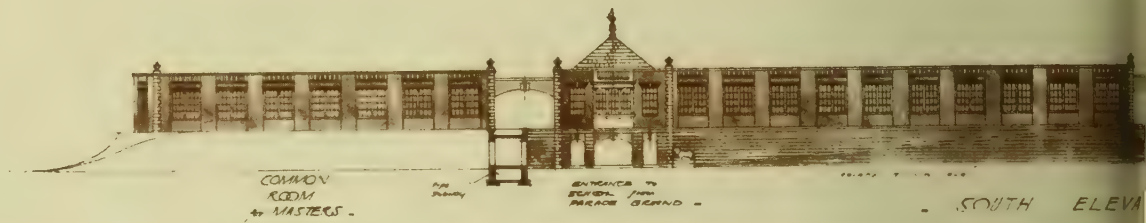
GROUND FLOOR PLAN

COMPETITION DESIGN BY MESSRS. WILLIAM & T. R. MILBURN.

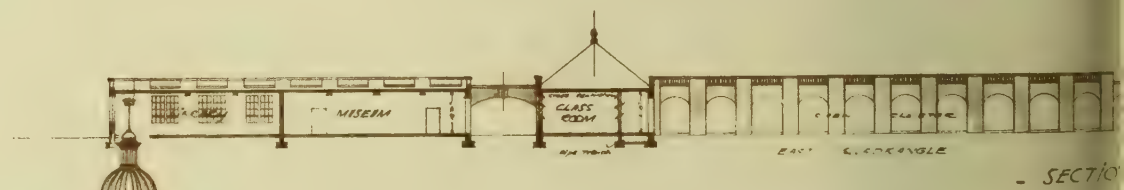


- PROPOSED - NEW - ROYAL - HOSPITAL

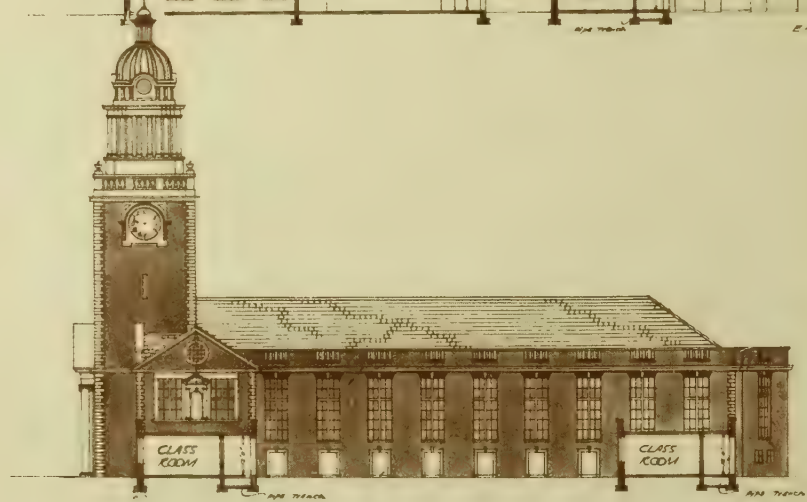
THE SCHOOLS,
SCIENCE SCHOOLS.
MUSIC HOUSE, LIBRARY
& MUSEUM & MASTERS'
COMMON ROOMS -



SECTION A-B
SEAMINSHIP INSTR. RM.



SECTION C-D
SCHOOL BLOCK



EAST ELEVATION
OF MUSIC HOUSE

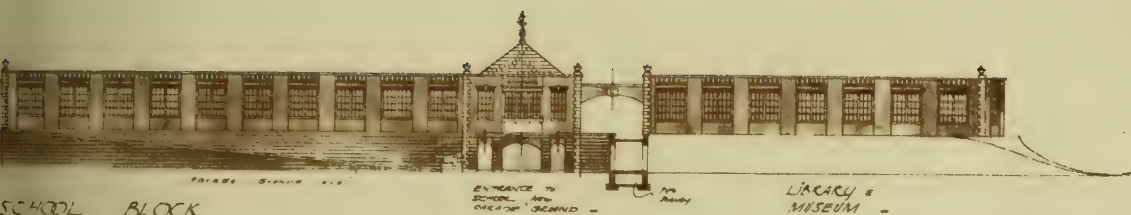


SECTION G-H
MUSIC HOUSE

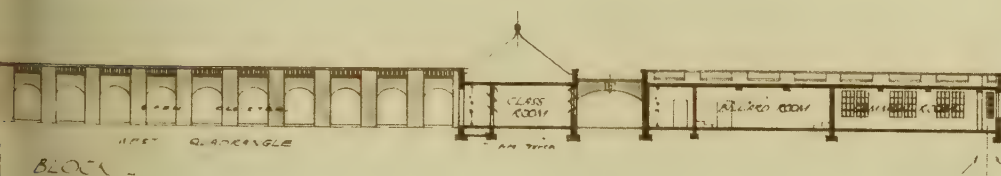
SECTION E-F SCHOOL BLOCK



SCHOOL - HOLBROOK - NEAR - IPSWICH -



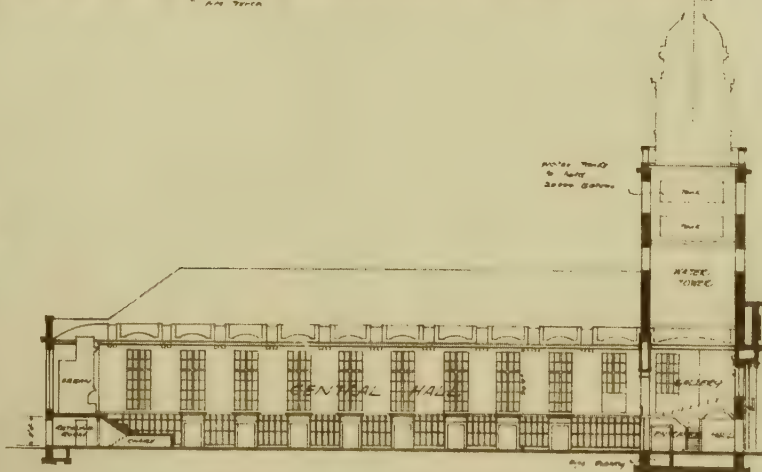
NORTH ELEVATION OF SEAMANSHIP INSTITUTE.



WEST ELEVATION OF SCIENCE SCHOOLS.



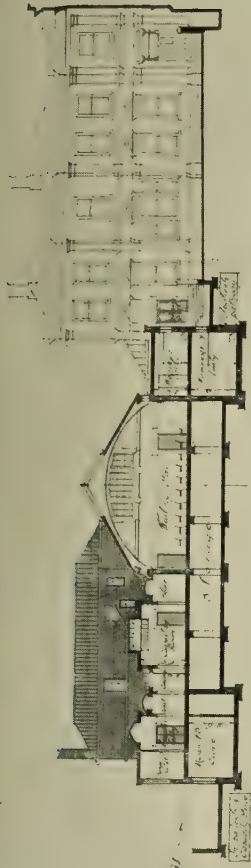
SECTION J-K SCIENCE SCHOOLS.



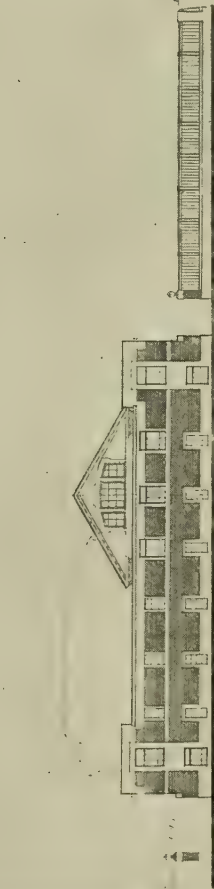
SECTION L-M SCHOOL BLOCK.



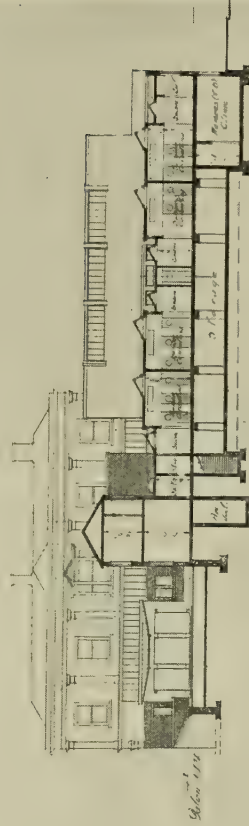
East Elevation.



Section on Line B.B.



North Elevation.



Section on Line A.A.



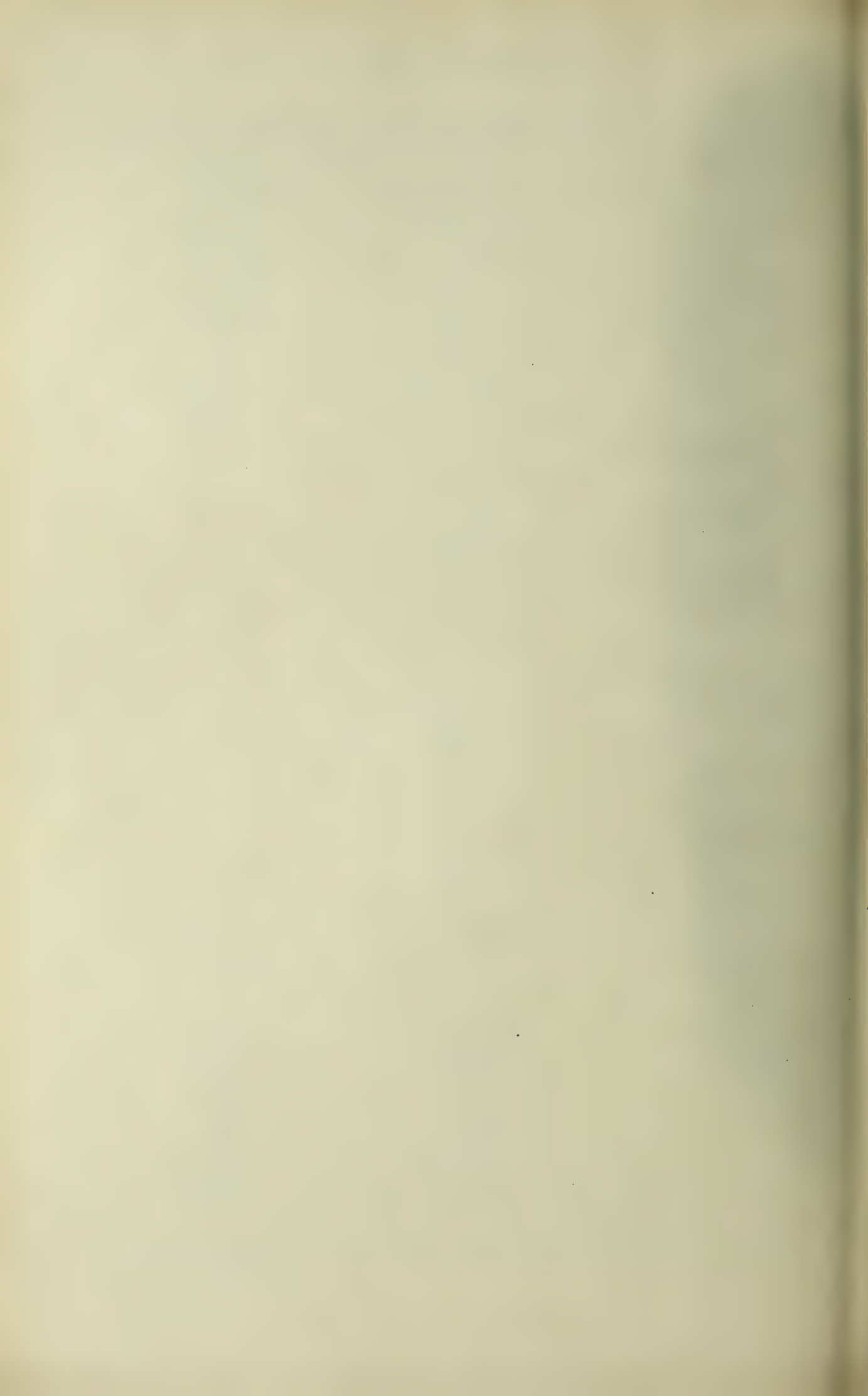
Sectional Elevation on Line C.C.



South Elevation.

Wolverhampton Out-Patients' and Casualty Department Competition: Winning Design.

Messrs. Elcock & Sutcliffe, Architects.





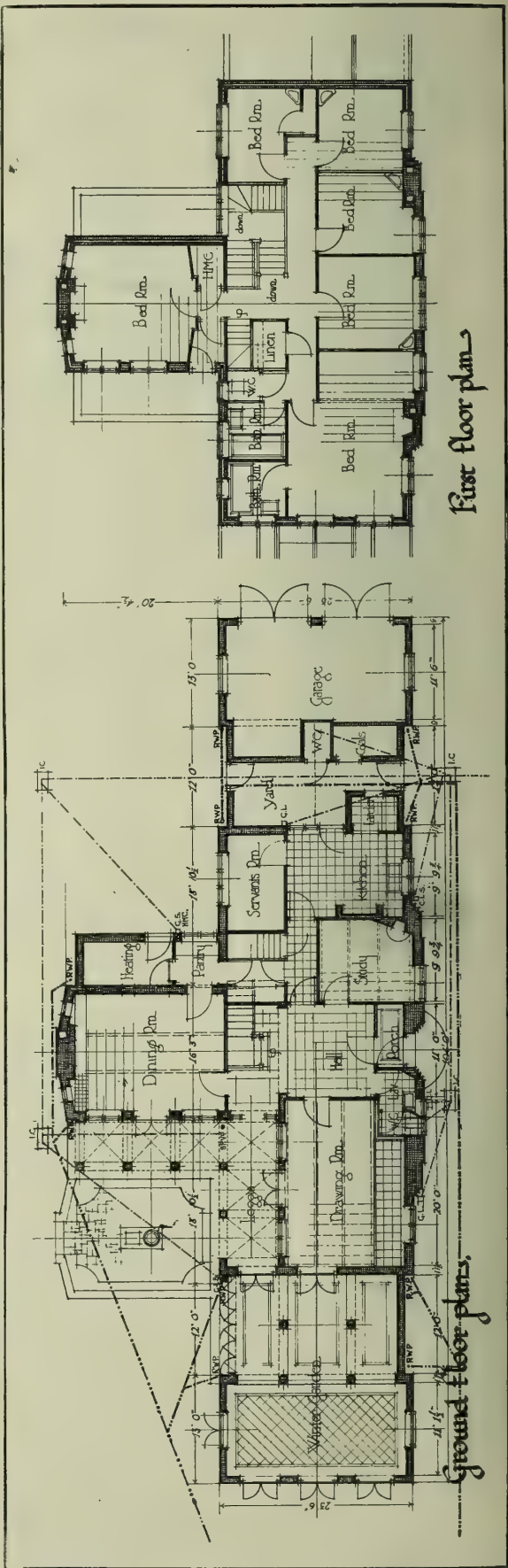
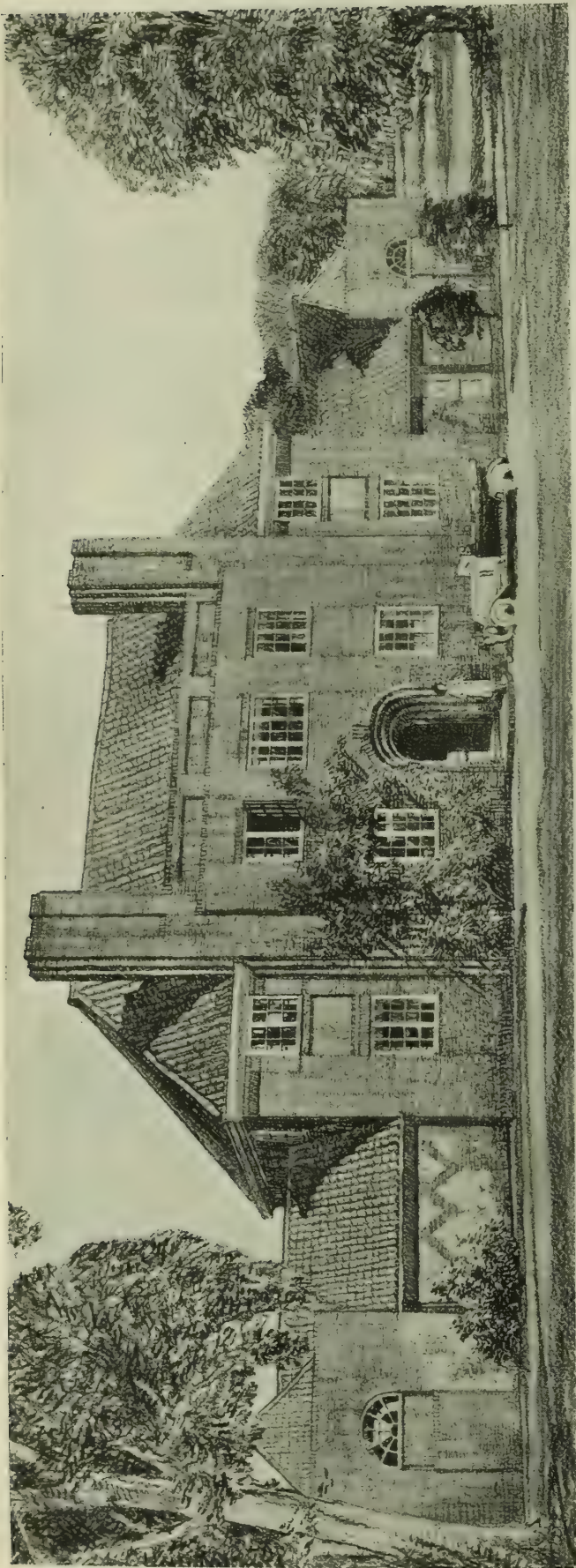
The Liberal Jewish Synagogue, St. John's Wood, London : Interior Views.

MESSRS. JOSEPH, Architects.



The Liberal Jewish Synagogue, St. John's Wood, London: The Staircase.

MESSRS. JOSEPH. Architects



A New House in Cassiobury Park, Watford. MR. HUBERT LIDBETTER, A.R.I.B.A., Architect.

This house is one of the largest erected in Cassiobury Park. The materials are the local purple brick with pantile roof and Portland stone in an arcade. The accommodation consists of five bedrooms, two bathrooms, and a large amount of cup-board space. The gardens have been laid out by Mr. Herbert Lidbetter, A.R.I.B.A.

THE RELATIONSHIP BETWEEN CONSTRUCTION & DESIGN IN ARCHITECTURE

the course of a lecture on this subject at Northern Polytechnic on Thursday, October 15, Professor A. E. Richardson, I.B.A., said that from the standpoint of construction building had been steadily improving for the past century, but it had just steadily been losing its best attribute, namely, gracious expression. As he understood the matter, there existed a strong line of demarcation between mere building and architecture. For example, whereas the conventions of the eighteenth century encouraged an adherence to classic form, which latter to some extent was complementary to traditional methods of construction, the nineteenth century encouraged an eclectic taste which was at the picturesque. They had also to consider the industrial revolution of the nineteenth century, the discovery of the properties of steel, and the gradual development of stone construction veneered with stone and

at the present time we were still under the influence of late Victorian methods. On the one hand we were hampered by obsolescent byways, and on the other by an innate sluggishness which fettered us to consideration of old styles, and reproductions. Architects' bodies were not wholly to blame for the present position of the arts and crafts. There had been sufficient excuse in professional necessities for the energy that had led in turn to study and analysis of first one phase of the style and then another. To be brief, we had been forced by the eclecticism of the Victorians to view past art as providing an almost inexhaustible store of motives and models from which to retrieve both details and ideas. Such a state of mind was inevitable. We had evidence of its workings in the contemporary architecture of Europe and America. As one writer remarked quite recently, "The Eighth century had been added to the seven described by Ruskin."

But in this process of close study, this dual building up of a repertoire of ideas, the very essentials of building had been relegated to a secondary place. In a small and lonely island, netted with ways of communication, the gradual suppression of local handicrafts and traditional methods had been sure. As individuals might regret the changes, we had to look to the new conditions in the

It was useless to attempt to reimpose the methods of art upon industrial expansion predetermined by questions of economy. Broadly, there were three main elements to be considered, viz., housing, industry, and transport. There were also the divisions into which building could be divided, and these could be enumerated to include domestic, civic, and ecclesiastical art. As to this latter group could be included engineering, which had a specific bearing on building. There were the other branches—planning and regional development. In order to bring about a greater continuity between the various branches of the art in which architecture should have a paramount position, it became essential to work for a closer affinity and co-ordination between these specialised branches. This was not only logical, it was true. But the problem was beyond the power of the individual. Every city and every town had its own particular problem to solve; every village was in a particular position. Therefore, to the study of planning must be added the even more important study of regional development.

The issue of the moment was to differentiate between reproducing old forms and their application to modern needs and the slow evolution of expression in building which had new life. Examination many so-called modern extensions had all the failings of works based solely on tradition. They were generally of a decorative character and aimed at freshness

of form often dissociated from the fabric of the building. At first sight these works had a novelty that attracted, but after a time the freshness became commonplace. A complete revolution in architectural design could not be effected at command. The nature of the art, its ramifications and conflicting interests demanded a compromise. On such reasoning it became clear that the new must to a great extent be determined by precedent, that the qualities and grace of old work and the truth of old craftsmanship must be considered.

To a great extent, modern building practice played its part in artistic expression; apart from steel and reinforced concrete for floors, the majority of buildings were constructed with small materials. We had bricks similar to those used during the last five centuries, and masonry that had changed very little since the time of Sir Christopher Wren. But these materials, except for buildings of small dimensions, were used as veneers to steel structures. There were, of course, exceptional buildings, such as the new cathedral at Liverpool, which had been built entirely of stone, to prove the rule. Small houses and cottages were almost invariably built, apart from character, on traditional methods. On such an analysis it would become clear that for many years the principle of compromise must be observed. The newer methods of construction such as reinforced concrete, reconstructed stone, and various compositions cast into materials of a size convenient to handle, showed the direction in which modern building was tending. The most revolutionary material was that of reinforced concrete, which permitted of buildings being cast *in situ*, ensuring the greatest freedom in treating large spaces and allowing the minimum of support.

At the present architecture was suffering not so much from want of nourishment as from want of training and discipline. It had become coarse and ill-mannered; it had lost the good breeding it once had. Moreover, in expression architecture was not in sympathy with commerce, neither was it regarded as essential to business by those who were obsessed with money-making. Hence the slipshod methods, the lack of culture, the contentment with the reproductions of the antique, and the slavish copying of the second-hand models which represented the feverish contribution of America.

We could not change the present, but it was our duty to project ideas for the benefit of posterity. In such ways was the continuity of the art attained. We felt our way gradually, often retracing our steps and changing our opinions. No longer must we view architecture with insular or parochial eyes; but, being English, we could not escape the dominant traits of our race, or do other than assist the vast tendencies of our times. His advice was not to be led away by mere novelty. The new was ever formed by recasting the old. There were, however, certain subtleties and niceties to be observed. The modern spirit was with us, but it was inarticulate; like London itself, it was a babel of discords and controversies. Small wonder, then, that building lacked vitality. For mankind nothing was impossible. He, for one, looked forward to the time when building would again become instinctive, and an appreciation of its qualities the prerogative of the man in the street. What France had achieved should be the case in this country.

The chief fault to-day in building was the non-observance of first principles. We had a confused idea of styles, of ornaments and details, and a strange facility for mixing them; but it could not be said that our ideas were original. We were fatigued by the effort to learn the past as our teachers would have it learnt, and listless in our essays. The method of improvement was along the structural path.

To examine the theory closer: the skeleton of the plan determined the design. This was a primary truth and must be followed. The constructive faculty next came into play, and this in its workings must be consistent with the main issues of the plan. The third quality, namely, form, was, or should be, of secondary consideration to the two previously mentioned. Form should develop from structure. The past styles were concrete examples recording the psychology of the people who brought such works into existence. It was for us to view the assemblage and to profit by the lessons, but it was our bounden duty as moderns to consider the monolithic properties of reinforced concrete, or of steel and composite structures. The reproduction of the antique must cease; it must give way to an expression which at first might have less grace but more of truth. Gradually, as experience taught, fresh grace would be acquired and a natural style result. As students, they must be conversant with past styles, for these presented the rungs of the ladder by which we have ascended to our present vantage point; but it was no help to the art to return to sheer copyism. There had been too much copying of form for form's sake, and little regard for the distinction between form which represented a lost tradition and form which exactly expressed the requirements and conditions of a problem.

The student from the outset should begin to classify all the buildings of history which exhibited harmony of structure with ultimate form. He would proceed to a general and catholic view of architecture, and would gain an independent outlook freed from the trammels of period and style. He would, in other words, look for the organic merits of a building rather than be seduced by the pictorial side of mere composition. Construction and design, therefore, connoted the return to first principles; in other words, it was the only sure means of securing modern expression in building. It could be argued that designs based entirely on logical reasoning were often ugly; on the other hand, it was equally true that the finest works owed a great deal of their coherent beauty to the observance of elemental truths. Another mistaken policy was to limit architectural study to any particular style or period. At this stage they could again discuss the meaning of structure—in other words, the correlation of building to character, or the endowing of assembled materials with grace.

They had, let it be supposed, arrived at the correct solution to a set of conditions in plan form. The structure in its grouping was determined in three dimensions. There remained: (a) The nature of the materials to be used; (b) the ability to exercise the function of these materials, in terms of strength and expression; (c) the observance of harmony in the use of materials. At this stage they came upon those nebulous qualities—scale, rhythm, sense of proportion, etc., which could be called articulation. The design was now in the embryonic state. This stage of thought in design could be summarised as knowledge of materials and the possibilities arising from the right employment of materials. Definition could be given to the parts of any structure by the correct employment of materials, especially if those materials were introduced exactly in conformity to their proper use.

The next stage, by far the most difficult, was to endow the structure with grace. No man, however gifted, was able to produce a new style of architecture. There were some who in their desire for novelty were prepared to sacrifice efficient requirements. They aimed at symmetry which was illogical or asymmetry which was forced. The unification of the components of a design was the most difficult task; it was one of compromise, and the designer was beset with a hundred conflicting thoughts. Generally he despaired and clothed his building with details which completely wrecked the elemental truths of his scheme.

[The lecture was illustrated by diagrams and slides showing modern buildings.]

THE SANTA BARBARA EARTHQUAKE

By S. HURST SEAGER, F.R.I.B.A., M.T.P.I.

SANTA BARBARA is a city of 30,000 inhabitants, distant about ten hours' journey south of San Francisco. It lies in a shallow valley and spreads itself over an area of about two and a half miles long and two miles wide. The axis of the valley is N.W.-S.E., rising gently from the sea at the south-east end up to the level of the low hills which surround the town. On the axis of the valley is the main street—State-street—and the other streets are all either parallel or at right angles to it. There was originally a stream running down the valley to the sea, and the site chosen for the old mission was on the high ground at the head of the valley on the north-west of the present town. The watercourse was filled up and now forms the centre of State-street. It has been said that this made ground is responsible for the principal damage to the town; but there is just as much damage to individual buildings far from the old valley stream, even up on the foothills in the north-

style, and others built in the flat-roofed style of the Pueblo Indians—are still there to attract tourists and to invite settlement to-day as in the past.

Ten days' residence, which terminated only a few days before the quake, left one with a vivid impression of perhaps the most beautiful town of California—the home of many wealthy Americans, who, having amassed their fortunes in the less highly favoured cities of the East, now devote themselves to community interests in this beautiful western home of their choice.



Fig. 1.—The Railway Station.

east and north-west, showing that the greatest damage is done in the centre of the valley, because along it are gathered the largest number of buildings. These were of the usual heterogeneous character and had no particular interest. The beauty of the town was in the residential areas, and fortunately these have not suffered to any great extent. The undulating tree-lined avenues, bordered by well-kept lawns and a wealth of flowering shrubs—in the midst of which stand the well-designed homes, some large and stately, some excellent examples of the Spanish Mission



Fig. 2.—The Railway Station.



Fig. 3.—The Hotel Californian.

The news of the disaster reached me in San Francisco, and as soon as possible I accepted an invitation to re-visit the town and report on the results. The notes and illustrations are the result of three very full days' work, in which I had every opportunity offered me for making a close inspection of the ruins and of studying the reports which had already been prepared by the State and County Engineers. The Community Arts Association kindly obtained for me, from the architects, details of



Fig. 4.—The Hotel Californian.

the construction of those buildings which had withstood the test of the shock.

Earthquake experts have not yet reported on the causes which led to the disturbance, nor as to the force or direction of the earth waves. There were two major shocks, one on June 29 and the other on July 3, and many minor shocks between these dates.

The N.W.-S.E. streets terminate at their eastern end in an esplanade on the shore of the bay, and the N.E.-S.W. streets (that is, those at right angles to State-street) terminate



Fig. 5.—The Hotel Californian.

at the northern end in low foothills and at the southern end in hills which separate the town from the ocean. Faults are known to exist in the northern hills, and a supposedly existing one close behind the town on the northern side, roughly parallel to State-street, enters the ocean to the south of Santa Barbara. It



Fig. 6.—Californian Hotel Garage.

assumed that the movements in these faults were caused by creating waves at right angles to the direction of the quake, and it will be noted that the examination of the buildings confirms this view; for while many cracks are seen in the walls at right angles to State-street (those facing either N.W. or S.E.) it is those facing State-street (that is, those facing N.E. or S.W.) which either show no significant fracture or else have some parts thrown to the ground.

Nothing can be learned from the buildings which have produced the most spectacular effects by tumbling to pieces, heaps of ruins without any cohesion in the materials which they were constructed, such as the central parts of the Arlington Hotel, the part of San Marcos Store, and the California Hotel. Fortunately there was no damage by fire, as there was in the San Francisco earthquake of 1906. There the damage from the quake was greater than that from the quake of 1906, so that all San Franciscans unite in sympathy for the victims of the earthquake, but of the "great" in the vain endeavour to make people



Fig. 7.—The Hotel Neal.

their city is subject to earthquake shocks. Santa Barbara only one of the reservoirs is broken, and any fire which occurred within the range of the supply was immediately extinguished by the water available from the river. The precaution was also taken to cut off all electric power and the gas supply.

But during my visit a disaster from fire nearly overtook the town. A violent hot wind had been blowing all day and increased to a hurricane at night, when the temperature reached 104 degrees Fahrenheit. It came from the Mojave Desert and reached us as from a furnace. Everyone's thoughts were naturally directed to the enormous risk of widespread destruction should a fire get a firm hold of the buildings; for all knew that under the circumstances no power could possibly cope with it. In this state of mind we went to our rooms. Sleep was out of the question, so that it can easily be imagined with what alacrity we responded to a call when at 11.30 we were informed that what we feared had taken place. A large fire was raging to the north-west of the town in the direct line of the hurricane. We were told to pack up all our belongings and to await developments on the verandah. As we gathered and watched with anxiety the rise and fall of the brilliant illumination in the sky. We could not see the actual flames for they were on the other side of rising ground, which lay about half-a-mile from us. For two hours we discussed what should be done if the flames came over the brow. Nearly all the guests had motor-cars—all had different ideas as to the direction they would take, if it was found necessary to flee. We could see that the whole town was alarmed, and we knew that in all the houses which were lighted the same subject was being discussed.

The risk from driving motor-cars is great enough at all times, as is proved by the fact that in 1924 no less than 26,000 deaths and 10,000 casualties occurred in the United States from motor-car accidents—this when people were in their right minds and free from pursuing danger. It was a grim thought to contemplate what would have happened if the thousands of motor-cars had suddenly dashed to safety. Most careful regulations had been made for directing the traffic during the day, but it would have been impossible to make regulations to ensure safety under such abnormal conditions. It was a relief, therefore,

to see the glow gradually dying down and finally disappear. We learned it had arisen from a large grass and bush fire close to the town, and it had only been extinguished by calling out the 200 marines stationed in the town, who aided the fire brigade and inhabitants in beating it out just as it reached the buildings on the north-west side. We were told that such a wind and such a temperature were "most exceptional" for Santa Barbara, and the refreshing appearance of the gardens and avenues stand as a witness to the truth of this assertion.

The disaster at Santa Barbara will therefore be known as the earthquake of 1925, and the resultant nervousness minimised as far as



Fig. 9.—The Arlington Hotel.

possible by the creation of a jubilant optimism. This is effected by organising "Community Sings" in the beautiful park in the centre of the town and by public meetings of rejoicing

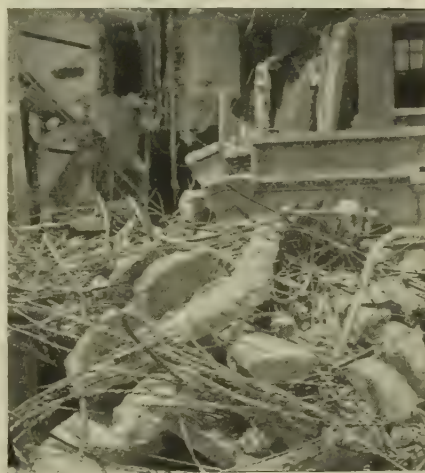


Fig. 10.—The Arlington Hotel.

that now the opportunity has arisen for widening State-street, and rebuilding it under a well-thought-out scheme from end to end. A grand opportunity indeed; and, if the enthusiasm shown at the first meetings of the property-holders is sustained, the result should be to make Santa Barbara famous, not only for the beauty of its scenery and the excellence of its climate, but also for the design of its architecture in its central street. The style selected is that introduced by the Spanish missionaries in the eighteenth century and is known as the Spanish Mission style—a style most appropriate from an historical and practical point of view. There are several modern buildings in the town, as throughout California, which are delightful examples of adaptations to meet the requirements of our modern life.



Fig. 11.—Trinity Church, looking East.

Large masses of plain, rough-cast surfaces, relieved by square-headed windows, having at times rich architraves and beautifully wrought-iron grilles; round arched arcades and interior courtyards or "patois" are the characteristic features. So optimistic are the community leaders that they arranged for one of the "Sings"—at which I was present—to commence with the grand, uplifting hymn, "Praise God from Whom All Blessings Flow."

It certainly was miraculous—and may be regarded as a blessing—that out of the 30,000 inhabitants only nineteen lives should have been lost in such a wreckage as the illustrations show. This can be accounted for by the fact that the quake occurred at 6.42 in the morning, before the business premises, where the greatest damage was done, were occupied. As stated, residences suffered comparatively little, the greatest damage to them being caused by the fall of chimney stacks; very few were left standing, for the reason that nowhere had the precaution been taken to allow for the difference between the quick oscillation of the wooden structure and the slower oscillation of the chimney itself. This damage would have been prevented if a space of about 3 in. had been left all round the chimney between the brickwork and the roof and the space covered only by the flashing. In this case the only result from the lack of synchronisation would have been the ruin of the flashing.

All the accounts from those who felt the quakes agree that they were violent ones, not a simple rocking, and the conclusion is inevitably reached that any buildings which are scientifically designed and honestly constructed, of whatever material, may be proof against any shocks which are likely to occur. This is borne out by the fact that buildings of



Fig. 12.—Trinity Church.



Fig. 8.—A Church in State-street.



Fig. 13.—The Mission Church of Santa Barbara.

timber, brick, stone, steel-frame, and concrete-frame reinforced with steel ties, are still intact in various parts of the town.

FOLLOWING are some special notes on the illustrations accompanying this article:—

No. 1. THE RAILWAY STATION.

At the south-east end of State-street, the direction of the long axis is W.S.W.—E.N.E. The building is of solid concrete without ties. This would account for the horizontal cracks one foot below the window sills and over the arches all around the building. The piers and arches are quite uninjured, except at the end arcade (see No. 2). The fractures are probably on the line of junction of the layers of concrete.

No. 2. RAILWAY STATION.

Arcade at W.S.W. end showing complete vertical fracture against main building. This would not have occurred if horizontal iron ties had been put above the arches to take up the tensile stresses which would be created by the oscillation of the building on its main axis.

No. 3. THE HOTEL CALIFORNIAN.

The N.E. front and part of S.W. side; it is a new brick building, but so badly constructed that the side walls facing S.E. and N.W. could not resist the diagonal strains set up. It is interesting to note that while the N.E.—S.W. oscillations cracked the side parapet, and moved it horizontally, the front N.E. parapet was completely thrown off. Interesting too, is the form the fractures took on the S.E. side (see No. 4).

No. 4. THE HOTEL CALIFORNIAN.

The northern end of the S.E. side showing the only portion of the wall which remained standing.

No. 5. THE HOTEL CALIFORNIAN.

The southern of the S.E. side showing the wall completely demolished, and the floor joists supported by the floor boards and lathing. Iron ties at rare intervals were placed into the bad mortar joints, and failed completely to fulfil their purpose. There is no sign of any hoop-iron bond in the brickwork. The debris shows a total disintegration of brickwork.

No. 6. CALIFORNIAN HOTEL GARAGE.

Totally destroyed; showing the type of construction used in this building throughout, and in the majority of buildings as "curtain" or filling walls between reinforced concrete framework. Note bad mortar joints—an extremely common fault.



Fig. 14.—El Paseo—the Patio.

No. 7. HOTEL NEAL.

Showing a very common and iniquitous form of construction; timber framing faced with brick, 4½ in. thick, and held to the studs by 6 in. nails driven into them. The upper part is of stucco facing and looks fairly sound, but is, in fact, in a dangerous condition. Sometimes the facing is of stone (see No. 8).

No. 8. A CHURCH IN STATE-STREET.

The form of construction referred to under (7) is here seen. All the work is done by the timber



Fig. 16.—The San Marcos Building, looking South-west.

framing, on which the thin stone slabs are suspended. Until the last month Santa Barbara had no building by-laws to keep erring architects out and contractors in the paths of rectitude.

No. 9. THE ARLINGTON HOTEL.

Santa Barbara's leading hotel, the resort of California's wealthy clients; furnished with every convenience—all "modern comforts"—except sound and honest construction. There was a tower to match one that stood the shock; but in this was a water tank holding 62,000 gallons, it crashed and carried with it the floors which are left hanging as shown. The remainder of the building is so badly damaged that it will have to be pulled down (see No. 10).

No. 10. THE ARLINGTON HOTEL.

Heaps of debris at the foot of the fallen tower. Ample reinforcement was used, but the concrete was too rotten to hold, as is shown by the quantity exposed.

No. 11. TRINITY CHURCH, LOOKING EAST.

Showing fallen gable of S.W. end of church. It was well built, as is shown by the fallen blocks, of brick and concrete. The wall was three bricks thick with very solid joints. The N.W. and S.E. side of the church shows no damage, but the tower is badly damaged. The belfry windows on the N.W. and S.E. side are very much broken, while those on the S.W. and N.E. side are only cracked. The tower is connected to the church and naturally its oscillation would be slower than that of the church; this might account for the throwing off of the gable; but it is probable it would not have occurred had the purlins been tied to the gable; they simply rested on the wall-plate. That the construction was sound is shown by No. 12.

No. 12. TRINITY CHURCH.

The debris of the fallen gable. The only instance of blocks of brickwork which have no disintegration. The concrete lintels are also in large blocks and the ties are still firmly fixed in them.

No. 13. THE MISSION CHURCH OF SANTA BARBARA.

The inferior workmanship of the tower accounts for their fall. They are of stone resting on "adobe" or clay walls.

No. 14. EL PASEO—THE PATIO.

Fortunately, among the many undamaged buildings is the El Paseo—a delightful grouping of offices and shops designed in the Spanish Mission style. The patio, or courtyard, overhung with an awning, is used as a restaurant.



Fig. 15.—The San Marcos Building, looking South.



Fig. 17.—The Carrillo Hotel.



Fig. 18.—The Carrillo Hotel.

5. THE SAN MARCOS BUILDING, LOOKING SOUTH.

A spectacular ruin is the result of building an addition to an existing building without any care to tie the one firmly to the other. The reinforced concrete building and is worthy of a study than I could give it; but the one I have formed is, that the portion of the original building facing north-east of State-street would pass through this portion and on the left of the illustration met the force of a shock travelling south-west. The oscillation set up would pass through this portion and communicated to the addition; through the built at right-angles and therefore facing south-west—it would continue, while that portion on State-street swung back towards the east, leaving a gap between the two portions; the two movements in opposite directions would come together with such violence that the angle of the original building was bound to be completely demolished. The addition on the north-west had not sufficient ties to the diagonal stresses set up and large parts of the north-east end were thrown off, as shown. The ties at the south-west end were strong enough to prevent damage there can be seen by photograph No. 16.

6. THE SAN MARCOS BUILDING, LOOKING SOUTH-WEST.

Part of the addition facing north-west. The joints are of stamped steel, and this accounts for their remaining intact.

No. 17. THE CARRILLO HOTEL.

One of the many illustrations of a reinforced concrete frame building with surrounding brick and curtain walls either of brick or terra-cotta being able to stand the strain. It will be seen that the walls of the upper four stories are, though the ground floor curtain walls have been considerably damaged. This is to be attributed for by the fact that the ground floor walls were not strong enough to resist diagonal strain. But the piers are firmly attached to the top by the beam, and on it the whole

of the building above swayed to and fro without injury. There are, however, horizontal cracks at the base of the piers and slight cracks at the junction of the piers to the beam.

No. 18. THE CARRILLO HOTEL.

North-west side of ground floor at the west angle, showing destruction of brick casings of the piers to the height of the horizontal beam.

No. 19. THE CARRILLO HOTEL.

The north-east front showing fractures of brick casing to the height of the windows.



Fig. 19. The Carrillo Hotel.

craftsman with a public taught to respect tradition and to appreciate the value of harmony, mutual trust, and respect.

The City of Architectural Re-birth : Palaces of Florence.

A lecture on "The Palaces and Churches of Florence," the first city where the newly-revived Classic traditions, called the "Renaissance," took root, was given on Wednesday last by Sir Banister Fletcher, V.-P.R.I.B.A., at the Central School of Arts and Crafts. He first pointed out the geographical position of Florence, and showed how the number of small states fostered a keen municipal spirit. The rule of the art-loving Medici family and the growth of art guilds in Florence gave rise to the stimulus in architecture which caused the adoption of the Renaissance, a use not merely of old forms but of new and pleasing combinations of these forms. Beautiful marble from the quarries of Carrara had great influence in producing the refinement of the style, and the brilliant climate resulted in the rugged facades and deeply frowning cornices of the palaces, such as the Palazzo Riccardi, the Palazzo Pitti, and others, which the lecturer illustrated by slides. Symmetry of classic origin is combined with variety and picturesqueness in detail. The next lecture (October 21), dealt with "The Palaces of Genoa and Milan."



The Liberal Jewish Synagogue, St. John's Wood, London. MESSRS. JOSEPH, Architects. (See p. 593.)

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting?—ED.

Boundary Wall Question.

[REPLY TO "OLD READER," OCTOBER 16.]

SIR,—I gather that everything has been done to settle this matter, but without success. The mould adjacent to the walls constitutes a nuisance and should be dealt with by application to the local council. It is obvious that the law compels one to have a damp-course in a dwelling-house wall, whether party or otherwise, and it therefore follows that steps must be taken to make same effective. The question of the shed can then be raised—as to whether due permission was given by the council before its erection. If this was not given an order will probably be given for removal.

G. W. H.

Concrete Bricks.

SIR,—In a district where it is extremely difficult and expensive to get ordinary bricks for building I am contemplating the erection of a fairly large number of lower middle-class houses, and desire to build them as cheaply as possible. I propose to obtain a hand-pressure brickmaking machine, using sand and gravel (of which there are large quantities on the site), combined with Portland cement in the proportion of 6 to 1, and after the bricks are thoroughly dry to use them in the ordinary way for building the houses. Would this brick work make a sound, substantial, and weather-resisting job, or would there be a danger of the bricks absorbing moisture which might penetrate through the walls to the interiors of the houses?

F. J. W.

Lath and Plaster Repairs.

[REPLY TO "MANAGER OF HOUSE PROPERTY," OCTOBER 16.]

In my opinion querist cannot do better than make use of the price list of building costs given every week in your journal, remembering always that the prices are for new buildings, and to add accordingly for old buildings, which may be worth anything from 25 per cent. to 50 per cent. more, according to quality and where situated.

G. W. H.

Treatment of Dairy Floor.

[REPLY TO "DAIRIES," OCTOBER 16.]

SIR,—I carried out some very large areas of dairy floor for a well-known dairy company in the following manner:—Ground floor: 4 in. to 6 in. hardcore, 4 in. Portland cement concrete, 6 and 1 gauge; when set, finished on top with 3 in. thickness of granite chippings and Portland cement with sufficient sand to fill interstices gauged to 2 and 1. In the centre of the 3 in. a reinforcement was inserted and all finished off together while green, in sections sufficient for a day's work, and allowed to be properly set before using, and well watered every day to harden same. This floor stood well for heavy work of dairies. I also laid asphalt in one coat $\frac{3}{4}$ in. thick, with granite chippings added while in the cauldron, with excellent results.

G. W. H.

Paving Materials.

[REPLY TO "BETON," OCTOBER 9.]

SIR,—The first method of paving would cost about 6s. 9d. per foot run, reckoning 8s. 6d. per yard super. for 2 in. flags laid complete. The second method seems to be extravagantly specified; it is quite sufficient to do little more than level up in ashes and cover with 2 in. of tarmac, and if granite chippings are available in the neighbourhood, a sprinkling of these on the wet surface is an excellent treatment. Such a paving as described would cost about 5s. 9d. per foot run. A reinforced concrete curb and channel combined with channel 6 in. deep by 12 in. wide, and upstanding curb 4 in. wide, and

rising 2 in. above the higher end of the channel would cost in any fair quantity about 3s. 4d. per foot run. Such a curb is not to be recommended as it is likely to become broken away with the scraping of wheels. I have recently put down a short length of such curb with a granite aggregate as a continuation of a similar granite curb, and the concrete curb compares very unfavourably, though little more than half the price.

"ROADS."

Fungus on Timber Floor.

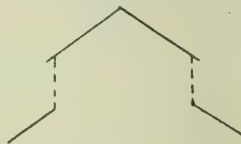
[REPLY TO "PUZZLED," OCTOBER 9.]

SIR,—Such a floor as described, if properly laid, should not be troubled with fungoid growth, and should be taken up and thoroughly examined. The most frequent cause of the trouble in such a case is failure to drive in and cover with concrete the level pegs used when laying the surface, and if this is the case this should be remedied and the surface re-coated with hot tar before the boards are replaced. Another cause is the laying of the boards while the concrete is still green, and again it will be necessary to re-coat with tar before re-flooring. Take particular care to burn all woodwork that has been effected with fungus, or there will be no cure at all.

"ROT."

Corrosion of Roof Shed.

SIR,—Having to replace a roof over a shed where steam and ammonia, also sulphuric acid fumes, attack the materials, I shall be glad to learn whether any of your readers have had a similar experience. If so, would they be good enough to suggest means of overcoming the corrosion by using either special materials in the construction of the new roof, or painting with special paint, or treating otherwise. The existing roof is six spans wide of 35 ft. each—"Queen" post trusses, ends carried on cast-iron columns, cast-iron valley gutters flanged and carrying feet of spars, which are not under-drawn. Roof covering is of slates. Roof light glazed into wooden bars in putty. Continuous vent, along ridge thus:—



Suggestions are: "Queen" post trusses all bolted together instead of the usual outside straps. Ends of bolts to be sunk in and covered. Steel trusses to be specially painted. Reinforced concrete trusses and stanchions. Patent glazing in all cases. Corrugated cement sheeting in all cases.

"QUERIST."

Combined Drains.

[REPLIES TO "S. P. T.," CROYDON, OCTOBER 9.]

SIR,—Under the Public Health Act, 1875, "drain" "means any drain of and used for the drainage of one building only, or premises within the same cartilage," and "sewer" "includes sewers and drains of every description except drains to which the word 'drain' interpreted as aforesaid applies." The effect of these two definitions is that a drain can be said to be that which receives the drainage of one house, while a sewer is that which receives the drainage of two or more. But under Section 19 of the Public Health Act, 1890, if the Act is in force in the district, when two or more houses belonging to different owners are connected with a public sewer by a single private drain, such drain may for certain purposes be treated as a drain and not as a sewer. The owner or occupier of any premises has the absolute right, in the case of domestic sewage, to empty his drains into the sewers of the local authority; but in the case of manufacturing and trade effluents this right is considerably qualified by statutory restrictions. The local authority must approve the connection, but in making the connection neither the owner or occupier or the local authority is entitled to trespass upon

private land. Once the connection has been made with the sanction or acquiescence of the local authority, or if the right to discharge into a sewer has been acquired by prescription, cannot be cut off by the authority without a new arrangement is made.

In general it may be stated that the local authority can enforce the drainage of a house to a sewer it is entitled to use, if it is not more than 100 ft. from the site of such house. The local authority has the power of adapting existing sewers to alterations made by them in the sewer, and the expense of such works of reconstruction provided must be paid by the local authority. If, however, a drain appears to be in breach of the local authority is entitled to serve the occupier with a notice to cleanse, and if he does not comply, amend at his, the owner's, expense. The local authority is insufficiently comprehensive answer to be given, but seen from the above that if the connection of the new drain was made to a private sewer already running through the adjoining land and without his sanction or any prescriptive right, the adjoining owner has the power for trespass, and that even where the connection to which the new house drain was connected was a "combined drain," and therefore vested in the local authority, the owner or occupier has no right to trespass upon the land to make the connection. If, as appears, the connection was wrongly made, the remedy is for a connection to be made to a sewer elsewhere, if it is within the prescribed distance—in the circumstances the owner's or occupier's expense.

SIR,—Generally, in the deeds of the property concerned, there will be found provision for drainage over neighbouring property. Where this can be substantiated there will be no difficulty in showing the adjoining owner such rights must be respected. Where record does not exist, proof of such right will need to be shown; but unless a drain is of recent date and connected with the knowledge and consent of the owner, the latter has no right to cut off a drain. Whether the local authority has power to demand connection to a public sewer put in at a later date and running over the original owner's property, will very largely upon the local by-laws should be studied.

Nine-Hole Golf Course.

SIR,—I shall be much obliged if you will give me information as to the cost of making a nine-hole golf course on grass land, and if there are firms who undertake such work.

Condensation in Basement.

[REPLY TO "READER," OCTOBER 9.]

SIR,—Excessive condensation, especially in the case of a basement, is more often due to inadequate ventilation. To overcome this difficulty, the most effective means of ventilation should first be tried before going to any drastic lengths suggested in your correspondent's letter. If there is a convenient flue into the basement large air brick could be inserted, this in an excellent upcast as an extractor; and are pavement lights, one or two rows of perforated ventilating panels, inserted in the walls, will afford the means of air inlet. Usually, the main cause of condensation is an excessive difference in the relative humidity of the outside and inside atmospheres, and ventilation for a reduction in this difference.

"FRESH"

Mortar.

SIR,—A building in which only cement is used generally means slow brickwork compared with one in lime mortar. Is there any means of treating the cement mortar so that it will work "fatter," and so lead to more being laid, without materially reducing the quality and strength of the work?

"BRICKLAYER"

THE BUILDING TRADE.

THE ROADS IMPROVEMENT ACT, 1925

AN Act came into force on August 7 which has received little public notice, entitled the Roads Improvement Act, 1925. This contains many important provisions, some of which have bearing upon our recent note, "The Country-side," in which we pointed out that a clearing of corners very often but leads to increased danger and hence increased danger. This measure is of a composite character, for whilst it empowers highway authorities to plant trees or shrubs and lay out grass margins on any highway maintainable by them (section 1, subsection (1)); it also contains restrictive provisions to prevent the obstruction of view at corners (section (4)). The powers under section 1 have to be exercised so as not to hinder the reasonable use of the highway by persons using the same or so as to be a nuisance to owners or occupiers of premises adjoining the highway, and by subsection (5) damage is so caused the owner or occupier to recover compensation to be assessed as provided in section 9. By section 2, section 8, subsection (5) of the Development and Roads Improvement Funds Act, 1909, is amended so as to include in the expression "improvement of roads" the planting of trees and laying out of grass margins.

Here, however, ends the æsthetic side of the Act, and a different note is struck in section 4, which provides that where the Minister of Transport or any highway authority is of opinion that it is necessary for the prevention of danger arising from obstruction to view of persons using the highway with respect to any land at or near any corner or bend in a highway, a notice may be served upon (a) the owner or occupier of the land directing him to alter the character or height of any wall or fence forming part of the structure of a permanent edifice, fence or hedge so as to cause it to conform with the requirements specified in the notice, or (b) upon any owner, occupier or lessee of the land training them either absolutely or subject to such conditions as may be specified in the notice from permitting any building, wall, fence, or hedge to be erected or planted on the land. By section 11 "hedge" is to include trees.

Before considering the rest of the section we remind our readers that obstruction to view by trees is also now dealt with by section 23 of the Public Health Act, 1925, which we are dealing with in another article. Turning to the Roads Act, it is provided in proviso (ii) to section 4 that a notice restraining the erection of any building upon land shall not be served by the Minister or any county council or other highway authority without the consent of the local authority of the district in which the land is situated, and under proviso (iii) the owner or occupier of any land shall not be restrained by a notice under this section from executing or permitting the reconstruction or repair of any building which was upon the land before the service of the notice, provided such reconstruction or repair does not create a new obstruction to the view of persons using the highway. By subsection 2 of section 4 the restrictions imposed by a notice are to remain in force until withdrawn by the authority by whom the notice was served, and are to be binding on successors in title to the owner or occupier of the land, subject, however, to the proviso "unless he" (the successor in title) "proves that when he became owner or occupier he had, after making inquiries, no reasonable cause to suspect any such restrictions were in force." Litigation is certain to arise in connection with this provision, which imposes a restriction on the title to land, as also from subsection (4), which provides that any person

served with a notice under this section shall have power, notwithstanding anything in any conveyance, or in any lease or other agreement to do all such things as may be necessary for complying with the requirements of the notice. The Legislature attempts to simplify the conveyance of land in one set of Statutes whilst at the same time complicating it in other statutes.

By subsection (3) a person served with a notice may within 14 days object to any requirement or restriction in writing to the authority by whom it was served, and this objection will be dealt with as defined in section 9, i.e., by a single arbitrator appointed by the parties, or, in default of such agreement, by the county court. The arbitrator or the county court shall have power to modify any requirement or restriction.

By subsection (5) where a notice has been served the authority by whom it was served may with the consent of the person on whom it was served do anything on his behalf necessary for complying with the notice. Where a notice has been served penalties are by subsection (6) imposed on any person who fails to comply with the provisions, and when a conviction has taken place unless the requirements of the notice are complied with within a time to be fixed by the court, the person shall be guilty of a continuing offence and a daily penalty.

Subsection (7) deals with expenses and compensation. The expenses reasonably incurred in complying with the provisions of notices may be recovered from the authority by whom the notice was served, and any person "sustaining loss in direct consequence of any requirement of a notice served under this section or who proves that his property is injuriously affected by restrictions imposed by any such notice, shall, if he makes a claim within six months after the service of the notice, be entitled to compensation."

The expenses are by section 8 to be paid out of the Road Fund, and the question as to whether expenses were reasonably incurred and whether compensation is payable and the amount will be determined under section 9, that is, as we have indicated above, either by a single arbitrator appointed by the parties or in default of such agreement by the county court.

Building Line.

Section 5 deals with the prescription of building lines by county councils or other highway authorities. Subsection (1) provides that subject to the provisions of this section a county council or other highway authority may by resolution prescribe in relation to either side of any part of a highway maintainable by them a frontage line for building which shall be referred to as "a building line."

It will be remembered that the Public Health Act, 1925, in sections 33 and 34, enables the local authority in respect of streets reparable by them or the county council in respect of main roads to prescribe "an improvement line" where (a) any street reparable by the inhabitants at large is narrow or inconvenient or without any sufficiently regular boundary or (b) it is necessary that such street shall be widened, but in section 5 of the Roads Improvement Act the power seems conferred without any such limitation. We are dealing with that "improvement line" in articles on the Public Health Act, 1925, but it was recognised in the Ministry's Memorandum which was issued in respect to that Act, that it was possible the two lines "improvement line" and the "building line" may exist in the same district.

Returning to section 5 subsection (1) of the Roads Improvement Act, 1925, there are two

provisos in this subsection. The first proviso (a) enacts that the Minister may by order direct that a building line shall not be prescribed in relation to any class of road classified by him under subsection 2 of section 17 of the Ministry of Transport Act, 1919, until notification of the building line proposed has been sent to him and his observations thereon have been considered. The roads here referred to are roads classified by the Minister and in respect of which the Minister defrays half the salary and establishment charges of the engineer or surveyor to the local authority responsible for the maintenance of such roads.

Proviso (b) provides that before a building line is prescribed (i) affecting any main road maintainable by an urban authority by virtue of subsection (2) of section 11 of the Local Government Act, 1888, notification of the building line proposed shall be sent to the council of any county in which any land affected is situated, and (ii) if the building line is proposed by the county council, notice shall be sent to the local authority for every district in which any land affected is situated and to every authority for the time being authorised to make a scheme under the Town-planning Act, 1925, or under any enactment repealed by that Act. The authorities to which this notification is sent may make observations, and if these observations are made within three months of the notification they shall be considered by the authority proposing the building line.

The roads mentioned in the first proviso are main roads within the meaning of the Highways and Locomotives (Amendment) Act, 1878, which, under section 11 subsection (2) of the Local Government Act, 1888, the district councils claimed to retain. As regards the second proviso, "local authority" for the purposes of the Town-planning Act, 1925, is by section 20 of that Act defined " (a) as regards the administrative county of London the London County Council and (b) elsewhere the council of the borough or urban or rural district."

Procedure to be Followed.

The procedure to be followed in prescribing a building line seems closely assimilated to the procedure prescribed by the Public Health Act, 1925, in the case of an "improvement line." Thus by subsection (2) of section 5, the building line proposed has to be shown on plans signed by the clerk and deposited with the clerk of the authority, and the plans are to be open to inspection by the public without charge. Before the building line is prescribed notice in writing of the proposal and of the times and place where the plans can be inspected shall be served upon every owner, occupier or lessee of land proposed to be affected, and any objection made within six weeks after service shall be considered. Within six weeks after the building line has been prescribed the plan shall be sealed and authenticated by the signature of the clerk, and again notice has to be served on the above parties.

This second notice of the building line, having been prescribed, is different from the procedure under the Public Health Act in the case where an "improvement line" has been prescribed, for in that case when the plans have been sealed and authenticated the improvement line comes into force and notice of the prescription having been made is not required. Under both Statutes it will be observed that no appeal is given to owners and others affected, and they have to be satisfied with the rather empty assurance that their objections will be "considered" for the provision for arbitration contained in section 9 in the case of objection does not apply to section 5. Subsection (3) closely resembles subsection 5 of section 33 of the Public Health Act; it provides that where a building line is in force it shall not be lawful without the

consent of the authority by whom it was prescribed to erect or make nearer to the middle of the highway than the building line any new building other than a boundary wall or fence, or any permanent excavation below the level of the highway.

Subsection (4) makes it an offence to infringe the building line, and imposes penalties, and so far resembles subsection 12 of section 33 of the Public Health Act, but it goes further, for it provides that any person so convicted shall within such time as the Court may allow "remove any building erected or fill in any excavation made in contravention of this section," and failing to do so shall be guilty of a continuing offence.

Subsection 5 deals with compensation to persons whose property is injuriously affected by the prescription of a building line, and, as under the Public Health Act, the compensation is to be assessed under the Acquisition of Land (Assessment of Compensation) Act, 1919, but there is a difference in the other provisions; for instance, in the case of persons injuriously affected the claim must be made within six months of the line being prescribed, but if such persons are owners, occupiers or lessees within six months of the service of notice of the prescription; the distinction between the two classes is by no means clear. No compensation is payable to any person in respect of anything done by him or on his behalf after the date of service of the proposal to prescribe a building line (subsection 5 (a)) and there is a betterment clause (subsection 5 (b)).

By subsection (6) in the administrative County of London the powers conferred by this Act are to be exercised by the London County Council, and by subsection (7) the powers conferred by this Act shall be in addition to and not in derogation of any powers conferred upon the authorities by any other Act.

By subsection (8) certain undertakings are excepted from this section. Section 10 contains provisions as to notices. We have referred to the most generally important sections of the Act, but in conclusion we may mention certain definitions contained in section 11. "Building" includes any erection of whatsoever material and in whatsoever manner constructed and any part of a building. "Fence" includes any hoarding or paling. "Hedge" includes any tree or shrub whether forming part of a hedge or not. "Local authority for the district" means as respects land in the administrative County of London, the Common Council of the City of London, or a metropolitan borough council, as the case may require, and as respects any other land, the district council. "New building" includes any addition to an existing building. "Wall" includes any partition of whatsoever material constructed, and any bank." The above is only a summary of the principal provisions of the Act.

TRADES TRAINING SCHOOLS

THE annual prize distribution of the Trades Training Schools took place on Friday last week at the Carpenters' Hall, London Wall. The Schools are conducted by the following City Guilds:—The Armourers and Braziers, Carpenters, Glaziers, Joiners, Paint-Stainers, Pewterers, Plasterers, Tylers and Bricklayers and Wheelwrights, at Great Titchfield-street, under the Directorship of Sir Banister Fletcher, F.R.I.B.A.

The thirty-second annual report, read by Mr. Frederick Sutton, chairman of the Schools Committee, showed a considerable increase in the number of students, which exceeded the records for many years past.

Sir Banister Fletcher read his report on the work of the past year, which stated that the attendance at the Schools totalled 14,355, an

average of 96.34 for every working evening. The demonstrations given by the instructors to architectural students from University College had been maintained, and thus a link existed between the theoretical and the practical aspects of the comprehensive art of building. The instructors in the various classes continued to keep burning the fires of progress and achievement, and the Schools were fortunate in having the services of those who had not only the rare gift of teaching but who were of high standing in their crafts. The associated City Companies did not lag behind the other Companies in their determination to carry on the mediæval tradition of craft organisation and service which had been handed down to them, and they bore the entire expense of carrying on the work independent of any outside aid or subsidy. The most diverse quarters of the City yielded keen learners of different ages who came for guidance and improvement, and more demands were made on the Schools than it was possible to supply with the present accommodation. Many students were sent expressly to the classes by their employers for the tuition which they needed. All the work was handicraft, and no machinery was employed to fashion it, and as a consequence the personal ideal was adhered to. One of the great objects of the Schools was to teach not only the governing principles of the various crafts, but also the best way of carrying out the technical details, combined with the most up-to-date methods of modern craftsmanship. An effort was made to implant a desire for good work for its own sake, apart from the pay it might command, and thus leave the lasting impression on the minds of students that everything that beautified and ennobled was worth while. "Work hard when at work and play hard when at play" was a motto he could give the students, and he felt that the training given was not only productive of sound workmanship, but it also played its part in the formation of character.

The prizes, medals and certificates were distributed by the Right Hon. Sir Douglas M. Hogg, M.P., K.C., who afterwards addressed a few words to the students. He said he had an hereditary interest in technical education, and above all in the great borough of St. Marylebone. On his visit to the Trades Training Schools in Great Titchfield-street he was very pleased to see in every class he visited that the men who were in charge were men who had worked and were working in the very trades in which they were instructing. When work began in the Regent-street Polytechnic some forty-three years ago, when technical education was being developed there, the trade unions regarded it with considerable suspicion; but they were now their best friends and supporters, because the class of people exclusively catered for were not those who wanted to get just a smattering of the trades but who were working day by day in those trades, and he found the same plan had been adopted by the Companies' Schools. Pride in workmanship was not dead, because the men who were learning the skilled crafts had a real love for them and a real pride in their craftsmanship, and because they knew by their sacrifice of time and energy they were qualifying themselves to take better and higher positions, which they could never hope to reach if they did not put in such work, and thus they were doing a great deal for their trade and their country. He referred to the public spirit the Companies were displaying in spending their money to educate, improve and qualify the craftsmen, and he congratulated the students on their interest and public spirit which made them enter the classes which were carrying them to triumphant success.

A vote of thanks to Sir Douglas Hogg, proposed by Professor W. H. Wagstaffe, Master of the Armourers and Braziers Company, seconded by Mr. O. Satchell, was carried unanimously.

Amongst those present were Sir George Frampton, R.A., Sir W. Goscombe John, R.A., Mr. E. Guy Dawber, V.-P.R.I.B.A.,

Mr. Arthur Keen, F.R.I.B.A., the Master Wardens and Clerk of the Carpenters' Company, the Masters of the Painters, Armourers and Braziers, Plasterers, and Tylers and Bricklayers Companies.

THE NATIONAL FEDERATION OF HOUSE BUILDERS

HALF-YEARLY MEETING AT BLACKPOOL

THE half-yearly meeting of the National Federation of House Builders was held at the Town Hall, Blackpool, on Friday and Saturday last and was attended by a large number of house builders from all parts of the country. Mr. G. F. Darbyshire (Manchester), the President of the Federation, proposed the following resolution, which was carried unanimously:—"That all local authorities' housing schemes should be confined to the erection of houses to be let at economic rents not exceeding ten shillings a week inclusive of rates after deducting the subsidy from the Government and the local authority, and that the Government be requested to refuse to sanction the erection by the local authorities of houses at higher rents, or for as long a period as the requirements of the poorer-working classes have been met."

In proposing the resolution, Mr. Darbyshire said that there was one unalterable factor in the building of houses on which all housing reform must necessarily rest—the amount which was available for rent in the working-class budget. House builders have always had to build houses with the rent in view, but local authorities approached the question from another standpoint. Their fixed factor was not the rent which could be obtained, but the garden city idea, and in many cases they laid it down that the people must have certain types of houses whether they wanted them or not. It was not every working man who wanted a large garden, and houses should be provided for those who did not care for gardening as well as for those who did. Before the war 65 per cent. of the houses were of a rateable value exceeding £10, and it was obvious that this was the one most wanted. Local authorities had thousands of names on their waiting lists, waiting for the smaller houses, and at the same time they were being built the demand for the larger types was getting larger rather than being reduced. The old cry of the Federation—"Remove the Rents Restriction Act and solve the housing problem," was as true today as it was five years ago; there was only one solution, and that was to restore confidence in housing as an investment. The present plan of municipal enterprise was but a temporary subterfuge; it could never provide a solution of the housing difficulty. Mr. George Satchell (Nottingham) seconded the resolution. An active discussion ensued as to the figure given in the resolution for the maximum rent of municipal houses. Mr. J. W. Comben (Wembley) said that it was too low, and Mr. C. H. St. John (Hull) that the figure was rather high. Mr. R. A. Costain (Liverpool) quoted figures to show that a house could be provided for 10s. per week and the resolution was passed as stated.

The second resolution aroused a lively debate on the amount which might reasonably be expected as a deposit on the sale of a house. The previous Federation resolution had stated:—"That as a suitable figure, but as a number of local authorities were selling houses for a deposit considerably less than that amount," it was that the purchaser of a house from a private builder should have the same facilities, and a resolution proposed by Mr. A. J. Belton (Sheffield) and seconded by Mr. J. B. Milner (Manchester), was unanimously adopted as follows:—"That in the opinion of this meeting prices should be brought to bear by the Government, the local authorities to make grants, an advance capital on mortgage under the provisions of the Housing Acts to the full ninety per cent. permitted under those Acts, thereby enabling the thrifty working man to purchase his house."



LONDON BUILDING ACTS APPROVAL OF HOLLOW FLOOR AND ROOF MATERIALS

The London County Council is empowered by Part III of the First Schedule to the London Building Acts (Amendment) Act, 1905, to approve from time to time any material as fire resisting other than those specified in the schedule. As regards floors and roofs, the materials specified are brick, terra-cotta or concrete not less than 5 in. in combination with iron and steel. Representations have been made to the Building Acts Committee that hollow floors and roofs constructed of other materials should be approved as fire resisting for the purposes of the Act, and the Committee are advised that, subject to the conditions mentioned, the use of such floors and roofs can safely be allowed. Mr. Topham Forrest writes that the following recommendation has been approved:—

That the Council, in pursuance of the powers conferred on it by the First Schedule (Part III) of the London Building Acts (Amendment) Act, 1905, do approve as fire resisting, in the case of hollow floors and hollow roofs, asbestos, brick, clay, cement mortar, or cement, concrete or terra-cotta, subject to the following conditions:— That all materials shall be to the satisfaction of the district surveyor, and the work of the work shall be executed to his satisfaction.

That if any blocks are of clay they shall be thoroughly burnt, free from lime and cracks and free from defects.

That all concrete which is less than 5 in. thick at any part, and all concrete for brick floors, shall be fine concrete, made in the proportion of at least one volume of Portland cement to three volumes of sand, composed of clean, silicious sand broken flint of all such sizes as will pass through a mesh of three-eighths of an inch measured in the clear.

That when such aggregate is not "fully clean," i.e., when such aggregate is not so fine in size that all voids can be filled with cement paste, then the proportions shall be not less than one volume of Portland cement to four volumes of aggregate.

That, in the case of hollow block floors, the ends of the blocks shall be solidly jointed with cement mortar in the proportions of one volume of Portland cement to two volumes of sharp sand.

That the concrete above the void shall be made in the same proportions as in the case of the floor.

That apart from any requirements in the First Schedule of imposed loads and working stresses:—(1) the least diameter of the main reinforcement shall be not less than three-eighths of an inch, (2) the least diameter of reinforcement (if any) shall be not less than three-sixteenths of an inch, and (3) the ends of all reinforcement shall be properly lapped to the satisfaction of the district surveyor.

That when burnt clay tiles are not used as a part of the covering of the reinforcement, the thickness of fine concrete (exclusive of any other material) covering the reinforcement shall be not less than three-quarters of an inch thick and not less than the diameter of such main tensile reinforcement.

That when burnt clay tiles are used as a part of the covering of the reinforcement, the thickness of fine concrete covering the reinforcement shall be not less than one-half of an inch, and not less than the diameter of such main tensile reinforcement, and the thickness of the tile shall be not less than one-half of an inch.

That the sides and undersides of steel beams and girders shall be protected from the action of fire by fine concrete at least 2 in. thick, rounded and rammed, or 1½ in. thick of round suitable mesh reinforcement, and that in all cases the concrete shall be

bedded solidly against the steel and there shall be no intervening cavity.

(xi) That fillets, strips and blocks of wood or other combustible materials shall not be embedded in the thickness of the fine concrete necessary—(1) to transmit stresses, (2) to provide protection to any steelwork or reinforcement, or (3) to comply with any of these conditions.

(xii) That when the material above the void is effectively arched or haunched the thickness of the material at the crown shall be not less than 2 in.

(xiii) That when the material above the void is not effectively arched or haunched the thickness of the material above the void shall be not less than (1) 2.0 in. in cases in which the width of the void is not more than 4 in.; (2) 2.5 in. in cases in which the width of the void is not more than 5 in.; (3) 3.0 in. in cases in which the width of the void is 6 in. and over.

(xiv) That the thickness of the soffit of the voids (exclusive of any plaster) shall be not less than three-quarters of an inch.

(xv) That the thickness of the material above the void added to the thickness of the soffit (exclusive of any plaster) shall be not less than 3 in.

(xvi) That the dimensions specified in the foregoing conditions shall refer only to questions of fire-resistance and resistance to impact during fires apart from any requirements in respect of imposed loads and working stresses under normal conditions of use.

Provided that this approval shall not in any way derogate from any of the powers of the Council, and shall not in any way affect the requirements of—(1) the London County Council (General Powers) Act, 1908, with respect to cubical extent of buildings; (2) the London County Council (General Powers) Act, 1909, with respect to the enclosure or encasing of pillars or girders with brickwork, terra-cotta, stone, tiles or other incombustible materials; and (3) the regulations made under the provisions of section 23 of the London County Council (General Powers) Act, 1909, with respect to the construction of buildings wholly or partly of reinforced concrete.

The Building Surveyors' Association.

A quarterly general meeting of this Association was held in the Council Chamber, Town Hall, Leeds, on Saturday, October 10. The first part of the day's programme was a visit to the modern clothing factory of Messrs. Montague Burton, Ltd., the party being conducted round the works by the architect, Mr. H. Wilson, of Leeds. The main outstanding features of the building are: One room without screens or divisions, where 3,000 persons are employed, and a dining-room with seating capacity for 2,000, and serving arrangements whereby this number can be supplied with a meal in eight minutes. Prior to the business meeting, Mr. F. E. Drury, M.Sc., Tech.E., Head of the Building Department, College of Technology, Manchester, gave a paper on "Practical Design and Checking of Reinforced Concrete Foundations."

The main feature of the business meeting was the classification of existing members. The manner in which the members accepted the committee's report showed that the work of classification has been carried out successfully. The hon. secretary reported a steady rise in the membership, this showing that building surveyors and inspectors were rallying to the support of an association whose objective was that of advancing the status of these two classes of municipal officers. From the organising secretary's report it was seen that educational bodies are making inquiries and framing courses of study suitable for students preparing themselves to sit at the Association's examination.

NEW BUILDINGS IN LONDON.

Baker-street.—A block of 12 flats is to be erected from the designs of Messrs. Burdwood & Mitchell, 80, George-street, Portman-square, W. The contractors are Messrs. Hammond & Barr, Ltd., 52, Beecham-place, S.W.3.

Battersea.—Excavations are being made in connection with the new factory in Park-road, S.W.11, for Messrs. Aplin & Barrett's Western County Creameries, Ltd. Messrs. Dove Bros., Ltd., general contractors, Clouesley-place, N.1. Mr. E. S. Underwood, F.R.I.B.A., architect and surveyor, 3, Queen-street, Cheap-side, E.C.

Bermondsey.—Plans have been prepared by Messrs. Butler's Wharf, Ltd., for a new warehouse. Messrs. G. Potton & Son, contractors, Gainsford-street, S.E.1.

Enfield.—Improvements, including a new electric lighting and power installation, are to be carried out at Enfield House, Chase Side-crescent, Enfield, under the supervision of Mr. E. Barrs, consulting engineer, 6, South-square, Gray's Inn, W.C.

Euston-road.—Steelwork is being erected by Messrs. Dorman, Long & Co., Ltd., Central Buildings, Westminster, S.W., for the new meeting house and central offices for the Society of Friends, in Euston-road, N.W.1. Messrs. Grace & Marsh, Ltd., general contractors, Waddon-street, Croydon. Mr. Hubert Lidbetter, A.R.I.B.A., architect, 12, Norfolk-street, W.C.2.

Ilford.—Mr. A. E. Symes, Carpenter's-road, Stratford, E., will shortly commence the building of a new church in Ilford-lane for the Baptist denomination, to plans prepared by Mr. H. Franklyn Murrell, A.R.I.B.A., 35, Bedford-row, W.C.1.

Kennington Oval.—Mr. A. H. Ryan Tenison, F.R.I.B.A., writes to point out that the rebuilding of Archbishop Tenison's Grammar School, somewhere in the neighbourhood of Kennington (referred to in our issue for October 2, under the above heading), is to be carried out from his designs. It is interesting to note that Mr. Tenison, who is the governors' architect, is descended from the Archbishop's brother in a direct line.

Kensington.—The Seventh Church of Christ Scientist is being erected on a site in Wright's-lane, W. Mr. G. H. Burgess, builder, 45, Berners-street. Steelwork by Messrs. Redpath, Brown & Co., Ltd., 3, Laurence Pountney hill, E.C.3.

Kensington.—The Ministry of Health has sanctioned the application of the Kensington Board of Guardians for permission to build a new nurses' home at St. Mary Abbott's Hospital, to provide accommodation for 54 beds for nurses, recreation facilities, and 10 bedrooms and dining-room for domestic staff.

Marlybone.—The last portion of a large housing scheme in Fisherton-street, N.W., consisting of three tenement blocks costing £48,968, is to be put in hand. The work will be carried out by Messrs. Walker & Slater, Ltd., Capland-street, N.W.8, under the direction of Messrs. H. V. Ashley & Winton Newman, 14, Gray's Inn-square, W.C.1.

Norbury.—Messrs. Thomas & Son, Elsmont, Bramley-avenue, Coudon, are to build a group of 28 houses on an estate on Norbury hill.

Norwood.—The L.C.C. have decided to spend £160,862 upon the development of their Blomfield estate, and the erection of flats and houses. Mr. G. Topham Forrest, F.R.I.B.A., architect, County Hall, S.E.1.

Paddington.—Among future proposals of the St. Pancras B.C. is the building of a public hall and library at the corner of Porchester-road, W.2. Mr. Herbert Shepherd, F.R.I.B.A., architect, 117, Queen's-road, W.2. The hall will accommodate 900 persons, whilst there will be five shops and a lending library, the total cost being £64,800.

Piccadilly.—Messrs. Citroen Cars, Ltd., Brook Green, W.6, will occupy a large area of the

ground floor of Devonshire House in Piccadilly, W.1, as showrooms and offices.

Piccadilly.—A large block of shops, show-rooms and flats is to be erected on the site of No. 80, Piccadilly, W. 1, and 1, Stratton-street, lately the residence of Lady Burdett Coutts. Particulars are in the hands of Messrs. John Wood & Co., surveyors, 6, Mount-street, W. 1.

Piccadilly.—It is proposed to build a block of bank and office premises on a site at the corner of Piccadilly and Albemarle-street, W. 1, to plans prepared by Mr. W. Curtis Green, A.R.A., 5, Pickering-place, S.W. 1.

Putney.—The foundation stone of the additions, chancel, sanctuary, north and south transepts, to the Church of St. Margaret, S.W. 15, has been laid. Mr. W. H. Forsyth, architect (Messrs. Forsyth & Maule), 12, Stratford-place, W. 1. Messrs. F. G. Minter, Ltd., contractors, Ferry Works, Putney, S.W. The cost is approximately £11,000.

Regent-street.—A new shop and showrooms are to be equipped in part of the ground floor frontage of the new Criterion Restaurant, in Regent-street, W. 1, for Messrs. Lillywhite's, Ltd., sports' outfitters, 31, Haymarket, S.W. 1.

Southwark.—The Church Council of St. George-the-Martyr, in the New Kent-road, S.E.1, propose to build a new church house to the design of Mr. J. Rawlinson, 11, Adam-street, Strand, W.C.

Strand.—New shops and offices are to be erected on a site in Villiers-street, W.C. 2, upon which previously stood the Villier's Cinema. Messrs. Henry Chapman & Co., surveyors, 2, Southampton-street, W.C. 2.

Strand.—The Vaudeville Theatre, W.C. 2, is shortly to be closed for entire reconstruction, to be carried out to the design of Mr. Robert Atkinson, F.R.I.B.A., 36, Bedford-square, W.C.1. The stage will be enlarged and the dress and upper circles rebuilt.

Tottenham Court-road.—Important building developments are imminent upon the completion of the negotiations for the purchase by the Beecham Trust, Ltd., 219, Strand, W.C. 2, of the site at the corner of Tottenham Court-road and New Oxford-street, W. 1. The area is about 2½ acres in extent, and includes the "Horseshoe" hotel, which, it is understood, will be rebuilt.

Tottenham Court-road.—Messrs. Oetzmann & Co., Ltd., Hampstead-road, N.W. 1, have purchased premises in Tottenham Court-road, W., where they propose to open an estate and house agency department.

Upper Baker-street.—With regard to the paragraph under this heading, which appeared in our issue for October 9, Messrs. Ernest Yates & Co. write to point out that they are not the architects for the work. They are estate and land agents, and an important part of their business is to formulate property development schemes, in regard to which they obtain the help of several well-known architects in the preparation of plans, &c.

Watford.—New heating and hot water supplies are to be installed in the new nurses' home at the Watford Institution in Vicarage-road. Mr. W. M. Blinny, consulting engineer, 38, Carlton-road, Putney, S.W.

Wembley.—A picture theatre is to be built in the High-street. Plans by Mr. Ernest G. W. Souster, F.R.I.B.A., 3, St. James's-street, S.W.1, acting on behalf of Mr. J. Morris, of the Harrow Coliseum.

Whitechapel.—Work is about to commence upon the building of the extension of the pathological department of the London Hospital, E. 1. Mr. J. G. Oatley, the hospital surveyor, is the architect. A new clinical theatre is also projected in the scheme.

Willesden.—The Indestructible Paint Co., Ltd., of King-street, E.C. 2, have purchased an area of land at Park Royal, N.W. 10, where they propose to build a large works.

Messrs. G. Godson & Son, 215, Kilburn-lane, W. 10, have been appointed to carry out the extension of the Willesden Hospital, in Harlesden-road, N.W., to the design of Messrs. Greenaway & Newberry, Parliament Mansions, Victoria-street, S.W. 1.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors

	Masons.	Brick-layers.	C'pters. Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labour
Aberdare.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Accrington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Altrincham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Ashton-under-Lyne.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barnsley.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barrow-in-Furness.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barry.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bath.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bedford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Birkenhead.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Birmingham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bishop Auckland.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Blackburn.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Blackpool.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bolton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bournemouth.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bradford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Brentwood.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bridgwater.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Brighton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bristol.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Burnley.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Burton-on-Trent.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bury.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Cambridge.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Cardiff.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chatham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chelmsford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Cheltenham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chesterfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Colchester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Coventry.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Crews.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Darlington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Derby.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Doncaster.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Dudley.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Durham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
E. Glam.(Mon. Val.).....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Eastbourne.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Exeter.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Folkestone.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Gloucester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Grantham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Grays.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Grimsby.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Great Yarmouth.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Guildford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hallifax.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Harrrogate.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hartlepool.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hastings.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hereford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Huddersfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hull.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Ipswich.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Launceston.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Leamington Spa.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Leeds.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Leicester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Lichfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Lincoln.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Liverpool.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Llanelli.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
London { 12 m. radius.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
{ 12-15 m. radius.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Loughborough.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Luton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Maidstone.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Manchester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Mansfield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Merthyr Tydfil.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Middlesbrough.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Newcastle-on-Tyne.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Newport, Mon.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Northampton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Norwich.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Nottingham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Oakham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Oldham.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Oxford.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Plymouth.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Pontypridd.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Portsmouth.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Preston.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Reading.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Rochdale.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Rochester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Rugby.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
St. Albans.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
St. Helens.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Scarborough.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Sheffield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Shrewsbury.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Southampton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Southend-on-Sea.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Southport.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
South Shields.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stockport.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stockton-on-Tees.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stoke-on-Trent.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stroud.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Sunderland.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Swansea.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Swindon.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Taunton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Torquay.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Tunbridge Wells.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Wakefield.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Walsall.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Warrington.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
West Bromwich.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Wigan.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Windsor.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Wolverhampton.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Worcester.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
York.....	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8

For rates of wages in the Building Trade in Scotland, see page 614

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

OCTOBER 26.—Clones.—OFFICES.—Offices, engine pits, &c., in reinforced concrete, at Clones Station, for the Great Northern Railway (Ireland), Co. J. B. Stephens, Secretary, Amiens-street Station, Dublin. Deposit £2 2s.

OCTOBER 26.—Edinburgh.—TRADES.—For (1) slater and barling works, and (2) plaster and cement works to be carried out at Bellevue Technical and Commercial School (Janitor's house), for the E.C. J. A. Carrae, architect, 3, Queen-street.

OCTOBER 26.—Exmouth.—HOUSES.—Fifty houses in Jarpool Park, for the U.D.C. Samuel Hutton, engineer and surveyor, architect. Deposit £1 1s.

OCTOBER 26.—Fyvie.—PLUMBING.—Plumber work of water supply to Woodhead School, for the Aberdeenshire E.C. W. L. Duncan, architect, Turriff.

OCTOBER 28.—Inverurie.—HOUSES.—Dwelling-house at Inverurie. G. Gray, architect.

OCTOBER 26.—Glamorgan.—BUILDING.—For (1) school for 496 scholars at Dole, Llanharan; (2) school for 200 scholars at Nantgarw, Taff's Well; (3) extension to cloakroom at Tynewydd Infants' Council school, for the C.C. T. M. Franken, Secretary of the E.C., Glamorgan County Hall, Cardiff.

OCTOBER 26.—Leeds.—HEATING.—Heating installation, electric lighting installation, emergency staircases, and sanitary fittings to the extensions of the Mental Wards at the St. James' Hospital, Beckett-street, for the E.G. Chorley, Gribbon & Foggitt, architects, 3, Park-place.

OCTOBER 26.—London.—COTTAGES.—283 cottages, six blocks of three story flats, nine lock-up shops with nine dwellings over, and other incidental work, at the White Hart-lane estate, Lordship-lane, Tottenham, for the L.C.C. Architect to the Council, the County Hall Room No. 3, Westminster Bridge, S.E.1. Deposit £2.

OCTOBER 26.—Rochester, Kent.—HOUSES, DRAINAGE AND SITE WORKS.—Erection of 66 houses (32 parlour and 34 non-parlour) on the Maidstone-road, Rochester, for the Corporation. William Law, M.I.C.E., City Surveyor, Guildhall, Rochester. Deposit £3 3s.

OCTOBER 26.—Southampton.—CONCRETE FOUNDATIONS, &c.—Construction of mass concrete foundations and retaining walls, and including concrete piles, or an extension of the engine room at the Electricity Supply Station, for the Corporation. Borough Engineer's Office, 33-35, French-street, upon production of the Borough Treasurer's receipt of deposit of £3 3s.

OCTOBER 26.—Stoke-on-Trent.—CONVERSION.—Conversion into water closets of about 70 privies and pails, in Hanford, for the T.C. Chief Sanitary Inspector, St. Peter's Chambers, Gleebe-street.

OCTOBER 26.—Torquay.—ROOM.—Recreation room, at the Police Station, for the Devon C.C. E. H. Jarbottle & Sons, architects, County Chambers, Exeter. Deposit £2.

OCTOBER 26.—Wetherby.—HOUSES.—Twelve houses at Wetherby, four at Weeton, four at Kirkby Overlow, and two at East Keswick, for the R.D.C. A. Suttel, architect. Deposit £1 1s.

OCTOBER 26.—Wicklow.—RECONSTRUCTION.—Reconstruction of the Court House, Bri Chualanp, for the C. Foley & O'Sullivan, architects and engineers, Rafter Chambers, 102 and 103, Grafton-street, Dublin.

OCTOBER 26.—Wokingham.—DECORATIONS.—Exterior decoration of the Council's cottages, 162, on 22 acres, in various parts, for the R.D.C. Housing manager, C. Aldridge, London Bridge Lodge, Wokingham, near Reading.

OCTOBER 27.—Barking, Essex.—ELECTRICITY SUB-STATION.—Erection of an electricity sub-station in re-street, within the district, for the Barking Town D.C. C. J. Dawson, Council's Architect, Clock House Chambers, Barking.

OCTOBER 27.—Belfast.—ALTERATIONS.—To Gate Lodge at Main Entrance, Botanic Gardens Park, for the B. City Surveyor.

OCTOBER 27.—Ilford.—LIBRARY BUILDING, &c.—Erection and completion of library building, together with Town Hall basement under, and extension of Town Hall offices, at Oakfield-road, for the U.D.C. Shaw, M.Inst.C.E., Engineer and Surveyor, Town Hall, Ilford. Deposit £5 5s.

OCTOBER 27.—Kilkenny.—WIRING.—Overhead wires at Kilkenny, for public electric lighting in the city, for the T.C. L. J. Lawless, Consulting Engineer, 19, Percy-place, Dublin.

OCTOBER 27.—Liverpool.—ALTERATIONS.—To classrooms, &c., at the Caledonian School, Oldham-street, the T.C. Land Steward and Surveyor.

OCTOBER 27.—London, E.C.—BUILDING ADDITIONS.—Erection and completion of an additional story to the Administrative Block (Nurses' Home) at the Royal Green Hospital, Cambridge-road, Bethnal Green, E.2, for the Guardians. C. Faulkner Jones, architect to the Guardians, Guardians' Offices, Bishopsgate, E.2. Deposit £3 3s.

OCTOBER 27.—Mynyddislwyn.—HOUSES.—For (1) 30 houses at Brynawel, Crosskeys; (2) road and sewer works in connection with the lay-out of the site, for the U.D.C. A. F. Webb and W. A. Griffiths, R.I.B.A., architects and surveyors, Tredegar Park, Blackwood, Mon. Deposit £3 3s.

OCTOBER 27.—Near Padstow.—REPAIRS.—Repairs and renewals to the Trevoise Head Lighthouse dwellings. K. Smith, Secretary, Trinity House, E.C.3.

OCTOBER 27.—Sefton.—COTTAGES.—Six cottages in Victoria-road, Ince Blundell, and 12 in Lydiate-lane, Runcell's-lane, Sefton, for the R.D.C. E. B. Bailey, architect, 9, Cook-street, Liverpool. Deposit £1 1s.

OCTOBER 27.—Shrewsbury.—ALTERATIONS AND EXTENSIONS.—Alterations and extensions to the P.O. Engineer's Office, Castle Foregate, Shrewsbury, for the Commissioners of H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, Westminster, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

OCTOBER 27.—West Ashford.—ADDITIONS.—Alterations and additions at the Poor Law Institution Infirmary, Hothfield, near Ashford, Kent, for the B.G. W. Bowles, architect, Elwick-road. Deposit £1 1s.

OCTOBER 28.—Aberdare.—PAINTING.—Painting and other works to the exterior of the hospital, for the District Hospital Committee. O. P. Bevan, architect, Bargoed.

OCTOBER 28.—Durham.—COTTAGES.—Two semi-detached single-storied cottages, at Houghall Horticultural Station, for the C.C. F. Willey, F.R.I.B.A., 34, Old Elvet, Durham.

OCTOBER 28.—Harrogate.—PAINTING, &c.—At Royal Bath Hospital and Rawson Convalescent Home, for the Committee. E. P. L. Dixon, Secretary.

OCTOBER 28.—London.—BUILDING WORKS.—Building works, being the erection and completion of two electricity sub-stations, one at Gainsborough-road, Hackney, and one at Holly-street, Hackney, for the Hackney Metropolitan B.C. Borough Electrical Engineer, 306, Mare-street, Hackney, E.8. Deposit £2 2s.

OCTOBER 28.—London.—FOUNDATIONS.—Construction of foundations for the new Whale Room at the Natural History Museum, South Kensington, S.W., for the Commissioners H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

OCTOBER 28.—Pontardawe.—HOUSES.—Twenty-eight houses and the construction of miscellaneous road works at Ystalyfera site, for the R.D.C. E. D. Jones, A.R.I.B.A., architect. Deposit £3.

OCTOBER 28.—Southampton.—HOUSES.—Twenty-two, 40 and 18 houses, respectively, on the Burgess-road housing site, for the C.B. Borough Engineer. Deposit £1 1s.

OCTOBER 28.—Wallsend.—CONVERSION.—Of cell privies into water closets, for the T.C. Borough Surveyor.

OCTOBER 29.—Londonderry.—SCHOOL.—Public elementary school at Upper Cumber, Claudy, County Londonderry, for the Government of Northern Ireland. Secretary, Ministry of Finance, 15, Donegall-square West, Belfast. Deposit £1.

OCTOBER 29.—St. Austell.—STORES.—Alterations to the Brewery Stores at Arwenack-avenue, Falmouth, for Walter Hicks & Co., Ltd. L. Winn, Architect and Surveyor, 27, Boscawen-street, Truro.

OCTOBER 29.—Southwark.—BUILDING.—Building to contain X-Ray room, dark room, electrical treatment room, and stores, at the Hospital at East Dulwich-grove, S.E., for the B.G. A. Saxon Snell & Phillips, architects, 9, Bentinck-street, Manchester-square, W.1. Deposit £5.

OCTOBER 29.—Southwark.—PAINTING.—External painting works and minor repairs to the whole of the Hospital at East Dulwich-grove, S.E., for the B.G. A. Saxon Snell & Phillips, architects, 9, Bentinck-street, Manchester-square, W.1. Deposit £5.

OCTOBER 29.—Wombwell.—REPAIRS.—Conversion of an existing room to a ladies' lavatory and the fitting out the Station-road Working Men's Club, for the Committee. C. Knowles, surveyor, Summer-lane.

OCTOBER 29.—Teddington.—LABORATORY.—New Physics Building at the National Physical Laboratory, Teddington, for the Commissioners of H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, Westminster, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

OCTOBER 29.—Warwick.—REPAIRS.—Papering, painting, &c., at the Scattered Homes, for the B.G. C. H. Passman, Clerk to the Guardians, 48, Bedford-street, Leamington Spa.

OCTOBER 30.—Bridgend.—CONVERSION.—Of Tregroes House, Pencoe, Bridgend, into a dairy school, and laying a new sewer, for the Glamorgan Agricultural Committee. T. Mansel Franklin, Clerk of the Glamorgan Agricultural Committee, Glamorgan County Hall, Cardiff.

OCTOBER 30.—Crawley.—EXTENSION.—To the Crawley Police Station, for the West Sussex C.C. Haydn P. Roberts, F.R.I.B.A., County Architect, Westgate, Chichester.

OCTOBER 30.—Dublin.—RESTORATION.—Of the Western Block of the Custom House, for the Commissioners of Public Works. J. J. Healy, Secretary, Oifig Oibreach Publi (Office of Public Works) Baile Atha Cliath. Deposit £5.

OCTOBER 30.—Orsett.—HOUSES.—128 non-parlour cottages, together with roads and sewers, sub-divided in parishes as follows:—Aveley 24, Corringham 16, Horndon-on-the-Hill 10, Stanford-le-Hope 28, Stifford 16, South Ockendon 10, West Thurrock 24, for the R.D.C. Engineer and Surveyor, at 2, Orsett-road.

OCTOBER 30.—Shrewsbury.—OFFICES.—Additional offices at the rear of the County Buildings, for the Salop C.C. Forsyth & Maule, 12, Stratford-place, London, W.1. Deposit £2 2s.

***OCTOBER 30.—Stamford.—RECONSTRUCTION WORK.**—Reconstruction of the Stamford Corn Exchange. Traylen & Linton, architects, 16, Broad-street, Stamford.

OCTOBER 30.—Urmston.—CONVENIENCES.—Sanitary conveniences at the Urmston Council school, near Manchester, for the Lancashire E.C. H. Littler, County Architect, 16, Ribblesdale-place, Preston.

OCTOBER 31.—Bolingey.—BUNGALOW.—Bungalow at Bolingey, Perranporth. Alfred J. Cornelius, F.R.I.B.A., architect, Truro.

OCTOBER 31.—Faversham.—HOUSES.—Erection of eight houses and incidental works in connection therewith, for the Corporation. S. Percy Adams, Borough Surveyor, 20, West-street, Faversham. Deposit £2.

***OCTOBER 31.—London.—ELECTRIC LIGHT AND CENTRAL HEATING.**—Installation of electric light and a central heating system at the Cumberland-road Secondary School, now in course of erection for the County Borough of West Ham E.C. John H. Jacques, Lic.R.I.B.A., 61, West Ham-lane, Stratford, E.15. Deposit £1 for each (either electric wiring or heating).

OCTOBER 31.—Northwood.—COTTAGE.—Police cottage for the Norfolk C.C. J. L. Carnell, F.R.I.B.A., and W. Dymoke White, L.R.I.B.A., architects, Paradise Chambers, King's Lynn. Deposit £1 1s.

OCTOBER 31.—Ynysddu.—CHURCH.—New church at Ynysddu, Mon. W. A. Griffiths, architect, Pontllanfraith, Mon. Deposit £2 2s.

NOVEMBER 2.—East Grinstead.—ALTERATIONS.—Structural alterations and additions to the sewage pumping station at Sunnyside, for the U.D.C. Dodd & Watson, engineers, County Chambers, Corporation-street, Birmingham. Deposit £2.

NOVEMBER 2.—St. Albans.—COTTAGES.—Erection of the second 50 cottages at the Camp housing site, for the Corporation. G. T. Negus, City Engineer and Surveyor, 96, Victoria-street, St. Albans. Deposit £1 1s.

NOVEMBER 2.—Southampton.—BUILDING.—Electricity sub-station on the Town Quay, for the Harbour Board. E. Cooper Poole, engineer. Deposit £1.

NOVEMBER 2.—Trimdon.—HOMES.—Twelve aged miners' homes at Trimdon Colliery. Hays & Gray, F. and A.R.I.B.A., architects, Central Chambers, Wingate.

NOVEMBER 2.—Worsborough.—HOUSES.—Twenty-two houses at Blacker Hill, for the U.D.C. T. Shield, Surveyor. Deposit £3 3s.

NOVEMBER 3.—Devonport.—EXTENSION.—Extension of Keyham Employment Exchange, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, Westminster, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

NOVEMBER 3.—Henley.—COTTAGES.—For (1) Binfield Heath, six cottages, in pairs, and (2) Binfield Heath, four bungalows, together with roads and drainage, for the R.D.C. E. V. Ive, architect, Hillside, Vicarage-road.

NOVEMBER 3.—Orpington.—WIRING.—Installation of cables, switchboards, &c., and wiring, at the Ministry of Pensions Hospital, for H.M.O.W. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

NOVEMBER 3.—Watford.—COTTAGES.—Twelve cottages at Batiers Green, near Radlett, and 16 cottages at Saratt, for the R.D.C. E. Lailey, Surveyor, 9, Market-street. Deposit £2 2s.

NOVEMBER 4.—Brighton.—TELEPHONE EXCHANGE.—Erection of a telephone exchange at Portslade, Brighton, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, Westminster, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

***NOVEMBER 4.—Herts.—NURSES HOME.**—Erection of a new nurses home at Leavesden Mental Hospital, King's Langley, Herts, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

***NOVEMBER 4.—London, S.E.—PAINTING AND REPAIRS.**—Painting and repairs at South Wharf, Trinity-street, Rotherhithe, S.E., for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

***NOVEMBER 4.—Sevenoaks, Kent.—CHIMNEY SHAFT.**—Repair of the chimney shaft at their institution at Sundridge, and the repair and making good of the lightning conductor affixed thereto. F. H. Vibert, Clerk to the Guardians, "Inglewood," Oak Hill-road, Sevenoaks.

***NOVEMBER 4.—Surrey.—CLEANING AND PAINTING.**—Cleaning and painting works at King George V Sanatorium, Godalming, Surrey, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

***NOVEMBER 4.—Various Places.—VARIOUS WORKS.**—(1) North Eastern Fever Hospital, St. Ann's-road, Tottenham, N.15, alterations and additions to laboratory buildings; (2) Southern Hospital, Dartford, Kent, rebuilding chimney stacks; (3) St. Ann's Home, Herne Bay, Kent, isolation accommodation; (4) Queen Mary's Hospital, Carshalton, Surrey, drainage channels to airing courts; (5) Highwood Hospital, Brentwood, Essex, minor structural alterations; (6) Grove Park Hospital, Lee, S.E.12, alterations to existing building to form residence for steward, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

NOVEMBER 5.—London.—HEATING.—Low-pressure hot-water heating, &c., at Montagu House, Whitehall, S.W., for H.M.O.W. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1.

***NOVEMBER 5.—Surrey.—FLATS.**—Erection of thirty flats, California-road site (a) with external walls of brick; or alternative (b) with external walls of concrete blocks, for the U.D.C. R. H. Jeffes, A.M.Inst.C.E., Council's Architect, Council Offices, New Malden, Surrey. Deposit £2 2s. (by cheque).

NOVEMBER 6.—Cudworth.—HOUSES.—Twenty-eight houses of the non-parlour type on Snydale-road site, for the U.D.C. J. A. Haigh, Surveyor and Engineer. Deposit £2 2s.

NOVEMBER 6.—Dublin.—BUILDING, &C.—For (1) erection of a Garda Siochana Station at Ballylooby, co. Tipperary; (2) restoration of Tipperary ex-R.I.C. barrack; (3) restoration of Nobber ex-R.I.C. barrack, co. Meath; (4) restoration of Kerrykeel (Greenfort) ex-R.I.C. barrack, co. Donegal, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath. Deposit £1 each.

NOVEMBER 6.—Leeds.—HEATING.—Accelerated low-pressure hot-water heating, at Gledhow Ministry of Pensions Hospital, for H.M.O.W. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

NOVEMBER 7.—Virginia.—ROOF.—New roof, plastering, &c., at Lurgan Roman Catholic Church, Virginia, co. Cavan, for the Rev. B. Gaffney. M. Grace, Oldcastle. Deposit £5 5s.

NOVEMBER 9.—Basford.—CONVERSION.—Conversion of pail closets to water closets, in the parish of Colwick, for the R.D.C. S. Maylan, engineer and surveyor. Deposit £1 1s.

NOVEMBER 9.—Clutton.—HOUSES.—Twelve houses at Clutton, for the R.D.C. W. T. Hawker, architect, Council Houses, Temple Cloud, near Bristol. Deposit £3 3s.

NOVEMBER 9.—Dartmouth.—HOUSES.—Block of four houses on a site known as Avery's Meadow, Victoria-road, for the T.C. Coudrey & Son, architects, Palace-avenue, Paignton. Deposit £2 2s.

NOVEMBER 9.—Edinburgh.—BUILDING.—Demolition and reconstruction of part of Inghinston Farm buildings, house and dairy, and demolition and reconstruction of double cottage, smithy, and cartwright's shop at Gogar, for the T.C. D. A. Donald, Chief Engineer, Edinburgh-Glasgow Road, 27 1/2, Alexandra-parade, Glasgow.

NOVEMBER 9.—Llandudno.—DWELLINGS.—Erection of 28 dwellings for the Llandudno U.D.C. The Engineer and Surveyor, Town Hall, Llandudno.

NOVEMBER 9.—London, S.E.—DWELLINGS.—Erection of a block of dwellings on the Dickens estate, Bermondsey, in brick, also alternative tenders for construction in reinforced concrete, for the L.C.C. Architect to the Council, The County Hall (Room No. 3), Westminster Bridge, S.E.1. Deposit £2 to the Cashier.

NOVEMBER 9.—Manchester.—HEATING.—Heating apparatus at the Free Trade Hall, for the T.C. City Architect. Deposit £1 1s.

NOVEMBER 9.—Sutton-in-Ashfield.—HOUSES.—Twenty houses in pairs, parlour type, and 28 houses, in pairs, non-parlour type, for the U.D.C. Warner & Bocoek, architects and surveyors, Mansfield-road. Deposit £2 2s.

NOVEMBER 10.—Birkenhead.—ALTERATIONS AND ADDITIONS.—Alterations and additions to Roland House Telephone Exchange. The Contracts Branch, M.H. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

NOVEMBER 10.—Bolton-upon-Deane.—DWELLING HOUSES.—Erection of seventy dwelling houses, together with road and surface water drainage works, on housing scheme sites, for the U.D.C. William H. Adams, A.R.I.B.A. Council Offices, Bolton-upon-Deane. Deposit £1 1s.

NOVEMBER 10.—Near Sheffield.—SCHOOL.—New school for 200 children at Woodsetts, near Sheffield, for the West Riding E.C. Education Department, County Hall, Wakefield.

NOVEMBER 10.—Northfleet.—HOUSES.—Erection of 26 houses or any less number as the tenderer may desire, on the house estate, for the U.D.C. Council Offices, High-street, Northfleet. Deposit £2 2s.

NOVEMBER 11.—Essex.—SECONDARY SCHOOL.—Erection of a secondary school at Brentwood for 275 pupils, for the Essex C.C. County Architect, Springfield Old Court, Chelmsford. Deposit £2 2s.

NOVEMBER 11.—Essex.—SCHOOL.—Alterations and additions to the elementary school at Rainham, for the E.C. Essex C.C. County Architect, Deposit £1 1s. to the County Accountant, Old Court, Springfield, Chelmsford.

NOVEMBER 12.—Lambeth, S.W.2.—DEMOLITION.—Demolition of the Old Workhouse, Prince's-road, Kennington, the materials from which will remain the property of the contractor; and for the erection on the vacant site of four blocks of dwellings, comprising 108 flats. Osmond Cattlin, Borough Engineer, Lambeth Town Hall, Brixton-hill, S.W.2. Deposit £3 3s.

NOVEMBER 14.—Gargrave.—STATION.—Police station at Gargrave, near Skipton, for the West Riding C.C. P. O. Platts, A.R.I.B.A., County Architect, County Hall, Wakefield.

NOVEMBER 14.—Wayland.—HOUSES.—Ten houses, for the R.D.C. A. A. Gompertz, Clerk, Watton, Norfolk.

NOVEMBER 16.—Chipping Sodbury.—HOUSES.—For (1) eight at Stoke Gifford; (2) two at Pucklechurch; (3) six at Shortwood; (4) four at Watley's End, Winterbourne; (5) four at Marshfield, for the R.D.C. Housing Inspector. Deposit £1 1s.

NOVEMBER 16.—London.—DWELLINGS.—Extension of a block of dwellings and the erection of a further block on the Whitmore Estate (Ware-street area), Shoreditch, for the L.C.C. Architect to the Council, The County Hall (Room No. 3), Westminster Bridge, S.E.1. Deposit £2.

NOVEMBER 18.—London.—HEATING.—Re-arrangement of the central heating and hot-water services at the St. Andrew's Hospital, Devons-road, Bow, for the Poplar B.G. Consulting Engineer. Deposit £2.

NO DATE.—Bo'ness.—HOUSES.—Forty-eight or more houses on Deanfield-road, Cowdenhill-road, and other probable sites, for the T.C. Wm. Beattie, Director of Housing.

NO DATE.—Elstree.—HOUSES.—Four houses on the Furze-hill estate, Furze-hill-road, for the Atlantic Assurance Co. A. E. Biggs, F.R.I.B.A., architect, 1, Museum-street, W.C.1. Deposit £2 2s.

NO DATE.—Innerleithen.—HOUSES.—Sixteen houses at Innerleithen, for the T.C. J. C. Miller, Burgh Surveyor.

NO DATE.—Leeds.—ADDITIONS.—Additional lavatory accommodation in the Nurses' Home extensions, St. James's Hospital, Beckett-street, Leeds, for the B.G. C. Frederick Bowman & Son, architects, 18, Park-roy.

NO DATE.—Mitcham.—HOUSES.—210 houses on a site near to Tooting Junction Station, for the U.D.C. Chart, Son & Reading, architects, Union Bank-chambers, Croydon. Deposit £2 2s.

NO DATE.—Scaunthorpe and Frodingham.—OFFICES.—New offices and stores, for the Gas Department of the U.D.C. J. F. Simpson, engineer and manager, Quantity Surveyor, Carpenter & Son, Palace-chambers, Leicester.

NO DATE.—Swinton.—HOUSES.—Seventy houses on the site adjoining the Brookfield housing scheme, for the U.D.C. H. Birks, engineer and surveyor. Deposit £2 2s.

MATERIALS, etc.

OCTOBER 26.—Grange.—FITTINGS.—1,200 lin. yds. 5 in. internal diameter cast or spun iron pipes in 12 ft. lengths, with S. and S. joints; 8 lin. yds. 6 in. do. do.; one taper pipe, 5 in. to 4 in.; one taper pipe, 5 in. to 3 in.; two bends, 5 in. diameter, one-eighth and one-quarter; two flanged tee pieces for hydrants, 3 in. off 5 in.; two junctions, 5 in. off 5 in., one angle and one square; one junction, 3 in. off 3 in., square; two combined screw-down and ball hydrants, complete with suitable surface boxes, six sluice valves, 5 in., S. and S., complete with suitable surface boxes, for the U.D.C. Thos. Huddleston, Engineer to the Council, Council Offices, Grange-over-Sands.

OCTOBER 26.—Pontypridd.—STEEL.—750 ft. of 10 in. lap-welded mild steel tubes, for the Pontypridd and Rhondda Joint Water Board. T. W. Coates, Waterworks Engineering Office, 27, Gelliwasad-road.

OCTOBER 26.—Tendring.—MATERIALS.—Screened stone, tarring shingle, granite chippings, for the R.D.C. Highway Surveyor, Great Bentley, Essex.

OCTOBER 26.—Middleton.—PIPES.—1,260 yards of 12 in. cast iron socket and spigot pipes, with turned and bored joints, also three tons of specials, for the T.C. Engineer, Gas Works.

OCTOBER 28.—Uckfield.—MATERIALS.—550 tons 1 1/2 in. tarred stone, 50 tons 1 in. tarred toppings, 150 tons 1 1/2 in. granite, for the U.D.C. G. E. Hart, Clerk to the Council.

OCTOBER 29.—Inverness.—MATERIALS.—Line and best Portland cement, for the District Asylum Committee. R. Gilbert, Clerk to the District Board of Control, 20, Church-street.

OCTOBER 30.—Derbyshire.—MATERIALS.—Refined tar, bitumen, &c., for the C.C. J. W. Horton, County Surveyor, County Surveyor's Office, St. Mary's Gate, Derby.

NOVEMBER 6.—Petersfield.—MAINS.—1,460 yards of 9 in. diameter cast-iron water main and specials, together with valves, fire hydrants, &c., for the U.D.C. H. Longbottom, Surveyor and Waterworks Engineer.

NOVEMBER 14.—Lewes.—MATERIALS.—Granite, granite binding gravel, 1 in. limestone chippings, and sand; tarred macadam, tar, for the East Sussex C.C. F. J. Wood, County Surveyor.

NO DATE.—Buckhurst Hill.—MATERIALS.—For (1) about 350 tons 1 1/2 in. broken Guernsey granite; (2) gravel for roads; (3) hoggins for roads, for the U.D.C. T. J. Tee, Clerk to the Council.

NO DATE.—Rawtenstall.—FLAGS.—1,600 square yards of well-matured 2 1/2 in. hydraulic pressed concrete flags, in 2 ft. by 2 ft., 2 ft. 6 in. by 2 ft., and 3 ft. by 2 ft., for the T.C. Borough Surveyor.

ENGINEERING, IRON AND STEEL.

OCTOBER 29.—Leyburn.—RESERVOIR.—Providing and laying about 400 lineal yards of 6 in. spun iron pipes, 2,640 lineal yards of 4 in. cast iron pipes, together with the construction of a covered service reservoir intake chamber, compensation tank, and all contingent works, for the R.D.C. F. J. Rodwell, engineer, 37 and 38, Prudential Buildings, Park-roy, Leeds. Deposit £2 2s.

OCTOBER 29.—Warwickshire.—BRIDGES.—For (1) the demolition of the existing bridge over the River Stour at Clifford Chambers, and the construction of a new bridge, 60 ft. span, approach roads and incidental works; (2) the widening of Marton Bridge, 32 ft. span, over the River Leam, Marton and Frankton, together with approach retaining walls, &c.; (3) the widening of Longford Bridge, over the River Sowe, Foleshill, two spans 7 ft. 6 in. and incidental works, for the C.C. D. H. Brown, County Surveyor, 8, Northgate-street, Warwick. Deposit £2 each.

OCTOBER 30.—London.—STEELWORK.—Steelwork for bridges, for the South India Railway Co. Robert White & Partners, consulting engineers, 3, Victoria-street, S.W.1.

OCTOBER 31.—Scarborough.—WHARF.—Reinforced concrete wharf, about 585 ft. in length along the north side of the Old Harbour, for the Harbour Commissioners. Consider Constructors, Ltd., 72, Victoria-street, Westminster, S.W.1. Deposit £3 3s.

NOVEMBER 2.—Southampton.—REPAIRS, &C.—For (1) alterations to the electrical equipment of the twelve existing cranes to make them suitable for a new system of supply; (2) provision and laying of certain cables, disconnecting boxes, &c.; (3) switchgear; (4) provision of two crane weighing machines, for the Harbour Board. W. G. Gubbins, Clerk. Deposit £5 5s.

NOVEMBER 6.—Denbigh.—BRIDGE.—Construction of a reinforced concrete trestle bridge and other works in connection with the proposed improvement of Cwm Alis Corner, situated about 4 miles north-west of Chirk on the Holyhead road, for the C.C. E. W. Jones, County Surveyor for Roads and Bridges (Eastern Division), Aelybryn, Wrexham. Deposit £5.

NOVEMBER 16.—Worthing.—RESERVOIRS.—Construction of two covered reinforced concrete reservoirs each of 500,000 gallons capacity, for the T.C. T. & C. Hawksley, civil engineers, 34, Old Queen-street, Westminster, S.W.1. Deposit £3 3s.

ROAD, SEWERAGE, AND WATER WORKS.

OCTOBER 26.—Guildford.—DRAINAGE.—Reconstruction of the drainage system at Broadwood Cottages, Wood-street, for the R.D.C. J. Anstee, Engineer and Surveyor.

OCTOBER 26.—Little Lever.—SEWERING.—Sewering, forming, ballasting, paving and flagging of certain streets, for the U.D.C. Surveyor.

OCTOBER 26.—Stainland.—PAVING.—For (1) 83 super yards of 6 in. paving on concrete, with relaying of footpath and kerb on the Stainland main road, near St. Andrew's Church, and (2) 830 super yards of best 6 in. Yorkshire gritstone setts, in connection with the works, for the U.D.C. H. Edgar Moses, Surveyor.

OCTOBER 26.—Wombwell.—REPAIRS.—Surface draining, forming, kerbing, channelling and flagging, William-street, Frederick-street, Princess-street, Western-terrace, and Mount-terrace, for the U.D.C. W. Quest, Surveyor. Deposit £2 2s.

OCTOBER 26.—Woodford.—ROADS.—Road construction, including hardcore foundation, tarmac surfacing, paving, kerbing, and surface water drainage, &c., of the Whitehall-road, for the U.D.C. Armand D. Ward, Surveyor to the Council. Deposit £2 2s.

OCTOBER 27.—Carshalton.—MAKING-UP.—Widening, diversion, sewerage, and making-up of Banstead-road, for the U.D.C. W. Willis Gale, surveyor. Deposit £2.

OCTOBER 27.—Davertry.—ROAD.—For (1) kerbing and concrete channels, approximately one mile; (2) strengthening, grading, and re-surfacing with asphalt and tarred granite, approximately one mile, for the Birmingham-Ipswich road, for the T.C. Borough Surveyor. Deposit £3 3s.

OCTOBER 27.—Enfield.—RESURFACING.—With tarred slag macadam about 13,000 sq. yds. of carriageway on roads in South-street and Lea Valley-road, for the U.D.C. Surveyor. Deposit £2 2s.

OCTOBER 27.—Hitchin.—ROAD.—New road on the Sunnyside housing estate, about 300 yards long, for the U.D.C. A. T. Blood.

OCTOBER 27.—Roscommon.—REPAIRS.—To roadway and cottages in Roscommon Rural District Scheme No. 74, for the Irish Sailors' and Soldiers' Land Trust, Engineer, 30, Lower Fitzwilliam-street, Dublin. Deposit £1 1s.

OCTOBER 27.—Truro.—RECONSTRUCTION.—Reconstruction of about 2,700 super yards of the carriageway of the Tregolls-road, for the T.C. F. A. Barnes, City Surveyor. Deposit £1 1s.

OCTOBER 27.—Willisden.—ASPHALTING.—Execution of 5,153 yards super, or thereabouts, of compressed asphalt paving 2 in. thick in Brondesbury-road and Mortimer-road, for the U.D.C. F. Wilkinson, Engineer to the Council, Town Hall, Dyne-road, Kilburn, N.W.6.

OCTOBER 28.—Forfar.—SEWERS.—Construction of sewage tanks, pump well, &c.; alterations of sewer and other relative works, for the T.C. G. Thomson, Engineer and Surveyor, 164, Bath-street, Glasgow. Deposit £2 2s.

OCTOBER 29.—Hendon.—SEWER.—Construction of about 480 yards of 7 in. and 9 in. stoneware pipe sewer, mostly 9 in., together with manholes and all appurtenant works, for the T.C. W. H. Radford & Son, engineers, Albion Chambers, King-street, Nottingham. Deposit £2 2s.

OCTOBER 29.—Lorn.—PIPES.—4,000 lin. yards of 4 in. diameter pipes, 900 lin. yards of 3 in. diameter pipes, for the Argyll C.C. W. MacDonald, Engineer Road Surveyor's Office, Columbia Buildings, Oban. Deposit £2 2s.

OCTOBER 29.—Morecambe.—MAKING-UP.—Albert road, extending from Balmoral-road to Osborne-road a length of 324 yards; Devonshire-road, extending from Balmoral-road to Lake-road, a length of 180 yards for the T.C. Percival Holt, Borough Engineer and Surveyor. Deposit £1 1s.

OCTOBER 29.—Shelf.—SEWER.—New sewer and septic tank formation at the Lumbrook Sewage Works Shelf, for the U.D.C. G. R. Oddy, Chartered Architect, Ward's End Chambers, Halifax.

OCTOBER 30.—Barton-upon-Irwell.—SEWER.—Construction of 1,190 lineal yards of 3 ft. 3 in. diameter concrete pipe surface water sewer, to be laid in Carrington-road and Flixton-road, Flixton, for the R.D.C. Engineer's Office, Council Offices, Green-lane, Patricroft. Deposit £2 2s.

OCTOBER 30.—Doncaster.—MAKING-UP.—King's road, Queen's-road, King's-terrace, Sunnymede-avenue and Sunnymede-terrace, for the R.D.C. W. R. Craltree, Surveyor.

OCTOBER 30.—Merton and Morden.—SEWER.—Construction of approximately 333 yards run of 9 in. stoneware pipe sewer at Green-lane, for the U.D.C. C. Jerram, Surveyor, Council Offices, Merton, S.W.1. Deposit £2.

OCTOBER 30.—Southend-on-Sea.—MAKING-UP.—New road north of Southchurch Hall Park, for the C.C. R. H. Dyer, Borough Engineer and Surveyor. Deposit £1.

OCTOBER 31.—Airdrie.—SEWERS.—Excavation work and laying of roads, sewers and digging trenches for water and gas pipes at the Chapelside site, for the T. Thos. Thomson, Town Clerk.

OCTOBER 31.—Bucklow.—EXTENSIONS.—Construction of five extensions to 9 in. and 12 in. diameter sewers in Timperley, for the R.D.C. R. Curtis Cordo, Engineer and Surveyor, 25-26, Station Building, Altrincham.

NOVEMBER 2.—Beckenham.—SEWERS.—Widening and the construction of soil and surface water sewers Scotts-lane, for the U.D.C. J. A. Angell, Surveyor.

NOVEMBER 2.—Hendon.—MAKING-UP.—Weave avenue, The Approach, Golder's-rise, The Croft Woodlands, and Woodlands-crescent, for the U.D. A. O. Knight, engineer and surveyor. Deposit £5.

NOVEMBER 2.—Hendon.—WIDENING.—Widening works, road and footpath construction in Lower Hall-lane, for the U.D.C. A. O. Knight, engineer and surveyor. Deposit £5.

EMBER 2.—Normanton.—MAKING-UP.—For (a) ellins-terrace, and (b) rebuilding boundary walls set-street, for the U.D.C. W. F. Copp, Surveyor.

EMBER 2.—Wallington.—ROAD.—New road, 1,600 ft. in length, to connect Sandy Plough-lane, Wallington, Surrey, for the M.F. al Road Engineer (London Division), Ministry report, 7, Whitehall-gardens, S.W.1. Deposit

EMBER 2.—Whitstable.—MAKING-UP.—Part of on-road, approximate length 838 yds., for the J. Dunn, Surveyor. Deposit £1.

EMBER 3.—Ezling.—MAKING-UP.—Gloucester-Windermere-road to Dorset-road, Hereford-Bramley-road to No. 36 inclusive, Rosebery-Park-view-road, Weymouth-avenue from y-road to Hereford-road, for the T.C. W. R. Borough Engineer. Deposit 10s. 6d. each.

EMBER 4.—Burntisland.—EMBANKMENT.—ment wall and other works at Rossend Bay, land, for the British Aluminium Co. C. S. Buchanan, engineers, 16, Victoria-street, nster, S.W.1. Deposit £5.

EMBER 4.—Farnham.—DRAINAGE.—Construct about 15 miles of 9 in., 7 in., 6 in., and 5 in-er stoneware and cast-iron sewers and pumping together with manholes, ventilating shafts, ther appurtenant works, for the U.D.C. G. y Taylor, of Messrs. John Taylor & Sons, engi-Caxton House, Westminster, S.W.1. Deposit

EMBER 4.—Glenbervie.—ROAD.—Diverting and icting 958 lineal yards of the Laurencekirk turn-out A 94, at Bridge of Mendynes, for the Kincare C.C. A. Forbes, County Road Surveyor, ildings, Stonehaven. Deposit £2.

EMBER 4.—Hove.—PAVING.—Making-up road-lying new paving and other works in connection ith in Hallyburton-road, for the T.C. Borough

EMBER 4.—Invercannie.—ROAD.—Diverting and icting 624 lineal yards of the Aberdeen-Braemar Route A93, at Invercannie, for the Kincardine C.C. A. Forbes, County Road Surveyor, County ns, Stonehaven. Deposit £2.

EMBER 5.—Bedford.—MAKING-UP.—Bradgate-Haynes-road, and part of Miller-road, for the t. Greenshields, Borough Engineer and Surveyor. t £2 2s.

EMBER 6.—Penybont.—SEWERAGE.—Construct sewerage and sewage disposal scheme at Pont-yf, Llangynwyd, for the R.D.C. J. Simon y Surveyor, 8, Wyndham-street, Bridgend. t £5 5s.

EMBER 10.—Featherstone.—KERBING.—Kerbing, lling, metalling on existing foundations, &c., ection with about 160 houses, for the U.D.C. Chesney, A.R.I.B.A., surveyor. Deposit

EMBER 14.—Kingston-upon-Thames.—ROADS WERS.—Construction of roads and sewers on estate, for the Corporation. Harold A. Winsor, Clerk, Municipal Offices, Kingston.

EMBER 19.—Staffordshire.—WIDENING.—Widen- the Old Chester main road, from Little Aston oads to Brownhills, a length of about 4 miles, C.C. J. Moncur, County Surveyor, County ns, Stafford.

Competitions.

(See Competition News, page 583.)

Construction Sales, Tenders, etc.

EMBER 26.—Braintree, Essex.—Henry Joscelyne ructured by the Crittall Manufacturing Co., Ltd., at Braintree, Essex, building materials, surplus including 500 metal windows. Auctioneers, ee.

EMBER 27.—Bucks.—Hampton & Sons will sell, acant possession, at the St. James' Estate t. St. James'-square, S.W.1, the Elizabethan ce of freehold tenure known as "The Grange," ury, Bucks; 6½ acres. Auctioneers, 20, St. square, S.W.1.

EMBER 27.—Market Drayton.—Henry Butcher will sell, without reserve, arising out of the on of the Mansion, by order of the contractor, premises, Cloverley Hall, near Market Drayton, material, stores, &c., including approximately good dressed bricks and 30,000 slates. eers as above.

EMBER 27 & following days—Andover, Hants.—C. is & Co. will sell, by order of the executors of e Bell (deceased), upon the premises, 15, London and the yards in Dene-street, East-street, llway Siding, Andover, Hants, the whole of k-in-trade, plant and rolling stock of a builder, or, decorator and undertaker, stock of timber, ctioners, 285, Borough High-street, London,

EMBER 29.—Edgware.—Leslie Raymond will e the site of "Portsmouth Lodge," Edgware e the Tube station), building materials of the e. Auctioneer, The Estate Offices, Edgware.

EMBER 29.—Twickenham, Middlesex.—Night-Page & Bennett will sell, at York House, am, builders' materials, &c. Auctioneers, ambers, Kingston-upon-Thames.

EMBER 30.—Northolt, Middlesex.—F. H. Clark without reserve, at the R.A.F. Depot, Northolt, d second-hand timber, corrugated iron, steel mes, &c. Auctioneers, Railway Wharf, York-landsworth.

*** NOVEMBER 4.—Cranbrook, Kent.**—eryard & Yates will sell, without reserve, the valuable materials arising from demolition of "Glebe House," Cranbrook, removed (owing to a sale on the premises being prohibited), to "Rectory Farm" (in rear of the "White Horse Hotel), timber and building materials, slates, &c. Auctioneers, 365, Norwood-road, S.E.27.

NOVEMBER 4.—Hayward's Heath.—Knight, Frank & Rutley will sell, as a whole or in 46 lots, by direction of Edward Huth, Esq., at the Goldings Hotel, Hay-ward's Heath Station, freehold residential, sporting and building property known as Wykehurst Park Estate (remaining portions), including The Stanley Mansion; also a private residence known as "Hazel-dean," about 380 acres. Auctioneers, 20, Hanover-square, W.1.

NOVEMBER 10.—Kent.—Hampton & Sons will sell, with vacant possession, at the St. James' Estate Rooms, 20, St. James'-square, S.W.1, freehold residential property between Chislehurst and Bromley, 300 ft. up, on dry gravel soil, the property known as "Mavelstone," Bromley, Kent, consisting of about 3½ acres; also two sites of about 2 and 6½ acres, respectively. Auctioneers, 20, St. James'-square, S.W.1.

*** NOVEMBER 10 AND 11.—Hammersmith, W.6.**—Henry Butcher & Co. will sell without reserve, at 237, Hammersmith-road, Hammersmith, W.6, woodworking machinery, builder's plant and stock, &c. Auctioneers, 63 and 64, Chancery-lane, W.C.2.

Public Appointments.

*** OCTOBER 26.—Middleton.—CLERK OF WORKS.**—Temporary clerk of works on the Boarshaw housing scheme required by the T.C. for a period of at least twelve months. J. P. Walsley, Town Clerk, Town Hall, Middleton, Lancs, endorsed, "Clerk of Works."

OCTOBER 29.—London, E.C.4.—Temporary ap- pointment of a first-class Architectural Draughtsman in the Department of the Engineer M.A.B. Clerk to the Board, Victoria Embankment, E.C.4.

*** OCTOBER 31.—Hammersmith School, Shepherd's Bush.**—A Visiting Teacher of Building Construction required by the L.C.C. Education Officer (T.I.(a)), The County Hall, Westminster Bridge, S.E.1.

*** NOVEMBER 5.—Huddersfield.**—Building Inspector required in the Borough Architect's Department, for the Borough Council. J. Henry Field, Town Clerk, Huddersfield.

*** NOVEMBER 7.—Croydon, Surrey.—ARCHITECT.**—Required by the Education Committee to superintend the erection of secondary school, also prepare plans. The Clerk to the Committee, Katharine-street, Croydon.

NOVEMBER 9.—Bradford.—Resident Clerk of Works required from January 1, 1926, to supervise the erection of new Freemasons' Hall, Manningham-lane, Bradford. H. E. Bower, 9, St. Andrew's-place, Bradford.

*** NO DATE.—London, S.E.1.—ARCHITECTURAL ASSISTANTS.**—For temporary engagements in the Architect's Department of the L.C.C. Architect to the Council, The County Hall, Westminster Bridge, S.E.1.

*** NO DATE.—London, S.E.1.—Quantity Surveyor's Assistants** for abstracting and billing for temporary engagements in the Architect's Department, required by the London County Council. Architect to the Council, The County Hall, Westminster Bridge, S.E.1.

PROPOSED NEW BUILDINGS & OTHER WORKS.*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ASHBOURNE.—The U.D.C. has decided to proceed with the erection of twelve type "A" houses, and to apply for sanction from the M.H. to borrow £5,688 for the work.

BARNET.—The Governors of the Grammar School have received a letter from the C.C. stating that they had had a report from the B.E. with regard to the condition of the boys' school, and the Board's suggestion that it was advisable to obtain a site for the erection of a new school.

BARNSLY.—The Town Clerk of the C.B. has reported that the M.H. are prepared to sanction a loan of £2,500 for the purchase of land at Hunningley-lane, Ardsley, for the erection of houses.—Application is to be made to the M.H. for sanction to borrow the sum of £42,000 for the erection of 100 houses on the Pontefract-road site.—The C.B. has received formal application for sanction for the borrowing of money for the purchase of Bunkers Hill Farm for market and slaughterhouse purposes. Application is to be made to the M.H. for sanction to borrow the sum of £4,270 for the purchase.—The Highways Committee recommended that the Town Clerk be authorised to apply to the M.H. for sanction to a loan of £4,935, being the Corporation's share of the cost of the Beever Bridge.

BATFORD.—The Hertfordshire E.C. propose to erect a school to accommodate about 150 children.

BECKENHAM.—The U.D.C. are considering the question of extending housing activities on the Shortlands estate.—Alterations are to be carried out at the Bromley-road school at a cost of £1,200.—The electricity show rooms are to be altered at a cost of £250, and efforts are to be made to secure a site or premises for new offices and showrooms.—The Rectory estate is to be developed for building by Mr. J. R. Davies.

BECONTREE.—The L.C.C. recommend that, subject to the approval of the M.H., a site in Valence-avenue be sold to H.M. Postmaster-General for £1,000, for the erection of a post office.

BIRMINGHAM.—Efforts are being made to build a civic hall.

BLACKPOOL.—The C.B. has instructed the Borough Surveyor to report on Mr. E. D. Dennis, architect, submitting fees for services to be rendered in connection with the erection of houses on the Hoo Hill estate, and also sketch plans for the lay-out of the houses.—The Surveyor has been instructed to press forward the plans for Abbey-road School.—The C.B. resolved to recommend that the Finance Committee make application, through the B.E., to the M.H. for sanction to the borrowing of the requisite sum for the erection of Layton Junior School.

BOLTON.—The Corporation Housing Committee are to report as to the erection of further houses.—St. Mark's School is to be remodelled by the managers, whose plans have been approved by the E.C.

BRIDGWATER.—The T.C. has accepted a local tender of £15,550 for the erection of 31 parlour houses.

BRISTOL.—Blaise Castle is to be converted into a convalescent home.

BROADSTAIRS.—The railway station and its approaches are to be improved at a cost of £30,000.

BROMLEY.—The M.H. has sanctioned the borrowing by the T.C. of £25,000 for housing purposes.

CARLISLE.—The City Council has approved the purchase, at a cost of £10,000, of an estate of 93 acres at Newtown, for the building of houses.

CHELTEXHAM.—The Corporation has decided to construct an underground convenience at Long Garden, at a cost of £2,500.—The Corporation has approved of lay-out and plans of 14 houses, prepared by Mr. Malvern, to be erected on the Stanhope-street improvement area. Further plans are to be prepared for two-bedroomed houses. Plans passed: 60 houses, St. Marks, for the Corporation.

COLNE.—The M.H. held an inquiry into the application of the T.C. for approval of a preliminary statement of proposals for development in connection with the West Colne town-planning scheme.

CONISBOROUGH.—The U.D.C. decided to make application to the M.H. for sanction to borrow £34,493 for the purchase of land, street and sewerage works, and the erection of 60 houses.—The Public Works Loan Board are also to be applied to for the borrowing of £114,598 sanctioned for housing advances.

COWLEY.—The M.H. has given the R.D.C. sanction to build sixty houses, and the Council agreed that thirty should be put in hand as soon as possible.

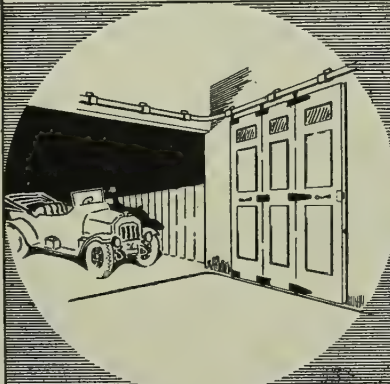
DONCASTER.—The West Riding E.C. recommends that temporary accommodation be provided at the Grammar School, at a cost not exceeding £1,620 for buildings and £450 for equipment; they also recom-

* See also our List of Contracts, Competitions, etc.

THE "HENDERSON" SYSTEM

SLIDING DOOR GEAR

FOR FACTORIES, GARAGES, SCHOOLS, ETC..



"TANGENT JUNIOR" FOR LIGHT DOORS.
"TANGENT SENIOR" FOR HEAVY DOORS.

WRITE FOR BOUND CATALOGUE B.24 TO:-
P.C. HENDERSON, LIMITED,
BARKING, ESSEX. PHONE. EAST HAM 242.

ment that extensions be carried out to the Technical College, at an estimated cost of £20,000.—The E.C. are to build an open-air school to accommodate 240 children.

DUNGANNON.—An inquiry into applications on behalf of 97 labourers for cottages in the R.D. has been held by the Northern Ministry of Home Affairs.

EALING.—The T.C. passed plans for the laying out of five new roads, and the erection of 136 houses, by H. S. Smallwood & Co., Victoria-street, on the Argyle Park Estate, adjoining the Greenford-road and Castlebar Halt; 14 houses by W. Walkerdine, in Gunnersbury-lane; and 12 in an adjoining new road; 10 lock-up shops, by W. H. Read & Co., in Northfield-avenue; dairy and five flats by the Express Dairy Co., in The Mall and Northcote-avenue; and for the laying-out of new roads on the Gunnersbury Estate by A. Lyford.

EASTBOURNE.—The Corporation are inquiring the terms on which the Compton Estate will sell 110 acres at Horsey Bank Farm for housing, education, allotment and playing field purposes.—Tentative plans have been prepared by the borough engineer for the construction of a bathing pool at the Redoubt.—The provision of a convenient east of the Redoubt is being considered.—A bowling green is to be provided at Gildredge Park, at a cost of £1,200.

EAST HAM.—The parishioners of St. Paul's, Burgess-road, are hoping soon to embark upon the first part of the scheme for the erection of a permanent church. The scheme is expected to cost between £10,000 and £12,000. It is proposed to enlarge and beautify the present building, and to commence with the west front.

FOLESHELL.—The Exhall Sanitary Committee reported that the Surveyor had submitted a scheme for the sewerage and the sewage disposal of the principal parts of the parish. This was estimated to cost £37,414 5s. 4d. The R.D.C. decided that the plans should be completed.

FOLKESTONE.—The T.C. are to ask the M.H. to sanction a loan for the Chapel at the new cemetery. The Council is also considering the completion of drawings for the new cricket pavilion.—The T.C. resolved that a sub-committee be requested to consider further and report as to the construction of a bathing pool with a view to providing work for the unemployed.

FRIERN BARNET.—The M.H. has approved the proposal of the D.C. to erect 20 houses. The Council has decided to apply for a loan of £11,600 for the work.

GLASGOW.—The congregation of St. Anne's R.C. Church are raising funds for the proposed erection of a new church and parochial hall.

GODSTONE.—Housing sites are being obtained by the R.D.C. at Limsfield and Woldingham for housing schemes.

GRAVESEND.—The Electrical Engineer is to prepare a scheme for the provision of showrooms for the department.—Plans are to be prepared for conveniences in Echo-square and an underground convenience in Porrock-street.

GREASBOROUGH.—The U.D.C. has received sanction from the M.H. to borrow £1,650 for the purchase of the land comprising the Feoffees estate in Potter Hill for building purposes.

GRIMESTHORPE.—The Wesleyan Reform Chapel, Sheffield, has undertaken extension of premises to provide a large room for the primary department's use and three vestries. These extensions involve an expenditure of £2,500.

HATHERLEIGH.—The P.C. has decided to erect 20 houses.

HIGHTOWN (YORKS).—A site is being prepared for the erection of a new institute and Sunday schools at the Parish Church, including a scheme of electric lighting. The estimated cost is about £3,000.

HULL.—The E.C. has instructed the surveyor to prepare sketch plans of the school proposed to be laid out on the Cottesingham-road estate, and that application had been made to borrow the necessary money for the work. The Director of Education has recommended the erection of an infants' block, at the school.—Sanction to borrow £3,879 for the purchase of the site abutting on to the Ings-road, Sutton Ings, has been given by the M.H.

ILFORD.—Mr. S. Robinson has prepared a scheme for roads and sewers and erecting 250 houses on the Wanstead-lane estate.

JARROW.—The T.C. has approved plans for the erection of forty houses.

KINGSTOWN.—The U.D.C. has adopted a recommendation of their Construction Committee that a loan of £5,000 be raised for the erection of 25 houses.

KNARESBOROUGH.—The U.D.C. has resolved that tenders be invited for the erection of a shelter in Castle-grounds.

LEEDS.—A M.H. inquiry has been held into an application by the T.C. to borrow £17,800 for the provision of a public washhouse and slipper baths at Stocks Hill, Holbeck.—The T.C. passed various plans, including: W. Ripley, 16 semi-detached houses.—The M.H. has sanctioned a loan of £2,180 for the purchase of land at Wyther Park for the erection of an elementary school.—A loan of £55,000 has been sanctioned for road construction works.—A loan of £6,817 has been sanctioned for the erection of branch libraries at Bramley and Burley.—The Housing and Electricity Committees are considering the erection of 50 houses.—A central heating system is to be installed at the Hope Hospital.—Further buildings at Chapel-town barracks are to be converted into housing accommodation, at a cost of £1,050.

LETHBRIDGE.—Plans for the reconstruction and improvement of the lakes in Howard Park have been considered by the U.D.C., the estimated cost for the execution of these works being £1,571, and for the provision of a bandstand, £450.

LEYTON.—The D.C. has approved the cost of the acquisition of the land in Lea Bridge-road for housing and street improvement purposes, estimated at £10,740, of which £10,356 had been apportioned to housing and £384 to street improvements.—The Council has decided to make application to the M.H. for sanction

to a loan of £65,000 to cover the estimated cost of the construction of outfall sewer to connect with the London main drainage system.

LONDON.—The M.A.B. recommend that approval be given to the provision at the Western Hospital, at an estimated cost of £1,145, subject to the sanction of the M.H., of a cottage for the engineer.—The Board also recommend that approval be given to the provision at the Western Hospital, at an estimated cost of £410, subject to the sanction of the M.H., of an operating theatre in accordance with the plan prepared by the engineer-in-chief.

LONDON (BATTERSEA).—A site in Metior-street has been acquired by the L.C.C. for an elementary school. LONDON (HAMMERSMITH).—A site in Lena-gardens has been acquired by the L.C.C. for the erection of an elementary school.

LONDON (ISLINGTON).—The B.C. recommend that application be made to the Electricity Commissioners for sanction to the borrowing of the sum of £16,281 for electricity purposes.

LONDON (LFWISHAM).—The L.C.C. has decided to enlarge the Athelney-street and the Elfrida elementary schools.

LONDON (PUTNEY).—The Kingston-road, Putney, is to be widened, at a cost of £53,000.—The Parish Church is to be repaired at a cost of £3,000.

LONDON (STEPNEY).—The B.C. recommend that the Town Clerk make application to the L.C.C. for a loan of £33,000, for electricity works.—The Council are considering the question of erecting a tuberculosis hostel for women.—The Council has approved a letter from the Assistant Superintending Engineer to the Post Office Engineering Department on the subject of the construction of a special girder bridge over the Limehouse Cut for the purpose of carrying a telegraphic line over the Cut in connection with the works involved in the laying of telegraph lines along Burdett-road.

LONDON (WESTMINSTER).—The City Council recommend (a) that the Council make formal application to the M.H. for sanction to borrow in respect of the expenditure to be incurred for the purpose of the proposed rebuilding of the Marshall-street baths and washhouses, and (b) formal application to the L.C.C. for sanction to borrow in respect of the expenditure to be incurred for the purpose of the proposed rebuilding of the Highways Depot.—The Council recommend that application be made to the L.C.C. for sanction to the borrowing of £16,712 for the new building in Drury-lane.—The City Council recommend that the treatment of the forecourt at 199-203, Buckingham Palace-road in the manner proposed by Messrs. Waite & Waite and the removal of the approach wall as suggested be approved, subject to the conditions recommended by the City Engineer.—The Council has accepted tenders for the repaving of Ebury Bridge-road with wood blocks and asphalt over the existing granite setts on the south side of Lincoln's Inn-fields, and in Great Scotland-yard, and for extras and repairs after trenches, at the total estimated cost of £10,149 18s. 9d.

LUDDENDEN.—The B.C. has approved plans for alterations to the school, for the Luddenden Foot and Midgley E.C.

MANCHESTER.—The Corporation are considering a proposal for a town planning scheme.—A site at Chorlton Brook has been allocated to the E.C. for the erection of a school.—It is suggested that sites on the Anson and Clayton housing estates should be sold for the erection of licensed premises.—It is proposed to proceed forthwith with a portion of the Davyhulme sewage scheme by direct labour, at a cost of £83,000.—It is recommended that Platt Hall should be converted into a branch art library, the City Architect computing the cost of adaptation at £4,500.—A new shelter is to be constructed at a cost of £400 in Bogart Hole, Clough.—Refreshment kiosks are to be erected in four parks at a cost of £100 each.—A loan of £2,894 has been sanctioned for the erection of a practical instruction centre at Rusholme.

MATLOCK.—The U.D.C. approved a recommendation from the Housing Committee with regard to the housing scheme that the plans be modified so as to provide 10 houses at an aggregate cost of £5,780, and 12 at £6,684, and that application for a loan of £13,268 18s. to cover all costs in connection with the scheme be made.

NORTHUMBERLAND.—The E.C. has decided, subject to the approval of the C.C., to purchase six portable buildings, at a cost of £730 per building.

NOTTINGHAM.—The Estate Committee, has submitted four schemes and recommended the construction of a women's lavatory in Greyhound-street, at a cost of £10,600, and the extension of the existing convenience in St. Peter's Church side, at a cost of £400.—The erection of washing baths at the junction of St. Ann's Well-road and Northampton-street, at a cost of £5,950, has been approved.—Alterations to Aston Hall at a cost of £5,429, with £2,534 for fittings, were likewise approved.

OADBURY.—Arising out of an application for a subsidy to be granted in respect of 76 houses to be erected on a new street leading from Stoughton-road, the Ministry has given the U.D.C. sanction for the subsidy to be granted in respect of 100 additional houses. Plans were passed for erection of 20 cottages and a memorial hall on the Stoughton-road site.

OLLERTON.—The L. & N.E. Railway Co. has decided to construct a special railway siding from their Chesterfield to Lincoln line, to serve the new colliery which is being sunk by the Butterley Colliery Co.

PENISTONE.—The R.D.C. decided to make application to the M.H. for approval to a scheme of 40 additional houses.

PETERBOROUGH.—The M.H. has sanctioned the housing scheme for 28 houses at Walton.

PORTADOWN.—The T.C. has applied to the Northern Ministry of Home Affairs for a further loan of £10,000 to make advances for building houses.

PORTSLADE.—The U.D.C. adopted a report submitted by the Housing Committee with regard to a fresh lay-out plan of houses on the Sheldale-road site.

PORTSMOUTH.—An improvement is to be carried out at the Highland-road Bridge site, at a cost of £10,000. A site in Landguard-road is being acquired for ways depot. A further 200 houses are to be built. A committee has been appointed to go into the question of coast erosion. The M.H. has sanctioned a £45,000 for the Fratton-road widening. A site obtained for the erection of workshops for the Royal Navy.—The U.D.C. has recommended contracts to two firms for the building of 50 non-parlour houses on the Ooze Wood site.

ST. HELENS.—The Managers of the Wind school are proposing the erection of new school premises to accommodate 80 children.

SALFORD.—The sum of £2,750,000 is to be raised from Liverpool to Salford.

SCARBOROUGH.—The Town Council has approved an expenditure of £14,181 on the construction of a wall and roadway at the base of the cliff of the Cliff gardens on the South Bay.

SHAW.—New bank buildings are to be erected at the corner of St. Mary's Gate and Rochdale-road. Williams Deacon's Bank, Ltd.

SHEFFIELD.—The Rev. Dunford, of the Church at Hillsborough, has a scheme in hand for the building of a new church and extensions to the premises.

SHELF.—The M.H. has given formal sanction to the U.D.C. to borrow £3,231 and £155 for the erection of houses on the Shelf Hall-lane site.

SKEGNESS.—The M.H. has held an inquiry into the Council's application to borrow £32,753 for the construction of a bathing pool and orchestral platform on the foreshore.

SOUTH SHIELDS.—The Corporation has decided to erect a convenience at Ravensworth-terrace, at a cost of £225. The R.D.C. are negotiating with the Corporation for the acquisition of 15 acres at Clea for a housing scheme. A handicraft centre is to be built at the Mortimer-road school, at a cost of £1,400. The Clea Cleadon Park housing estate has been sanctioned for the erection of an elementary school. T. A. Page & Sons, on behalf of Mr. Milton Swales, prepared a scheme for the development of a housing estate at Cauldwell. The Corporation are to grant of £500 to the South Shields Institution Blind for a scheme for the provision of new work. A loan of £42,000 has been sanctioned for residential streets.

STOCKSBRIDGE.—The E.C. has approved tenders and estimates for the new school.

STOCKTON.—The T.C. has decided that the Local Engineer and Medical Officer present a report to the Health Committee giving an estimate of the cost of providing an abattoir.—The Council is to make application to the M.H. for sanction to borrow £8,650 for the erection of an open-air school at Norton.—The Local Engineer submitted an estimate of £30,000 for the construction of a subway, including retaining walls, the provision of a bridge in place of the St. level crossing.

STOKE-ON-TRENT.—Sanction to borrow £120,000 for a big scheme of gas centralisation is being sought by the City Council of the M.H.

STRATFORD-ON-AVON.—A report on the Guild by Mr. N. Jewson to the Society for the Preservation of Ancient Buildings was presented, and the Council was instructed to get an estimate for the reconstruction of the Chapel.

SUNBURY.—The Thames Conservancy Board decided to make a new lock, at a cost of £17,000, the land on the south and towpath side of the lock.

SWANAGE.—The U.D.C. passed plans: Lay Wall estate, for Messrs. Pond & Walton; 13 houses in the Old Mill estate, for J. Parsons; tea room and shop in Hillesa-road, for Miss Dawson.

TRETFORD.—The T.C. are considering the cost of additional accommodation at the Isolation Hospital.

TORQUAY.—Messrs. Vanstone & Son propose to build 300 houses on the Daison estate. Messrs. Wilkinson propose to build a large number of houses in the Barton district. A loan of £10,500 has been sought for the erection of 21 houses for housing displaced in the clearance schemes. Sanction is to be made for sanction for a further £5,000 in connection with the reconstruction of Quay.

TRURO.—The Corporation are seeking sanction to borrow a further sum of £4,000 for the completion of the work of converting and adapting old market buildings into a civic hall.—The Cornwall Territorial Association are purchasing a quarter-acre site for a Corporation at Hendra for the erection of a drill hall. Coast Lines, Ltd., are negotiating with the Corporation regarding the provision of new and improved accommodation on the Town Quay.—The Corporation are considering the possibilities of alterations to the City Hall annexe, so that it may be used for a public hall, the architect having reported that the extra cost would be about £600.

TYNEMOUTH.—The Housing Committee is considering schemes for providing accommodation for people by the erection of large three-story terrace buildings, and sites have been provisionally selected.

UXBRIDGE.—The M.H. has approved the application of the R.D.C. for sanction to a loan of £81,000 for works of sewerage and sewage disposal for the town of Uxbridge, Hillingdon East, and Ickenham.

WAKEFIELD.—The Corporation has decided to build 50 houses on the Lupset estate by departmental administration.—Plans for the extension of a maternity hospital are to be submitted to the Council, the cost being estimated at £5,000.—It is urged that a new bridge should be constructed in place of the old bridge.—A store shed is to be erected in place of the Old Bar House, Mantgates-lane, at a cost of £200.—The city engineer has prepared plans for a convenience at Westgate.—The city engineer has requested to prepare plans for the erection of a sale warehouse on the Market estate.

(Continued on page 614).

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.			
Per 1,000 Alongside, in River Thames up to London Bridge.	£ s. d.		
Best Stocks	4 3 6		
Second Hard Stocks	3 18 6		
Per 1,000, Delivered at London Goods Stations.			
Flintons, at	£ s. d.		
King's Cross	2 13 3	Best Blue	£ s. d.
Do. grooved for plaster	2 15 3	Pressed Stuffs	9 5 0
Do. Bullnose	3 8 3	Do. Bullnose	9 15 0
Best Stourbridge Fire brick:—		Blue Wire Cuts	7 5 0
2½ in.	8 11 0	3 in.	10 3 0
GLAZED BRICKS—			
Best White		D'ble Str'ch'rs	30 0 0
Ivory, and		D'ble Headers	27 0 0
Salt Glazed		One Side and	
Stretchers	21 10 0	two Ends	31 0 0
Headers	21 0 0	Two Sides and	
Quoins, Bull-		one End	32 0 0
nose and 4 in		Squints and	
Plats	28 0 0	Spays	29 10 0
Second Quality, £1 per 1,000 less than best.			
and buff, £2 extra over white. Other colours, Hard			
Glaze, £5 10s. extra over white.			

BREEZE CONCRETE SLABS.			
Delivered London			
£ s. d.		£ s. d.	
1 in. per yd. super	1 11	3 in. per yd. super	2 9
2 in.	2 4	4 in.	3 6
James Ballast	10 6	per yd.	
1st Sand	13 9		
Best Sand	14 6		
Best Washed Sand	14 6		
in. Shingle for Ferro-			
Concrete	12 9		
in. "Brick"	14 0		
in. Broken "Brick"	11 6		
an Breeze	7 6		
Per ton delivered in London area in full van loads.			
Best Portland Cement, British			
Standard Specification, Test £2 18 0 to £3 3 6			
5ls. alongside at Vauxhall in 30-ton lots.			
Ferrocrete per ton extra on above.	0 10 0		
Super Cement (Waterproof)	4 8 0		
Roman Cement	8 15 0		
Parian Cement	5 15 0		
Keene's Cement, White	5 15 0		
Pink	5 10 0		
Plaster, Coarse, Pink	3 0 0		
White	3 12 6		
"Fine	5 12 0		
Irapipe, Coarse	3 9 0		
"Finish	3 17 0		
Grey Stone Lime	2 11 9		
halk Lime	2 11 9		
Best Ground Blue Lias Lime	2 4 6		
air	32 0 0		
White Chippings	1 12 0		
RE—Sacks are charged 1s. 9d. each and credited			
1s. 9d. if returned in good condition within three			
months, carr. pd.			
Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dpt.			

STONE.			
Delivered in railway trucks at			
Westbourne Park, Paddington, G.W.R., or			
South Lambeth, G.W.R., per ft. cube	2 9 1		
Do. delivered in railway trucks at Nine			
Elms, L. & S.W.R., per ft. cube	2 11 1		
ORTLAND STONE—			
Brown Whitbed, in random blocks of 20 ft.			
average, delivered in railway trucks at			
Nine Elms, L. & S.W.R., South Lambeth			
Station, G.W.R., and Westbourne Park,			
Paddington, G.W.R., per ft. cube	4 4		
Do. do. delivered on road wagons at above			
stations, per ft. cube	4 5		
White basebed, 3d. per ft. cube extra.			
NOTE.—1d. per ft. cube extra for every foot over			
20 ft. average, and 4d. beyond 30 ft.			
ORTON-WOOD STONE—			
Delivered at any Goods Station, London.			
Small random blocks, up to 10 ft. cube. P. ft. cb.	7 0		
Random blocks from 10 ft. and over	17 0		
Own two sides	27 0		
Own three or four sides	32 0		
ORK STONE, BLUE—Robt. Hood Quality.			
Delivered at any Goods Station, London.			
in. sawn two sides landings to sizes (under			
30 ft. super.)	5 6		
in. rubbed two sides, ditto	6 0		
in. sawn two sides slabs (random sizes)	2 3 1		
in. to 2½ in. sawn one side slabs (random			
sizes)	1 6 1		
in. to 2 in. ditto, ditto	1 4		
RD YORK—			
Delivered at any Goods Station, London.			
Applied random blocks	5 3		
in. sawn two sides landings to sizes (under			
30 ft. super.)	5 1 1		
in. rubbed two sides ditto	6 1 1		
in. sawn two sides slabs (random sizes)	2 10		
in. ditto ditto	2 1 1		
in. self-faced random flags	9 0		

ARTIFICIAL STONE.			
Delivered in London Area in full van loads, per ft.			
Plain, 6s. 6d.; Moulded, 7s. 9d.			
Cills, 8s. 3d.			

WOOD.			
GOOD BUILDING DEAL.			
£ s. d.		£ s. d.	
11	232 0	3 x 6	233 0
x 11	232 0	3 x 11	233 0
x 9	28 0	3 x 11	233 0
x 8	26 0	2 x 11	233 0
x 7	25 0	3 x 9	25 0
x 6	24 0	2 x 9	25 0
x 5	23 0	3 x 4	23 0
x 4	22 0	3 x 4	23 0
x 3	21 0	1 x 9	23 0
x 2	20 0		
x 1	19 0		

PLAIN EDGE FLOORING.			
Inches.	per sq.	Inches.	per sq.
1½	21/-	1½	32/6
1	25/-	1	37/6
TONGUED AND GROOVED FLOORING.			
Inches.	per sq.	Inches.	per sq.
1	25/-	1	16/6
1½	32/6	1½	20/-
1	37/6	1	25/-
MATCHINGS (BEST).			
Inches.	per sq.	Inches.	per sq.
1	25/-	1	16/6
1½	32/6	1½	20/-
1	37/6	1	25/-
BATTENS.			
2 x 2		2	6 per 100 ft.
SAWN LATHES.			
1" AND UP THICK.			
Dry Austrian Wainscoat, per			
ft. cube	0 16 0	to 0 13 0	
Dry American and/or Jap-			
anese Figured Oak, ft. cube	0 15 0		
Dry American and/or Jap-			
anese Plain Oak, ft. cube	0 11 0	to 0 13 0	
Dry sq. edged Honduras			
Mahogany, ft. cube	0 16 0	to 0 13 0	
Dry Log cut Honduras			
Mahogany, ft. cube	0 18 0	to 1 1 0	
Dry Cuba Mahogany, ft. cube	1 4 0	to 1 10 0	
Dry Teak, ft. cube	0 13 0	to 0 15 0	
Dry American Whitewood,			
ft. cube	0 11 0	to 0 14 0	
Best Scotch glue, per cwt.	4 10 0	to —	
Liquid Glue, per cwt.	4 7 0	to 5 10 0	

SLATES.			
1st quality slates from Bangor or Portmadoc carriage			
paid in full truck loads to London Rate Station. Per			
1,000 of 1,200.			
24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.			
Per 1,000 f.o.r. London.			
Best machine-made tiles from Broseley or			
Staffordshire district	5 12 6		
Ditto hand-made ditto	5 17 6		
Ornamental ditto	6 2 6		
Hip and valley tiles	0 9 6		
(per dozen)	(Machine-made)	0 9 0	

METALS.			
JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—			
£ s. d.		£ s. d.	
R.S. Joists, cut and fitted	13 10 0		
Plain Compound Girders	15 10 0		
Stanchions	17 10 0		
in Roof Work	20 10 0		

MILD STEEL ROUNDS.			
To London Station, per ton.			
Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	12 10 0	½ in. to 1 in.	11 5 0
1 in.	11 10 0	1 in. to 2½ in.	11 0 0
WROUGHT-IRON TUBES AND FITTINGS—			
(Discount off List for lot of not less than £7 net value			
delivered direct from Works, 2½ per cent. less above			
gross discounts, carriage forward if sent from			
London Stocks.)			

Fittings.			
Tubes.	Over	Under	Over
Sizes	1" to 6"	1" to 6"	1" to 6"
Black Gas	55	47 1/2	50 1/2
Blue Water	50	42 1/2	45 1/2
Red Steam	45	37 1/2	40 1/2
Galv'd Gas	40	32 1/2	35 1/2
Water	33 1/2	27 1/2	30 1/2
Steam	27 1/2	22 1/2	25 1/2

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.			
Per yd. in 6 ft.			
lengths.	Gutters.	Nozzles.	Stops.
3 in.	1/2	1 1/4	3 1/4
3 1/2 in.	1 1/4	1 3/4	3 3/4
4 in.	1 5/8	1 7/8	3 7/8
4 1/2 in.	1 3/4	1 7/8	3 7/8
5 in.	1 7/8	1 7/8	3 7/8
O.G. GUTTERS.			
3 in.	1/7	1 3/4	3 1/4
3 1/2 in.	1/7	1 3/4	3 1/4
4 in.	1/8	1 3/4	3 1/4
4 1/2 in.	1/10	1 3/4	3 1/4
5 in.	2/3	1 3/4	3 1/4

RAIN-WATER PIPES, &c.			
Bends, stock Branches,			
angles, stock angles.			
Per yd. in 6 fts.	Pipe.	angles.	stock angles.
2 in. plain	1/9	1/2	1 1/8
2 1/2 in.	1 1/11	1/4	2 0/8
3 in.	2 4/4	1/8	2 6/8
3 1/2 in.	2 10	2/8	2 10/8
4 in.	3 3	2 1/4	3 6/8
L.C.C. COATED SOIL PIPES—London Prices, ex Works.			
Bends, stock Branches,			
angles, stock angles.			
Per yd. in 6 fts.	Pipe.	angles.	stock angles.
2 in. plain	2 11	2 3	2 9
2 1/2 in.	3 5	2 6	3 5
3 in.	4 1	2 9	4 0 1/2
3 1/2 in.	4 5 1/2	3 5	4 8 1/2
4 in.	4 11 1/2	3 9 1/2	5 5 1/2
L.C.C. COATED DRAIN PIPES—London Prices ex Works.			
Bends, stock Branches,			
angles, stock angles.			
Per yd. in 9 ft. lengths	Pipe.	angles.	stock angles.
4 in.	6 3	6 11	7 8
5 in.	7 10	12 0	13 3
6 in.	9 6	15 0	20 9
Gasken for jointing 38/6 per cwt.			

IRON—			
Common Bars			
Staffordshire Crown Bars	13 10 0	to 14 10 0	
good merchant quality	14 5 0	to 15 5 0	

Starfoursure			
Bars	16 10 0	to 18 10 0	
Mild Steel Bars	11 0 0	to 12 0 0	
Steel Bars, Ferro-Concrete			
quality, basis price	11 0 0	to 12 0 0	
Hoop iron, basis price	16 0 0	to 17 0 0	
Galvanised	31 0 0	to 32 0 0	
Soft Steel Sheets, Black—			
Ordinary sizes to 20 g.	13 10 0	to 14 10 0	
20 g. to 24 g.	14 10 0	to 15 10 0	
24 g. to 26 g.	16 10 0	to 17 10 0	
Sheets Flat Best Soft Steel, C.I.R. & C.A. quality—			
Ordinary sizes, 6 ft. by	19 10 0	to 21 10 0	
2 ft. to 3 ft. to 20 g.			
Ordinary sizes, 6 ft. by	21 10 0	to 22 10 0	
2 ft. to 3 ft. to 22 g.			
Ordinary sizes, 6 ft. by	23 10 0	to 24 10 0	
2 ft. to 3 ft. to 24 g.			
Flat and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. by	18 10 0	to 19 10 0	
9 ft. to 20 g.			
Ordinary sizes, 6 ft. by	19 0 0	to 20 0 0	
9 ft. to 22 g. and 24 g.			
Ordinary sizes, 6 ft. by	22 0 0	to 23 0 0	
9 ft. to 26 g.			
Sheets Galvanised Flat, Best quality—			
Best Soft Steel Sheets,			
6 ft. by 2 ft. to 3 ft. to	22 10 0	to 23 10 0	
20 g. and thicker			
Best Soft Steel Sheets,	24 10 0	to 26 10 0	
22 g. and 24 g.			
Best Soft Steel Sheets,	26 0 0	to 27 0 0	
26 g.			
Cut Nails, 3 in. to 6 in.	19 10 0	to 21 0 0	
(under 3 in. usual trade extras.)			
METAL WINDOWS.—Standard sizes, suitable for com-			
plete houses, including all fittings, painting two			
coats, and delivery to job, average price about			
1s. 4d. to 1s. 7d. per foot super.			

LEAD, &c.			
(Delivered in London.)			
LEAD—Sheet, English, 4 lb. and up	51 10 0		
Pipe in coils	53 0 0		
Soil Pipe	55 0 0		
Compo pipe	56 0 0		
NOTE—Country delivery, 30s. per ton extra; lots under 5			
cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.			
Old lead, ex London area,	36 10 0		
at Mills.			
Do., ex country, carriage	37 10 0		
forward			

COPPER.			
Seamless Copper tubes (basis)			
per lb.	1 1 1/2		
Strong sheet	2 3		
Thin	2 4		
Copper nails	2 4		
Copper wire	2 4		

PLUMBERS' BRASS WORK.			
-----------------------	--	--	--

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.				CARPENTER AND JOINER—continued.			
Loading and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep....				FRAMES.			
per yard cube	s.	d.		Deal wrot moulded and rebated.....	per foot cube	s.	d.
if in clay.....	"	"	1 0	Plain deal jamb linings framed.....	per ft. sup.	1 7	1 8
for every additional depth of 6 ft.....	"	"	0 6	Deal shelves and bearers.....	"	1 4	1 6
banking and strutting to trenches.....	per foot super		0 5	Add if cross-tongued.....	"	2d.	2d.
Do. to sides of excavation, including shoring	"	"	1 0	STAIRCASES.			
CONCRETOR.				Deal treads and risers in and	1"	1 1/2"	1 1/2"
land cement concrete in foundation 1 to 6..	per yard cube		32 0	including rough brackets.....	2/1	2 4	2 9
if in underpinning in short lengths.....	"	"	7 0	Deal strings wrot on both			
if in floors 6 in. thick.....	"	"	3 3	sides and framed.....	1/8	2/-	2/2
if in beams.....	"	"	3 9				
if aggregate 1:2:4.....	"	"	10 0	Housings for steps and risers.....	each		0 11
for hoisting not exceeding 10 ft. beyond the	"	"	2 6	Deal balusters, 1 in. x 1 1/2 in.....	per ft. run		0 9
BRICKLAYER.				Mahogany handrail: average 3 in. x 3 in.....	"	"	6 0
duced brickwork in lime mortar and Fletton	per rod	£	s. d.	Add if ramped.....	"	"	11 10
bricks.....			30 0 0	Add if wreathed.....	"	"	23 9
if in stocks.....	"		7 10 0	FIXING ONLY IRONMONGERY (INCLUDING SCREWS).			
if in Staffordshire blues.....	"		22 0 0	6 in. barrel bolts.....	8 1/2d.	Rim locks.....	2/-
if in Portland cement and sand.....	"		1 10 0	Sash fasteners.....	11 1/2d.	Mortice locks.....	4/6
FACINGS.				Casement fasteners.....	1/5	Patent spring hinges and	
tra for facing in English or Flemish bond for				Casement stays.....	1/2	letting into floor and	
every 10s. per 1,000 over the price of the				Cupboard locks.....	1/5	making good.....	19/-
common bricks.....	per ft. super	0	0 1 1/2	FOUNDER AND SMITH.			
POINTING.				Rolled steel joists.....	per cwt.		16 3
at flat struck or weathered joint.....	"	"	0 0 3	Plain compound girders.....	"		19 0
ARCHES.				Do. stanchions.....	"		21 9
tra only to the price of ordinary brickwork:—	"	"	0 0 10	In roof work.....	"		27 6
r external in half brick rings.....	"	"	0 1 9	RAIN-WATER GOODS.			
ed in stocks.....	"	"	0 1 9	Half-round plain rebated joints..	ft. run	3"	4"
bbbed and gauged jointed in putty camber or	"	"	0 6 0	Ogee Do. Do.	"	1 9	2/-
segmental.....	"	"	0 6 0	Rain-water pipes with ears....	"	1 9	2/7
SUNDRIES.				Extra for shoes and bends.....	each	4/4	5/11
mp course in double course of slates breaking				Do. stopped ends.....	"	1/11	2/4
joint and bedded in Portland cement.....	"	"	0 1 0	Do. nozzles for inlets....	"	2/2	2/7
iting ordinary register grates and stoves....	each	"	1 0 0	FLUMBER.			
iting kitchener, including forming flues, &c.,	"	"	4 15 0	Milled lead and laying in flashings and gutters....	per cwt.		66 0
with all necessary fire-bricks.....	"	"	4 15 0	Do. Do. in flats.....	"		65 0
ASPHALTER.				Extra labour and solder in coated cesspools.....	each		6 9
ft-inch horizontal damp course.....	per yard sup.		4 3	Welf joint.....	per ft. run		0 6
ee-quarter-inch vertical damp course.....	"	"	8 6	Soldered seam.....	"	"	1 6
ch on flats in two thicknesses.....	"	"	6 3	Copper nailing.....	"	"	0 6
gel fillet.....	per foot run		0 3	Drawn lead waste per ft. run	1 2	1 9	2/-
irting and fillet 6 in. high.....	"	"	1 2	Do. service.....	1/8	2/2	2/7
MASON.				Do. soil.....	—	—	—
rk stone templates fixed.....	per foot cube		13 0	Bends in lead pipe.....	each	—	3/3
rk stone sills fixed.....	"	"	22 0	Soldered stop ends.....	1 2	1 8	2 1
th stone and all labour fixed.....	"	"	10 6	Red lead joints.....	11d.	1/-	1/3
land stone fixed.....	"	"	20 0	Wiped soldered joints.....	2/10	3/6	4/-
SLATER.				Lead traps and clean-			
sh 16 in. x 8 in. 3 in. lap, including nails....	per square		72 9	ing screws.....	—	—	14 7
o 20 in. x 10 in. Do. Do.	"	"	80 9	Bib cocks and joints.....	6/4	9/7	15/4
o 24 in. x 12 in. Do. Do.	"	"	90 0	Stop cocks and joints.....	15/4	17/2	25/8
CARPENTER AND JOINER.				PLASTERER.			
framed in plates.....	per foot cube		5 0	Render, float and set in lime and hair.....	per yard sup.		2 4
Do. joists.....	"	"	5 6	Do. Do. Sirapite.....	"	"	2 7
Do. roofs, floors, and partitions.....	"	"	6 0	Do. Do. Keen's.....	"	"	3 7
Do. trusses.....	"	"	8 6	Add sawn lathing.....	"	"	1 7
rough close boarding.....	per sq.	3 1/2	1" 1 1/4" 1 1/2"	Add metal lathing.....	"	"	2 6
centering for concrete floor, in-				Portland cement screed.....	"	"	2 2
cluding struts or hangers.....				Do. plain face.....	"	"	3 3
p. to beams.....	per ft. sup.		1 0	Mouldings in plaster.....	per 1 girth		0 1 1/2
res for arches.....	"		1 6	One-and-a-half granolithic pavings.....	per yard sup.		5 9
er boards and bearers.....	"		1 0	GLAZIER.			
FLOORING.				21 oz. sheet plain.....	per foot sup.		0 8 1/2
edges shot.....	per sq.	3 1/2	1" 1 1/4" 1 1/2"	26 oz. Do.....	"	"	1 0
b. tongued and grooved.....	"		44/6 53/- 60/6	Obscured sheet.....	"	"	1 1
b. matchings.....	"		49/- 57/6 65/-	1/2 in. rolled plate.....	"	"	0 9
ded skirting, including back-				1/2 in. rough rolled or cast plate.....	"	"	0 10 1/2
ys and grounds.....	per ft. sup.	1/6	1/9 2/0 2/6	1/2 in. wired cast plate.....	"	"	1 4
SASHES AND FRAMES.				PAINTER.			
and-a-half moulded sashes or casements.....	per foot super.		1 10	Preparing and distempering, 2 coats.....	per yard sup.		0 9
Do. Do. Do.	"	"	2 1	Knotting and priming.....	"	"	0 7
for fitting and fixing.....	"	"	0 3	Plain painting, 1 coat.....	"	"	0 9
casement frames with 1 in. inner and outer				Do. 2 coats.....	"	"	1 2
linings, 1 1/2 in. pulley stiles tongued to linings,				Do. 3 coats.....	"	"	1 9
hard wood sills with 2 in. moulded sashes in				Do. 4 coats.....	"	"	2 4
squares, double hung, double hung with pul-				Graining.....	"	"	2 3
leys, lines and weights: average size.....	"	"	3 9	Varnishing twice.....	"	"	1 9
DOORS.				Sizing.....	"	"	0 3
panel square framed.....	per ft. sup.	2 1	2 4 2 6	Flattening.....	"	"	0 7
panel Do.	"	2 5	2 8 2 11	Enamel.....	"	"	1 1
panel moulded both sides.....	"	2 8	2 11 3 2	Wax polishing.....	per foot sup.		0 6
panel Do. Do.	"	2 11	3 2 3 5	French polishing.....	"	"	1 2

These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1 1/4 should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TRADE NEWS

The Uni-Hygea Automatic Disinfecter.

Messrs. Uni-Hygea, Ltd., have sent us a leaflet illustrating their automatic disinfecter, cleanser, and deodoriser, and explaining its functions and principle. The makers claim that it is the simplest, most effective, and cheapest means of keeping w.c.s and urinals thoroughly disinfected, and, what is more, back up this statement by guaranteeing the Disinfecter for three years. It functions every time the w.c. is flushed, any desired quantity of disinfectant being discharged into the pan immediately after the flush; here it remains to carry out its work of decomposition of insanitary matter and fluid until the flush is used again. It is simple of construction, and entirely rust-proof. Its running costs amount to only a few pence a month, and it has the additional attraction of being British-made throughout. Particulars can be obtained from the firm's offices at 5, Crown-court, Chancery-lane, E.C.2.

Davis Gas Grates.

Gas fires are becoming increasingly popular nowadays owing to their supply of heat always being literally "on tap"; they are ready for any emergency or any sudden change of weather. They eliminate hard work in carrying coal, clearing ashes, or laying the fire; there is no waiting for the fire to burn up and no waste of fuel while it dies out. The Davis Gas Grate gives healthy radiant warmth—just as much as desired (for the degree of warmth is precisely adjustable), and for exactly so long as required. The burners are of a modern type, and are highly efficient and economical. In many cases they are "duplex," enabling either the whole or only part of the fire to be used, as desired. The "Peerless" designs, their premier production, are the Davis Series of the Gas Grates standardised by all the firms associated with Radiation, Ltd. Whilst preserving individuality in external design, they are composed of parts every one of which—namely, burner, injector, back, fire-brick, flue-outlet, &c.—size for size, is interchangeable, not only throughout the series itself, but also throughout the standardised grates made by all the associated companies.

"Longleys' " Wood Block Floors.

A polished wood block floor, besides being attractive in appearance, possesses high wear-resisting qualities. Shrinkage is a most important factor to be considered; the wood used by Messrs. Longley & Co., Ltd., is specially dried by a patent process which, they claim, completely ensures against any subsequent shrinkage. For thirty years, the "Longley's" Perfected Wood Block Flooring has been manufactured, and numbers of prominent architects, including Sir Edwin Lutyens, Sir Aston Webb, and Mr. H. Percy Adams, have specified it for various works. Production was arrested recently owing to a fire, but the firm has installed the latest machinery and are once more in a position to execute orders for block flooring in any kind of wood. Their pitch pine block floor averages 50 per cent. rift-sawn. When laying the floor, their men lay the rift-sawn blocks where the hardest wear is expected, and in this way customers have the benefit of a 100 per cent. rift-sawn block floor without having to pay an extra charge for the sorting and waste necessary to produce such a floor, although all rift-sawn blocks would be laid if required. A brochure containing all particulars will be supplied to architects and builders on application. Messrs. Longley, Ltd., do a large business as building contractors and joinery manufacturers, and have carried out many important building contracts, both public and private, during the last forty years.

Builders' Estates.

Mr. Frank Marland, contractor, of Grenville-street, Ashton-under-Lyne, who died recently, aged 66, left estate of the gross value of £20,905.

Mr. John Henry Iliffe, plumber, of Leicester, has left nett estate of £5,170.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes accepted. † Denotes provisionally accepted.
‡ Denotes recommended for acceptance.
§ Denotes accepted subject to modification.

ABERAMAN.—Painting the ironwork on the outside of the public hall, institute, library and grand theatre, for the Committee. Mr. H. Vause, General Manager:—

J. Stephens, Aberaman..... £245 0
R. Taylor, Aberdare..... 225 0
*Thomas Sadler, Merthyr..... 191 10

AWBRIDGE, NEAR ROMSEY.—Pair of bungalow cottages, for Col. Webb, D.S.O. Mr. W. Comley Roles, architect:—

F. G. Vinall..... £1,220 0
G. F. Hurst & Sons..... 1,114 0
*F. W. Collins & Son..... 1,058 18

ALLERTON-BY-WATER.—120 houses, for the Tadcaster R.D.C.:—

†L. J. Gallagher, Castleford... £387 per house

ASHTON-UNDER-LYNE.—Forty-four houses on the Pelham-street site, for the Corporation:—

*T. Deane & Co., Ltd.

AYLESBURY.—Council school to accommodate 280 children at Southcourt, for the Bucks E.C. Mr. C. H. Riley, County Architect, Education Sub-Office, Aylesbury. Quantities by Messrs. Baker & Mallett, Lonsdale Chambers, 27, Chancery-lane, W.C.2:—

Y. J. Lovell & Son, Beaconsfield .. £9,775
Cannon, Green & Co., Ltd., Aylesbury..... 9,432
E. Archer & Sons, Ltd., Northampton 9,398
G. Biggs & Sons, Great Kingshill.... 9,225
Webster & Cannon, Aylesbury..... 8,888
†Honour & Son, Ltd., Tring..... 8,648

BANGOR.—Extension of the hospital, for the Committee:—

*W. Dowling, Ltd..... £3,150

BARNES.—Construction of entrance drive at East Sheen Cemetery, for the U.D.C.:—

*A. A. Williams..... £1,495 15

BARNET.—Two almshouses in Wood-street, for the Eleanor Palmer's Charity. Messrs. Caroe & Passmore, architects, Westminster:—

*Pearson & Son, Barnet.

BARNESLEY.—100 houses on the Hunningley-lane site, Ardsley, for the C.B.:—

*C. Smith..... £42,000

BARNESLEY.—100 houses on the Pontefract-road site, for the C.B.:—

*W. Dunk & Sons..... £420 each

BELMONT.—Cleaning, painting and repairs, at the laboratories, for the M.A.B.:—

W. H. Child..... £564 10 0
Burnand & Pickett, Ltd..... 389 0 0
T. Singfield & Sons..... 372 16 0
H. Freeman, Ltd..... 365 0 0
R. Scase & Son, Ltd..... 349 0 0
Fernguson & Frawley..... 332 0 0
W. H. Merrett & Son..... 330 14 0
E. Proctor & Sons..... 328 0 0
J. B. Boorman & Son, Hastings... 312 0 0
Wm. Hussey..... 310 0 0
W. A. M. Stevenson..... 297 19 4
C. H. Boyd & Son, Ltd..... 272 0 0
D. C. Bowyer..... 267 10 0
A. Black & Son..... 252 0 0
A. H. Inns, Ltd..... 245 0 0
C. N. King..... 212 8 0
*Smith, Clifton & Co..... 194 2 6
(All of London.)

BIGGLESWADE.—Forty-one houses on the Town-hill housing site, for the U.D.C. Mr. T. R. Howitt, surveyor:—

Arthur Carter, Luton..... £19,078
M. & F. O. Foster & Co., Ltd., Hitchin..... 18,946
S. Redhouse & Son, Stotfold, Beds. 17,861
Wrights (Langford), Ltd., Langford 17,565
Seymour Bros. & Tookley, Stotfold 16,480
*C. D. Woodward, Biggleswade.... 16,265

BLACKPOOL.—Demolition of old Albion Hotel and shops on the Promenade and erection of new shops and offices, for Messrs. Montagu Burton, Ltd. Mr. H. Wilson, architect, Leeds:—

*Wm. Townson & Sons, Ltd., Bolton.

BRADFORD.—Electricity transformer chamber at Norman-lane, Eccleshill, for the Corporation:—

*F. Robinson.

BURNHAM-ON-SEA.—Twenty-two non-parlour type houses on the Highbridge-road site, for the U.D.C. Mr. F. H. J. Gabbutt, architect and surveyor, Cornhill Chambers, Bridgwater:—

C. W. Applin, Burnham-on-Sea .. £11,412 10
W. J. Pople & Sons, Burnham-on-Sea..... 11,412 10
F. L. Roberts & Sons, Burnham-on-Sea..... 11,412 10
Padfield, Sons & Co., Shepton Mallet..... 11,000 0
G. V. Sheppard, Highbridge..... 10,604 0
Arthur Guest, Langport..... 10,411 8
T. Hall & Co., Weston-super-Mare 10,200 0
*Clare's Construction Co., Ltd., Glastonbury..... 10,152 0

CARLISLE.—New gas holder, for the T.C.:—
*R. & J. Dempster, Ltd., Manchester .. £32,250

CARLISLE.—Foundations for new gas holder the T.C.:—

*West's Rotinoff Piling & Construction Co., Ltd., London..... £2,608

CARLISLE.—Screen and pump chambers for new electricity works, for the T.C.:—

*Ormerod & Sons, Carlisle..... £6,878 13

CASTLE WARD.—Twenty houses at Ponteland the R.D.C. Mr. J. Jameson, surveyor, "Fer Ponteland":—

*J. & G. M. Hunter, Newcastle-on-Tyne..... £9,388

CHELMSFORD.—Painting 144 houses, for T.C.:

*E. Allen..... £36

CHELMSFORD.—Enlargement and addition the laundry at the Institution, for the B.G.:—

*E. Dix, Ingatestone..... £896 1

CHELTENHAM.—Ironwork and fillings for tower at reservoir, for T.C.:—

*J. Blakeborough & Son, Ltd..... £66

CHORLEY.—School on a site in Duke-street, for T.C. Messrs. Biram & Fletcher, architects, 17, Gt. street, St. Helens:—

Wm. Hampson, 81, Pall Mall, Chorley.

DERBY.—Elementary school at Nightingale for the E.C.:—

*Ford & Weston..... £10,290

DONINGTON.—Reinforced concrete bridge the South Forty drain, for the Holland C.C. Mr. Rogerson, County Surveyor, Sessions House, Boston:

*R. J. May, Norwich..... £5,279 6

DURHAM.—For (a) electric light installation Boys', Girls' and Infants' Departments at Station Council school; (b) alterations and extensions, gas repairs and painting and renovation, at the Sun Council school; and (c) re-slating roof, re-lining formation of porch, &c., at the Wingate Council for the Durham C.C. County Architect, 34, Old Durham:—

(a) †Simm & Richardson, Newcastle-upon-Tyne..... £128 14
(b) †Beadle & Chapman, Bishop Auckland..... 2,630 18
(c) †T. Coates, Durham..... 454 3

EAST KERRIE.—Sewage works at Swanvale the R.D.C.:—

*E. Thomas, Falmouth..... £6,728 18
Engineer's estimate..... 6,808 18

ESHER AND DITTONS.—For (a) 18 holl Naylor's Nursery, Long Ditton, and (b) 10 holl Coverts-road, Claygate, for the U.D.C.:—

(a) *Rutherford & Woolford..... £6,300
(b) *Durnford, Ltd..... 3,545

FELTHAM.—New primary school, for the Midd. C.C. Mr. H. G. Crothall, F.R.I.B.A., County Architect:—

W. Lawrence & Son, Ltd., London... £15,169
A. Monk, Edmonton..... 14,883
W. H. Gaze & Sons, Ltd., Kingston... 14,864
H. Knight & Son, Tottenham..... 14,854
G. Bolloom & Son, Ltd., Acton..... 14,717
Leslie & Co., Ltd., London..... 14,695
W. Lacey, Hounslow..... 14,629
W. J. Maddison, Ltd., London..... 14,429
Ferris Bros., Acton..... 14,419
Y. J. Lovell & Son, Gerrard's Cross... 14,374
†G. Godson & Sons, Ltd., Kilburn-lane 14,177

GODSTONE.—Twenty-four houses at Warrington for R.D.C.:—

†W. B. Lee, Purley..... £12,132

GRAVESEND.—Foundation steelwork at general station, for the T.C.:—

†Measures..... £239 17

GRAVESEND.—Forty-eight flats, for the T.C.:

†J. Clements..... £17,520

HANWELL.—Painting of the railings, repair to the Church, superintendent's lodge, and to offices and gatekeeper's quarters, and the provision of a new potting shed and workmen's messroom, place of the existing one, at the Cemetery, for Westminster City Council:—

E. H. Brooks, West Ealing... £223 7 0
Myring & Son, Ealing..... 842 3 0
A. Jamieson & Son, Hanwell... 634 19 6
*Sims & Russell, London..... 593 0 0

HASWELL.—Electric light installation at the B. Girls' and Infants' Departments of the Council for the Durham C.C. County Architect, 34, Old Durham:—

†Simm & Richardson, Newcastle-upon-Tyne..... £184 4 7

HUDDERSFIELD.—Four detached houses at Leas Scholes, for the B.G. Messrs. J. Berry & architects and surveyors, 3, Market-place:—

Mason—*R. Turner & Co., Holmfirth.
Joiner—*J. Batley & Sons, Thongsbridge.
Plumber—*F. Tinker, New Mill.
Plasterer—*G. Haigh, Scholes.
Painter—*J. Hudson, Scar End, Thongsbridge.
Slater—*Ellis Partridge & Co., Ltd., Leicester.
Concrete—*E. H. White, Huddersfield.
Electrician—*A. E. Beaumont, Huddersfield.

NOTTINGHAM.—Fifty-two additional houses, for the

Keitch, Ottery—		
Four houses at Combe		
Raleigh	£1,550	5 0
Two at Cotleigh	760	0 0
Two at Farway	801	10 0
Four at Northleigh	1,642	10 0
Ellis, Payhembury—		
Four at Broadhembury ..	1,239	0 0
Two at Payhembury	579	18 6
A. Northcote, Sidmouth—		
Eight at Sidford	3,136	17 0
Evans, Widworthy—		
Two at Widworthy	760	0 0
Pulman, Luppitt—		
Two at Luppitt	834	10 0
Pulman, Honiton—		
Four at Monckton	1,600	0 0
Carnell, Payhembury—		
Two at Broadhembury,		
Colliton	600	0 0
G. Abbey, Ottery—		
Six at Awliscombe	2,190	0 0
A. Dodd, Honiton—		
Four at Otwell	1,490	0 0

G'S LYNN.—Erection of the Wootton sub-station, for the T.C. :—

D. Allbutt	£188
G'S LYNN.—Sub-station in Gayton-road, for C.C. :—	
edwell & Sors	£118 10

PAX.—Forty-two houses, for the Tadcaster

Green & Sons, Kippax ..	£409 per house
-------------------------	----------------

STONE (YORKS).—Sewage works, for the

hompson & Co.	£399 16 6
--------------------	-----------

ERPOOL.—Structural alterations and additions

Lucas & Son, Prescott	£268
-----------------------------	------

ERPOOL.—Repairing and strengthening Sefton

urmer & Moss, Garston	£2,517
-----------------------------	--------

ERPOOL.—Plant house at the Botanic Gardens,

rown & Backhouse, Liverpool	£486
-----------------------------------	------

ERPOOL.—New tramway works and car depot,

ambourne & Co., Ltd., Manchester ..	£44,400
-------------------------------------	---------

ERPOOL.—Interior painting and general

H. Taylor, Ltd., Copperas Hill, Liverpool.	
--	--

ERPOOL.—Alterations and additions to the

Flaming & Son	
---------------------	--

NDON.—Covering of pipe work with non-

I. Nelson, Belfast	£1,050 0 0
--------------------------	------------

shby, Warner & Co., Ltd.,

Homerton	650 0 0
----------------	---------

Kenyon & Sons, Ltd. Dukin-

field	570 0 0
-------------	---------

shestes Supply Co.

onsdale & Co.	517 13 4
--------------------	----------

ntcliffe Bros. & Bryce, Ltd.

ondon Covering Co.	516 0 0
-------------------------	---------

ll's United Asbestos Co., Ltd.

all & Hall	498 15 0
------------------	----------

os, Anderson, Ltd.

ewall's Insulation Co., Ltd.	476 15 0
-----------------------------------	----------

(All of London.)

NDON.—Adaptation of northern wing for	
---------------------------------------	--

purposes, at Geffrye Museum, for the L.C.C. :—

J. Dixon & Son	£1,968
----------------------	--------

ithby, Ltd.

Garrett & Son	1,935
---------------------	-------

Shurmer & Sons, Ltd.

C. C. Bowyer, Ltd.	1,769
-------------------------	-------

bert Monk

P. Roberts & Co.	1,750
-----------------------	-------

(All of London.)

the architect's estimate, comparable	
--------------------------------------	--

with the tenders, amounted to £1,690

NDON.—Roof and lantern light over the existing	
--	--

kitchen, at the Central Home, Union-road,

LONDON.—Stone piers and the supply only of

Brookes, Ltd.	£781 4 5
--------------------	----------

LONDON.—Alterations and repairs to shed, to form

H. Parkinson & Co., London	£349
----------------------------------	------

F. E. Smith, Purfleet	345
-----------------------------	-----

J. Darch, Ltd., London	299
------------------------------	-----

*A. H. Inns, Ltd., London	217
---------------------------------	-----

LONDON.—House coal store, at the Colindale

F. E. Smith, Purfleet	£321 11 6
-----------------------------	-----------

A. H. Inns, Ltd., London	297 0 0
--------------------------------	---------

F. Parvin, Ltd., London	282 15 0
-------------------------------	----------

*C. H. Boyd & Son, Ltd., London	282 0 0
---------------------------------------	---------

LONDON.—Steel tank at the Grange-road Baths, for

*M. T. Shaw & Co., Ltd.	£810
------------------------------	------

LONDON.—Underground watertight ferro-concrete

Saxill & Partners	£9,950
-------------------------	--------

Jones Bros.	9,620
------------------	-------

Jones Bros. (alternative)	9,350
---------------------------------	-------

George Wimpey & Co., Ltd.	6,765
--------------------------------	-------

W. H. Cooper & Son	6,580
--------------------------	-------

F. G. Cressy, Ltd.	6,500
-------------------------	-------

*John Garrett & Son	4,369
---------------------------	-------

LONDON.—Provision of additional office and

Whitby's, Ltd., London	£6,125
------------------------------	--------

Rowley Bros., Ltd., Tottenham	5,820
-------------------------------------	-------

W. J. Dixor & Son, Bermondsey	5,619
-------------------------------------	-------

J. Garrett & Son, London	5,540
--------------------------------	-------

J. C. Bowyer, Ltd., London	5,459
----------------------------------	-------

L. H. & R. Roberts, London	5,424
----------------------------------	-------

Albert Monk, Lower Edmonton	5,380
-----------------------------------	-------

John C. Mather, London	5,357
------------------------------	-------

C. P. Roberts & Co., Ltd., Dalston ..	5,180
---------------------------------------	-------

*Allen Fairhead & Sons, Ltd., Enfield ..	4,966
--	-------

The architect's estimate, comparable	
--------------------------------------	--

with the tenders, is	5,092
----------------------------	-------

LONDON.—Annual cleaning and painting work at

Maple & Co., Ltd.	£4,981
------------------------	--------

Bovis, Ltd.	2,163
------------------	-------

Wimpey Whiteley, Ltd.	1,989
----------------------------	-------

Higgs & Hill, Ltd.	1,940
-------------------------	-------

*G. E. Wallis & Sons, Ltd.	1,604
---------------------------------	-------

The architect's estimate, comparable	
--------------------------------------	--

with the tenders, amounted to	2,500
------------------------------------	-------

LONDON.—Steelwork for flooring at Whitechapel

Redpath, Brown & Co., Ltd., London ..	£395
---------------------------------------	------

Jos. Westwood & Co., Ltd., Millwall ..	312
--	-----

M. T. Shaw & Co., Ltd., Millwall ..	294
-------------------------------------	-----

*Sanders & Forster, Ltd., Barking	269
---	-----

LONDON.—Underground conveniences, Philpot-

H. Newell	£3,974 2 2
-----------------	------------

W. Gladding & Co.	3,610 0 0
------------------------	-----------

G. Barker	3,583 0 0
-----------------	-----------

*W. S. Sharpin	3,306 0 0
----------------------	-----------

C. P. Roberts & Co., Ltd.	3,263 0 0
--------------------------------	-----------

(All of London.)	
------------------	--

Estimate of Borough Engineer and Surveyor, £3,500.

MICKLEFIELD.—Sixty houses for the Tadcaster

*G. B. Marshall & Sons,	
-------------------------	--

Garforth	£404 5 per house
----------------	------------------

NEWCASTLE.—Supply of a tramway junction,

*United States Steel Products Co.	£552
--	------

NEWMILL.—Twenty-five houses in Kirkroyds-lane,

for the U.D.C. Messrs. J. Berry & Sons, architects,	
---	--

3, Market-place, Huddersfield :—	
----------------------------------	--

Mason—*G. England & Son, Totties, Thongs-	
---	--

bridge	
--------------	--

Joiner—*G. Ainley & Sons, Ltd., Huddersfield.	
---	--

Plumber—*W. E. Bailey, New Mill.	
----------------------------------	--

Electrician—*W. E. Bailey, New Mill.	
--------------------------------------	--

Plasterer—	
------------	--

*Oldfield Bros., Honley, near Huddersfield	
--	--

(14 houses)	
-------------	--

*G. Haigh, Scholes, Thongsbridge (11	
--------------------------------------	--

houses)	
---------	--

Painter—*Haigh & Lawton, Riley, Kirkburton.	
---	--

Slater—*A. Hills, Lockwood, Huddersfield.	
---	--

NOTTINGHAM.—1,000 steel-framed bungalows, for	
---	--

the T.C. :—	
-------------	--

*J. Booth & Sons, Bolton.	
---------------------------	--

(Subject to M.H. approval.)	
-----------------------------	--

ORSETT.—Outside work at Park Farm houses, for	
---	--

the R.D.C. :—	
---------------	--

*Fuller Bros.	£675
--------------------	------

OTLEY.—Houses, for U.D.C. :—	
------------------------------	--

*W. J. & R. Turnbull—	
-----------------------	--

12 houses	each £405
-----------------	-----------

14 "	" 453
------------	-------

OXFORD.—Public convenience in Alexandra	
---	--

Recreation ground, for the T.C. :—	
------------------------------------	--

*W. Rose	£537
----------------	------

PENZANCE.—Alteration at Old Salt House, for the	
---	--

T.C. :—	
---------	--

*Perkins & Caldwell	£333
---------------------------	------

PLYMOUTH.—Retaining wall at Clayton-road, for

*Plymouth Builders, Ltd.	£798 11 6
-------------------------------	-----------

PLYMOUTH.—Physics laboratory at the Technical

*Elliott & Tallamy, Ltd.	£396 7
-------------------------------	--------

PORTSMOUTH.—Garage at 95, Waverley-road, for

Mr. S. E. White, architect, 73, Waverley-road, South-	
---	--

sea :—	
--------	--

*John Lay & Co.	
-----------------	--

RADFORD.—Branch library fronting Lenton-

Boulevard, for the Miners' Welfare Committee and

Nottingham Corporation. Plans by Mr. F. Wallis

Gordon, City Engineer, Nottingham :—	
--------------------------------------	--

*White & Kennell, Nottingham.	
-------------------------------	--

ROCHDALE.—External and internal painting at

Falings Park, West Rake Gardens, Cronkyslaw

Recreation ground, Smallbridge Recreation ground,

and Newbold Recreation ground, for the C.B. :—	
--	--

*M. Lodge, Rochdale.	
----------------------	--

*H. Gladwell & Co., Rochdale.	
-------------------------------	--

*A. Turner, Rochdale.	
-----------------------	--

*Yates & Lomas, Ltd., Ashton-under-Lyne.	
--	--

*Pickles, Ayland & Co., Ltd., Ossett.	
---------------------------------------	--

ROMFORD.—External plastering work to houses at

the Park Farm housing estate, London-road, for the

U.D.C. Mr. F. G. Beaumont, surveyor, 73, South-	
---	--

street :—	
-----------	--

*Fuller Bros., Chigwell-row	£675 16 8
----------------------------------	-----------

ROYTON.—For the construction of a reinforced con-

crete culvert at the sewage works :—	
--------------------------------------	--

*J. Spencer & Bro., Ltd., Oldham	£1,700
---------------------------------------	--------

ST. AUSTELL.—Alterations and additions to the

White Hart Hotel. Mr. L. Winn, architect and sur-

vveyor, 27, Boscawen-street, Truro :—	
---------------------------------------	--

*Wingate, Ltd., St. Austell.	
------------------------------	--

SALFORD.—Exterior painting work at the Infirmary

and Nurses' Home, Stott-lane, Pendleton, for the

B.G. :—	
---------	--

*W. Walton, Salford	£670
---------------------------	------

SHEFFIELD.—Twelve houses at Retford-road,

Handsworth, for the T.C. Mr. F. E. P. Edwards, City	
---	--

Architect :—	
--------------	--

*S. C. Boul, Sheffield	£5,916
------------------------------	--------

SHEFFIELD.—Conveniences, for the T.C. :—	
--	--

Leadmill-road and Matilda-street—	
-----------------------------------	--

*T. Roper & Sons, Ltd.	£397 13 2
-----------------------------	-----------

Abutting on Abbeyfield-road—	
------------------------------	--

*S. Highton & Sons	607 0 0
--------------------------	---------

||
||
||

SOUTHPORT.—Block of shops and offices facing Eastbank-street, and extensions to the Art Gallery, &c., facing Sharrock-street. Mr. A. Jackson, Borough Engineer and Surveyor :—

*Jonathan Partington & Son, Ltd., Manchester

SOUTHWICK.—Painting and repair work at The Gardens, for the U.D.C. :—

*Woolgar Bros. £355 10

SWILLINGTON.—Forty-eight houses, for the Tadcaster R.D.C. :—

*L. J. Gallagher, Castleford .. £405 per house

TADCASTER.—Twelve houses at Church Fenton, for the R.D.C. :—

*L. J. Gallagher, Castleford .. £410 per house

THORNABY.—Conversions of cell privies to water carriage system, for the T.C. :—

*E. Harrison (375 conversions) £2,986 19 0

*George Fordy (208 conversions) 1,772 19 6

TONBRIDGE.—Two houses on land at New Wharf, for the U.D.C. :—

*L. Thorpe £1,300

WARWICK.—Four non-parlour type houses on the Emscote site, for the T.C. Messrs. F. P. Trepass & Son, architects, 1, Church-street :—

Corfield & Burton, Wolston £2,190

C. Weaver & Son, Warwick 1,920

Crosbee & Aitkins, Warwick 1,894

E. E. Batchelor, Harbury 1,820

Packmore's Building Co., Warwick.. 1,700

*Standbridge & Parker, Leamington 1,640

WESTHAMPNETT.—Six pairs of non-parlour type houses at Singleton, for the R.D.C. :—

*A. Crane & Sons, Worthing.

WESTHAMPNETT.—Three pairs of non-parlour type houses at East Dean, and six pairs of parlour type houses at New Fishbourne, for the R.D.C. :—

*H. J. Hart & Sons, Ltd., Selsey.

WORTHING.—For (a) new dining hall, and (b) hot-water heating apparatus, at the secondary school, for the T.C. :—

* (a) F. Sandall & Sons, Worthing .. £1,575 0

* (b) J. Smith & Sons, Brighton 135 15

WREXHAM.—(1) Thirty houses at Byrnden Garden Rhos, streets and sewers at Rhos; (2) 26 houses at Caegwyllyl Caffin; (3) four houses at Bwlchgwyn Brimbow, for the R.D.C. Mr. J. H. Edwards, surveyor :—

(1) *W. H. Humphreys & Son, Acrefare £14,675

(2) *S. Mitchell, Caffin 11,958

(3) *Sinns & Stephen, Broughton.. 1,974

Decorative Arts Exhibition.

The jury which had the duty of distributing the awards of merit among the exhibitors at the Decorative Arts Exhibition, Paris, has now concluded its work. The awards will be distributed on October 26.

Helping the London Boy.

Mr. J. J. Mallon, Warden of Toynbee Hall, 28, Commercial-street, London, E.1, writes that workers in the East End have long desired a wider provision for the needs of working boys. "Our desire," he says, "is likely soon to be realised, for the generosity of the Carnegie Trustees, Sir Ernest Benn, Mr. Thomas Wall, and others, has enabled us to obtain possession of an extensive building in Bower-street, Stepney." Much money will be needed to complete the undertaking, and an appeal for funds will be made in due time. For the present, however, Mr. Mallon asks for the sympathy and co-operation of particular members of the community, namely, those who are able to help in the practical work of adapting the building to its new purpose. What is needed he indicates generally as follows: "The adaptation of the building involves very varied operations and supplies, including a moderate amount of constructional steel work, metal enclosure to large lift-well, iron grates, external fire escape staircase, small passenger and service lifts, sanitary

J. J. ETRIDGE, J. Ltd.

SLATING AND TILING

SLATE MERCHANTS

CONTRACTORS.

Inspections and Reports made on
OLD or FAULTY ROOFS
in any part of the country.

Telephone: Bishopsgate 1944/5, or write,

Bethnal Green Slate Works,
BETHNAL GREEN, LONDON, E.

requirements, hot and cold water heating and repairing the existing large ming bath, &c." Are there firms, he asks, who make life easier for East London boys, provide the goods and services referred to at a very small rate of profit? He is glad to hear from contractors.

FLOORING

HIGH-CLASS

of every description in

WOOD BLOCKS. PARQUET

SEASONED T. & G. WAINSCOT

TEAK AND MAPLE.

FACTORY AND ROADWAY PA

STEVENS & ADAM

LIMITED

VICTORIA MILL, POINT PLEAS

WANDSWORTH, S.W.18.

(Phones: Putney 1700 &

FITZPATRICK & S

Masons and Paviors,

455, OLD FORD ROAD, BOW,

Phone: EAST 4308.

Granite Setts and Kerb (redressed and hand), York Paving Spur Stones, Chippings, and Granolithic and Sett Paving.

School & Hospital St

MAKERS OF

WRIGHT'S IMPROVED and also SHORLAND

WARM AIR VENTILATING PATTERNS

GEO. WRIGHT (1914)

19, Newman St., Oxford St., London, W.

Burton Weir Works, Rotherham.

OGILVIE & CO.,

Telephone Oms
Many years co
with the late I
W. H. LARSEN
of Sunhill B

Wildmay Works, Wildmay Avenue, Isling

EXPERTS IN HIGH-CLASS JOIN

ALTERATIONS AND DECORATIONS.

Telegrams: 'Frolic, Liverpool' 'Phone 2281

E. B. BURGESS & C

6, CASTLE ST., LIVERPOOL

WOOD BLOCK FLOOR

AND PARQUETRY.

HOWELL J. WILLIAMS

Builders Ltd.

High-Class Building

and
Joinery Work

11/17, BERMONDSEY STREET,

Telephone: LONDON BRIDGE, S.E.1
HOP 202

Builders of very many well-known Banks, Office and Business premises. Our works especially convenient for City Building and fitting.

Wheatly & Co.,

SPRINGFIELD TILERIES, NEWCASTLE, STAFFS.

'Phone: Newcastle, Staffs, 101.

'Grams: 'Wheatly, Trent Vale.'

Estd. Over 50 Years.

Brand: TRITON.

SPECIALITIES.

Rustic, Sand Faced and Hand Pressed Tiles in Blue, Blue Brindled, Red, Light Brindled and Dark Brindled Colours. Extensive stocks held of many varieties of Flooring Quarries, Ridge Tiles, Garden Edging Tiles, Air Bricks, Blue Bricks, Copings, etc., etc.

Price List and Catalogue, or Illustrated Brochure of Roofing Tiles free on demand.

N.B.—ALL our products are Hand-made by the Plastic Process.

THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

LXIX. No. 4,317

OCTOBER 30, 1925

THE PRESERVATION OF ARCHITECTURAL MONUMENTS

THERE is, in our civilisation of to-day, an intelligent and widespread interest in the preservation of ancient edifices, ruins, and even mere traces of pre-existing structures which differentiates it from all previous periods. This appreciation of the work of our predecessors is also in striking contrast to the comparative indifference and lack of public interest in modern architecture which is a characteristic of our own times.

In the (so-called) "Dark Ages," and in the days of the Renaissance, this attitude of mind was unknown; the approved method of dealing with any ancient building which required repair, or which was judged to have outlived its usefulness, was to replace it by a new building or to make additions and alterations were considered requisite, in accordance with the ordinary building tradition of the day, and without any intention to copy or follow a previous mode or tradition which might be considered to be a living force.

When it was done, not in any spirit of iconoclastic destruction, but because it was the natural and ordinary way of satisfying the needs of a new generation; in the few cases where, in earlier times, the style of an earlier period was consciously preserved—for the completion of a cathedral or other important building—the result inevitably lacks something of the sincerity and simplicity of the earlier work, and becomes (as is too much the case in modern architecture), self-conscious, dull and lacking in vitality. And it is perhaps here that we find the key to the desire, common to all European nations, to preserve the architectural monuments of the past; the sincerity of this desire, the zeal and religious fervour of our ancestors is greatly appreciated as being a possession of artistic value of historical importance.

In the Middle Ages education (as we understand it to-day) did not exist, but, in its place, we can trace artistic instinct and feeling, confined to the monastic orders, religious bodies, and building guilds, while the majority of the population were ignorant, of child-like simplicity of faith, and no doubt in mental development to the state of the peasant of to-day. Emotions were primitive, society was divided into distinct and very widely separated classes, the destroying influence of industrialism had not eclipsed the sense of beauty which was to be found in the peasant's life as well as in the great noble's castle, or the churches and cathedrals, in the building of which all must have taken part.

It would seem, therefore, that the interest in the preservation of architectural monuments, which appeals so strongly to the educated man of our complex civilisation, is the result of this simple love of beauty; an unconscious revolt against the dull monotony of our industrial age and the unnecessary prevalent ugliness which distinguishes too many cities. The ancient monuments and architectural glories of our country which should be preserved is now an accepted commonplace, and, although it is so, the careful and excellent work undertaken of late years by the Office of Works at Fountains, Rievaulx and elsewhere does not receive the commendation it deserves. The work of such societies as the Ancient Monuments Society is, however, better known, as it depends upon voluntary subscription; but some note (given elsewhere in this issue), of the work recently carried out at Cockersand Abbey by a local branch of that society* may not be without interest to a wider circle than the subscribers.

It is a good example of the care expended on the tracing and recording of the remains of an ancient building, and one cannot help contrast this with the coincident public indifference to the preservation of many architectural monuments of less antiquity but of equal, if not greater, beauty and interest. It is not that a fine street of homogeneous design and

conception (with admirable perspective and a sense of scale and proportion which make it a thing of beauty), may be destroyed, but, almost daily, one hears of country towns where a fine street or market place is ruined by the destruction of some old building and its replacement by a monstrous shop front or red brick store.

In a small village in one of the home counties is a "green," which has, for many centuries, preserved the original charm and character of the English village. Recently, one of the old houses was acquired by a resident who, quite honestly, caring nothing for traditional beauty or old-world charm, transformed it into a blatant red brick modernity, distinguished from its charming neighbours by every defect in taste which our modern education provides. One cannot help feeling that in our democratic times such action as this should be prevented, and the artistic and historical treasures of our great past should be considered and preserved as being of value to the community.

In France (although the appreciation of the value of old buildings is confined to a relatively small section of the population) such "historical monuments" are rightly considered as national possessions and are, therefore, protected from destruction, alteration or "modernisation" by severe penalties, including heavy fines or imprisonment. The Commission of Historical Monuments is a branch of the Ministry of Public Instruction and Fine Arts under the supervision of the Under Secretary of State (Directeur des Beaux Arts), and is composed of distinguished architects in two classes, *Inspecteurs Généraux* and *Architectes en Chef*. Each of the *Architectes en Chef* is responsible to the Commission for the preservation of all historical monuments scheduled in a County (*Département*) or, in some cases, in more than one *Département*. Under his direction are a certain number of "*architectes ordinaires*," selected by examination, and who are resident in one or other of the towns where important scheduled buildings exist. Their duties are to inform the *Architecte en Chef* of any possible danger to ancient buildings in their districts and to supervise works of repair, &c., sanctioned by the Commission and ordered by the *Architecte en Chef*. The *Inspecteurs-Généraux* are, as their title indicates, appointed by the Ministry to supervise and inspect all works undertaken in certain districts.

An example of the functioning of this organisation is afforded by a case which recently occurred in a big seaport town in the south, where a whole block of houses of architectural and historical importance was scheduled by the Commission and the owner was warned that any alterations must be approved by the *Architecte en Chef* and be carried out in strict accordance with his plans, the penalty for infringement (a heavy fine or term of imprisonment) being notified at the same time. In consequence of this timely and energetic action the old buildings remain untouched.

In another case the reconstruction of a scheduled church, at Laon, half of which had been destroyed by shell fire, was being inspected by the *Architecte en Chef* when the Curé asked whether some fine old eighteenth-century stalls and panelling in the choir of the church (which had escaped damage) could not be altered or in part removed to provide for a new organ, but the architect informed the Curé that the panelling and choir stalls were included in the schedule and could not therefore be touched without his sanction and approval.

These two instances are certainly instructive: they illustrate the necessity (in any form of preservation of existing buildings) of devising a scheme which is sufficiently rapid in execution to deal with urgent cases. This is the more necessary, because in the majority of instances the work of destruction is not undertaken after a long period of consideration, but is immediately started when some owner, whose business needs or personal requirements do not coincide with the preservation of those irreplaceable architectural treasures, commences that work of destruction which is gradually transforming the character and charm of our towns, villages and countryside.

Ancient Monuments Society. Cockersand Abbey Exploration Committee. Second Report and Appeal for Funds. H. J. & Co., Manchester. 1925.

NOTES.

Waterloo Bridge.

THE following letter, which the President of the Royal Institute of British Architects has received from Mr. D. Everett Waid, the President of the American Institute of Architects, will be read with pleasure by all who are concerned in the preservation of Waterloo Bridge: "The ancient and beautiful Waterloo Bridge across the Thames," says the writer, "possesses historic and artistic attributes of interest to other nations as well as to Great Britain. Please accept that fact as excuse for this address. On behalf of the American Institute of Architects, I beg to express to the Royal Institute of British Architects the hope that some means may be found to preserve from destruction this truly national monument."

Architecture and the Public.

WE expect interest and amusement from the remarks of Mr. G. K. Chesterton on almost any subject, and at the opening of the Architecture Club Exhibition, the austerities of architectural art proved no hindrance to his jocularity. The Chairman remarked that if he had not built columns he had filled many, and the versatile and gifted writer himself suggested buildings as symbols of fancy dress, evidently with an eye on the Albert Hall for himself. But it would have been of great interest and perhaps value to the profession if some thoughtful and observant criticism on our new buildings had been brought forward by the cultured layman, so that we might

see how far the ideals and aspirations of architects appeal to the public.

The Royal Artillery Memorial.

MANY will sympathise with a letter to *The Times* in which the writer criticises the stone howitzer as a symbol that seems "to bring thoughts of vengeance utterly alien to the atmosphere of world peace that all nations are endeavouring to create." Those who agree with this misgiving feel that such a monument cannot be judged solely as a work of art. They claim that it symbolises the power and domination of the gun rather than the self-sacrifice of those who laid down their lives in serving the gun in the hope that they might end its dominance in the world. The two ideals are antagonistic, and there can be little question as to which deserves commemoration.

THERE is a somewhat surprising answer to criticisms advanced against the form of the Artillery Memorial, which is to the effect that the Artillery only are concerned with its character, that it is a memorial to their own men, and that if they like it, it is no affair of the public outside their ranks. Without entering into the merits of the memorial itself, such a view is so debatable that it is worth while to examine it in its bearing on art and the national life. That the Army is only representative of the Army, for which the nation pays, and that the nation is not concerned with the memorial for which it provides the site, will hardly be accepted. These are national affairs in which we are all concerned. But it also jeopardises the permanence of the

memorial itself. What the Artillery might appear to a later time very able, for it is generally recognised where time has dimmed the memories, regard is felt more for the character of the monument itself than for what it commemorates. Such a view includes the better view that it is what we like, but what is desirable, may like what is bad, which a later time will remove. So that for the security of our memorials it can be left to undisciplined choice lest we lose our own object. We render more homage to the dead when we put their minds above imitative experience in mud and blood, into the sphere of art, and in doing so we shall give security to our national monuments. But we are far from understanding that the artist is required not merely to execute our own, perhaps unattainable desires, but to illuminate and exalt

A Willett Memorial.

THE suggestion that an able memorial should be erected to Mr. Willett will certainly be of interest to the public. There are probably instances in history of a man who has preferred so widespread a benefit upon his own kind who was himself so little known. Had it not been for the war, it is conceivable that his suggestion for "light saving" would have gone unheeded, of so many other apparently brilliant fancies that cause a moment's sensation and are then forgotten. A queen, it certainly was, repugnant alike to common sense, but it has been that reason and common sense are a reliable and even dangerous guide. A man more surely deserved a memorial not only to remind future generations and foreign visitors of the debt owed by the greater part of Europe, but to introduce his name to his contemporaries, most of whom are unaware of his work or existence.

TRAFALGAR Day passes the usual floral tributes. Nelson's memory is commemorated in a square. A temporary signalised the occasion by a cartoon representing the column by its shaft, with its capital resting upon a base, and surmounted by the statue with the comment, "One of the 'cuts' that we don't want to see erected by the Cabinet Committee on Education." We should certainly not see any mutilation of the column, but the cartoon serves to emphasise the folly of erecting on such a site a statue that it cannot be properly seen. A bright sky forms the worst conceivable background for so much of it as is visible. Too often have human figures been employed as terminals upon buildings, even by talented architects, who have thus shown their imperfect appreciation of sculpture and of its proper place in architecture.



Carved Shield on Sports Pavilion, Clifton College.

MR. EDWARD WARREN, F.R.I.B.A., Architect. (See p. 628.)

Designed by MR. EDWARD SPENCER. Made by
the ARTIFICERS' GUILD.

GENERAL NEWS

Partnership.

Mr. A. H. Kersey, F.R.I.B.A., F.S.I., has taken into partnership Mr. George Alexander Gale, architect, and Mr. William George Fraser Spooner, surveyor. The practice will in future be carried on under the title of Kersey, Gale and Spooner, at 91, Moorgate, London, E.C.2. Tel.: Central 4412.

Retirement.

Mr. J. A. Williamson, A.R.I.B.A., has retired from the position of architect of Edinburgh City Council.

The English Bridge, Shrewsbury.

The third arch of the English Bridge, in Shrewsbury, which is undergoing reconstruction, recently collapsed owing to the pressure of the flooded river.

Kitchener Memorial.

Lord Kitchener's statue, the national memorial for which the House of Commons voted a sum after the war, is to be unveiled in the Horse Guards' Parade next spring. Mr. John Tweed is the sculptor.

Birmingham Art Gallery.

The Birmingham Museum and Art Gallery Committee has accepted a gift of a water-colour drawing, "Ypres," by Mr. J. A. Swan, F.R.I.B.A.

Glasgow School of Art.

At the annual meeting of the Governors of the Glasgow School of Art, the resignation of Sir John J. Burnet, R.A., F.R.I.B.A., vice-chairman, after thirty-four years of service, was announced.

An Appointment.

Mr. Philip S. Hudson, A.R.I.B.A., has resigned his position with the Willesden District Council on his appointment as Assistant Architect in the Public Works Department, Shanghai.

The Building Trade.

Returns have been received from 138 local authorities in Great Britain, showing that the estimated cost of buildings for which plans were passed during the third quarter of 1925 was £13,639,800.

Bridgewater-square.

The Corporation of the City of London recently expressed their inability to comply with the suggestion of the Metropolitan Public Gardens Association to purchase Bridgewater-square, Barbican, as an open space for the permanent use of the public.

Gunnersbury Park.

Acton Town Council has associated itself with the Ealing Town Council in raising a loan for the purchase of Gunnersbury Park for public pleasure and sports grounds. Ealing's share of the joint liability will be £51,070, and Acton's £45,342.

Lambeth Palace.

A number of Churchmen have recently combined to contribute a large sum of money for the purpose of securing for ever to the Church of England some of the historic furniture at Lambeth Palace. Much of it dates from 1633.

Eton's Tapestries.

The second of the tapestries, designed by the Hon. Mrs. Akers Douglas, and woven at the Morris works at Merton Abbey, has been put in its place in Eton Lower Chapel. The third tapestry is more than half finished, and the fourth and last will be put in hand shortly.

Gloucester Town Planning.

At a recent conference at Gloucester, presided over by Mr. G. L. Pepler, it was decided to form a committee to consider and report on the scheme of town-planning outlined by the Inspector, who suggests that the core of Gloucester should be preserved intact and that round it should be made a ring road boulevard.

Perth Church Restoration.

At a recent meeting at Perth of St. John's Church Restoration and County War Memorial Committee, reports by Sir Robert Lorimer on the progress of the work were submitted. He hopes to be able to inform the Committee at

their next meeting of the probable date of the reopening of the restored church and dedication of the war memorial.

New L.C.C. Schools.

The current three years' building programme of the London County Council Education Committee provides for the completion of 13,744 new places and enlargements. Out of forty-three sites required, twenty-seven are clear and available for building on at short notice. Four of the remaining sixteen sites have been purchased.

Town Planning.

Mr. R. A. Hudson recently read a paper before the Junior Institution of Engineers on the subject of "Town Planning: Its Effect and Influence on Industry." Beginning with an historical review of the growth of towns all over the world, the lecturer came to a practical discussion of the demands of industry in connection with the development of new areas and improvement of existing ones. The principal demands were for suitable transport facilities, systematic erection of buildings, and adequate supply services. Mr. Hudson then gave a short account of the purpose of the Town-Planning Acts, and by means of examples and maps illustrated the types of town-planning schemes which were actively being brought into operation at the present time. The lecturer suggested, in conclusion, that an early knowledge of the tentative proposals promoted by a town-planning authority was advisable, and that a scheme given full support and co-operation would prove of material benefit to everyone.



Architecture Club Exhibition.

Berkhamstead School Memorial Library: Entrance Detail.

MESSRS. FORSYTH & MAULE, F.R.I.B.A., Architects.

COMPETITION

Reconstruction of the Mosque of Cairo.

Members of the Royal Institute considering taking part in this competition strongly recommended to consult the R.I.B.A., before deciding to compete.

Coventry and Warwickshire Hospital.

Messrs. T. R. J. Meakin & Son, of Birmingham, have been awarded a premium of £500 in this competition. There were ten competitors. The assessor was Mr. C. E. Bateman, F.R.I.B.A.

Designs for Middle-Class Houses: International Competition.

By the generosity of an American Willard Reed Messenger, engineer, New York, an international competition, with the object of promoting and facilitating the construction of houses for the smaller middle-class intellectual workers, is to be inaugurated. The prizes are: First, 500 dollars; second, 300 dollars; and third, 200 dollars. The competition is to be held under the auspices of the International Federation of Architects and Public Works. The jury will be composed of eleven members, representing various nationalities. Competitors will be required to submit sketches, descriptive particulars of construction, and schemes intended to reduce cost. Desirous of submitting designs should send them to the Director-General of the International Federation, 17, Avenue Carnot, Paris. Memorandum and sketches have to be sent not later than January 14 next. The results will be published before the end of 1926.

Competitions Open.

Newcastle Fire and Police Station. Premiums: £500, £300, £100. Mr. P. S. Worthington, F.R.I.B.A., Assessor.	June 1
Town Hall, Acc. Pretoria. Open to architects residing in South Africa or Registered under Architects' Act, of 1909, Transvaal. Assessor to be appointed by R.I.B.A. Premiums: £250, £150, £100.	—
Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply particulars, 35, Old Queen-street, S.W.1	April 24
New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool.	Aug 7
Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London	Aug. 16
Plan for construction of Conference Hall, for League of Nations, Geneva. International Competition, Sir John Burnet being British representative on Jury of Assessors. 100,000 Swiss francs to be divided among architects submitting best plans. Programmes will be deposited in due course with R.I.B.A., 9, Conduit-street, where intending competitors should apply. Single copies from Secretary-General, League of Nations, Geneva, on payment of 20 Swiss francs.	Jan. 2
*Portstewart Golf Club.....	—
*Carnegie Hall, Dingwall.....	—
*Fleetwood Hospital.....	—
*Parish Hall, Braunton.....	—
Art Gallery and Museum, Birkenhead. Limited to competitors practising within 20 miles of Birkenhead since January 1, 1923. Premiums: £250, £175, £100. Sir Robert Lorimer, A.R.A., assessor. £25s. deposit. Apply Curator, Central Public Library, Birkenhead.	Oct. 16
Model Dwellings, Russia.....	Sept. 4
*Proposed New School, Gosport	—
*Competitions when "warned" or voted by are starred.	—



Architecture Club Exhibition.

Royal Veterinary College, Camden Town, N.: Research Institute: Detail of Main Entrance.

Messrs. FORSYTH & MAULE, F.F.R.I.B.A., Architects.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

The Age We Live In.

SIR,—Never at any time in the history of building have so many books been written on the subject. We are told what to study and how we ought to study, but we are not instructed as to what constitutes good building. For years, the papers have reflected current views and opinions; there have been illustrations of every type of building exactly expressing the conditions of the time when it was projected, and just as exactly revealing the character of the artists responsible for the design.

I am sorry to find by the tone of the public press that the professional art critic has lately discovered that architecture is worthy of attention. This has led to some curious statements, purely gratuitous, and, moreover, couched in the arrogant terms usually employed by such gentry to describe the works of painters and sculptors. Far from assisting architects to a better understanding with the public, the literary matter that is now flooding the market intensifies the confusion. For example, it is possible for the layman to purchase a popular magazine, and after reading a few of the articles to proceed to act as his own architect. Another man picks up a book describing the buildings of the Far East, and promptly becomes enamoured of some exotic palace which he determines to reproduce.

For my own part, I wish most heartily that architects and builders would show more application and make greater efforts, either by study or research, to improve the tone of building in this country. The buildings which confront me during my perambulations in London, and other cities, appear cold and indifferent. In vain do I search for that touch of grace combined with delightful invention which is never absent from the buildings of other ages. The architecture of England has at all times been accessible to ideas which have with particular care been blended with national ideals. But the same cannot be said to be the case when recent buildings are under review. I am informed on good authority that America has solved the difficulty of correctly expressing her artistic needs by carrying ideas from the old world in order to found a tradition. Be this as it may, it appears a little illogical to a man of my temperament that English architects should be borrowing those ideas and using them at second-hand. Surely we, as a nation, have not so far forgotten our birthright that we are content to become helots in such matters. Another of my informants spoke of a mysterious "Northern Light," which is of the utmost value to a tired race. Then, again, I hear much talk of "Modernity," whatever that means; and I am distressed to find eminent people taking sides on the merits of this or that travesty of good taste in sculpture or painting.

If anyone would become a judge of the merits of a work of art, let him give the greatest inquiry into the spirit of the conditions that prompted the novelty. He will find, more often than not, that absurdity is hand in glove with a desire for notoriety. Of what use is it that domestic architecture has been advanced, when the architecture of commerce continues to show gestures and tricks which are beneath contempt? To make my point a little clearer, I will refer to a building in a prominent thoroughfare which was completed last year.

If nonsense accompanied by vulgarity imply the modern note, then this building most assuredly can claim distinction. The building belongs to no particular school of design; it has every feature known to architecture. There is no reason against the employment of these features, but when they are composed in an ill bred manner, their employment deserves censure. The man in the street when he sets out to enjoy architecture expects in a subconscious way to have a compliment paid to his fine sense.

Architects, I submit, do not, as a body, understand this act of courtesy. The building I have referred to fully illustrates the confusion that exists regarding modernity in building. We men in the street have very decided views upon offences against public taste. When we take our walks we expect to be instructed, not driven into acceptance of a meaningless essay in stone or concrete. In the case of shop premises and commercial buildings, we look for invention in its widest issues. We like to see how architect and client have worked together for the convenience of the buying public. Our eyes are accustomed to the scale of human beings, not of giants. Is it not burking the difficulty to erect a fantastic screen or show façade and to bedizen it with curious detail? What a contrast is afforded by the Bon Marché or the Printemps in Paris. There is another building in — but I will write about that in the distant future, when it is completed.

EDWARD MASSINGHAM WARBOYS.

The Penalty of Age.

SIR,—A few months ago London and the provinces were singing "Where do flies go in winter-time?" and it has occurred to me, where do the builders' assistants go when grey hairs make their appearance? According to the advertisement columns in your journal many who can afford it try their luck in advertising for appointments. They may get a reply and an interview. At an interview they are courteously received, the grey hair duly noted when the hat is removed, the references produced by the applicant are scanned—not read—and the applicants then bowed out by the interviewer with a promise "to let you know." Then the usual result. Grey hairs have lost. Many of the assistants have a good record, are experienced and know their work thoroughly.

The war or bankruptcy of firms has interfered with their business careers, and they are flung on the scrap heap. The writer knows of one or two good fellows who have been victims of circumstances as stated, and cannot get going. Their references are good and genuine. The men are hard-working; they would not rob their employers of "five minutes" or a "nail," and would use all their energies to forward the interests of any firm, but they are beaten by grey hairs. Why, I wonder?

"ACTIVE."

Registration of Architects.

SIR,—With reference to the chairman of the R.I.B.A. Registration Committee's letter appearing in your issue of the 23rd inst., I note he states that the pending legislation will not in any way affect anyone who at the time of passing of the Act is earning his living by the practice of architecture; but what of those living in retirement on the date of passing of the Act, and who desire to restart business again? There are hundreds of others who have never been in practice, having either held official appointments or been employed as draughtsmen. Are these people safeguarded against being shut out?

I think it highly desirable that non-members of societies should join up so that their interest may be protected, otherwise I fear they will find themselves on the other side of the fence in the event of the Bill becoming law.

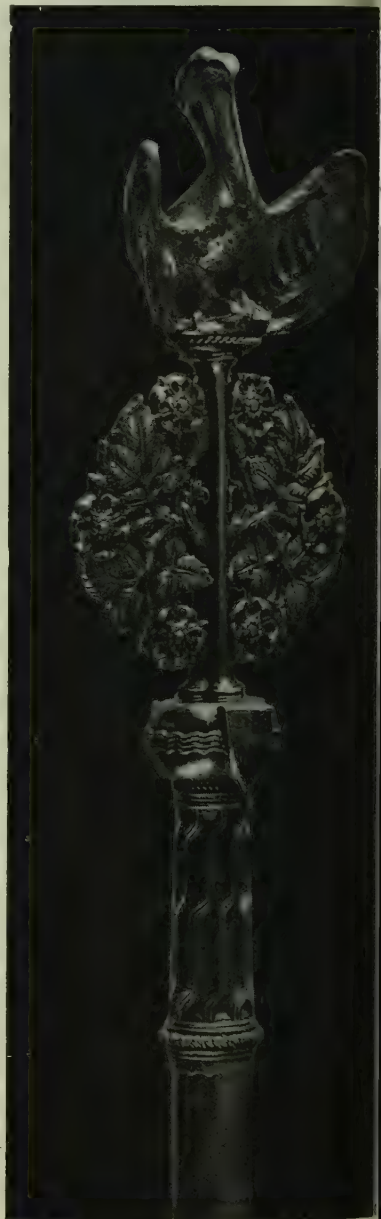
NON-MEMBER.

R.I.B.A. Opening Meeting.

The new Session of the R.I.B.A. will be opened by a general meeting on Monday, November 2, at 8.30 p.m., when the President, Mr. E. Guy Dawber, F.S.A., will deliver his inaugural address; the portrait of the Past-President, Mr. J. Alfred Gotch, which has been painted by Mr. T. C. Gotch, will be unveiled and presented to the Royal Institute, and the R.I.B.A. Medal and Diploma for the best London building completed in 1924 will be presented to Messrs. Greenaway & Newberry for the new building of the Auctioneers' and Estate Agents' Institute in Lincoln's Inn Fields.

MATERIALS AND BRILLIANCE OF STYLE

A comprehensive glimpse of the building Northern Italy in the Renaissance period, of those of Pavia, Milan, and neighbouring cities was given in a lecture by Sir Banister Fletcher at the Central School of Arts and Crafts, Wednesday, October 21. Milan, said Sir Banister, when she had shaken off the influences which had prevailed in the Gothic period, soon reverted to the old Classical conditions which in Italy had always been dominant to the solidity and stateliness of design and the delicacy of conventional detail. The beautiful marble of Carrara made a new refinement possible; while in the valley of Lombardy the clay provided a brick architecture characteristic in its aspect, and the latter, too, itself to a grace of decorative detail which was dear to the Italian spirit. At the great Casian church of Certosa, at Pavia, the Gothic blended oddly with the brick Renaissance of the gorgeous west front, in which the vertical lines took the form of pilasters slender baluster columns.



Processional Staff in Silver and Enamel
Liverpool Cathedral.

MADE BY THE ARTIFICERS' GUILD.



ON Monday evening, Mr. H. S. GOODHART-DEL (President) occupied the chair at the meeting of the Architectural Association for the present session.

President's Address.

MESSRS. A. K. Parkinson, R. Walker, and J. Hobday having been elected members, the PRESIDENT delivered his inaugural address, entitled "Ourselves." It was, he said, the hope of many of them that the forthcoming year might see the beginning of changes which would increase the usefulness of the Association to its members. Those changes would consist in the extension not only of the premises but also of the facilities and privileges offered to members. It had been stated that the rapid development of the school had detracted the energy of the Council in the efforts it was bound to make to further the development of the Association as a whole, but he did not think that criticism could be justified. During the past two years the School had been overcrowded, and a choice was to be made between two policies—that of enlarging the buildings, or reducing the number of students admitted to the course. The latter policy must necessarily be retrograde, and the Council therefore had no alternative but to build. Whether they could only supply the bare necessities of the moment, or whether they would be able to provide for the growth they expected in the future would depend simply on how much money they could obtain. The only dangers which the School had at present were those which came from too much success, and he believed those dangers were well guarded against. Obviously there were imperfections in the training of the young architect; it was, for instance, extremely difficult to avoid a certain academicism in the teaching of building construction away from the job. But the system had come to stay, and sooner or later it would entirely replace the system of pupilage, and the comparative uniformity of training which would result from it would be a gain to English architecture as a whole. He did not think there was any danger that uniform training would make for uniform architecture to any harmful degree. A uniform practice of good theoretic design was all a school could teach. Light innovation could not be taught in school but out of it; but the capability of it, if it existed, could be encouraged and guided.

As the profession was constituted at present, the artistic and commercial elements had to be combined more or less in one man. Taken by itself, the commercial element was a perfectly honourable one, and there was no cause for saying that a man was not justified in becoming an architect with no intention but that of giving people who did not care

for art sound and useful buildings which made no pretension to art. As people fond of architecture, it was their business to question the necessity of anomalies found in its practice, even though they did not foresee the method of their cure. Architects could be divided into three classes: architects who were good at designing and liked doing it; architects who were bad at designing and liked doing it; and those who were bad at designing and were glad when they were relieved of it. In a free country those in the second class could not be interfered with; those in the third, which undoubtedly included many men of unimpeachable honesty and great ability on the practical side of the profession, ought to be rescued from the fancied obligation of either trying to do what they could not or of obtaining secret rather than open assistance. He did not know how the matter was managed in America, where the monster practices were, but he fancied the inevitable designing by proxy which such practices must involve was no mystery. The great bulk of such practices seemed to be the manufacture of architectural Robots out of dead bones from Europe, and it was possible that no individual designer was concerned in the process. However it was done, it must necessitate a kind of specialisation from which we could derive some useful lessons. Possibly the combination of small practices on an extensive scale might remedy many of their ills, for it was an ill that a large number of the bad buildings which lowered the average of architecture in England were designed by men who would not pretend to any special aptitude in that direction, but who had sufficient other aptitudes to give them a perfect right to practise as architects.

Most of them had not only a life to live, but a living to make. Of the irresponsible artist it was often said in justification that at any rate he lived his life, but more often than not he did it entirely at the expense of other people. In the present state of public appreciation of the arts, bad art was, as a rule, more marketable than good, and while that continued it was certainly an advantage to the artist not to be dependent upon his work for his house, his food, and his clothing. Given, however, the improvement in public taste which the idealist was bound to pre-suppose, it was extremely good for an artist to have a paymaster to please. In the great majority of cases the honest architect would find that he could gain most valuable stimulus and suggestion from the wishes of his employer. The first obligation on every artist was to do no bad work if he could help it, but he was under an equally stringent obligation of honour to do, if he could help it, no work which his employer disliked. Some people talked as though the man who paid for the building should be gagged and bound at the signing of the contract and not released until the architect had moved on to another job. That would have its conveniences, no doubt, but the architect would miss thereby a large part of his artistic education, of his education in resourcefulness, in open-mindedness, in alertness to opportunity.

An architect must not only live, but he must let live. Every architect had a right to say what he thought of the works of his confreres, provided he could not be suspected of getting any personal advantage from the expression of an unfavourable opinion. The public was so ignorant of the standards of architecture that architects must help them in the making or unmaking of reputations by free criticism. But they must regard that right as a great responsibility, and be very specially on their guard against any expression of tolerance, or of personal animus perhaps almost unsuspected by themselves. If, in self-examination, they thought there were a great many good architects, but all of them dead, it was better to reserve their opinions upon their contemporaries for a while, until they began to see a glimmer of merit in them which they could praise.

Discussion.

MR. J. ALAN SLATER said much of the value of the Association arose from the fact that no less than 75 per cent. of the members were old students of the School. He agreed that there must be more and more uniformity in the methods of architectural education throughout the country, and that would be helped by the fact that the Visiting Board of the R.I.B.A. Board of Architectural Education consisted of the same examiners for more than one year; they were thus able to see the work of all the schools and see how they varied from a standard such as that set by the Architectural Association. On the question of the combination of architectural practices, it was quite obvious that a man who specialised in domestic work would not be the best architect for a cathedral, no more than the man who could build a good factory would necessarily be the best man to design a house. To a certain extent the difficulty was already met by partnerships, and a combination of practices would only be a development of the partnership principle. During the R.I.B.A. Conference on architectural education a Danish architect had told him that in Denmark they endeavoured to specialise in the training of students for different branches of architecture.

MR. O. P. MILNE said they must all feel that the architect was in the position of the general who marshalled and governed the whole of the building operations, and that he was a better general if he had designed the building he was carrying out. He agreed that the school system had come to stay, and that the whole future of architecture was in the hands of the students.

MR. MANNING ROBERTSON said he was much interested in the suggestion that practices might be combined, not in a loose partnership but in a guild in which architects interested in housing and lay-outs would carry out that kind of work, those who specialised in factories and construction would do that work, church specialists would do the ecclesiastical work, and the man who was never happy unless dealing with ancient lights and party walls could have his paradise all to himself.

MR. E. SHEPPARD said in America the big architects did not really design or superintend their work, but they did get it. In America he thought the drawings were more studied, and that, contrary to the general opinion in this country, work was rather slower. As to competitions, there were some good perspective men in America, and that had a great influence on the result.

MR. H. M. FLETCHER said although uniformity was one of the aims of the Board of Architectural Education, they welcomed individuality. They would not like to see all the schools exactly alike. They would like all the schools to give thorough education in the subjects necessary to an architect, but they welcomed specialisation on the part of different schools.

MR. HOWARD ROBERTSON said members of the Association could greatly help the school by taking the students into their offices after they had completed their course; they already helped very much in that respect, but more should be done. The difficulty was to get office experience. The fault was not entirely with the architects, but with the students themselves, who left the school with a good knowledge of design and wanted to take over the designing work of his employer straight away. The students should remember that there was a market for architectural assistance, and a market value for their work. They should not expect a big salary to start with, and employers should make sure the students were suitable before employing them.

MR. GILBERT JENKINS said the whole of the energies of the Association should not be confined to the school. The older membership was a very important factor which should not be altogether ignored, and the club side should be kept going.

THE ARCHITECTURE CLUB EXHIBITION

OPENING CEREMONY.

THE third Exhibition of the Architecture Club was opened by Mr. G. K. Chesterton in the R.I.B.A. Galleries, Maddox-street, on Monday afternoon last.

Mr. J. C. Squire, President of the Club, who presided, thanked Mr. Chesterton for coming up from the country especially to open the exhibition. Mr. Chesterton, he continued, was not an architect, but he knew a lot about columns. Perhaps he (the speaker) might be allowed to describe those that Mr. Chesterton filled as being mostly of the Corinthian order.

Mr. Chesterton, in the course of a brief but witty speech, apologised for being a little late in arriving, and said the delay was entirely due to the London traffic blocks. He had imagined that it would have been quicker and easier to reach London by car, but there appeared to be springing up in London, as the latest development in architectural history, large villages or hamlets of stationary vehicles on wheels. They would probably soon see these groups of motor-cars, taxi-cabs, and omnibuses with ivy climbing up them and little gardens cultivated just outside them, together with everything else which betokened a normal and settled civilisation. That they would ever get on again he very much doubted. He would have got there much quicker had he walked and lost his way, as usual. It was true he was not an architect, and there were apparently others present who also were not architects. It would be a fine idea, he continued, if they could have a kind of festival, a sort of pageant or fancy dress procession, in which they could embody or represent different buildings. Someone would like to represent the graceful and gilded form of the Albert Memorial, and he would only be too delighted to stand opposite him permanently, being himself more of the conformation of the Albert Hall.

Mr. E. Guy Dawber, P.R.I.B.A., proposed a vote of thanks to Mr. Squire and Mr. Chesterton, which Mr. H. M. Fletcher seconded.

Mr. Squire, in reply, said the club was very grateful to the Institute for allowing that exhibition to be held in their galleries. What other professional body, he asked, would extend such a privilege to a body of laymen?

SOME NOTES ON THE EXHIBITION.

THE present exhibition is of a more modest nature than that held at Grosvenor House last year, and falls short of what has come to be expected of the Club. In the preface of the catalogue giving the names of the exhibitors, Mr. Charles Marriott asks: "What, glanced at broadly, does the exhibition represent?" and then explains: "It represents the choice of an unofficial body of professional architects and interested laymen from what they consider the better in contemporary building." This statement, coming from a distinguished art critic, may be thought authoritative; but can it be said that the exhibition is fully representative? And if it is not, what is the cause?

Of the grouping of the photographs and drawings there is little to say. Recent architecture occupies two of the galleries; there is an overflow in the corridor, and a few models and stray statues serve as furniture to a background of photographs. From the preliminary invitations, architects and the public were led to expect a good selection of rough sketches which for the first time would show the working of an architect's brain, but this section of the show is limited to twenty-five subjects of miscellaneous character. Every architect has his own process of developing a design, and there must be plenty of material to furnish a dozen exhibitions of this nature if the artists could be induced to comply, and we regret there are not more of these sketches, especially as architects are becoming rather tired of photographic displays, which mean a considerable expense to the practitioner and are not helpful to a full consideration of the subjects illustrated. And why are plans so religiously avoided?

In its general formation the exhibition has a certain modesty, which may arise from the process of weeding out undesirables, but one hoped to have been brought into touch with the poetry of modern building, instead of which the onlooker is shown a few studied perspectives and the photographs. There are very few designs of outstanding merit, though the selection has been wide and many familiar buildings have been included. As a special attraction, Mr. Harvey Corbett's proposed Restoration of King Solomon's Temple and Citadel, which is to be built in temporary materials for the Sesqui Centennial at Philadelphia, is on the central screen in the first gallery. This is a species of cinema attraction which appeared to us to have been worked up from Chipiez. The cost will be 2,000,000 dollars!

First the models must be mentioned. These range from the proposed cenotaph for Durban, which is surely intended as a compliment to Sir Edwin Lutyens, to models of houses and cottages. If there is one section of insular building of which we may be justly proud, it is the small house intended for the people. There are many designs of this character on the walls. Broadly speaking, the housing problem has raised the whole tone of vernacular building throughout the country. It is obvious, therefore, that questions of economy have led in turn to close study and good results. In the case of houses for the middle classes, such as those illustrated by the models, the garden lay-outs are pretty in their conceits of lily ponds, pergolas and what-nots; but the designs lack somewhat that urbanity which should make its own appeal. The model of the Plaza Theatre, Regent-street, now building, illustrates "Masks and Faces." The outside of the building recalls the style of the Second Empire, but there is no special indication of a theatre. The value of a model is here apparent, but it should have been placed at a much higher level. The building will be amongst the best of our modern theatres.

Among the good things on view, one noticed "Hatchford End," Cobham, by Mr. Goodhart-Rendel, west wing, excellent for its note of repose; a house on the Roehampton estate; and the Eton College Picture Gallery and Drawing School, by Messrs. Forsyth and Maule. Sir Giles Gilbert Scott, R.A., exhibits the fine new buildings at Clare College. Sir John Burnet & Partners head the "modernists" with Adelaide House, which gains considerably when photographed with London Bridge in the foreground. The showrooms and flats, High-street, Wandsworth, have been inspired direct from Holland. The studio for Mr. W. Reid Dick, A.R.A., is ingenious. In the same category can be placed the new building for Messrs. Austin Reed. Here is a building which aims at novelty on a novel site, and attempts to beggar its neighbours by sheer force. The design of "Little Salters," Beaulieu, by Mr. Horace Farnquarson is in the homely manner of Hampshire. There is one old familiar, the British Pavilion from the Paris Exhibition, which so palely reflects the northern light, and the well-planned Sports Pavilion of the City of London School (Ralph Knott and E. Stone Collins), which has much interest in its developed dimensions. There is a good brick house at Littlestone-on-Sea (Messrs. Adhead and Ramsey), and some convincing flats from the Duchy of Cornwall Estate. By far the most entertaining of the models is that concealed within a box raised on a pedestal; but surely the façade of Mr. Curtis Green's able London Life Association would have been better understood in the open! Other interesting exhibits are Mr. Oliver Hill's House in Argyllshire and Churt Gatehouse; Messrs. Blair, Imrie and Angell's several excellent houses with good variety of treatment; a pleasingly simple house at Kingswood by Mr.

Edwin T. Reynolds; Messrs. Forbes and Tate's interesting addition to Barrington Court; Messrs. Forsyth and Maule's Royal Veterinary College; Mr. Harold Gibbon's rich altar piece; Mr. Oswald P. Milne's domestic work; Mr. Ed. Maufe's five exhibits and various subjects by Messrs. Worthington Chas. Spooner, E. Vincent Harris, Walter Tapper. It has only been possible to touch on the general characteristics of the exhibition. There is, it is only fair to say, much work of good average merit, but this is best judged by the individual. The Architecture Club, in spite of its powerful backing, has not yet succeeded in effecting harmony between the arts. That the exhibition finds shelter at Conduit-street is, as Mr. Marriott states, "a sign that the Institute is satisfied that the activities of the Architecture Club are at least not prejudicial to the interests of the art for which the Institute is responsible."

It remains, however, to warn the promoters of the exhibition that their show is far from representing the current work of the day. And with this line of advice to guide the public, fresh opinions must be formed. What all is said and done, there are three hundred and six exhibits, and it is common knowledge that architects are numbered in the thousands. Surely such an exhibition might have brought to light more illuminating ideas.

"BEAUTY IN ARCHITECTURE"

Under the auspices of the South Wales Institute of Architects (Western Branch) a lecture was given recently by Mr. W. S. Purchon, M.A. A.R.I.B.A. (Head of the School of Architecture, Cardiff), on "Beauty in Architecture." Mr. H. C. Portsmouth, F.R.I.B.A., occupied the chair and a large number of local architects, students, and members of the general public interested in architecture attended. In the course of his remarks the lecturer enunciated the principles of architectural design and composition and put forward a scheme of architectural criticism applicable to the architecture of the past and present, the various points raised being considered in connection with a fine series of about 100 lantern views of famous ancient and modern buildings. Among other points dealt with was the expression of function and of the purpose of the building, composition of façade, the massing of buildings; grouping; environment; how unity of design may be achieved; lost; the art of "leaving out"; preservation scale. The lecturer further pointed out that architecture was not a matter of added expense to a building, the skilled designer producing in given conditions better results than the untrained man. A vote of thanks was proposed by Mr. Charles S. Thomas, F.R.I.B.A., and seconded by Mr. S. R. Crocker, L.R.I.B.A., and carried with acclamation. Mr. J. Herbert Jones, F.R.I.B.A., the Honorary Secretary, expressed on behalf of the Council their pleasure at a large number who attended the lecture, and expressed the hope that future lectures on the subject of architecture would be equally attended.

New Theological College, Cambridge.

A new post-graduate theological college known as Wesley House, has been opened in Jesus-lane, Cambridge. The building, designed by Sir Aston Webb, is of red brick with sparing use of Bath stone dressings and green tiles. The cost of the site was £18,000 and of the building about £42,000.

The British Industries Fair.

The eleventh British Industries Fair, held in London and Birmingham, from February 15 to 26, next year promises already in many ways to be the most successful of the series. Although forms of application for space have been in the hands of potential exhibitors a few days, over 100,000 sq. ft. of space already been applied for. The charge for has been reduced this year at both London and Birmingham, the charge in London is 2s. 6d. per sq. ft.

NORTHERN A.A. INAUGURAL ADDRESS

the course of his inaugural address to the Northern Architectural Association at New-
 upon-Tyne, on Wednesday, October 21,
 Reavell, F.R.I.B.A., President, referred
 the depressed condition of national affairs,
 direct consequence of the war, and urged
 we must devote all our energies toward
 in planning and construction, and
 it clear to all the world that the services
 keen and experienced architect are
 nothing worth retaining. While on the
 of work, he continued, he might perhaps
 allowed to say to his student friends that
 had adopted a hard and exacting pro-
 whose reward in most cases could only
 close and untiring effort. They suffered
 a new atmosphere, which placed far more
 on recreation and less on work than was
 case 50 years ago. Then, the home study
 serious and prolonged, and the interest in
 was betokened by hot discussions on the
 and animated criticisms on the plates in
 professional papers. Now the same papers
 are often very languidly turned over and our
 who did not worry about the styles, while an
 architect he knew who was remonstrating
 gently with a really gifted youth about wasted
 opportunities was told: "Well, you see, one
 must not neglect one's golf." His imagination
 was not equal to guessing the result of such
 play in his student time.

The outstanding event of the year, so far as
 we were concerned, had been the visit of the
 Royal Institute and Allied Societies to New-
 castle in July. There had been many successful
 meetings in the history of the Institute, but on
 this occasion it was willingly said that none sur-
 passed the meeting there. As President, he
 had officially congratulated on the organisation,
 hastened at once to pass on the encomium
 to those who so ably helped him.

The adoption by the City Council of the line
 of the proposed new street was a great event
 of the year. It must be a matter of satisfaction
 to that Association that the scheme of Mr.
 Dick had become virtually the official
 scheme. It was no easy matter to drive a new
 road through an ancient city, and doubtless
 many technical difficulties would arise to worry
 the City Engineer, but they were safe in his
 able hands. What did matter was that
 instead of legislating from hand to mouth,
 scattering away money by a few thousands here
 and another few thousands there, paring down
 expensive frontages and eventually being little
 better off, a comprehensive scheme had
 been adopted which would clear away a great
 deal of poor property, give a wide and direct
 thoroughfare from the new bridge to the North
 end, afford valuable business sites, and in the
 end add enormously to the rateable value of
 the city.

He would utter a word of warning concerning
 the circular, which no doubt most of them
 had received, purporting to establish "The
 Incorporated Association of Architects and
 Surveyors." The ostensible reason for the
 formation of the Association was to protect
 practitioners who were not members of the
 I.B.A. when legislation was asked for to
 obtain registration. They might take it from
 him that the R.I.B.A. would not ask for any-
 thing that did an injustice to anyone who had
 previously been making his living by archi-
 tecture or surveying, and they might be soundly
 assured that no British legislature would pass
 such a Bill.

During the year the discussion with the
 Quantity Surveyors and the Builders' Federation
 to Standard Measurement of Building Works
 had proceeded rather slowly in the hands of the
 joint sub-committee. While on that subject
 he would point out that, whatever system was
 adopted, those architects who took out their
 quantities should make it a point of honour
 to render them beyond reproach, avoiding
 vague clauses, loose description, excessive use
 of p.c. amounts and other faults of the idle or
 incompetent surveyor.

A pleasing incident during the year had been
 the election of their very popular member and
 past-President, Mr. T. R. Milburn, to a vice-
 presidency of the R.I.B.A. Mr. Milburn had
 a faculty for seeing the kernel of a subject under
 discussion very quickly, and the gift of express-
 ing his views thereon with point and lack of
 verbiage—valuable qualities that would be of
 great service to the profession in the exercise
 of his new dignity.

A matter that had been growing in interest
 during the last few years, particularly in the
 post-war period, was the training of young
 architects. The old system was for an aspirant
 to serve his articles with a practising architect,
 and it was a system that turned out a large
 number of good men. When the architect had
 a good sound practice, a good architectural
 library and a disposition to help and advise the
 pupil, and he on his part inclined to study and
 to burn a little of the midnight oil, the results
 were generally satisfactory but, alas! in many
 cases pupilage was undertaken with little sense
 of responsibility on either side, and at the end
 of it an unlucky youth was turned out to find
 that he was totally unqualified to undertake
 the duties of an architectural assistant. If we
 went in for academical training, we must keep
 in touch with the actual. If we got our heads
 in the air we must plant our feet on solid
 ground. Professor, principal and pupil alike
 must see that in the latter part of his training,
 the student had ample opportunity to familiarise
 himself with real buildings.

The last occurrence of the year had been the
 unveiling of the Memorial to those of their
 number who gave their lives for their country
 in the Great War. They knew their worth and
 appreciated their sacrifice, but beyond tendering
 the affectionate tribute of old colleagues he
 need not add to the words so fitly spoken at
 that afternoon's ceremony. On their behalf he
 congratulated Mr. Weightman on the success of
 his restrained and balanced design.

A hearty vote of thanks was accorded to the
 President on the motion of Mr. C. S. Errington,
 F.R.I.B.A., ex-President, seconded by Mr.
 T. R. Milburn, V.-P.R.I.B.A., ex-President. A
 number of other members also spoke.

EXHIBITION NOTES

THE ARCHITECTURAL ASSOCIATION.

THOSE who are interested in water-colour
 art should see the excellent collection of work
 brought together at the Architectural Associa-
 tion in Bedford-square. This is one of the best
 of these small exhibitions we remember. A few
 running notes on the drawings may interest
 our readers.

A grey drawing of Pump Court is by K. M.
 Wallis, and a nice careful study of a bit of the
 Orangery at Kensington by the same hand. A
 pleasant grey-green study of landscape by
 J. A. Hallam, a vigorous study of the rocky
 coast at Bude by A. C. Knapp Fisher, a Venetian
 impression by C. J. Kennedy; a nicely toned
 drawing of Passan-on-Danube, not impeccable
 as to perspective, by Thatem, and the same
 skilful handling of colour in the Beguinage,
 Bruges, are all noticeable things. North Rocks,
 Cornwall, by A. C. Knapp Fisher, is a boldly
 handled and vivid study; a clever purple and
 green landscape hangs above it, by A. S. Knott.
 There is another nameless landscape in brown
 and green, and a delightful little blue-grey
 landscape by H. M. R. Drury, a very telling
 sketch of Bourges by "E. G. D.," and also by
 the same hand a bright drawing of Gisors; the
 stairs, Canterbury, by Vincent Hooper, another
 fine study at Bude by Knapp Fisher, not
 inferior in some ways to D. Y. Cameron, and
 two fine photographic studies of Prague by
 F. R. Yerbury conclude our notes of an inter-
 esting exhibition.

WESSEX SOCIETY OF ARCHITECTS' INAUGURAL DINNER

THE members of the Wessex Society of Archi-
 tects (incorporating the Bristol Society of Archi-
 tects and the Gloucestershire Architectural Asso-
 ciation) inaugurated the new session by holding
 a dinner at Georges' Restaurant, Cheltenham,
 last week. The President of the Society (Mr.
 G. C. Lawrence) occupied the chair, and was
 supported by Mr. E. Guy Dawber (President of
 the R.I.B.A.), Sir George Oatley, Lieut.-Col. N.
 H. Waller (President of the Gloucestershire
 Architectural Association), Mr. F. B. Kirby
 (President of the Liverpool Society of Archi-
 tects), Mr. Ian MacAlister, Mr. F. W. Waller,
 and Major Stratton Davis (hon. secretary of the
 Society).

Before the company sat down, Col. Waller
 asked Mr. Dawber to invest Mr. G. C. Lawrence
 with the President's badge, which was designed
 by a Wessex architect, modelled by a Wessex
 sculptor, and cast in gold by a well-known firm
 at Frome.

Mr. Dawber, in making the investiture, said
 he looked upon their President as the real father
 of the Wessex Society. For a long time the
 Bristol Society had been affiliated to the Royal
 Institute, and they also had in Gloucestershire
 an Architectural Association which was not
 affiliated with either the Bristol Society or with
 the Institute; and it was owing to Mr.
 Lawrence's initiative and exertion that these
 two Societies were now amalgamated into one
 organisation called the Wessex Society of Archi-
 tects. On behalf of the Institute he wished
 their Society every possible success, and it gave
 him the greatest pleasure to invest Mr. Lawrence
 for the first time with his badge of office.

Col. Waller, in proposing "The Royal Institute
 of British Architects," said there was no doubt
 that the Institute was whole-hearted in its efforts
 to help the allied societies, and it had welcomed
 a number of the representatives of the allied
 societies on its governing body. The movement
 was still going on, and it behoved them to con-
 sider what was the objective to which they were
 aspiring. With all diffidence he suggested that
 it was an even closer liaison between the govern-
 ing body in London and the societies all over
 the country, each society dealing with its local
 problems, but looking to the Council of the
 Institute to lay down for them the strictest code
 of professional honour, and at the same time
 refereeing the difficult cases.

Mr. Dawber, replying, assured them that the
 Institute took the deepest interest in all its
 provincial and allied societies and cordially
 welcomed to its deliberations the representatives
 of those societies, one of the most helpful of
 whom at the Council meetings was the President
 of the Wessex Society, Mr. Lawrence. He (the
 speaker) happened to know Wessex. He had
 done work in all four counties, and had a fair
 knowledge of all the materials to be found in
 them; but above all his heart went out to the
 Cotswolds—it was there that he learnt what
 a sound, sensible English building was.

Mr. Ian MacAlister submitted the toast of
 "The Allied Societies." In 1908, he observed,
 there were 20 of these societies with members
 counted by hundreds; to-day the societies and
 branches numbered 60, and the membership
 was well into thousands, every part of the
 Empire being represented by a society or a
 branch.

Mr. E. B. Kirby, President of the Liverpool
 Architectural Society, replied.

Sir George Oatley proposed "The Visitors,"
 and Sir Philip Stott, Bart., responded. He said
 he looked forward to the time when the Institute
 would make the profession a close corporation.

Mr. Dawber said that the Institute had been
 preparing the ground for a Charter. A Regis-
 tration Bill had been drafted, and would shortly
 be sent to the allied societies for their considera-
 tion before it was laid before Parliament.

Mr. H. H. Hardy proposed "The Wessex
 Society of Architects," coupled with the name
 of Mr. G. C. Lawrence, who responded.

LEADING CONTENTS. PAGE

THE PRESERVATION OF ARCHITECTURAL MONUMENTS	619
NOTES	620
GENERAL NEWS	622
COMPETITION NEWS	622
CORRESPONDENCE	624
ARCHITECTURAL ASSOCIATION	625
THE ARCHITECTURE CLUB EXHIBITION.....	626
NORTHERN A.A. INAUGURAL ADDRESS.....	627
ARCHITECTURE AND SCULPTURE AT THE GLASGOW INSTITUTE	634
TRANSPORT AND HOUSING	635
COCKERSAND ABBEY	635
LEGAL SECTION	636
ARCHITECT'S CLAIM FOR FEES.....	637
ARCHITECTS' AND BUILDERS' INQUIRY BUREAU	638
THE BUILDING TRADE	639
FLOOR LOADS AND L.C.C. REGULATIONS...	640
CONTRACTS, COMPETITIONS, ETC.....	644
PROPOSED NEW BUILDINGS AND OTHER WORKS	646
TENDERS	651

ILLUSTRATIONS

Military Buildings, Fort Canning, Singapore.

The scheme for replacing military buildings at Fort Canning, Singapore, rendered necessary by the construction of the service reservoir at the top of the Fort Canning Hill, is being undertaken by Captain S. D. Meadows, F.R.I.B.A., Chief Architect to the Municipality. The scheme includes seven large blocks, and is estimated to cost one million dollars. The blocks include headquarters' offices, warrant officers' quarters, soldiers' institute and barracks, married soldiers' quarters, &c. Most of the buildings sites are on the steep hillside in difficult positions from a building point of view, and a good deal of earth work and road work has thus been necessary. A new road is at present being made to serve the proposed buildings. The required building levels have not made it possible to cut far into the hillside, and the buildings are therefore to be supported on reinforced concrete piers taken down into solid laterite stratum. The work is being carried out under contract. The buildings are to be of reinforced concrete framework construction, with brick filling plastered over and French tiled roof. Timbers of Kapor will be used for carpentry and Chenghai for joinery work. A wide veranda around all offices and living quarters is a feature in the planning, and this, coupled with a simplicity of treatment, lends dignity to the design.

Sports Pavilion, Clifton College.

This pavilion, which is brick built and rendered with quoins and dressings contains, on the nominal ground floor, which is considerably raised above the level of the Close, a large central room or hall, with the cricket professionals' room at its eastern end, and a lobby and cloakroom admitting to the staircase and lavatories at the western end. Above this, and partly in the roof space, are the dressing-rooms for the school teams and for visiting teams, and lavatories and shower baths. The flooring of the ground and upper floors is in maple wood, over concrete, in order to avoid the splintering action of most other woods by spiked cricket shoes. In the basement are a garage for the motor lawn mower, storage room for goal-posts, cricket nets, &c., a heating chamber, a gas kitchen for the preparation of tea and coffee, &c., and lavatories. A hand-power lift connects this basement with the two upper floors. The ground is banked up in front of the building to form a turfed terrace, giving extra accommodation for persons watching matches. The general contractors were:—Messrs. J. Long & Sons, Ltd., of Bath. The principal sub-contractors were:—C. P. Kinnell & Co., Ltd., London, heating and hot water supplies; Dent & Hellyer, Ltd., lavatory ranges; H. Pontifex & Sons, Ltd., London, sanitary fittings; J. H. Pye, Moreton-on-Marsh, Glos., metal casements and glazing; F. Clubb & Son, Sudbury, Suffolk, w.i. balustrades and

grilles; Gardiner & Sons, Ltd., Bristol, hand-power lift and iron staircase; T. Elsley, Ltd., London, rain-water heads and pipes; T. E. Jago, London, modelling of date panels and coat-of-arms in special cement; The Silverdale Tileries Co., Stafford, roofing tiles; Adamite Co., Ltd., "Atlas White" Cement, quoins and dressings. The electric light installation was carried out by the Clifton College workshops.

Mr. Edward Warren, F.R.I.B.A., was the architect.

Sports Pavilion, Grove Park, Kent.

This sports pavilion—a photograph of which is included in the Architecture Club Exhibition—has been erected as a memorial to the Boys and Old Boys of the City of London School who gave their lives in the Great War. The building was designed by Messrs. Ralph Knott & E. Stone Collins, F.F.R.I.B.A., who are both Old Boys of the School. The contractors were Messrs. Arthur Vigor, Ltd. The figure studies for the decoration of the tea room, embodied in three framed sketches accompanying the two photographs sent for exhibition by Messrs. Knott & Collins, are by Mr. Steven Spurrier, R.O.I., who will execute the decorative panels in the tea room. Mr. Spurrier is also an Old Boy of the School.

Denham Golf Club House.

This building was originally an old farm, and some years ago was converted into a club house, the barn being utilised as a dining-room, stables formed into dressing-rooms, and additions made to form the outbuildings, &c., into one homogeneous block. Old oak, tiles, bricks, &c., obtained by the removal of another old barn belonging to the farm, were employed in the additions and renovations. The present illustration shows further contemplated additions and improvements, some portion of which has been carried out, but the whole scheme is subject at present to variation owing to expense. The general contractor was Mr. W. J. Page, of Northwood; heating was by Young, Austen & Young, Leicester and London; and lead lights, &c., by J. Binder, London.

Mr. Melville Seth-Ward, F.R.I.B.A., was the architect.

Guildhall, Conway, North Wales.

From pre-war days representations had been made by more than one County Court Judge that the accommodation provided in the Conway Guildhall buildings, put up some seventy years ago for both Judges' and the civic authorities' use, was in urgent need of improvement. A scheme was accordingly prepared for an entirely new building, and, although approved, had to be shelved through the war, and, unfortunately, for reasons of economy, had to be abandoned and a less expensive solution of the problem adopted by making use of the existing erection as far as possible, adding alongside a new court and subsidiary rooms to serve the dual requirements of Council and judges and magistrates. The site is adjacent to the ancient castle, and from local archives appears to have been continuously occupied by a Guildhall right on from the thirteenth century to the present day. The burgesses of Conway have been the proud possessors of a charter for over 600 years, Edward the First having granted it in 1284.

By absorbing all the available area of the restricted ground, adequate accommodation has been contrived to meet the increased requirements of the borough. The floor level, fixed by the former one, involved the flight of steps in the main approach, and another leading to the Judges' entrance and retiring rooms at the rear. Local stone of dark grey colour similar to the old building has been used for the walling, with Yorkshire stone for doors, windows and copings. The exigencies of cost compelled a simple treatment throughout, both exterior and interior; such enrichment as was allowable being confined to the public entrance, which carries the title "Guildhall" in carved letters with the ancient seal of "Conewey" above. The contract—about £6,000—is being carried out by Messrs. H. A. Clegg & Sons, of Chester, under the direction of Messrs. Douglas, Minshull & Muspratt, architects.

Wolverhampton Hospital Competition.

We publish this week the second preliminary design in the competition for a new Out-Patient and Casualty Department, Wolverhampton, Mr. W. Sydney Trent. The design placed first by Messrs. Elcock & Sutcliffe, was illustrated our last issue. We regret that owing to printer's error the estimated cost of the building was wrongly given. The correct amount is £45,578.

Workmen's Dwellings, Endell-street, London.

The new block of workmen's dwellings Short's-gardens, Endell-street, W.C., known as St. Giles's-buildings, has been erected by the Society for Improving the Condition of the Labouring Classes. The vacant site was purchased by the Society from the Holborn Borough Council for £5,500, and in addition to the workmen's dwellings a clinic has been built in connection with the Maternity and Child Welfare Committee of the Borough Council. The main building has been erected at a cost about £22,000, and the estimated cost of the clinic is about £2,750. The buildings will accommodate 140 persons, and consist of twenty-four flats. The largest of these (four in number) are of five rooms, and there are two of two rooms, and ten of three rooms. The builders were Messrs. Allen Fairhead & Sons, and the sub-contractors were as follows: Morden, Hayne & Co., Ltd., steelwork; Limm & Trinidad Lake Asphalt Co., Ltd., asphalt; Hardware Trading Co., sanitary fittings, bath &c.; Yannedis & Co., locks and door furniture; Malcolm McCloud & Co., artificial stone staircase; G. & F. May, hot-water installation; Gardener, Son & Co., escape stairs.

Architects were Messrs. Reeves, Son & Rance.

Architecture Club Exhibits.

Reproductions of a number of photographs which are now on exhibition at the R.I.B.A. Galleries, Maddox-street, are given in this issue. An article on the exhibition appears on page 626.

MEETINGS

FRIDAY, October 30.

Royal Sanitary Institute.—Mr. F. Wilkins on "Building Sites, Construction and Sanitary Planning." At 90, Buckingham Palace-road, S.W.1. 6 p.m.

Glasgow Architectural Craftsmen's Society.—Mr. J. Wilson Paterson on "The Preservation of Ancient Monuments." At the Royal Technical College. 7.45 p.m.

MONDAY, November 2.

Royal Institute of British Architects.—Inaugural Address by the President, Mr. E. G. Dawber, F.S.A. At 9, Conduit-street, W. 8.30 p.m.

Society of Engineers.—Mr. G. O. Case on "The Influence of Aggregates on the Strength and Properties of Concrete." At Burlington House, W.1. 5.30 p.m.

TUESDAY, November 3.

Society for the Promotion of Roman Studies.—Dr. R. E. M. Wheeler on "The Roman Fort Brecon and its Environs, 1925." At Burlington House, W.1. 4.30 p.m.

Institution of Civil Engineers.—Address by Sir W. H. Ellis, the President. At Gre George-street, S.W.1. 6 p.m.

WEDNESDAY, November 4.

Royal Archaeological Institute.—Mr. G. M. Rushforth on "The Painted Windows in the Chapel of the Wyne in Hampshire." At Burlington House, W.1. 5 p.m.

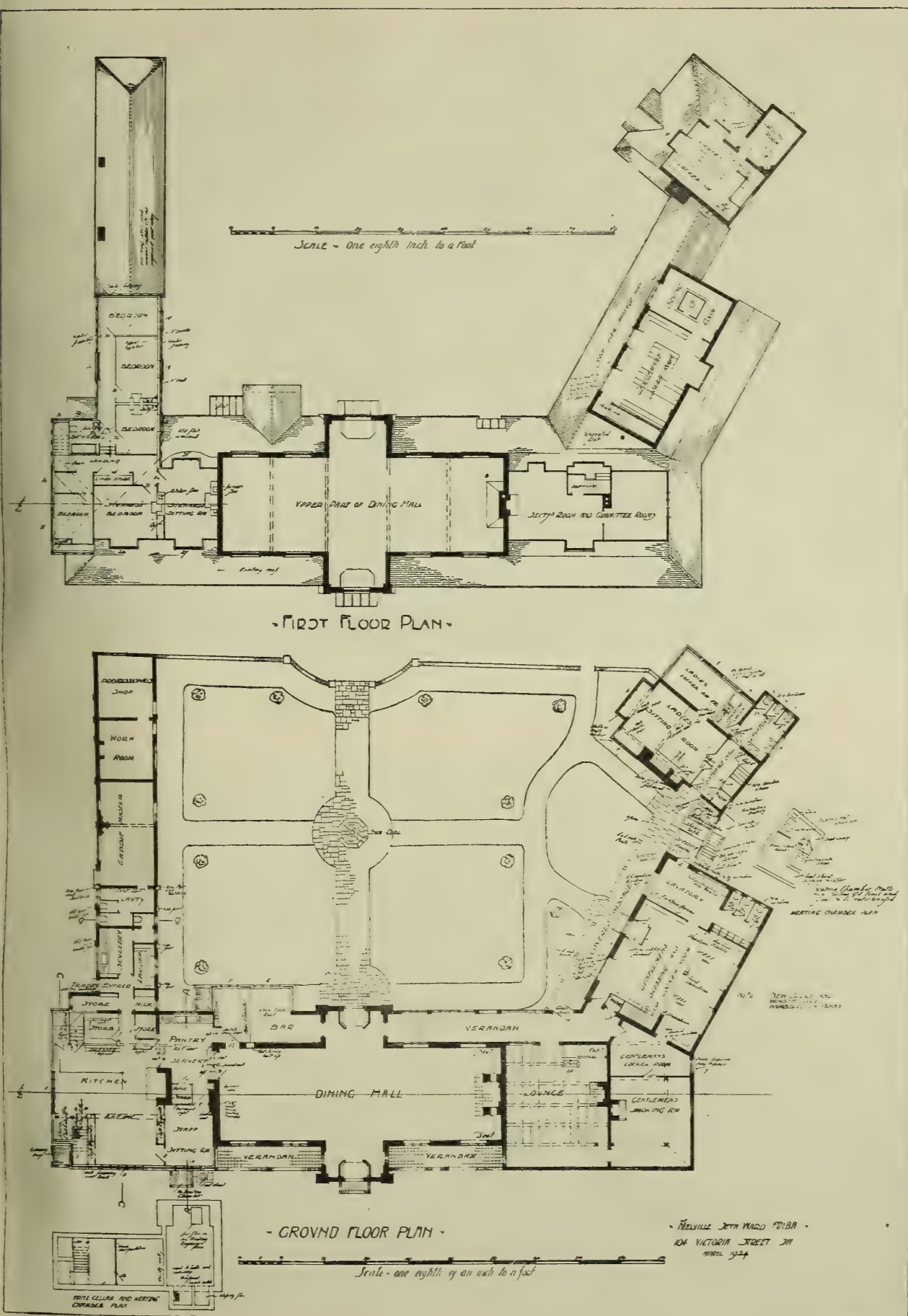
Institution of Sanitary Engineers.—Annual Dinner. At Holborn Restaurant.

THURSDAY, November 5.

Victoria and Albert Museum.—Mr. E. Millar on "English Thirteenth-Century Illuminated MSS." At South Kensington. 7 p.m.

Stepney Public Libraries.—Mr. W. J. Roff on "London's Dickensland." At 236, Cab street, E.1. 8 p.m.

Structural Engineers.—Presidential Address by Sir Charles T. Ruthen, O.B.E., F.R.I.B.A. At 296, Vauxhall Bridge-road, S.W.1. 7.30 p.m.



Plans of Golf Club House, Denham, Bucks.

MR. MELVILLE SETH-WARD, F.R.I.B.A., Architect.



Architecture Club Exhibition.

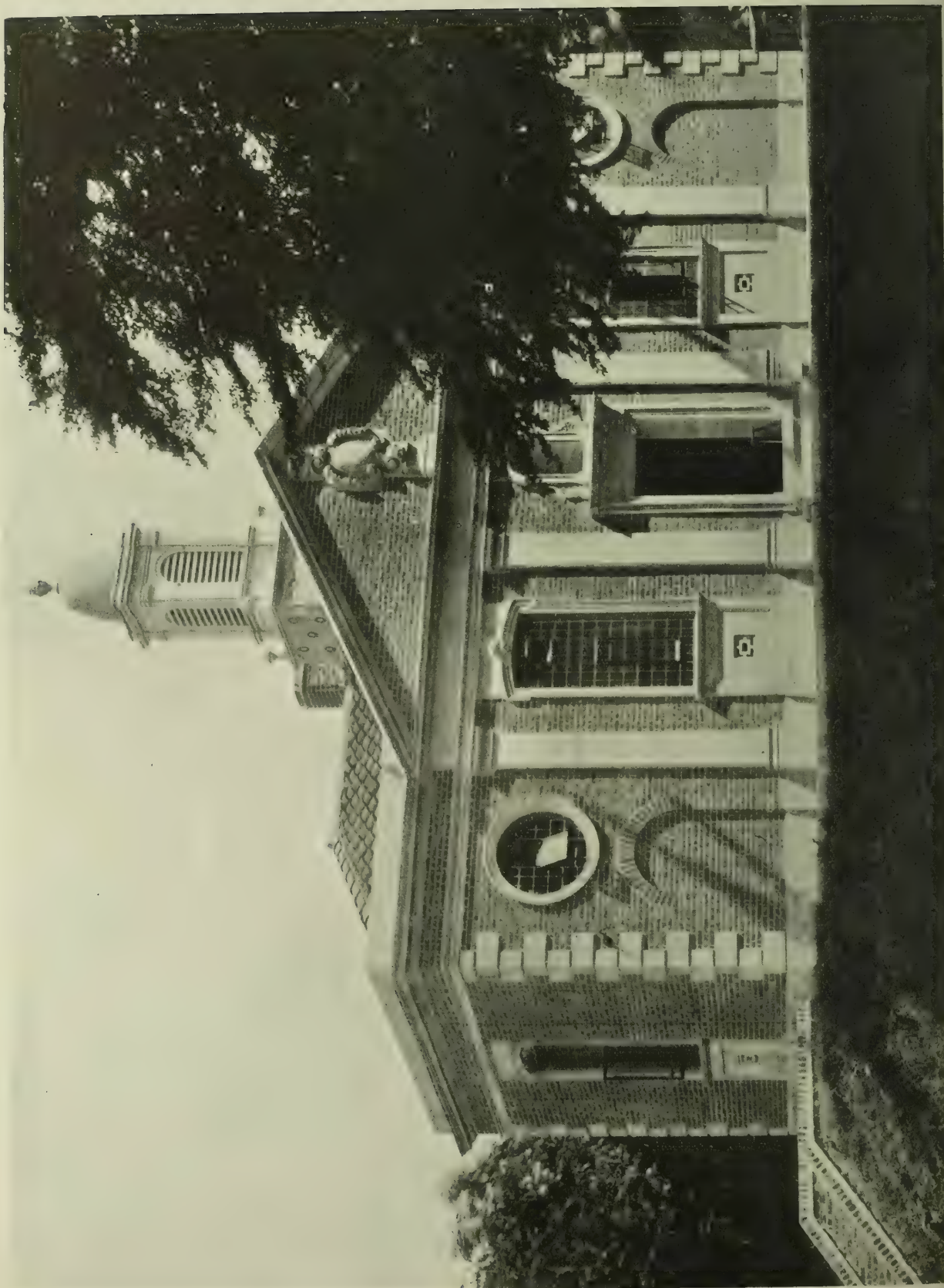
Berkhamsted School Memorial Library.



Architecture Club Exhibition.

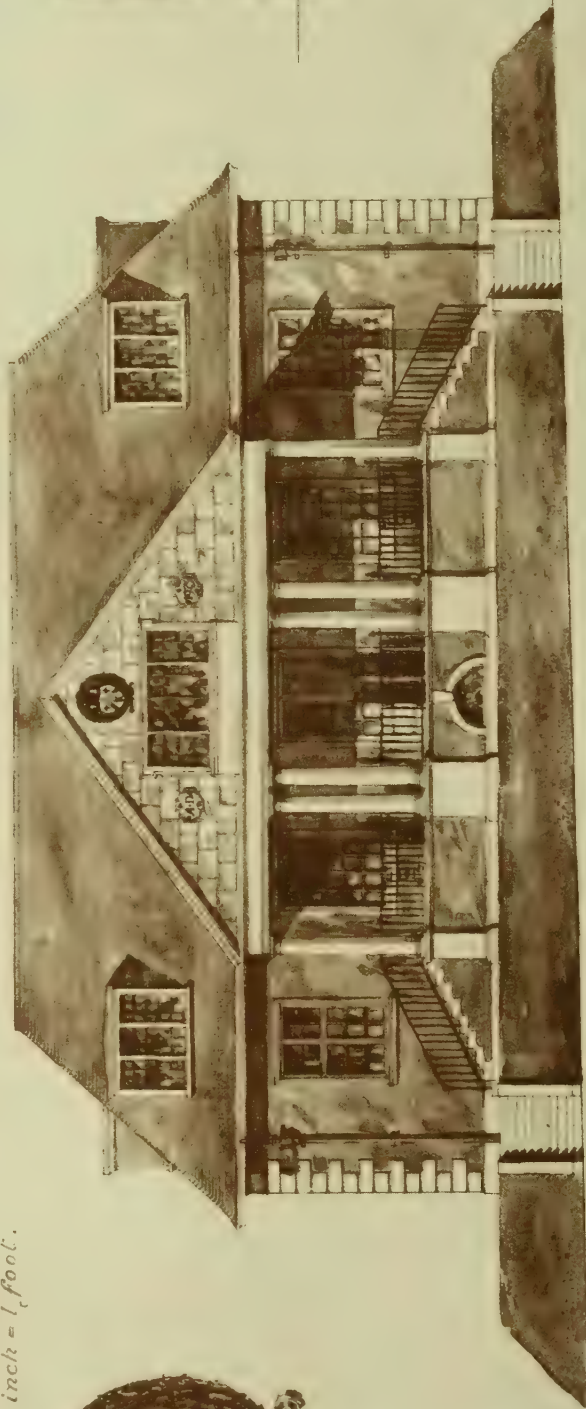
Royal Veterinary College Research Institute, Camden Town, N.

MESSRS. FORSYTH AND MAULE, F.F.R.I.B.A., Architects.



Architecture Club Exhibition.

SPORTS PAVILION for
CLIFTON COLLEGE.
Scale, $\frac{1}{4}$ & $\frac{1}{8}$ inch = 1 foot.

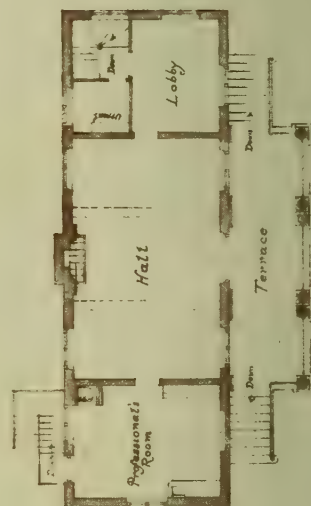


SECTION

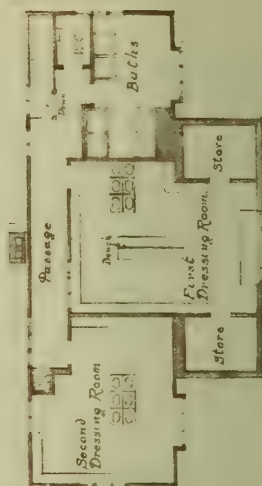
ELEVATION TOWARDS PLAYING FIELDS.



VIEW FROM THE NORTH-WEST.



GROUND FLOOR PLAN



FIRST FLOOR PLAN

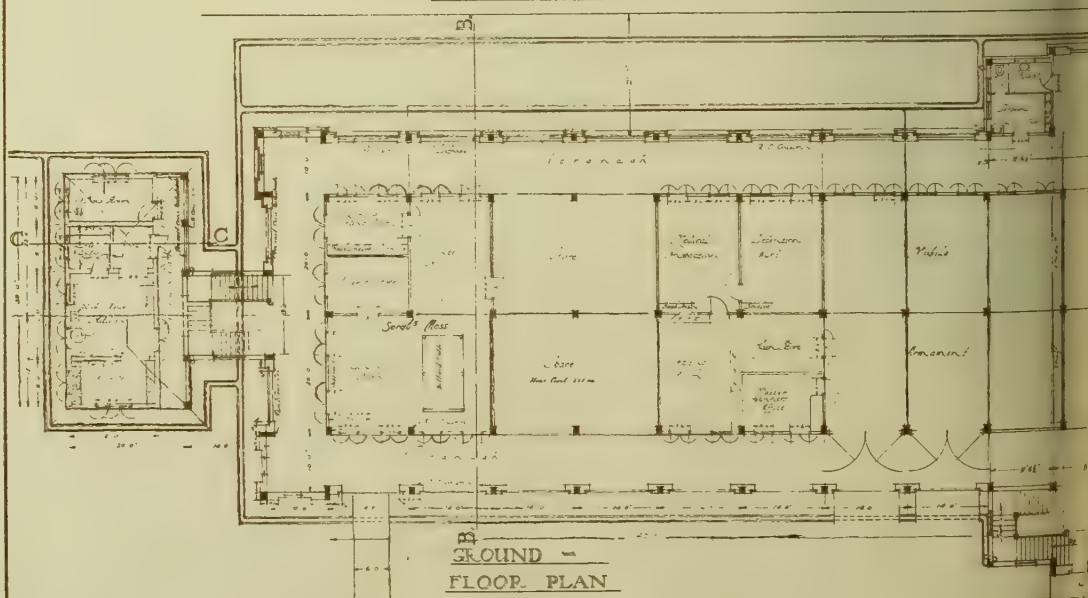
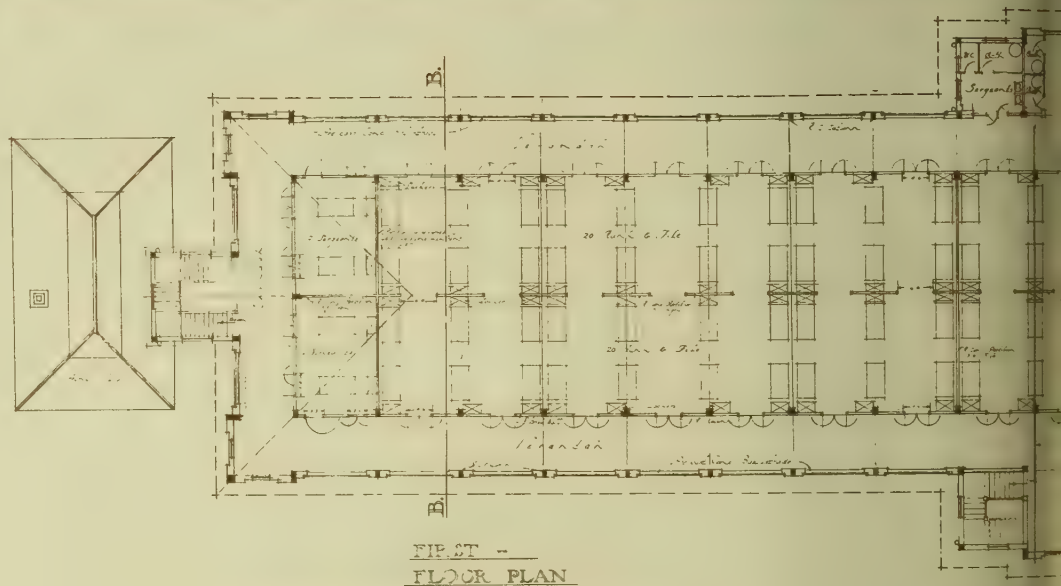
Edward Warren
March 1925



GOLF CLUB HOUSE, DENHAM. MR. MELVILLE SETH-WARD, F.R.I.B.A., ARCHITECT.



R.A. EXHIBITION, 1925.

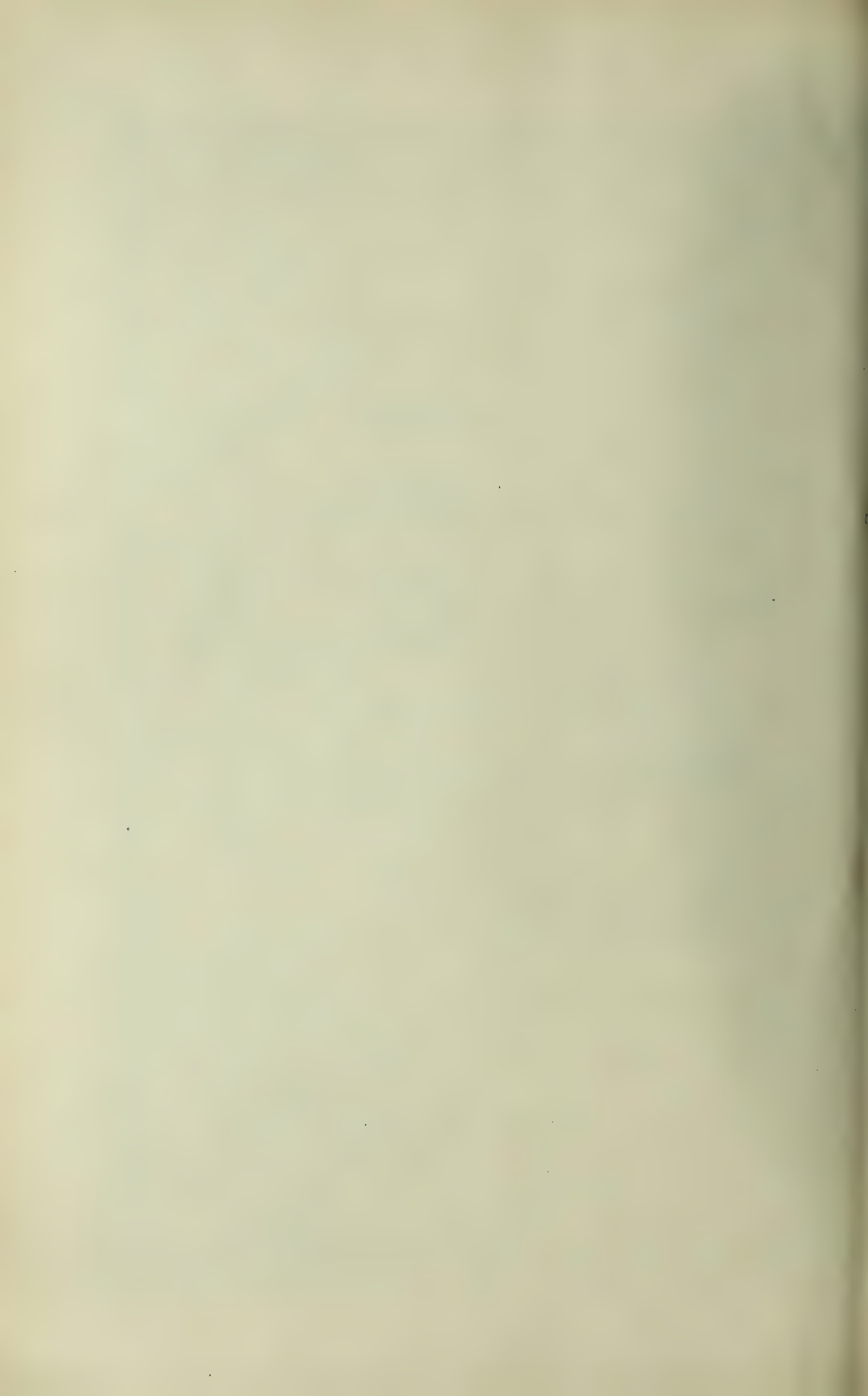


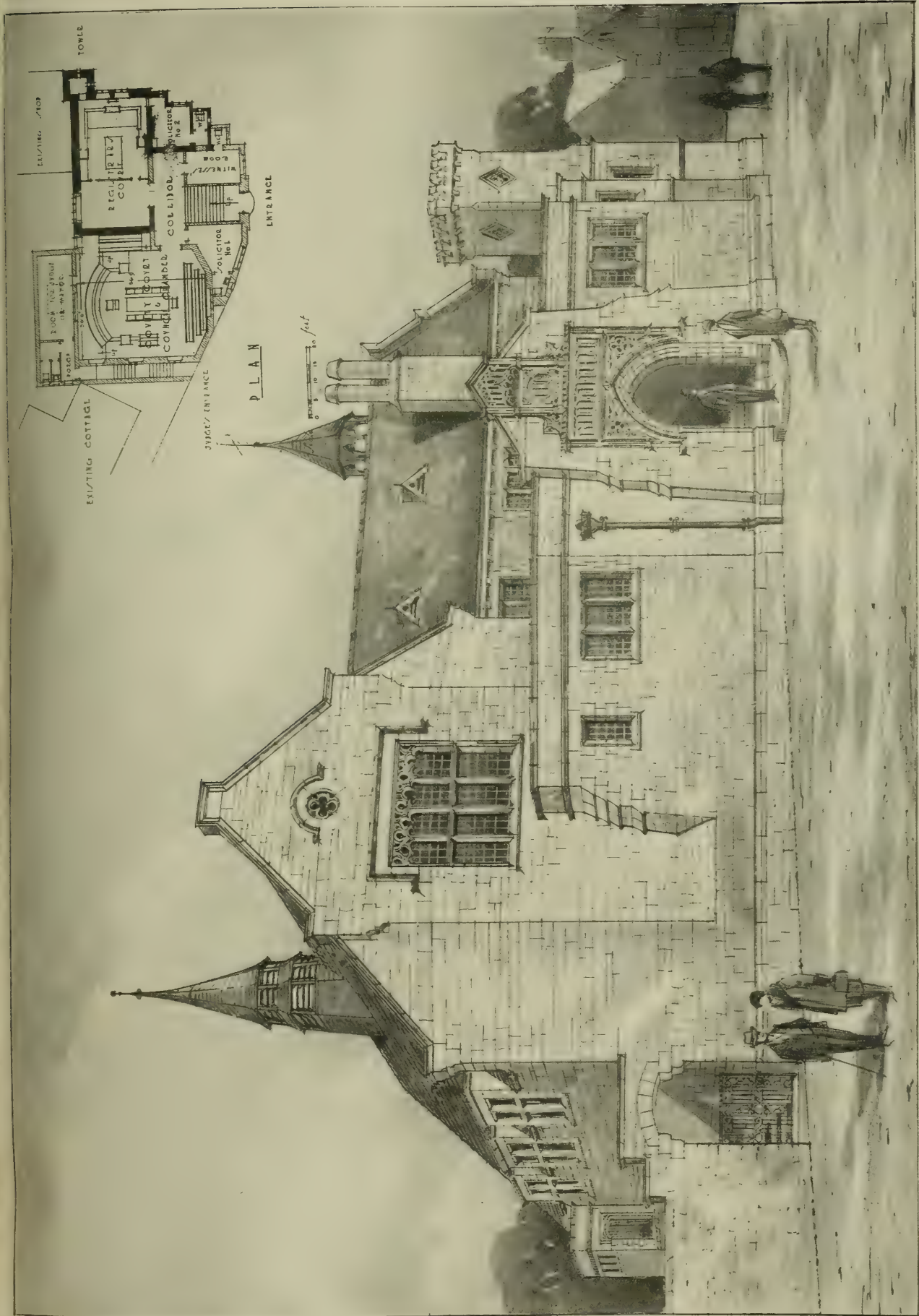




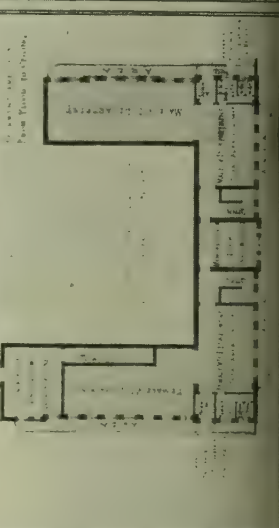
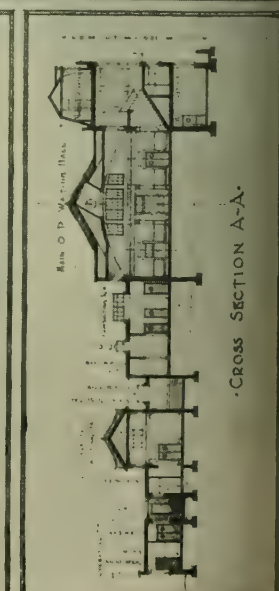
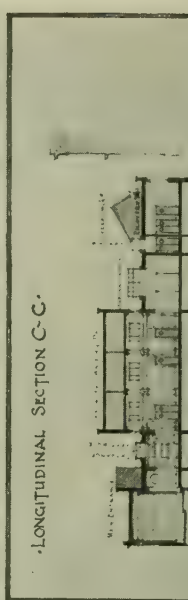
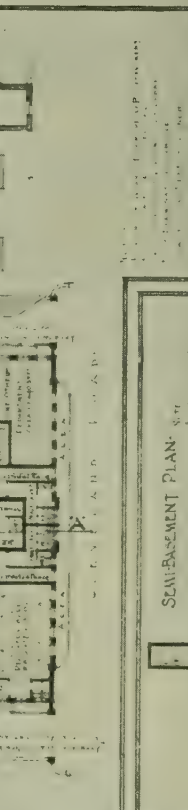
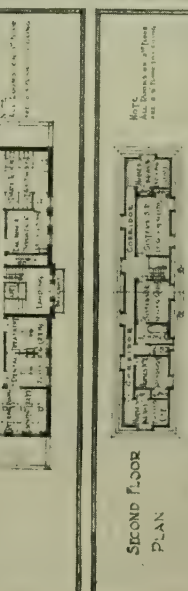
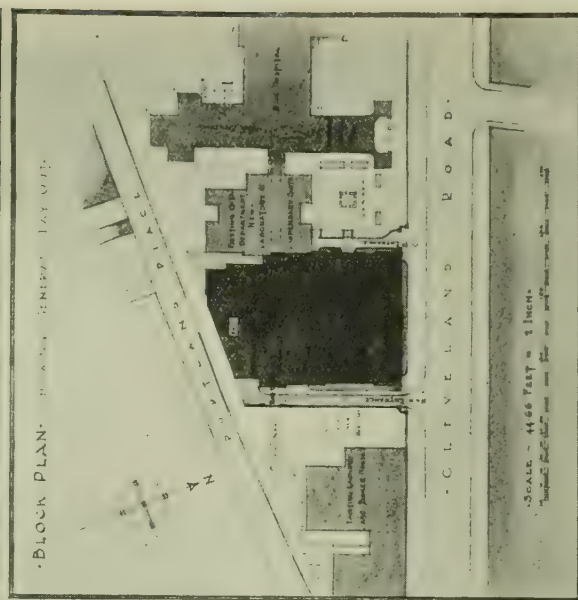
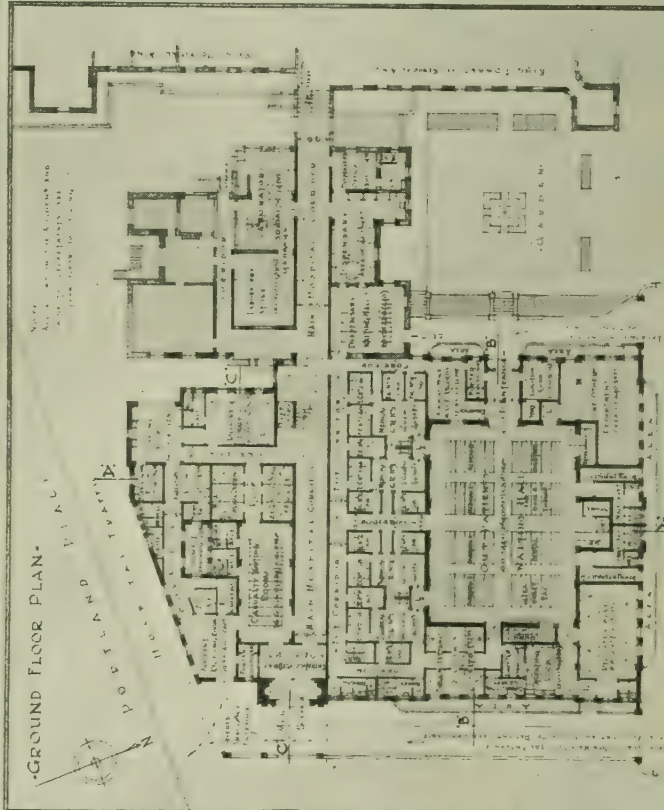
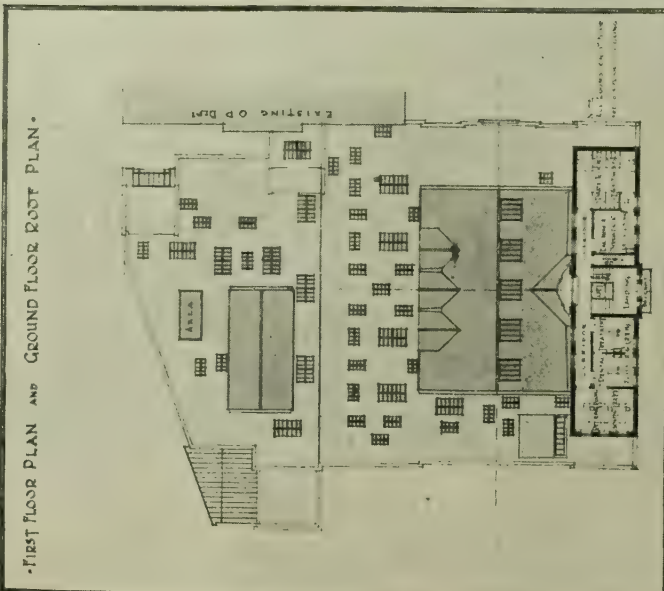
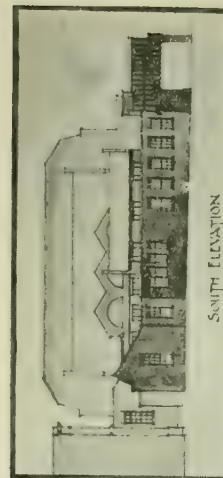
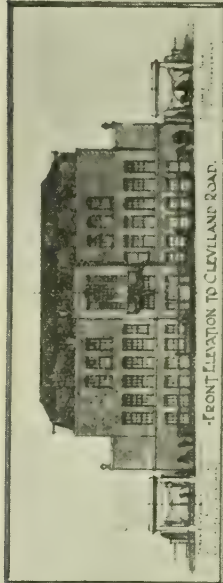
City of London School Memorial Sports Pavilion, Grove Park.
Messrs. Ralph Knott & E. Stone Collins, F.F.R.I.B.A., Architects.

Architecture Club Exhibition.





Conway Guildhall, North Wales : Alterations and Additions. MESSRS. DOUGLAS, MINSHULL & MUSPRATT, Architects.

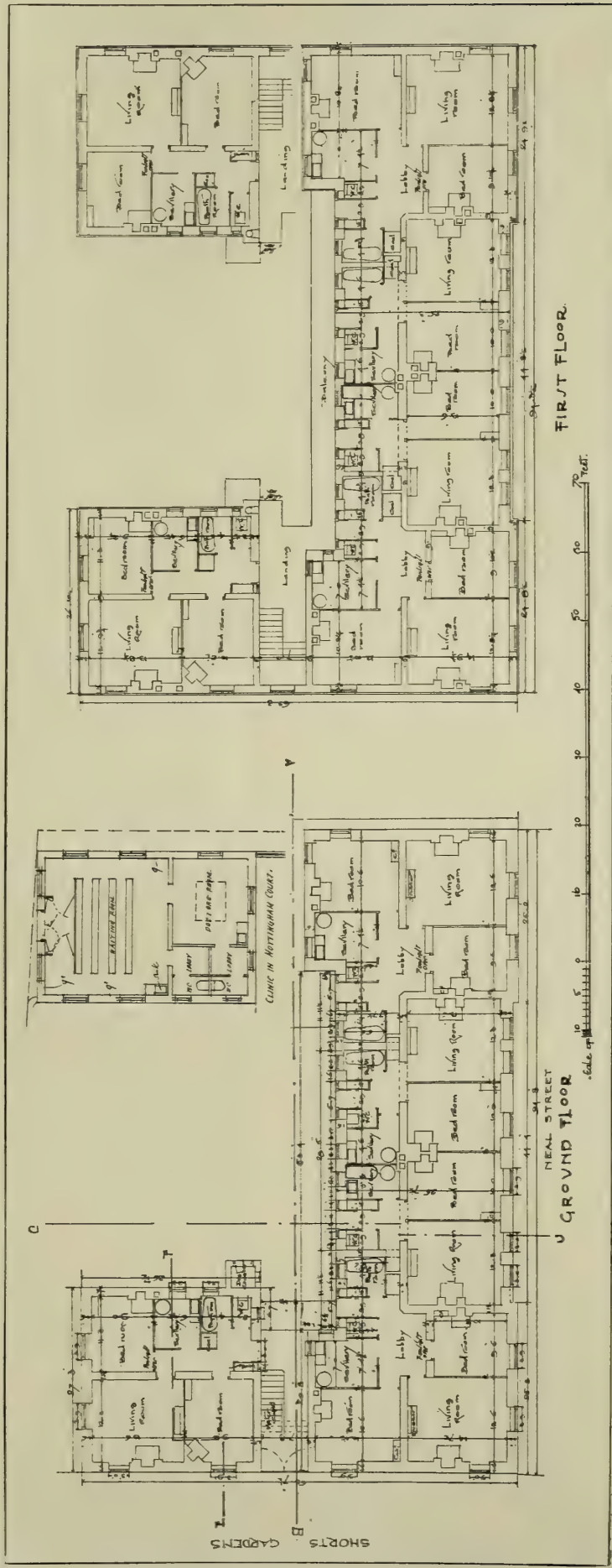
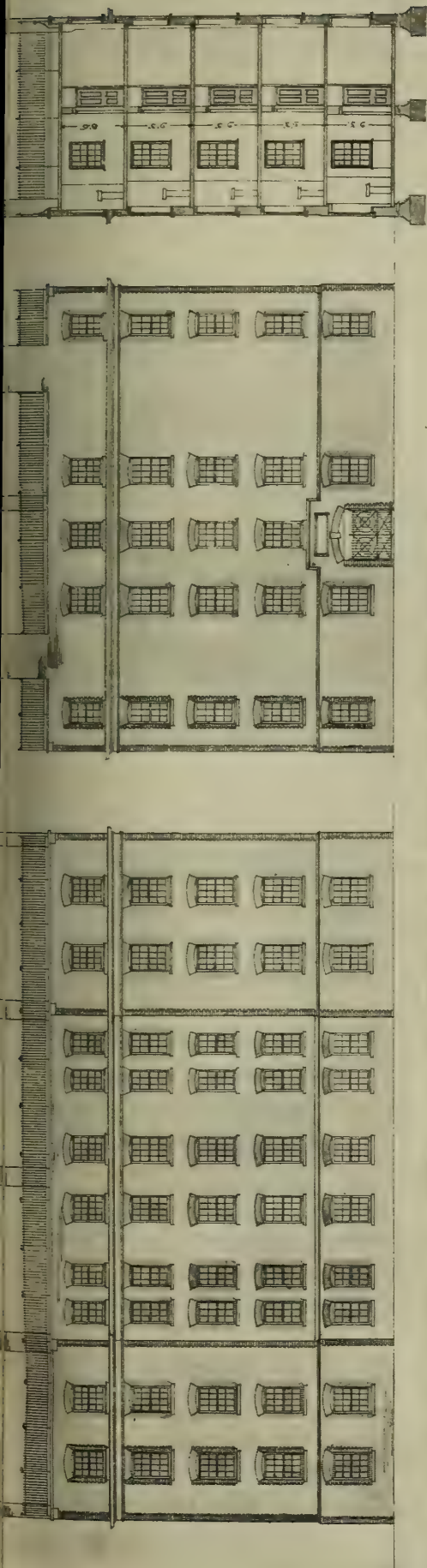


ESTIMATE OF COST

Total cubic contents of New Building - 287,150 cu ft

Estimated Cost - \$84,300-00

DRAWING No - 10



New Block of Model Dwellings, Short's Gardens, Drury-lane, London. Messrs. Reeves, Son, & Rason, Architects.

ARCHITECTURE AND SCULPTURE AT THE GLASGOW INSTITUTE

By BENVENUTO BRUNELLESCHI.

"Every noble city has been a crystallisation of the contentment, pride and order of the community."—*Lethaby*.

"Self-expression is a human need that cannot be suppressed without a host of resultant disorders."—*Clutton-Brock*.

THE Royal Glasgow Institute is to be congratulated on reinstating architecture, after many years of neglect, to a definite position in its annual show. Mr. John Watson, F.R.I.B.A., who, we understand, is responsible for bringing together and hanging the architecture shown, is to be commended for his discrimination and tasteful arrangement. Although the architectural room is little more than 20 ft. square, one has only to mention that it contains one drawing by Mr. Walcot, three by Mr. Farey, three by Mr. Bucknell, and one by Mr. Bradshaw to realise that pictorially it cannot lack distinction. To say that "the man in the street" does not understand architecture as expressed by such drawings is to insult his intelligence, and if he can appreciate the architectural paintings of such men as Canaletto and Sargent (as he says he does) there can be no longer any excuse for the lack of interest in such work by the general public. It is certainly unfortunate that the Institute has curtailed the water-colour section to make room for this collection of architecture, and we feel that some of the space allotted might have been taken from the oil-painting section.

The place of honour in the architectural room has been awarded to Sir Herbert Baker's interior of the central dome of the Legislative Buildings at Imperial Delhi. This drawing, by Mr. Bucknell, shows a classical interior on somewhat Roman lines. The distribution of the mural decorations is particularly happy in composition, while the scale of the coffered dome is in perfect harmony with the lower order on the ground floor. The scale of the Indian-like band of enrichment round the drum of the dome might have been slightly increased to advantage.

Mr. A. N. Prentice shows two interiors from the new Orient liner "Orama"—the "Dining Room" and the "Smoke Room." They are on severe Classic lines, and although drawn with great skill, suffer somewhat by over-neatness in the handling of the water-colour. New premises, Doncaster, for Westminster Bank, by Messrs. Brierley & Rutherford, is a pleasing Ionic Renaissance façade, showing distinct Wren and Bryce influence. It is rendered in Mr. Walcot's usual facile and understanding manner. Such work shows that our sanest men are still carrying on the best elements of British Renaissance.

Messrs. Watson, Salmond & Gray show the extension to the Municipal Buildings, Glasgow—a fine drawing by Mr. Farey of an Ionic façade. The solidity of the design is somewhat marred, however, by the over-emphasis of the casements and astragals, while the blocking and attic seem somewhat heavy. The detail is certainly an improvement on Young's work. Messrs. Keppie & Henderson show the quadrant rebuilding at Glasgow Cross. This work carries on the best traditions of the firm and possesses that freshness of arrangement of Renaissance detail which we always find in the best modern Glasgow work.

Messrs. A. N. Paterson & Stoddart show a model of a Mausoleum in a private park somewhat reminiscent of a Chambers garden temple. Mr. James Millar exhibits a photograph of the interior of the great hall at the Institution of Civil Engineers, Westminster, S.W. It is on the lines of the Scottish Renaissance work by Bruce. In the photograph, the treatment of the ceiling and the ceiling decoration seems somewhat large in

scale for the wall pilaster treatment. In his Abbey Church at Fort Augustus, Mr. Reginald Fairlie has captured most successfully, in his free Romanesque interior, the monastic spirit, and his personal interpretation of Romanesque detail preserves that unity of scale which marks all his church work with such distinction. The incised coloured leatherwork of the Baldachino is a great success. Sir John Burnet, Son & Dick show six photographs of the Savings Bank, Glasgow, Bridgeton Cross Branch; New Baptistery, St. James's Church, Edinburgh; and the Hunter's Memorial, Glasgow University. The Bank is in Sir John's characteristic Burnetesque Renaissance manner. The screen in the Baptistery seems much too heavy in detail for the arcading of the church, and the Memorial, although fine in detail, suffers materially from the scale and detail of the background. The New Town Hall, Hamilton, by Messrs. Cullen, Lochhead & Brown, shows a Renaissance building of the "Belcher-Rickards" type. While possessing certain monumental qualities, it is somewhat lacking in unity of composition and the detail of the twin towers, as shown in the pen drawing, seems rather too small in scale. The Hull Cenotaph, by Mr. T. Harold Hughes, shown by photograph, is fine in detail but somewhat lacking in harmonious composition between the masonry and the bronze work. The sculpture group is rather energetic in treatment for the simple lines of the Cenotaph and other architectural detail.

In the Scottish Veterans' cottages at Callander, Messrs. Stewart & Paterson have captured the true spirit of Scottish domesticity, both in design and treatment of masonry. The firm has studied Queen Mary's Bath at Holyrood and Pepper Mill to some purpose. In the New Chancel, Helensburgh Parish Church, the same firm displays a scholarly understanding of Gothic, the scale of the detail being finely preserved throughout. The Norfolk and Devon Screen work has formed a sound basis of inspiration for the woodwork. Messrs. Falconer, Baker & Campbell, in the suggested New Wing to Great Rissington Manor, Glos., are true to the traditions of the Weldon, Northamptonshire, type of English Renaissance.

Greenock War Memorial, by Messrs. Wright & Wylie, shows the usual combination of architecture and sculpture. The detail seems rather lacking in scholarship and the bronze work rather spotty in effect. The new Zoology Buildings, Glasgow University, by Sir John Burnet, Son & Dick, lack unity in design. The curiously unbalanced nature of the composition is probably due to the necessities of the internal arrangements.

Two drawings are exhibited of the rebuilding of Warrington Church Training College at Childwall, Liverpool, by Mr. A. H. Moberly. The drawings are in water-colour by Mr. Bucknell. The close and regular repeat of the fenestration seems rather monotonous, but no doubt the question of expense has entered very largely into this problem, thereby depriving the designer of the opportunity of getting a truly collegiate feeling into the design. Mr. Bucknell's drawing of the South Front is an excellent piece of water-colour.

In Mr. Walter Tapper's Little Coates Church, Lincoln, we have a fine drawing in a cool grey scheme of colour by Mr. Farey. Hambros Bank, Bishopsgate, London, E.C., another drawing by Mr. Farey, shows a front in brick and stone. The Corinthian pilasters have no structural or organic meaning and are rather overpowered by the heavy double attic story. There is something of Wren's Winchester College Chapel feeling in this design.

Alterations and additions to Easthorpe Hall,

near Malton, by Messrs. Brierley & Rutherford, consist of a Renaissance front rendered by Mr. Bradshaw. The handling of the colour is fresh and sunny. The ironwork is distinctly reminiscent of the work at York Beverley.

At the end of the Print Room a few architectural drawings are found. Sir John Burnet, Son & Dick exhibit a sketch of additions to Forsyth's, Edinburgh, carried to harmonise with the original portion of work. In Sir John's earlier manner rather restless and overloaded with detail. Mr. Reginald Fairlie, in Kilmany House, Fife, gives an example of his domestic Colonial Dutch in feeling. Proposed Main Hall, Stroud, by Messrs. Falconer, Baker & Campbell, is a fine example of pencil draftsmanship in the detail of the entrance way. It is a strikingly original design, a curious blending of Babylonish and Egyptian elements.

Only two Edinburgh firms are represented in this exhibition—Mr. Reginald Fairlie and Mr. William Davidson—the latter by drawing of a large Celtic Cross which has been erected at Newton Don, Kelso, as a memorial to late Captain C. B. Balfour, C.B. In design the crude elements of Argyll Celtic have been so adapted as to give almost Classic appearance to this large

Sculpture.

In the Greek Anthology, Praxiteles' Niobe is given as saying: "From the life the artist made me into a stone, and from a stone Praxiteles wrought me into life." Such might be repeated before Mr. W. M'Millan's beautiful white marble quarter length figure of "Syrinx," which occupies the place of honour in the Sculpture Hall. Critics who wish that this figure had been a full length fail to perceive the plateness of the composition as rendered, the grace of the lines in the arms, the subtlety of the pose of the head, the soundness of the modelling, and the almost Greek-like pretension of the spirit of the subject make it one of the most outstanding works in the gallery.

Another work of great charm is Mrs. M. Gabriel's "The Song of Birds"—a drawing of a young girl looking skywards with an expression of wrapt ecstasy, most completely realised, as Mrs. Gabriel's work generally is. Mr. D. M'Gill shows "The Bathing," a realistic piece of work with fine lines. Benno Schotz's decorative portrait of Cecile Walton Robertson is a good piece, but technically the work is not completely realised, and the arrangement of the limbs in the right hand is not sculpturally treated, the flower being too decorative. "Reverie," a seated nude statuette by the same artist, is more finished in handling, better in construction. His portrait by the R.A. and the R.S.A. were stronger and sounder work. "Le Belier Retif," "Bacchante," by Mr. E. A. Bourdelle, saw at the last R.S.A. show. "Jane," by Mr. A. F. Hardman, is subtly and delicately modelled. "A Modern Madonna," by Mr. C. W. Tyson-Smith, is fine in quality of sculpture, but the expression rather suggestive of a Magdalene than a Madonna.

"Mehariste en Vedette," by M. E. Navellier, is a statuette of an Arab on a realistic in detail and feeling. "Memories," by Mrs. Hilda B. Marsden, a female bust, great subtlety of expression and good modelling. "The Imp," (bronze head of a child which is really impish and suggests a Hal in the round) is by Miss Erica M.

"Statuette" is by Mr. W. Reid. It is a seated nude, crisply modelled and composed. "The Challenge," a lion standing by Mr. Allan G. Wyon, is strongly modelled in a fine architectonic manner. "Sandal," by Miss Elizabeth A. Clapp, cleverly composed figure of a little girl on a sandal. "Aureola," by Mr. C. Jackson, is a fine piece of stone carving.

of the hair suggesting Roman work as at Naples Museum.

"Rumschisky," by Mr. W. Reid Dick, is a piece of portrait work. "Panther and Bone" is a characteristic work by Miss M. Bone, in which the treatment of the vulture solves a difficult problem in the composition. Mr. William Blanton's sketch for a garden figure is a balanced classically composed figure of

J. Epstein, in his head of "Rima," is to have been inspired by one of Michelangelo's angel heads in fresco. "Mrs. Rumschisky," by the same hand, is a strong piece of character study. Epstein's "Mr. R. B. Blanton-Graham" is a masterly portrait. "Petia," by Mr. Allan G. Wyon, is a fine study of a head. Mr. A. Proudfoot has a colossal head, fine in feeling but rather awkward in handling. "A Dryad of the Forest," by Mr. Richard Garbe, is subtle and effective in composition.

It seems unfortunate that several of the best Scottish sculptors are unrepresented in the Glasgow show, but no doubt they are well represented on larger work which could not conveniently be shown in this gallery. The position of sculpture in Europe to-day is not altogether hopeless as some critics would have us believe, and the best work in this gallery will find its place in the true line of traditional art.

TRANSPORT AND HOUSING

At the Housing Conference, which was held last week in Dublin, Mr. G. Topham Forrest, Director of the London County Council, read a paper on the subject of "Transport." In his paper, he said, during the last three years the question of transport was one which greatly exercised the minds of those who were responsible for the many thousands of houses which were being created in the outlying districts. The crowding of the city resulted in the fact that the majority of the people in the outskirts were ten miles from their work. Then a great number of people came in by train, and the suburban railways were packed to their fullest capacity. Extending a railway, or building of a new one, was a costly thing.

In New York, the enormous amount of transport carried out by private motor cars was a serious problem. There a great many of the working class owned their own cars—mechanics, bricklayers, &c. He did not say the cars were Rolls-Royces, but they served the purpose. But still the suburban railways were packed. It was evident that, as they increased the housing in the outskirts they increased the distance of the journey from their place of work. The relation of transport to housing was a most important one. The way they could deal with it was by widening the streets, but that was a very long and tedious process. In London they were doing it in some instances—Euston-road, Regent-street, &c. It was progressing slowly, and it was years and years before they really widened a street. There was the question of zoning. In London they had formed a Town-Planning Commission, which dealt with the unbuilt portions. They dealt with the position of factories with regard to houses. There was also the suggestion of going higher; they had heard about the skyscrapers. When he looked at the crowded streets of London, and remembered the thousands of people which these buildings held, he wondered if they were going to get the people away. They would have to house the workers within a reasonable distance from their work. In the building of these houses, they could go much further than at present, even to nine stories in height, with, of course, much wider spaces. It was hard to get people to go out from the city; they must be housed near their work. They had to rebuild and re-house the people in the slum areas. In rebuilding on the slum areas, they were sometimes able to re-house 50 per cent. of the former population.

It was in a great many of the big cities the green spaces were vanishing, and he was sorry to see that something ought to be done to save them.

COCKERSAND ABBEY

At a recent meeting of the Cockersand Abbey Exploration Committee, held at the Storey Institute, Lancaster (Alderman Briggs presiding), the complete programme of exploratory work contemplated was very carefully considered. The opinion was generally expressed that the Committee have now demonstrated that the remains of Cockersand Abbey are of sufficient importance to demand more complete exploration. When they made their first trial explorations on the site in 1923, the arrangement of the buildings and their extent were a matter of vague speculation. Last year the work was resumed in the latter part of the summer, and only discontinued when weather conditions became unfavourable. So far it has only been possible to carry on the work in a spasmodic manner as funds have become available. The Committee, however, believe that when the true significance of their discoveries is fully realised all needful funds will soon become available. They consider that, in view of the importance of the remains, they should wait until they have in hand a sum adequate to enable them to proceed with their work in an exhaustive and systematic manner. The Committee wish not merely to explore the site, but to protect the walls and other newly-discovered remains from injury. It is thought that the tops of most of the walls unearthed should be protected, by covering them with concrete. Other kinds of reparation are also contemplated. Donations are invited and should be forwarded to the Hon. Treasurers, Mr. W. G. Collingwood, M.A., F.S.A., President of the Cumberland and Westmorland Antiquarian and Archaeological Society, Lancaster, Coniston, Lancs., and to Mr. Alan T. S. Holt, M.C., Solicitor, 2, Booth-street, Manchester.

The House of St. Mary-of-the-Marsh at Cockersand, to which reference is made in our leading article, was founded in 1190 for Premonstratensian or White Canons and survived until the Dissolution in 1539. It stands in a picturesque situation, on the exposed lowland between the estuaries of the Lune and the Cocker, apparently separated in former times from the mainland by the quagmires of Thurnham Moss. A more secluded, romantic situation it would be difficult to imagine. The surrounding country and distant hills present a singularly pleasant prospect, but the few hawthorns on the site, bent almost parallel with the ground by the fury of the winds, afford some indication of the fierce gales that frequently sweep over the adjacent country. Probably no part of the Lancashire coast is so much exposed and so little frequented.

Masses of masonry and the footings of ruined walls are seen, covering more than three acres of ground, and among these the Early English Chapter House, preserved as a burial place of the Daltons of Thurnham, stands alone. Its interior is a fine piece of thirteenth-century work, with a remarkable vaulted roof in four quadripartite bays, supported by a central shafted column with well-carved foliated capitals. Owing to the historical importance of the Abbey, it has been scheduled for protection as a National Monument by the Ancient Monuments Board.

The income of the house at the Dissolution in 1539 entitled it to be included among the Greater Monasteries and was inferior only, in Lancashire, to the revenues of Furness and Whalley. The exquisitely carved canopied stalls of about A.D. 1340, now in Lancaster Parish Church, are sometimes stated to have been taken there from the Abbey Church at Cockersand in 1543.

The exploration of the site in 1924 proved that the ground was even richer in remains than had been anticipated. The arrangements of the Church and of all the apartments around the Cloister were largely determined, although a few points were not finally solved. Even those doubts, however, may be speedily removed when work comes to be resumed. Traces of a small chamber with a tiled floor were found on the west side of the South Transept. Professor

Hamilton Thompson considered that this apartment might have been the Library and Sacristy referred to by the Commissioners of Henry VIII, and Mr. Swarbrick suggests that possibly over it the Night Stairs to the Canons' Dormitory may have passed. The tiling of the floor of this chamber still remains *in situ*. Close by, in a position further to the east than was anticipated, the foundations of the Pulpitum were found. Mr. Swarbrick has observed the proximity of these indications to the large mass of foundations at the north-east corner of the South Transept, which has long aroused curiosity, and points out that it may form the base of the staircase which would give access to the top of the Pulpitum. It will be remembered that the pair of great organs, mentioned in the Inventory prepared by the Commissioners of Henry VIII, stood, it was stated, on the rood-loft. Professor Hamilton Thompson is of the opinion that the organ was most probably on the Pulpitum, judging by analogies elsewhere, and that the reference to the rood-loft in the Inventory is a very loose use of the term. Mr. Swarbrick, moreover, called attention to the presence of large blocks of millstone grit in this mass of foundations and observed that grit-stone only appears to occur in the later work at Cockersand, the earlier remains being entirely of red sandstone, which was doubtless more readily obtainable. It therefore seems that these foundations may belong to later constructions such as the Pulpitum staircase. Another detail of some significance is the presence of a straight joint, across the north wall of the Choir. The reason for this may become more clear when the exploration of the site is resumed. Traces of an entrance to the Lady Chapel were also found and also structural remains on the line of the wall that ran in a north-westerly direction from the Lady Chapel. Much may still remain to be unearthed in this quarter. Attention was, however, largely diverted from it last year by the discovery of the substantial foundations of an unknown structure on the south side of the site, adjacent to the massive drain of the Abbey. It was at first thought that this might be the rere-dortoir or a portion of the Infirmary building; but, in the course of his lecture at the Manchester University, Professor Hamilton Thompson stated that the southern foundations may have belonged to the Abbot's House, which, owing to the encroachments of the sea and gales, may have been transferred from the exposed west side to the more congenial south side of the site.

One of the most interesting views revealed by the excavations last year was the one through the south porch, across the cellarge of the Refectory, and through the opposite doorway, which admits to the Cloister. This portion of the remains will probably become even more interesting when the masses of earth that still encumber the cellarge have been removed. Across this chamber a considerable length of seamed lead pipe has been found, which appears to have conveyed the waste water from the Canons' Lavatory in the Cloister. The builders of mediæval abbeys were undoubtedly sanitarians.

Liverpool Health Report.

We have received the 1924 Report on the Health of the City of Liverpool, compiled by the Medical Officer of Health. We see from the Housing Section that Liverpool suffers from a serious shortage of houses; there are at present existing approximately 2,250 houses of the worst type, and 6,000 in a very bad state in regard to sanitary arrangements; 6,000 houses have been erected recently, and are now occupied, and contracts have been entered into for 3,206 further houses and 169 flats, but by the provision of these the Committee has not overtaken the arrears, and still less has it met the needs of the growing population. It is estimated that the natural shortage of dwellings within the city amounts to 8,000 to 10,000 houses.

LEGAL SECTION

NOTES ON CURRENT CASES

Breach of Covenant: Affixing Electric Advertisement.

THE case, *London County Council v. Hutter* (1925, 1 Ch. 626), raised a point which should be noted. The plaintiffs were the London County Council, successors in title of the original lessors, and the defendant was the successor in title of the original lessees of premises at the corner of Piccadilly and Shaftesbury-avenue, which had originally been leased from March, 1885, for a term of eighty years. The premises were used by the defendants as a restaurant, and they, without the consent of the plaintiffs, had installed on the facade of the building fronting both streets an electric light advertisement set in an iron framework, 75 ft. long and 10 ft. high, which ran round the whole frontage of the building, which had a rounded off corner at the junction of the two streets. This framework was bolted to and supported by twelve tee irons and eleven iron brackets cemented into holes cut in the stonework of the building, twenty-three holes having been cut for this purpose about 2½ in. square and 6 in. deep. The advertisement was not necessary for the plaintiff's business, but related to a make of gin and the defendant received payment for its display.

The action was brought for a declaration that the framework constituted a breach of the following covenant and for a mandatory order for its removal. The covenant was: "That the lessee, his executors, administrators, or assigns, will not during the said term, without the previous written consent of the lessors, their successors, or assigns, cut or maim any of the principal walls or timbers of the building . . . or commit or permit any waste or damage to the said building, or to the floors or timbers thereof, or make or permit to be made, any alteration in the elevation of the buildings, or in the architectural decoration thereof." In the judgment delivered in this case, this covenant was considered as divisible into three branches, thus (1) a covenant not to cut or maim any of the principal walls; (2) not to commit or permit waste or damage to the building or to the floors or timbers; and (3) not to make any alteration in the elevation or the architectural decoration.

The Court held that the cutting of the twenty-three holes was a breach of the first division of the covenant. If the framework of the design was unbolted and removed the tee pieces and brackets would remain as a permanent addition to the fabric of the building, unless cut out, and the cutting out would leave the stonework holed and deteriorated. What had been done would also, under the second division, amount to damage to the building, and the Court also held that, under the third division, there had been an alteration in the elevation and also in the architectural decoration, for one of the holes had been cut through the moulding round one of the windows in the architrave. The Court added that this "alteration" was not performed in connection with the ordinary user of the premises, and, therefore, did not fall within any such exception as that illustrated in the case *Bickmore v. Dimmer* (1903, 1 Ch. 156; *The Builder*, December 13, 1902).

In *Bickmore v. Dimmer*, the premises were being used by jewellers and clock makers, and they had affixed a large clock to the exterior of the building by means of bolts driven into the structure. The covenant in that case was "not to make or suffer any alteration" to the demised premises. The court of first instance had granted a mandatory injunction, but the Court of Appeal had set this aside on the ground that the word "alteration" in the covenant must be limited to alterations which would affect the form or structure of the building; but Lord Justice Stirling laid it down that there must be excepted from the covenant not only things absolutely essential to the carrying on of the business, but also things fixed on the pre-

misses for the purposes of carrying on the business in a reasonable ordinary, and proper way. The reason why the Court, in the case we are considering, held this dictum could not apply, because the sign was affixed to the premises for a purpose wholly extraneous to the business carried on by the lessees, but to enable the wall to be used as an advertising station.

Another case was distinguished by the Court in considering this third division of the covenant relating to the elevation and architectural decoration, *Joseph v. London County Council* (1914, *Weekly Notes*, 204). In that case the covenant was very similar to that in the case under consideration and the addition complained of was an electric light sign, but it was so attached to the building as not to affect the fabric at all. It is not stated in the report what was the nature of the business carried on on the premises, but from the context it appears that in that case the advertisement of whiskey, Bovril and Ginger Ale was connected with the business, and in that case the Court appears only to have referred to *Bickmore v. Dimmer* to point out the distinction in the covenant that, being a simple covenant not to make "any alteration," whereas in the case it was considering the covenant was a long compound covenant dealing with the preservation of the building. The decision turned upon whether there had been an alteration of the elevation or architectural decoration, and the Court held that an alteration in appearance did not infringe the covenant; there must be some alteration in the fabric of the building.

From a consideration of the above cases the deduction might possibly be drawn that even an alteration which affected the fabric of the building might not be held an "alteration of the elevation and architectural decoration," provided that it had been made for a purpose ordinarily necessary for the business carried on by the lessees, but we think that would be straining the effect of the decisions. *Bickmore v. Dimmer* has been acted upon as a general guide, but it must be remembered that, as we have pointed out above, the covenant in that case was a very limited covenant and the dictum as to things fixed to the building in the ordinary course of the business was that of only one of the members of the Court of Appeal. Lord Justice Cozens Hardy in the same case indicated that if, after entering into such a covenant, the covenantor, notwithstanding notice of objection by the covenantee, deliberately committed a breach of the covenant, a mandatory injunction should be granted provided there had been no laches on the part of the covenantee. If, therefore, the lessor of premises considers that the lessee is committing what he deems an obvious breach of covenant, he should at once give notice of objection to his lessee, but there is still the difficulty of determining what is a breach of the covenant. If the fabric is unaffected and the alteration will affect the appearance only, then both *Bickmore v. Dimmer* and *Joseph v. London County Council* show there is no ground for an injunction, but supposing the fabric to be seriously affected and yet the purpose for which the alteration is being made to be connected with the ordinary conduct of the business, what is the position then? We submit, but there appears no actual authority upon the point, that the real effect of *Bickmore v. Dimmer* would appear to be that if premises are let by a lessor for use in a particular business, any alteration that should reasonably have been within the contemplation of the parties could not be objected to under a covenant which only prohibits the "alteration" of the elevation or architectural decoration; but any alteration unusual in its character and serious to the fabric could be objected to. It would thus appear to be a question of fact to be determined whether the alteration was one which reasonable persons would contemplate or whether it went outside

those limits; but as we have said there is no definite authority upon this point.

Consents to Assignments.

In our Legal Section for June last the case *Houlder Brothers & Co. v. Gibson* at the time that note was written the judgment of the Court of Appeal had not been reported in the Law Reports, and we intimally should refer to the case again. The case is now reported, 1925, 1 Ch. 575.

It will be remembered that the plaintiffs were lessees of certain premises, and the premises contained a covenant by the lessees that they would not assign, sublet or part the premises of the premises, or any part thereof, without the consent of the lessors, "such consent to be withheld unreasonably in the case of a respectable and responsible person of good repute."

The plaintiffs desired to assign the premises to a firm who were in every way respectable and responsible, and the only objection to the assignment was that the firm were tenants of other property of his adjoining premises in question, and that if he consented to the assignment he would lose them as tenants. The Court below held that this was no reason for refusal, and this decision was affirmed by the Court of Appeal, but the case was put as to whether, as Counsel for the plaintiffs put it, the proviso to the covenant is in relation to whether it has to be construed with reference to the relationship between the parties of lord and tenant. That is to say, can the object because of some injury he anticipates to other property of his, or must there be a connection between the objection to the particular property the subject matter of the lease, or to the person to whom it is proposed to be assigned.

Counsel for the appellants, the lessors, contended there was no case directly in point. The Court of Appeal, in considering this question, agreed with the judgment delivered in the Court below that although the injury threatened and apprehended and made the ground for refusal by the lessor may be in respect of relation to other property of the lessor, the ground must arise either from the user of the demised property proposed or the personality of the proposed assignee.

In the Court of Appeal the case mainly turned upon the case of *Bates v. Donaldson* (1892, 2 Q.B. 241), as some reliance had been placed by the appellants, the lessors, on the judgment delivered in that case by Lord Justice Kay, passage relied upon being: "So I should not think there might be other reasons" (i.e., than the proposed user) "personal rather than the relation of the lord than the tenant which might justify refusal under the terms of this covenant." Lord Justice A. L. Smith, however, in the same case had put his judgment thus: "I am not in my opinion, the true reading of the clause that the permission can be withheld in order to enable the lessor to regain possession of the premises before the termination of the term. It was, in my judgment, inserted *intuitu* altogether, and in order to protect the lessor from having his premises used or occupied in an undesirable way or by an undesirable tenant or assignee." The Court of Appeal preferred the latter portion of this extract from the judgment of Lord Justice A. L. Smith to that of Lord Justice Kay, but the meaning is made absolutely clear by Lord Justice Warrington in the following passage:—

"The user of the property to be reasonably objectionable need not necessarily be objectionable to the lessor as lessor of that particular property. The user of the property may damage the lessor in other ways, and if it is then an objection to that user would be reasonable; but whichever way it is looked at, you must find in the objection some connection which connects it either with the person of the intended assignee suggested as the

nt of the property, or with the user which s likely to make of the property to be ned to him." The Lord Justice then trated his meaning by referring to the Governors of Bridewell Hospital v. Fawcner (times L.R. 637), a case relied upon by the rs in this case because what was there ehended was damage to the lessor in ect of other property of his. In that case proposed assignee was the General of the ation Army, but as the Lord Justice pointed the damage which was apprehended would resulted, if it resulted at all, in that case r from the personality of the proposed nee or from the user to which he was likely ut the property. There the refusal was onal rather to the landlord than to the nt, but it had reference to the user of the erty, and Lord Justice Warrington pointed that Lord Justice Kay in the judgment he erred in Bates v. Donaldson may have had a case in contemplation.

ne case is very important for it has cleared ubs and made it clear that the reason refusal of consent to an assignment must something affecting the subject matter of contract which forms the relationship een the landlord and tenant, and not as the case under consideration something ly extraneous to, and completely dissociated n, the subject matter of the contract.

LAW REPORTS

Building Material. Question of Trade Custom.

BEFORE his Honour Judge Alan Macpherson Ross County Court, an action was brought ntly by Charles E. Sutcliffe, a brewer, and r of the Barrel Brewery, Ross, against k Truscott, builder and contractor, for the rn of certain goods and effects, viz., a tank brass fittings, flagstones, etc., valued at 15s. the plaintiff further claiming 30s. ges for the detention of such goods.

r. Lionel Lane, of Gloucester, appeared the plaintiff, and Mr. Herbert Williams, onmouth, was for the defendant.

r. Lane, in opening the case, said the de- ant had to carry out certain alterations at Hostelrie Hotel, Goodrich, and in doing rried away a tank with brass fittings and ain flagstones which were taken up from kitchen floor and outside. Though re- ed requests had been made for the return ese goods, and promises made to do so by defendant, the articles were still retained im.

r. Williams said he might say at once his pce was that in accordance with the m well-known in the building trade these aterials, if not particularly specified for he terms of the contract, became the pro- y of the contractor.

r. Thomas Platts, of the Waverley Hotel, r, said he was tenant at the Hostelrie n the alterations were carried out. The en, from which the flagstones were re- ed, was 15 ft. by 30 ft. There were a few square yards of stone outside. flagstones were to be used in the path ing to the Old Castle roadway, and they e instructed to be taken into the orchard. ndant, however, took them into the road. spoke to Truscott about it, and defendant it was just as easy to take them round lane as through the garden. The flag- es were never taken into the orchard. He a man loading the stone up and he told to unload them, which the man did. They e taken away in his (Mr. Platt's) absence. valued the stones at 9s. per square yard. price of the tank would be £5 when new, £2 second-hand. The window frame d be worth from 30s. to £2. The flag- es were in such a condition that they were ed to be put down again, and they were broken.

he defendant said he had been in the build- trade 35 years, including ten years as an, and it had always been the custom

for the builders to take away the old materials, if they were not mentioned in the contract. In some cases they used parts of the old materials, and it would place them in a very difficult position if they did not abide by this custom. All he took away of the flagstones was about five yards.

Mr. William Bevan, a master builder, of Ross, and president of the Herefordshire Builders' Association, said he had been in business nearly 25 years. There was a custom in the building trade, well known to both builders and those people who employed the builders, of taking away these surplus materials. Personally he had never been asked to return anything.

Mr. Walter Smith, of Monmouth, formerly surveyor to the Monmouth County Council, and consulting surveyor, said in large contracts allowances were generally made for old materials. It should be stated in the specifications as to whether the contractor was to have the old materials or whether allowances were to be made for them. If such was not done then the old materials became the property of the contractor.

His Honour said this was a most important case. It was not a new one to him. He had listened very carefully to the evidence on this occasion, and he was quite satisfied that there was no such custom. He said quite candidly that he did not like this claim on the part of the builders. There was bound to be a limit, and it must be confined to only very small articles. One of the witnesses admitted that in large contracts these things were provided for, and something ought to be done if builders were to have these materials. He did not like builders regarding such things as tanks, boilers, lead pipes and taps as sorts of perquisites. He did not think it was an honest thing for builders to tender for work, go and do the work, and then take away valuable materials, simply because they said it was a custom in the trade. There could be no such custom, and builders had no right to do it. If they wanted to take away these materials there should be some stipulation, making it quite plain as to what allowances should be made. He did not apply these remarks to the present case, but the practice was a most undesirable one, and it would be no use for people to come before him with the idea of trying to make him think that this was a custom that could be allowed. He would, therefore, give judgment for the plaintiff for £10, with costs on scale C, the sum to be reduced to £8 if the tank was returned within six days.

[The above report is abstracted from THE HEREFORD TIMES.]

ARCHITECT'S CLAIM FOR FEES

Dundee Housing Scheme Dispute.

AN action by an architect against Dundee Town Council in connection with the Logie housing scheme was the subject of an opinion issued recently by Lord Constable in the Court of Session.

In this action William Bruce Dickie Keith, architect, Dundee, asked for payment of £1,053, being the balance of fees claimed to be due to him as architect of certain dwelling-houses. The account sued on included both architect's fees proper and measuring fees.

Various objections to the account were stated by defenders, but the parties agreed that in the meantime consideration should be restricted to two general points. The first and main point was whether the architect's fees claimed had been calculated on the proper basis, and the other was whether pursuer had committed a breach of his duty as architect by failing to give explanations with regard to certain items in the contractor's accounts.

The houses referred to form part of those built at Logie. These houses number 250 in all, and were distributed among five architects, of whom pursuer was one. The scheme originally

contemplated by defenders was much larger and even as ultimately sanctioned by the Board of Health it included 886 houses erected on six different sites, on most of which pursuer was also one of the architects employed.

Pursuer framed the present account on the footing that the houses on the Logie site formed an independent scheme, and maintained that his remuneration was regulated by, *inter alia*, a scale of fees issued by the Ministry of Health in September, 1919. Defenders on the other hand, maintained that the scale applicable was a scale issued by the Scottish Board of Health in September, 1920, and that under that scale all the houses erected by defenders under the Housing and Town Planning Act of 1919 fell to be treated as one scheme, and pursuer's fees fell to be calculated at a materially lower percentage on a value ascertained from the average cost of all the houses in the scheme, the accounts for which were not in fact yet complete. The question depended upon the terms arranged by the parties, because it was common ground that there was an express arrangement regarding remuneration.

Lord Constable pronounced findings to the effect (1) that pursuer's claim to remuneration was regulated by memoranda issued by the Board of Health in September, 1920, on November 7, 1922, and on August 23, 1923; (2) that in applying the scale of fees therein contained all the 886 houses referred to fell to be treated as one scheme; and (3) that pursuer was bound as a condition of proceeding with his action to give to defenders such explanations as might be reasonably possible with regard to the items detailed in the notes of the Board of Health; and continued the cause.

His Lordship also found defenders entitled to expenses since the date of the order for proof.

DELIVERY OF CEMENT

Question of Number of Sacks to the Ton.

IN Barnet County Court the case was recently heard of Lewis Morgan & Co. (1925), Ltd., v. Jones Bros. The plaintiff company claimed £14 14s. from defendants, who were engaged in work in Friern-lane, Friern Barnet, and whose registered offices were stated to be at Friern Villa, High-road, Whetstone, in respect of five tons of cement supplied to the order of defendants.

In evidence for the plaintiff company, it was stated that there was some delay in the delivery of the cement on account of the lorry being held up by a damaged axle. Defendants wrote cancelling the order, stating that the cement had not been delivered in time. It was a term of the contract that the order could not be cancelled while the goods were in transit.

In the course of cross-examination, counsel for defendants alleged that defendant's foreman had been bribed to accept delivery of the cement. John Pringle, a director and secretary of the plaintiff company, said when defendant's foreman refused to accept delivery he offered the foreman "a drink" (he afterwards said a shilling) in order to get his (plaintiff's) man away.

Alfred William Jones, builder, trading as Jones Bros., the defendants, said plaintiff's representative told him they could give him immediate delivery. The cement he ordered from plaintiffs did not arrive in time, and he had to order elsewhere and cancel the order to plaintiffs. There was one sack short in every ton, and he had suffered damage by the delay in delivery.

George Thomas Lawrence, defendants' foreman on the estate at Friern-lane, said Mr. Pringle offered him 5s. if he would unload the cement from the lorry. He refused to take the money, and told Mr. Pringle to telephone to Mr. Jones and get authority to deliver. Mr. Pringle came back and said he had the authority over the telephone for the cement to be unloaded, and witness then unloaded it. Out of 50 sacks 46 had been used.

The Judge gave judgment for plaintiffs, for the amount claimed, with costs, and dismissed a counter-claim which had been filed.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting?—ED.

Liability of the Building Owner.

An inquirer states that he built some houses in a certain suburb, and that another person has denied this. He then goes on to state that he did not build them. He further states that a certain manager to a firm has informed him that he did build the houses, and that in any case if a workman employed on the work met with an accident he, the inquirer, if "the builder went bankrupt," would be liable. It is somewhat difficult to reconcile all the above statements and to explain the law without some further and better information; but if, as it appears, the inquirer is the employer, and has in fact employed a builder to build the said houses, then, if an accident happens to an employee of the builder and the builder becomes bankrupt, the following may be of use to him:—

Most building contracts contain a clause whereby the builder indemnifies the building owner from all liability for damage or injury which is the result of negligence on the part of the builder, or his workmen or agents, in executing the work. The builder is, therefore, liable under the terms of the indemnity clause referred to, and the work is a lawful undertaking, for injury to one of his employees; but, if the building owner retains any control over the work during its execution, or it can be shown that he has interfered materially with the builder's control of the work, and the workmen employed, then he, the building owner, is liable for his own negligence, and any injury also for that of the builder or the builder's workmen; and he loses his rights under the indemnity clause referred to. It follows that if the building owner does not employ a builder, but engages workmen direct and carries out the work himself, he is the builder and is liable for negligence or injury to workmen he employs, and he should guard himself against this by a policy of insurance.

When an employer is insured and becomes bankrupt, the rights of the workman under the policy of insurance become the same as his employer's. Section 5 of the Workmen's Compensation Act, 1906, transfers to, and vests in, the workman, all the rights of the employer against the insurers. If the employer is not insured, then the protection afforded by the Act to the workman is that of placing the compensation payable among those debts which, in the case of bankruptcy or liquidation, are required to be paid in full in priority to all other debts. So, if the builder is not insured and is liable for injury to a workman, the liability is not shifted to the building owner by the former becoming bankrupt. See also chapter xvii of "Creswell On Building Contracts."

Boundary Wall Question.

[REPLIES TO "OLD READER," OCTOBER 16.]

SIR,—I am afraid your correspondent has no redress in the matter described. It would appear from the sketch that the shed preceded the brick wall, and A should have taken steps to construct the wall so that it could suffer no damage from the existing conditions. He cannot expect those conditions to be altered because these precautions were not taken. It would also appear that now the vertical damp-course has been laid, the heaping up of the earth at the back is doing no harm. Z.

SIR,—Every landowner is entitled to the free enjoyment of the land he possesses, and to use it to its best advantage subject to any restrictions there may be thereon. The violation of some right which another—as, for instance, the adjoining owner—possesses may constitute an actionable nuisance; and the act or omission causing or constituting the alleged nuisance is unlawful if it is in violation of statutory provisions, or of private common law rights. In the case of a private nuisance by a continuance of an illegal act the wrongdoer may

be able to gain a right to continue it, i.e., he may obtain a prescriptive right to commit the nuisance.

On the facts given by "Old Reader," "B" appears to have constituted an actionable nuisance, and "A's" remedies are:—

(1) To seek the aid of the local authority under Section 35 of the Public Health Acts Amendment Act, 1907, if the deposit of material &c., renders the building so damp as to be dangerous or injurious to health.

(2) To abate the nuisance himself.

(3) To apply to the court for an injunction, compelling the defendant to abate the nuisance.

(4) To bring an action for the money value of the damage caused by the interference.

If (1) is not applicable, it must, however, be borne in mind in considering (2) that no one has the right to trespass on his neighbour's land, even to redress a grievance. A physical remedy, involving trespass, is not satisfactory or respectable; and the trespass is necessary every time the difficulty arises. Taking the law into one's own hands, especially if damage is caused thereby, generally leads to litigation.

The remedy is to obtain redress in the court, and the court will settle the particular kind of remedy applicable—generally in favour of settlement by a money payment for damage done rather than by granting an injunction. If the wrongful act or omission is repeated or continues there is a new nuisance each day, and a cause of action arises from day to day.

It will be seen that, though "A" cannot directly force "B" to reconstruct the roof of the shed or to remove it, if he pursues one or other of the remedies above indicated "B" will, no doubt, fall in, or be made to fall in, with some scheme that will end the nuisance which has hitherto been created.

LEGAL.

Lath-and-Plaster Repairs.

[REPLY TO "A MANAGER," OCTOBER 16.]

SIR,—A fair price for cutting out old lath-and-plaster work, repairing laths and making good with lime and hair and finishing with Sirapite, would be 4s. 2d. per yard super. Generally speaking repairs to old property do not form the subject of a fair lump sum contract. The builder does not know quite what he is up against when work has to be uncovered, and his tender is generally made with the prospect of finding the worst. Consequently the employer often pays through the nose for the pleasure of knowing at the outset what will be his total commitment. If a reliable firm is chosen and employed upon the basis of cost plus an agreed percentage, it is generally the most satisfactory method in the long run.

"JOBBER."

Treatment of Dairy Floor.

[REPLY TO "DAIRIES," OCTOBER 16.]

SIR,—Asphalt, as a term, is applied to various classes of coverings, and to various grades of each class. An asphalt floor of the right grade and quality should not behave as described by your correspondent, under the heaviest wear. If a good firm of specialists are employed, they should be able to make good the floor in asphalt, and guarantee its wearing properties. This will be better than any cement or concrete floor, which will inevitably chip and wear under the heavy usage indicated.

BITUMEN.

Concrete Bricks.

[REPLY TO "F. J. W.," OCTOBER 23.]

SIR,—Having had considerable experience in the use of concrete bricks, I advise "F. J. W." not to use them for 9 in. solid walls if made in the proportion he states. With different coloured aggregate, or a little colouring added to some of the bricks, a very pleasing effect can be obtained. The outer walls should, however, be hollow.

G. QUINTON.

SIR,—In my opinion a perfectly sound and substantial job can be obtained with a concrete brick of the solid variety if built as cavity walls, with the usual galvanised iron bonds; but for

the front work one should make a brick with a fairly fine aggregate (ballast) and sharp sand in proportion of 6 and 1, mixed with one of many well-known waterproofers, powdered liquid. The interior brick could be made with indented surfaces for plastering. Be sure in building that the iron bonds are kept clear of mortar droppings, air-bricks, and damp-course. G. W. I.

SIR,—A very good brick can be made with sand, gravel and cement, but it is essential the raw material should not contain any organic matter. If bricks are made with material containing clay—except, perhaps, a very small percentage say not exceeding 2 per cent.—they will crack when built in, owing to shrinkage. I have used excellent bricks with sand and gravel and cement, the mix being 8 to 1. This is strong enough provided the brick is made under pressure and therefore thoroughly consolidated. Resistance to water is not so much a matter as a rich mixture as of density, and this applies equally to the crushing resistance. An important factor is the thorough watering of bricks after manufacture in order to get each particle of cement to act. If your correspondent cares to communicate with me I can call attention to a hand machine yielding between 8,000 and 9,000 bricks per 8-hour working operated by two unskilled men. F. I.

[A reply has also been received from "R. K."

Mortar.

[REPLY TO "BRICKLAYER," OCTOBER 16.]

SIR,—The addition of hydrated lime, or putty, thoroughly mixed with the cement sand will make the mortar "fat" and will reduce the strength. Lime slaked with water and sifted or screened should not be used. About 30 years ago I was in charge of a hospital scheme abroad. The lime available was fit for plastering only. The sand was angular grit, and the specification provided the mortar to be 1 part cement to 4 parts sand. This was very "short," and it was practically impossible to get it to hold up against the weight of the bricks. I made lime mortar with 1 part cement, 1 part sand, and 2 parts of this added 1 part cement. The bricks were well soaked before use, and the result was excellent from every point of view, and the saving in expense was considerable. At that time it was a popular belief among architects that the addition of lime to cement was detrimental to the latter, and it was only proved by experiment that I was all right to use the mortar as above. A large proportion of cement might be required for some alterations and repairs I always specify a class of mortar in preference to cement and sand. Hydrated lime is cheap and plentiful, and I advise its use instead of lime putty.

G. QUINTON.

SIR,—To make Portland cement "fatter," I have used the following: 1 part land cement, 1 part ground grey lime, and 6 parts clean, sharp sand. This is extremely hard when set, and is used by pointing bricklayers' work. Make only sufficient for a day's work. G. W. I.

"Plans and Local Authority."

SIR,—In the reply on this subject in issue for October 16 the statement is made, "in any case the authority must approve or disapprove such plans within a month after the date of submission." I know that the quoted words are an "urban" authority, but is every "rural" authority under the same obligation? I should be glad of an assurance on this point. SURVEYOR.

Internal Finish for Exposed Walls.

SIR,—Have any of your readers had experience of a suitable internal finish for brick or concrete walls of a building having a long frontage, the whole of which is permanently open and exposed to the air, fog or damp atmosphere? I desired to finish the internal walls and ceiling in a smooth plaster such as Keen's, finished with paint. Will exposure such as mentioned above have any ill-effect on the plaster? Have your readers any alternatives to suggest? SUBSCRIBER.

THE BUILDING TRADE.

HINTS TO BUILDERS

By J. H. BARNES, F.I.O.B.

SETTING OUT THE WORKS.

IN many instances it can be seen that to-day architects are relying on simple lines for their effects rather than using masses of ornate work, and these simple line effects usually require more care in arranging and setting out, and, as a rule, are rather costly to produce. Indeed, a great deal more precision seems to be needed nowadays in the setting out of building work, as the expensive rental of the site and sharply-defined boundaries make it essential that even the smallest amount of space should not be lost, and there is therefore little or no margin left for errors or inequalities in setting out. Building work carried out under these conditions is bound to prove more expensive than a structure of a rough warehouse character erected in a field, where the question of a few inches either way is not of great importance.

The setting out of the premises would have to follow the usual course and each part would not doubt be required to be done by the various experts in each particular trade with the general co-operation of the foreman to get the right interpretation of the architect's drawings and specification. If one were to speak generally on such a vast subject as the setting out of a building it could only be to say that there are no short cuts possible, and each particular piece of work must be performed with meticulous care and attention by men well skilled in their own trades.

Avoidance of Errors in Setting Out.

There are a few obvious points which can be indicated as to how and where mistakes are likely to occur, because the drawings of any building are usually only general drawings and cannot be expected to give the detailed construction of what is required at every particular part of the building. What is correctly shown as the section of a wall in one place will not necessarily be the section of the wall on other parts of the same floor. For instance, sometimes the wall on the floor of which the section is shown may set back $\frac{1}{2}$ in. either on the outside or the inside face of the wall. If this offset were to occur on the inside it might be necessary to increase the length of the girder or floor joists from what is required for the lower floors. Offsets of this description would be almost certain to affect such details as vertical runs of pipes, which are sometimes desired to be carried in the angle or chase of the building, and the setting back of the wall on one particular floor would necessitate either the pipes being bent to arrange them back against the recessed face of the wall, or if the pipes were to be continued quite plumb from top to bottom they would have to be kept away from the angle on some floors because of the offsets in the wall previously mentioned. If the wall is set back on the outside of the building there is a likelihood of errors arising at some points because where the wall is set back the stone cornice (if any) may need to be taken further on to the wall, so as to be properly tailed down by the brickwork above.

Another of the traps for the unwary "setter-out" is that the girders which may appear to be in a certain position when set out on the plan, may, when set up in elevation, come below the head of the window. This sometimes occurs in the case of windows to staircases.

A difficulty may be experienced in obtaining sufficient head room to a staircase, and the diversion of chimney flues will sometimes need considerable ingenuity.

Where large pieces of joinery are required the "setter-out" must satisfy himself that the framing is made in sections of sufficient size to secure their access into the building.

Where large boilers have to be installed in the building, openings should be arranged for removal of the boilers when required, without

a large amount of demolition being needed. Where wells have been sunk within the confines of the site, arrangements must be made for leaving a sufficient space overhead to allow of the removal of well rods for repairs, &c. Where lifts are to be fixed against an external wall, the offsets in the brickwork may cause some little trouble in setting out.

It is often a matter of very great difficulty to obtain an adequate fall to the gutters on the roof, as, with the usual system of drips to gutter, and only one outlet to a large roof, it may necessitate the gutter being carried up a greater height than may be considered convenient to the general arrangements of the building. The general arrangement and the construction of the roof usually presents many opportunities for errors, particularly where the building is not exactly parallel on plan.

The drains and general sanitary arrangements of the building will need considerable care in setting out before the work is commenced to make sure that the drains will not be constructed at too low a level, as they must obviously be governed by the depth of the sewer in the road.

These and many similar matters may be quoted to show the need of particular care in setting out, and where the beginner comes across some special "trap" he should make a note of this for future reference and consideration, so as to safeguard the setting out of his next job. It is no doubt possible to blunder through most jobs, but the cost of rectifying several errors after the work has been wrongly executed would probably be very much more than to have had the job properly set out by a painstaking method.

The use of the usual well-known instruments, such as dumpy level, &c., can be strongly recommended, as the foreman is able in a few minutes to get the required levels from any particular spot, but the ease and accuracy with which this result can be attained would in itself often cause a liability to error, so that many firms nowadays prefer to check their levels by the old-fashioned methods, with a long spirit level, &c.

Water for Use of the Works.

As in most cases the water required for building works will have to be obtained from the mains of the local water supply company, it will be necessary to give them notice of the proposed works and make a formal application for connection and supply. Such applications should give some particulars and dimensions of the intended building, together with the approximate cost. In London any person making application for a supply of water is required by the Metropolitan Water Board to give fourteen days' notice to the Board before the service pipe is connected to the Board's main, and beginners should bear this in mind, and lodge their application in ample time. The Metropolitan Water Board have two methods of charging for supplying water for building purposes:—

1. By meter, by which the amount consumed is recorded and charged at the statutory rate per 1,000 gallons, subject to the statutory minimum charge of 20,000 gallons of water at 1s. 2d. per thousand, amounting to £1 3s. 4d. per quarter, together with the charge for meter, &c.

2. By agreement, at the rate of 7s. per cent. on probable cost of proposed building, and the Board will make such allowance as they may think reasonable for decorative or ironwork not requiring water. The charge in the latter instance would be payable in advance.

Application for water supply must give the dimensions and description of proposed building. Notice must be given in writing to the

Board not less than twenty-four hours before disconnection of any meter or pipe and this disconnection must be done under superintendence of an officer of the Metropolitan Water Board. The builder must further undertake not to use the building or temporary supply pipe for the permanent supply of the building without obtaining the consent of the Board. These and other regulations are made so that the Board shall have a record as to when the building operations are completed and actual occupation of the premises takes place, and an opportunity of examining the new pipes and fittings to see that they comply with the Board's requirements.

It is somewhat difficult to compare the cost of the two methods of charging water consumed on the works, but speaking quite generally it may be taken that the cost of water by meter would work out at about half the cost of water assessed at 7s. per cent. on cost of building work. If the job were a small one and likely to spread over a long time, it may be cheaper to pay 7s. per cent. on the estimated cost of the building than for the metered supply, as in the latter case the "minimum" sum which the Board would charge each quarter together with hire of meter may cost more than the first mentioned method. In the case of building work being done in an occupied building where the water supply is already in existence, either by meter or otherwise, the builder would still be charged for water on the lines indicated above, and should allow in his estimates accordingly.

The water service pipe should be arranged to be brought into the building in a convenient position for supplying the general permanent sanitary arrangements so that the temporary building main connected with the Company's service may be adjusted for the permanent supply and thus save the cost of opening up the road to alter the position of the communication pipe, which would be necessary if the service is brought in at the wrong point.

The temporary supply pipe should be connected to a temporary storage cistern, usually placed on the ground floor, so that water may be baled out when required. When the building to be erected reaches to a height of several stories it is usually a convenience to fix a temporary rising main to each floor with a hose connection so that the water may be delivered to the required position.

Provide all Necessary Watching and Lighting.

If the job is to be a long time in progress, it may cost a fair sum in watchman's wages, the provision of fuel, &c. Therefore it should be a matter for careful consideration as to whether a watchman is actually required, as on many jobs there is very little of value that can readily be removed and it may be worth while to take the risk of any small amount of pilfering or damage than to go to the expense of installing a watchman. On some jobs the matter may be dealt with by providing a watchman for the week-ends only. In some contracts it is specially stipulated that a watchman must be in attendance during the time that the works are not in progress, which may necessitate a system of "relief" men for Sundays and holidays. In certain cases it is advisable to install some system of "time recording" or "tell-tale" to ensure the watchman being at defined points at a given time. A watchman may be a great convenience to a job if some system of inspection is arranged to see that the duties are being carried out in an efficient manner, as he could give early notice of accidents, such as burst pipes, which may flood the premises.

Artificial Light for the Works.

On some jobs artificial light is needed at all times of the year, particularly in basements, &c., and most building jobs will need to have artificial light fitted during the winter months. Wherever possible temporary electric lights should be installed, at least, for lighting the

general area of the site. It may prove too expensive to install an adequate system of temporary electric lights, but so long as the general area is lighted by electric or other lamps, the particular parts of the work requiring concentrated light can be dealt with by hand lamps, using carbide or oil. In the case of electric light being used the contractor should be careful to protect the lamps against damage, and it is sometimes considered advisable to have the contractor's name marked on the lamps. Where carbide is used the local by-laws (if any) governing its use and storage must be observed. The smoke and fumes of carbide may discolour the plastering, and care should be taken as far as possible to prevent this. The waste carbide should be periodically removed from the works and not allowed to become mixed with any building material. Hand lamps will need constant attention and replenishing, and this general attendance may be an expensive item. Temporary gas points are sometimes a convenience for lighting the works.

Attendance on Other Trades.

The builder is usually called upon to provide the attendance of one trade upon another, and to perform any cutting away required. This cutting away may be a very great source of expense, and care should be taken as far as possible to leave the holes in the work as it is being executed, and thus save a great deal of the continual cutting away which sometimes goes on. Pneumatic tools will effect a saving in cost of such work where the job is of sufficient importance to justify their installation. Electric drills are not often used for perforating brick-work.

THE SHUTTERING COMPETITION

The Committee appointed "to inquire and report as to new materials or methods of construction which are or may be available for the building of houses for the working classes and to make recommendations as to the organisation required for securing the adoption and use of a proved new materials or methods by local authorities and other bodies or persons providing such houses" have now reported to the Minister of Health on the recent Shuttering Competition. They state that they have completed their examination of all the systems entered for the prize offered for a new method of shuttering to be used in connection with concrete cottages. The primary object of the competition was to stimulate and bring out new ideas, and methods and systems already in use, or published by patents, were, therefore, specifically excluded from the competition. The Committee are of opinion that the system submitted by Mr. R. L. Bendall, "Scarborough," Richmond Wood-road, Bournemouth, is the best entry received, and, therefore, should be awarded the prize of £250. While, however, they are satisfied that this system has merits and is the best of those submitted, they think it necessary to state that it must not be regarded as superior to some of the systems which are already in use, or published, and were, therefore, ineligible for this competition. They have not felt justified in advising that the further prizes which it was within their discretion to recommend should be awarded.

New Reservoir at Bushey Heath.

The Colne Valley Water Company are constructing a new reservoir at Bushey Heath, at a cost of £120,000. It will hold 8,000,000 gallons and, with two other reservoirs, will give the company a covered storage capacity of 14,500,000 gallons. Wembley is within the company's area, and arrangements were made to supply the British Empire Exhibition with 1,500,000 gallons a day.

FLOOR LOADS AND L.C.C. REGULATIONS

MR. TOPHAM FORREST's recent Report to the London County Council on "The Construction and Control of Buildings and the Development of Urban Areas in the United States of America" contained some important recommendations relating to the revision of the floor loads provided under the London Building Acts. A correspondent reminds us that the County Council has power to make by-laws relating to the dimensions of joists of floors, and suggests that the recommendations referred to should be brought prominently to the notice of architects and builders. We accordingly reprint the recommendations hereunder.

Mr. Topham Forrest gives a comparison between British and American floor loads, together with his suggestions for the proposed regulations. It will be seen that these figures show a trend towards an international standard which perhaps may be regarded as a consensus of universal opinion in a matter on which there is universal experience.

Mr. Topham Forrest adds that he is well aware of estimates which have been made both in this country and abroad in respect of the actual weights found in actual buildings, but the result of such tests should not be regarded as the sole criterion. The weights proposed in regulations should take into account all the questions which go towards the stability, fire resistance, endurance, freedom from excessive deflection and general security of floor construction, including those properties which conduce to silence.

of the floor itself and not the purpose of the building as a whole, and it certainly should not vary with the material used in the construction. It is certain that the advocates of any given material would regard any attempt to vary the loads on a floor according to the kind of material as an act of injustice. It is also certain that the Technic Institutions would disapprove of any suggestion so unscientific. If any form of construction does possess greater or less stiffness or greater or less reliability, the correct method would be to make some appropriate adjustment of the safety factor, and of the constants used in the calculations of deflections.

The question of floor loads is highly controversial, and recommendations often seem to come in pairs—one to reduce and the other either to conserve or increase.

The accompanying table bears comparison with any in respect of its regularity and reasonableness, and if later on the consensus of technical opinion suggests any improvements, Mr. Forrest will be prepared to recommend their immediate adoption.

The London Building Acts contain no provision as to the construction of floors in buildings other than those of steel frame or reinforced concrete construction, whilst the American Codes contain regulations as to floors in all buildings.

The Council has power under the London Building Acts to make by-laws relating to the dimensions of joists of floors, but up to the present has not done so, probably owing to the difficulty in small property of having to work to specific sizes for joists when scantling other dimensions might give an equal stability.

SUPERIMPOSED LOADS ON FLOORS. Comparison of London Practice with Practice in 109 American Cities.

Use of Floor.	Superimposed weight in lbs per sq. ft.			
	Present practice in London.	Average of 109 American cities.	Proposed for London.	
Attic floors in dwellings.....	70	49.7	.....	40
Dwelling (ground floor).....	70	52.2	.....	50
" (above ground floor).....	70	49.7	.....	50
Tenements (ground floor).....	70	55.8	.....	50
" (above ground floor).....	70	50.6	.....	50
Hotel bedrooms.....	84	57.3	.....	60 average
Assembly halls with fixed seats.....	112	95.9	.....	80
School classrooms.....	112	69.9	.....	80
Offices (above ground floor).....	100	69.7	.....	80
Hospital wards.....	84	61	.....	80
Assembly halls where crowds may be closely packed.....	112-150	110.3	.....	100
School corridors, stairs and landings.....	112	92.5	.....	100
Halls in schools.....	112	99.5	.....	100
Hotel corridors.....	112	87.7	.....	100
Hospital corridors.....	112	83.6	.....	100
Retail shops.....	112	119.4	.....	120
Offices (ground floor).....	100	114	.....	120
Factories for light loads.....	112	121.8	.....	120
Drill rooms.....	150	137	.....	140
School halls in which drilling may take place ...	150	137	.....	140
Playgrounds on school roofs.....	150	—	.....	140
Ballrooms (and other floors subject to rhythmic vibrations).....	150	115.9 av. 250 max.	.....	140
Retail shops for heavy goods.....	—	162.8	.....	160
Factories for medium loads.....	150	177	.....	160
Warehouses.....	224 min.	184.2 av. 450 max.	.....	200 min.

Mr. Forrest observes that he is aware of suggestions which have been made to vary the permissible floor loads according to the type of construction (wood, steel, or reinforced concrete, as the case may be), and while arguments may be adduced in favour of this procedure, he feels that the weight of argument is against it.

In his opinion the permissible floor loads should be specified according to the purpose

and be more easily obtainable for the particular building. But whilst it might be considered unnecessary to lay down rules for loads and stresses in relation to floors in comparative small dwelling houses, it is desirable that the construction of floors in buildings of the same character as those in which steel frame reinforced concrete construction is common should be controlled both as regards loads and stresses.

NEW BUILDINGS IN LONDON.

Berkeley-street.—Messrs. Gordon Hotels, Ltd., 1, Whitehall-place, S.W. 1, are to equip as a large restaurant and grill room the ground floors of building in course of erection in Berkeley-street, W. 1. The work will be carried out by Messrs. Edcaster, Ltd., Vinery Works, Goldsmith-road, W. 12. Mr. W. Henry White, F.R.I.B.A., architect, 14A, Cavendish-place, W. 1. Messrs. The National Provincial Bank, Ltd., Bishopsgate, E.C. 3, have purchased large premises in Berkeley-street, W. 1, which they propose to open as a branch bank. Mr. F. C. R. Mer, F.R.I.B.A., architect.

Bishopsgate.—Marcus Estates, Ltd., are erecting a four-story building at 203-211, Bishopsgate, E.C. 2, with a frontage of 90 ft. to Bishopsgate. The Construction Department of the company are carrying out the building operations. Mr. Paul Hoffman, architect, Capel-street, E.C.

Bishopsgate.—Possession is to be obtained shortly of the large site in Bishopsgate and Houndsditch, E.C. 4, recently acquired by the London & Northern Estates Co., 42, Old Broad-street, E.C. 2. A modern block of offices, with shops on the ground floor, are to be erected to plans of Messrs. Richardson & Gill, 41, Finsbury-square, W.C.

Borough High-street.—A new block of shop and office premises is to be erected by Messrs. F. Blay, Ltd., Spital-street, Dartford, Kent. **Buckingham Palace-road.**—Rebuilding of the "King's Arms" public house is now in progress, under the direction of Messrs. Petch & Fernand, 1, Buckingham Palace-road, S.W. 1, acting on behalf of Messrs. Watney, Combe, Reid & Co., Ltd., owners. Messrs. Prestige & Co., Ltd., contractors, Cambridge Wharf, Grosvenor-road, S.W. 1. Cornish granite by Messrs. Bodmin Granite Co. (1912), Ltd., St. Stephen's House, Westminster, S.W.

City-road.—A large site is to be let on building site, situated at the corner of City-road and Hatherstone-street, E.C. 1. Details are in the hands of Mr. W. A. Lewis, A.R.I.B.A., 11-12, Finsbury-square, E.C. 2.

Coulson.—Plans have been prepared by Mr. Craddock Perkins, F.R.I.B.A., 25, Alkham-street, Stoke Newington, for the erection of a new branch for Messrs. Westminster Bank, Ltd.

Cricklewood.—A site in North Circular-road, N.W., has been purchased by Messrs. Allen-Perthridge, Ltd., acetylene manufacturers, extending to 10 acres, for the erection of new works and warehouses. Messrs. Heron, Roger & Pitt, consulting engineers, 181, Queen Victoria-street, E.C. 4.

Crouch End.—Messrs. Lloyds Bank are building a new branch at 34, The Broadway, Crouch End. Mr. Charles R. Price, contractor. Messrs. Price & Hobday, architects.

Denmark-hill.—A contract will be placed shortly for the building of the William Booth Memorial Institution, S.E., for the Salvation Army, which will cover a site about 20 acres, at cost £250,000. Joint architects, Mr. Alexander Gordon, F.S.I., 97, Queen Victoria-street, W. 1, and Mr. G. J. Morris-Viner, F.R.I.B.A., 1, New Court, Lincoln's Inn, W.C., in consultation with Sir Giles Gilbert Scott, R.A., 7, Gray's Inn-square, W.C. Messrs. Fleetwood, Persden & King, quantity surveyors, 3, New Court, Lincoln's Inn, W.C.

Euston-road.—The Metropolitan Railway Co. are in contemplation the reconstruction, with enlarged booking and other buildings, the premises of their Euston-road station to plans prepared by their architectural and engineering staffs at Baker-street Station, W. 1.

Fenchurch-street.—A further rebuilding scheme is to be put in hand early next year upon a site in Fenchurch-street, E.C. 3, including the shop and showrooms of Messrs. Ball & Co., at No. 41.

Gracechurch-street.—Messrs. Barclays Bank (London, Colonial and Overseas), are carrying out extensive alterations at 29, Gracechurch-

street. Mr. Charles R. Price, contractor, of Bishopsgate. Mr. H. Guy Holt, A.R.I.B.A., architect.

Greenwich.—Messrs. J. Elliman & Son, Ltd., 102, Bromley-road, Beckenham, Kent, are the contractors for the building of a new nurses' home at "The Woodlands," Vanbrugh-hill, East Greenwich, to accommodate 136 nurses. Messrs. William A. Pite, Son & Fairweather, architects, 12, Carteret-street, S.W. 1. Mr. Louis Jacob, quantity surveyor, 39, Bloomsbury-square, W.C. 1.

Hampstead.—A new art school, domestic science school, preparatory school, library, reading rooms, gymnasium and offices are to be erected at the Hampstead Garden Suburb Institute, in Central-square, N.W. 11, at a cost of £30,000. Sir Edwin Lutyens, R.A., 17, Queen Anne's-gate, S.W. 1, and Mr. C. E. Handscombe, A.R.I.B.A., Station Approach, Sanderstead, joint architects.

Hanwell.—A branch of Messrs. Lloyds Bank is being built at The Broadway, Hanwell. Mr. Charles R. Price, builder, Bishopsgate, E.C.

Harrow-on-the-Hill.—The Old Gaytonians' Association propose to build new club premises to plans prepared by one of their members, Mr. D. H. McMoran, of Harrow, who is an architect.

Holborn Circus.—The important modernisation to be carried out at the premises of Messrs. Thomas Wallis & Co., Ltd., general drapers, referred to in *The Builder* for August 21, is to be probably put in hand next year. Messrs. Yetts, Sturdy & Usher, architects, 115, Moor-gate, E.C. 2.

Houndsditch.—Messrs. S. Lesser & Co., Ltd., merchants, are to rebuild their showrooms and warehouse at the corner of Houndsditch and Creechchurch-lane, E.C. 4, to the designs of Messrs. Lewis Solomon & Son, 133, Moorgate, E.C. 2. Messrs. Griggs & Son, contractors, 100, Victoria-street, Westminster, S.W.

Iford.—The local Congregationalists propose to build a new church upon a site they have purchased in Broomhill-road. Messrs. George Baines & Son, 121, Victoria-street, S.W. 1, architects.

King's Cross.—A new warehouse is to be built at Field-street, N.W. 1, for Messrs. Hewitt Bros., printers' engineers, under the direction of Mr. Max Clarke, F.R.I.B.A., 20, Bedford-row, W.C. 1.

Kingsland-road.—Messrs. Young & Hall, 17, Southampton-street, W.C. 1, have prepared plans for the erection of a new nurses' home at the Metropolitan Hospital, E. 8.

Lincoln's Inn.—Messrs. E. & S. Smith, chartered surveyors, 68, Great Queen-street, W.C. 2, have acquired, on behalf of the Holy Trinity Church, in Kingsway, W.C., the premises at the corner of Whetstone-park and Gate-street, W.C., for conversion to parochial purposes.

Lincoln's Inn Fields.—Messrs. John Greenwood, Ltd., 12, Arthur-street, E.C. 4, are carrying out extensive alterations and improvements to a block of offices.

Ludgate Hill.—The City of London Electric Light Co., Ltd., Falcon House, Aldersgate-street, E.C. 1, have purchased the ground floor and basement of corner premises, which they propose to convert into showrooms and a restaurant. Messrs. Bull & Esdaile, Ltd., 30, Stannary-street, S.E. 11, contractors for alterations.

Muswell-Hill.—The cost of extending the Hornsey, Finchley, and Wood Green Isolation Hospital, in Coppett's-road, N.W. 10, is estimated at £30,000, and plans are now under consideration. Mr. E. J. Lovegrove, Southwood-lane, N. 6, Surveyor to Hornsey B.C., is acting as architect.

New Oxford-street.—The architect for the extension of the branch offices of Messrs. Barclays Bank, Ltd., at the corner of New Oxford-street and Hart-street, is Mr. Dudley G. Marsh, 38, Chancery-lane, W.C.

Old Bond-street.—Messrs. Archibald D. Dawson & Son, Ltd., Steelworks-road, Battersea, S.W., have erected the steelwork for the new six-story shop and office building, at the corner of Old Bond-street and Burlington-gardens, W. 1, for Messrs. J. & E. Atkinson, Ltd., perfumery manufacturers, Southwark Park-road, S.E. Messrs. E. A. Roome & Co., Ltd., contractors, 7, Urswick-street, E. 9. Messrs. Stanbrough & Harris, architects, 29, St. James's-square, S.W. 1.

Orpington.—Messrs. Edcaster, Ltd., Goldhawk-road, W. 12, have acquired the Knoll Park estate, where it is proposed to carry out a large development scheme, including the erection of 250 houses of a value of about £1,500 each.

Oxford-street.—Messrs. Bovis, Ltd., 43, Upper Berkeley-street, W. 1, are constructing foundations for the six-floored office and showroom building to be erected at No. 100, Oxford-street, W. 1, for Messrs. F. & C. Osler, Ltd., electric light fittings manufacturers. Messrs. Constantine & Vernon, architects, 82, Mortimer-street, W. 1.

Piccadilly.—Messrs. Rootes, Ltd., automobile agents, 141, New Bond-street, W. 1, have secured large premises on the corner of Piccadilly and Berkeley-street, W. 1, where they propose to open extensive showrooms.—The steelwork for the first section of the new building for Messrs. Swan & Edgar, Ltd., in Piccadilly and Regent-street, W. 1, is now completed. Demolition of the remainder of the old block will commence when the new building is available for occupation. Messrs. Higgs & Hill, Ltd., contractors, Crown Works, South Lambeth-road, S.E. Messrs. Dorman Long & Co., Ltd., steelwork, Central-buildings, Westminster, S.W. Mr. J. J. Joass, F.R.I.B.A., architect, 10, Old Burlington-street, W. 1. Mr. E. R. Babbs, 10, Old Burlington-street, W. 1, quantity surveyor.—The new terracotta front for the Park-lane Hotel, in Piccadilly, W. 1, is now being commenced, and work is being pushed forward on all parts of the site. Messrs. Higgs & Hill, Ltd., contractors, Crown Works, South Lambeth-road, S.W. Messrs. Smith-Walker, Ltd., steelwork, 33, Tothill-street, S.W. 1. Messrs. Kleine Patent Fire-Resisting Flooring Syndicate, Ltd., 133, High Holborn, W.C. 1, flooring. Messrs. Ragusa Asphalt Co., Ltd., 35, Oxford-street, W. 1, asphalt. Messrs. Henry Tanner, 3, Hanover-square, W. 1, architects.

Piccadilly-circus.—Work has now been started upon the foundations for the large new offices at the corner of Regent-street and Glasshouse-street, W. 1, for the County Fire Office, Ltd., who are now located at Lower Regent-street. Messrs. Holloway Bros. (London), Ltd., contractors, Bridge Wharf, Grosvenor-road, S.W. 1. Joint architects, Messrs. Ernest Newton & Sons, 4, Raymond's-buildings, Gray's Inn, W.C., and Messrs. William Woodward & Son, 15, Great James-street, W.C. 1.

Wimbledon.—A contract has been placed with Mr. Albert Monk, Lower Edmonton, N.W., for the erection of the first portion of the permanent buildings at the Wimbledon Park Council School, S.W. The accepted tender is £12,636.

Treowen Housing Scheme.

The State, the trustees of the Llanover Estate, the Housing Corporation of Great Britain, and the Abercarn Council are co-operating with the object of providing 600 dwellings for workers, at an estimated cost of between £250,000 and £300,000. A representative meeting has been held at Treowen, near Newbridge.

Limerick Docks Extension.

The Limerick Harbour Board have approved the Parliamentary plans for the extension of the docks.

The plans provided for a dock extension of seven acres, with a western entrance. There will be additional quayside space of 1,700 ft., and a bridge connection between the existing dock basin and the proposed extension.

The work will be carried out in concrete, at an estimated cost of nearly £150,000.

THE COMMERCIAL MOTOR EXHIBITION

THE Commercial Motor Transport Exhibition, which opened at Olympia on Thursday and closes on Saturday week, November 7, is one that is likely to attract builders and contractors in large numbers, for few other trades have been more thoroughly converted to mechanical transport. On the score of economy in working cost and in general efficiency, the motor and the steam lorry have long proved their value to the building industry; by no other means would it be possible to transport, with equal ease and rapidity, the heavy and often cumbersome materials which are employed in the construction of modern buildings.

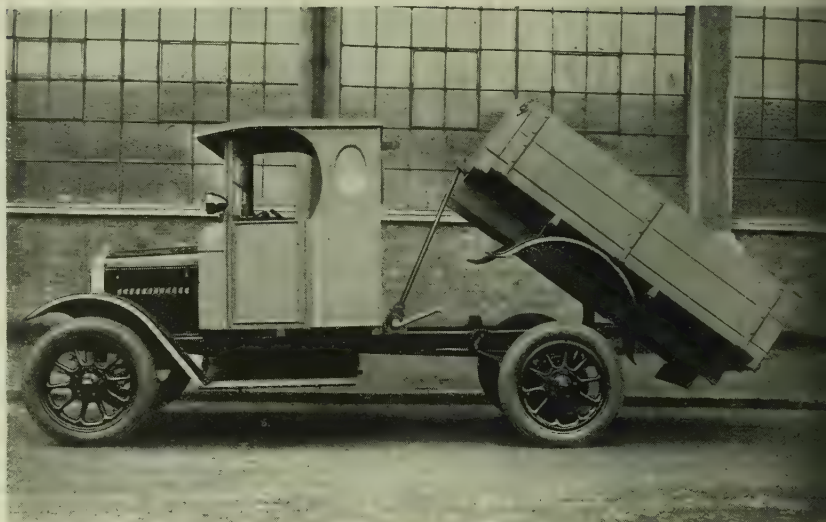
Transport must keep pace with industrial necessity, and it is manifest from the Olympia show that the manufacturers of commercial vehicles are fully alive to the requirements of the time. Here is a wide variety of vehicles and equipment to meet an equally wide variety of needs. Below we refer to some of the vehicles which are on show and which have been especially designed to meet the requirements and conditions of the building trade.

The Morris Exhibit.

Morris Commercial Cars, Ltd., exhibit their one-ton tipping lorry. This vehicle is built for big jobs and tackles them with ease and efficiency. The hand-operated gear is capable of managing a full ton load, and the tail-board can be made to swing at the bottom as well as the top. Heavily constructed of the best materials, and having a platform lined with the toughest steel, the body of the lorry has been especially designed for the hard usage of builders and contractors; while the chassis follows the tradition of the Morris one-ton truck in the strength and reliability of its engine. The cost of the lorry is £238, which includes spare wheel, grease jars, Lucas electric lighting, driving mirror, and comfortably upholstered driver's cabin. The body sizes of the lorry are: Length, 7 ft. 6 in.; width, 5 ft. 6 in.; height of sides, 1 ft. 6 in. It is an excellent general purpose vehicle as well as a tipping lorry.

"Sentinel" Exhibits.

The main features of the "Super-Sentinel" design, which was offered to the public in 1923, remain unchanged, having proved in practice entirely satisfactory. Improvements in details suggested by experience, have, of course, been carried out from time to time. Amongst these may be mentioned the brake hand-wheel, which has been considerably increased in size, thus giving much more power. The pipes between the pump and the feedwater heater, and also from the feedwater heater to the boiler, have been increased in diameter to allow of a more ready flow. The original funnel base has been considerably altered, the damper having been removed therefrom and placed at the top of the funnel; the funnel also has been entirely modified, its lining now being shaped as a Venturi tube. The result of these changes has been still further to improve the steaming and economy of the boiler. Another feature worthy



The Morris Tipping Lorry.

of note is that the lighting dynamo on those waggons equipped with electric light are now driven by chain instead of by belt, this drive being more positive and less likely to derangement through adverse weather conditions. A feature of the "Sentinel" exhibit is the large number of vehicles which are repeat orders for famous firms.

The Leyland Exhibit.

Messrs. Leyland Motors, Ltd., are exhibiting their well-known commercial vehicles. The price of their 6-ton "Q.H.2" chassis is £1,050. An illustrated description of the Leyland lorry will appear in our next issue.

The Bean Commercial Lorry.

The Bean Commercial Lorry provides a vehicle particularly suited to withstand service under the most strenuous conditions, and its capacity—25 cwt.—is such that it meets the requirements of 90 per cent. of users of motor transport. Among the many desirable features it embodies is the four-speed gear-box, with right-hand change; the bottom gear, having a ratio of 25 to 1, is purely an emergency gear, thus permitting the engine to negotiate freak hills with full load and the minimum amount of stress and strain, whilst the top gear, which is 6.14 to 1, enables a good turn of speed to be attained. Because of this, and the robust construction of the chassis as a whole, the Bean will be found particularly suitable for service in hilly country.

London Builders' Foremen's Association Dinner.

The Fourth Annual and Second Ladies' Night Dinner of this Association was held on Saturday, October 24, at the Abercorn Rooms, Great Eastern Hotel, Mr. F. Thorne, F.I.O.B., President of the London Master Builders' Association,

occupying the chair, and Mr. W. J. Tozer, President of the London Builders' Foremen's Association, the vice-chair.

Redecoration of Coliseum Auditorium.

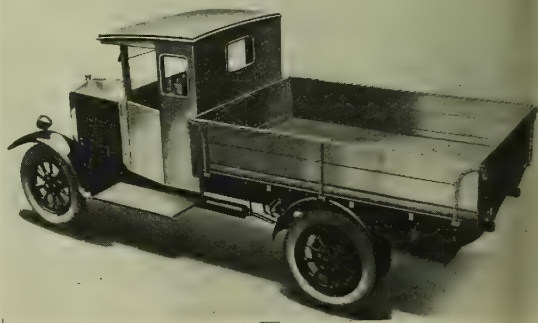
The work of redecorating the auditorium in the London Coliseum has been completed by the contractors, Messrs. F. De Jong & Co., of 84, Albert-street, Camden Town, N.W. The colour of the Italian sky has been substituted for the gold of the 1904 design.

Streatham Common Town-Planning Scheme.

The L.C.C., on April 15, 1924, decided to prepare a town-planning scheme in reference to certain land, about twenty acres in extent, in the neighbourhood of Streatham Common. The Town-Planning Special Committee report that they have prepared the draft scheme and map. As regards new streets, they think it desirable to prescribe a street already proved by the Building Acts Committee, which is designed to connect with a proposed street in the Croydon (North) Town-Planning Scheme on the other side of the county boundary, through communication to Streatham Common. With regard to limitation of user, they suggest two divisions, an area of about five acres to the south of "The Rookery" to be reserved as a public open space, and the remainder to be used for residential houses. A general limit of houses to the acre is proposed. As regards proportion of the plots to be occupied by buildings, the houses in the neighbourhood contain two floors, and occupy about one-third of the plot, and it is considered that this should be adopted. Having regard to the fact that the height of houses in the neighbourhood does not exceed 30 ft., it would be desirable to add to prescribe a lower limit than that which would operate under the London Building



The Sentinel Steam Lorry.



The Bean Commercial Lorry.

NEWS ITEMS.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

Stoke Power House Extension.
Extension to the Central Power House, at Stoke-on-Trent Electricity Works, was recently. The complete scheme is costing £1,000,000.

Southport Kinema Fire.
An amounting to several thousand pounds was done to the Palladium Picture Palace, Lord-street, Southport, by a recent fire.

Tube Extension.
Contract for the construction of crossovers at Kennington Station has been awarded to the Underground, and work is to commence immediately.

Hackney Electricity Works.
A new electricity demonstration hall and the Hackney Borough Council, in Lower Road, N.E., built at a cost of about £100,000, were opened recently.

Timber Merchant's Estate.
Reuben Gliksten, of Park-lane, and of Park-road, Stratford, E., a timber merchant has left net estate of the value of £1,000,000.

Southampton Fire.
A serious fire broke out in Southampton recently and burnt down a seven-story warehouse. The damage is estimated at about £1,000,000.

Clacton Road Improvements.
Clacton U.D.C. propose to apply to the County Grants Committee for sanction of £22,050 for widening and improving the road from the Station-road to the boundary of the district.

More Nottingham Schemes.
County Council have approved the extension of a new road through Wollaton at a cost of £45,630. The Corporation is purchasing the Lenton Abbey estate, at a cost of £20,000, for housing purposes.

Yarmouth's New Shopping Centre.
Progress has been made in preparing a new arcade between Regent-street and the sea. The architect is Mr. F. R. B. B. and the building contractor, Mr. B. G. of Yarmouth.

Rural Road Grants.
Ministry of Transport has recently made towards rural road schemes, the total cost is about £300,000. The latest agreement the Treasury provides for an increase in the next financial year by £750,000 of the already made for the needs of rural roads.

Obituary.
Death has occurred at Tiverton, at the age of 64, of Mr. John Somers Grater, head of Messrs. John Grater & Sons, builders.

Death took place recently of Mr. William G. builder, of Boyn Hill, at the age of 61.

Frederick John Voisey, for many years Surveyor of Dartmouth, prior to which a builder, died recently at the age of 61.

Death has taken place at Penzance, at the age of sixty-five, of Mr. William James, head of Messrs. Perkins & Caldwell, firm of builders and builders' merchants in West Cornwall.

Regret to record the death of Mr. Edward Lister, a well-known Plymouth architect and surveyor. Mr. Lister, who was 70 years of age, carried out much work in Plymouth, including the Market buildings, the Royal Eye Hospital, the Pearn Convalescent Home, and in connection with his former partner, Mr. C. Augustine's Church.

	Masons.	Brick-layers.	C'pters Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers.
Aberdare.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Accrington.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Altrincham.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Ashton-under-Lyne.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Barnsley.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Barrow-in-Furness.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Barry.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Bath.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Bedford.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Birkenhead.....	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
Birmingham.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Bishop Auckland.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Blackburn.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Blackpool.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Bolton.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Bournemouth.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Brentford.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Brentwood.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Bridgewater.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Brighton.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Bristol.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Burnley.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Burton-on-Trent.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Bury.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Cambridge.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Cardiff.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Chatham.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Chelmsford.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Cheltenham.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Chester.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Chesterfield.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Colchester.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Coventry.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Crawe.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Darlington.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Derby.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Doncaster.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Dudley.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Durham.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
E. Glam. (Mon. Vall.).....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Eastbourne.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Exeter.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Folkestone.....	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/1
Gloucester.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Grantham.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Grays.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Grimby.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Great Yarmouth.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Guildford.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Halifax.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Harrogate.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Hartlepool.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Hastings.....	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/1
Hereford.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Huddersfield.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Hull.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Ipswich.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Lancaster.....	1/3	1/3	1/3	1/3	1/3	1/3	1/3	1/1
Leamington Spa.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Leeds.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Leicester.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Lichfield.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Lincoln.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Liverpool.....	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
Llanelli.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
London { 12 in. radius.....	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
London { 12-15 in. radius.....	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
Loughborough.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Luton.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Maidstone.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Manchester.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Manitford.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Merthyr Tydfil.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Middlesbrough.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Newcastle-on-Tyne.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Newport Mon.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Northampton.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Nottingham.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Nottingham.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Oakham.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Oldham.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Oxford.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Plymouth.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Pontypriid.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Portsmouth.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Preston.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Reading.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Rochdale.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Rochester.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Rugby.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
St. Albans.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
St. Helens.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Scarborough.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Sheffield.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Shrewsbury.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Southampton.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Southend-on-Sea.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Southport.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
South Shields.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Stockport.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Stockton-on-Tees.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Stoke-on-Trent.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Stroud.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Sunderland.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Swansea.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Swindon.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Taunton.....	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Torquay.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Tunbridge Wells.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Wakefield.....	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Walsall.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Warrington.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
West Bromwich.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Wigan.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Windsor.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Wolverhampton.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3
Worcester.....	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
York.....	1/8	1/8	1/8	1/3	1/8	1/8	1/8	1/3

(For rates of wages in the Building Trade in Scotland, see page 649)

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

NOVEMBER 2.—**Dublin**.—REPAIRS.—To Buckingham-street fire station and painting work, Thomas-street library, for the C.B. J. J. Murphy, Town Clerk.

NOVEMBER 2.—**East Grinstead**.—ALTERATIONS.—Structural alterations and additions to the sewage pumping station at Sunnyside, for the U.D.C. Dodd & Watson, engineers, County Chambers, Corporation-street, Birmingham. Deposit £2.

NOVEMBER 2.—**Huddersfield**.—PAINTING.—Interior painting of the nurses' home at the Deanhouse Institution, for the B.G. T. W. Armitage, Clerk.

*NOVEMBER 2.—**Kent**.—SCHOOL.—Erection of Swanscombe Knockhall proposed central school, for the Education Committee. W. H. Robinson, F.R.I.B.A. Room 69, Sessions House, Maidstone. Deposit £2 2s., payable to the Kent Education Committee and crossed "National Provincial Bank, Ltd."

NOVEMBER 2.—**Nottingham**.—PAINTING.—Cleaning and painting of the male and female sanatoria, at the Bagthorpe Institution, for the B.G. J. A. Battersby, Clerk to the Board, Poor Law Offices, Shakespear-street.

NOVEMBER 2.—**St. Albans**.—COTTAGES.—Erection of the second 50 cottages at the Camp housing site, for the Corporation. G. T. Negus, City Engineer and Surveyor, 96, Victoria-street, St. Albans. Deposit £1 1s.

NOVEMBER 2.—**Southampton**.—BUILDING.—Electricity sub-station on the Town Quay, for the Harbour Board. E. Cooper Poole, engineer. Deposit £1.

NOVEMBER 2.—**Sunbury-on-Thames**.—HOUSES.—Twenty-six houses in Cavendish-road near Vicarage-road, Sunbury Common for the U.D.C. H. F. Coales, Surveyor. Deposit £2 2s.

NOVEMBER 2.—**Trimdon**.—HOMES.—Twelve aged miners' homes at Trimdon Colliery. Hays & Gray, F. and A.R.I.B.A., architects, Central Chambers, Wingate.

NOVEMBER 2.—**Worsborough**.—HOUSES.—Twenty-two houses at Blacker Hill, for the U.D.C. T. Shield, Surveyor. Deposit £3 3s.

NOVEMBER 3.—**Barnsley**.—OFFICES.—New office buildings in Peel-street, for the Yorkshire Mutual Trading Co., Ltd. C. F. Moxon, architect, Regent-street South.

NOVEMBER 3.—**Devonport**.—EXTENSION.—Extension of Keyham Amusement Exchange, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, Westminster, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

NOVEMBER 3.—**Henley**.—COTTAGES.—For (1) Binfield Heath, six cottages, in pairs, and (2) Binfield Heath, four bungalows, together with roads and drainage, for the R.D.C. E. V. Ives, architect, Hillside, Vicarage-road.

NOVEMBER 3.—**Orpington**.—WIRING.—Installation of cables, switchboards, &c., and wiring, at the Ministry of Pensions Hospital, for H.M.O.W. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

NOVEMBER 3.—**Watford**.—COTTAGES.—Twelve cottages at Batlers Green, near Radlett, and 16 cottages at Sarratt, for the R.D.C. E. Lailey, Surveyor, 9, Market-street. Deposit £2 2s.

NOVEMBER 4.—**Brighton**.—TELEPHONE EXCHANGE.—Erection of a telephone exchange at Portlady, Brighton, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, Westminster, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

NOVEMBER 4.—**Chichester**.—REPAIRS.—To 59-64, Saint Pancras, for the T.C. Sanitary Inspector.

NOVEMBER 4.—**Herts**.—NURSES HOME.—Erection of a new nurses home at Leavesden Mental Hospital, King's Langley, Herts, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

NOVEMBER 4.—**Leeds**.—POINTING.—Repairing lightning conductor and pointing the chimney to the boiler house at the Bramley Institution, and also for similar work at the Holbeck Institution, for the B.G. J. H. Ford, Clerk to the Guardians, Poor Law Offices, 11, South Parade.

NOVEMBER 4.—**London**.—S.E.—PAINTING AND REPAIRS.—Painting and repairs at South Wharf, Trinity-street, Rotherhithe, S.E., for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

NOVEMBER 4.—**Rickmansworth**.—FLATS.—Five blocks of four flats each at Mill-end for the U.D.C. S. A. Bateman, Clerk to the Council. Deposit £2.

NOVEMBER 4.—**Sevenoaks**.—KENT.—CHIMNEY SHAFT.—Repair of the chimney shaft at their institution at Sundridge, and the repair and making good of the lightning conductor affixed thereto. F. H. Vibert, Clerk to the Guardians, "Inglewood," Oak Hill-road, Sevenoaks.

NOVEMBER 4.—**Sheffield**.—HOUSES.—166 houses at the Manor estate Intake, for the T.C. F. E. P. Edwards, F.R.I.B.A., City Architect. Deposit £2.

NOVEMBER 4.—**Surrey**.—CLEANING AND PAINTING.—Cleaning and painting works at King George V Sanatorium, Godalming, Surrey, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

NOVEMBER 4.—**Various Places**.—VARIOUS WORKS.—(1) North Eastern Fever Hospital, St. Ann's-road,

Tottenham, N.15, alterations and additions to laboratory buildings: (2) Southern Hospital, Dartford, Kent, rebuilding chimney stacks; (3) St. Ann's Home, Herne Bay, Kent, isolation accommodation; (4) Queen Mary's Hospital, Carshalton, Surrey, drainage channels to airing courts; (5) Highwood Hospital, Brentwood, Essex, minor structural alterations; (6) Grove Park Hospital, Lee, S.E.12, alterations to existing building to form residence for steward, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

NOVEMBER 4.—**Wath**.—PAINTING.—Distemping, painting, &c., required at the maids' and nurses' rooms at the Wath Wood Hospital, for the Wath, Swinton and District Joint Hospital Board. Nicholson & Co., Clerks to the Board, Wath-upon-Dearne.

NOVEMBER 4.—**Windsor**.—HOUSES.—Ten non-parlour type houses at the Windsorham site in Thorn-down-lane, for the U.D.C. C. Gray, Surveyor to the Council, Council Offices, Bagshot. Deposit £2 2s.

NOVEMBER 5.—**Clayton**.—ADDITIONS.—Additions (teachers' lavatory accommodation), at Clayton Council school, for the Queensbury and Clayton District Subcommittee. B. Leah, Education Office, Bingley.

NOVEMBER 5.—**Glasgow**.—SCHOOL.—Erection of Riddrie Public School, Leader-street, Riddrie, for the E.C. J. Clark, Director of Education, 129, Bath-street. Deposit £1.

*NOVEMBER 5.—**Kent**.—PURCHASE AND REMOVAL.—Of a number of old cement chamber kilns from the Thames Deep Water Co., Northfleet, Kent. T. H. McDermott, A.M.I.M.E., Consulting Engineer, Rowanmore, Edwin-road, Rainham, Kent.

NOVEMBER 5.—**London**.—HEATING.—Low-pressure hot-water heating, &c., at Montagu House, Whitehall, S.W., for H.M.O.W. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1.

NOVEMBER 5.—**Surrey**.—FLATS.—Erection of thirty flats, California-road site (a) with external walls of brick; or alternative (b) with external wall of concrete blocks, for the U.D.C. R. H. Jeffes, A.M.Inst.C.E., Council's Architect, Council Offices, New Malden, Surrey. Deposit £2 2s. (by cheques).

NOVEMBER 6.—**Cudworth**.—HOUSES.—Twenty-eight houses of the non-parlour type on Spydale-road site, for the U.D.C. J. A. Haigh, Surveyor and Engineer. Deposit £2 2s.

NOVEMBER 6.—**Cudworth**.—PREMISES.—New office premises in Barnsley-road, for the U.D.C. J. A. Haigh, surveyor.

NOVEMBER 6.—**Dublin**.—BUILDING, &c.—For (1) erection of a Garda Siochana Station at Ballylooby, co. Tipperary; (2) restoration of Tipperary ex-R.I.C. barrack; (3) restoration of Nobber ex-R.I.C. barrack, co. Meath; (4) restoration of Kerrykeel (Greenfort) ex-R.I.C. barrack, co. Donegal, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath. Deposit £1 each.

NOVEMBER 6.—**Leeds**.—HEATING.—Accelerated low-pressure hot-water heating, at Gledhow Ministry of Pensions Hospital, for H.M.O.W. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

*NOVEMBER 6.—**Southend-on-Sea**.—SCHOOL.—Proposed additions to West Leigh Council School, for Education Committee, Southend-on-Sea. Director of Education, Education Offices, 20, Warrior-square, Southend-on-Sea. Deposit £2 2s.

NOVEMBER 7.—**Chapel-en-le-Frith**.—WARDS.—Maternity wards and alterations to Poor Law Institution, Chapel-en-le-Frith, for the B.G. C. Flint, L.R.I.B.A., architect, Buxton. Deposit £1.

NOVEMBER 7.—**Halifax**.—PLUMBING.—Converting to the water carriage system, 31 closets at various properties in the Salterhebble District, for the C.B. Borough Engineer, Crossley-street.

NOVEMBER 7.—**Tadcaster**.—PAINTING.—The outside of infectious diseases hospital, Garforth Cliff, for the R.D.C. H. M. Driver, Surveyor, Garforth, near Leeds.

NOVEMBER 7.—**Virginia**.—ROOF.—New roof, plastering, &c., at Lurgan Roman Catholic Church, Virginia, co. Cavan, for the Rev. B. Gaffney, M. Grace, Oldcastle. Deposit £5 5s.

NOVEMBER 9.—**Basford**.—CONVERSION.—Conversion of pail closets to water closets, in the parish of Colwick, for the R.D.C. S. Maylan, engineer and surveyor. Deposit £1 1s.

NOVEMBER 9.—**Clutton**.—HOUSES.—Twelve houses at Clutton, for the R.D.C. W. T. Hawker, architect, Council Houses, Temple Cloud, near Bristol. Deposit £3 3s.

NOVEMBER 9.—**Dartmouth**.—HOUSES.—Block of four houses on a site known as Avery's Meadow, Victoria-road, for the T.C. Couldrey & Son, architects, Palace-avenue, Paignton. Deposit £2 2s.

NOVEMBER 9.—**Dunmow**.—HOUSES.—Forty-six houses, as follows:—Twenty houses at Chelmsford-road Great Dunmow; six at Church End, Great Dunmow; four at Broxted; four at Bampers Green, Takeley; two at Mole Hill Green, Takeley; four at High Easter; six at Stebbing; two at Little Easton; two at Aythorpe Roothing; two at Barnston; two at Bardfield Saling, for the R.D.C. J. Plumley, Sanitary Surveyor, 58, New-street.

NOVEMBER 9.—**Edinburgh**.—BUILDING.—Demolition and reconstruction of part of Ingliston Farm buildings, house and dairy, and demolition and reconstruction of double cottage, smithy, and cartwright's shop at Gogar, for the T.C. D. A. Donald, Chief Engineer, Edinburgh-Glasgow Road, 271, Alexandra-parade, Glasgow.

NOVEMBER 9.—**Fowey**.—VICARAGE.—New at Fowey. C. W. Parkes Lees, architect, 2, street. Deposit, £2 2s.

*NOVEMBER 9.—**Herston**.—HOUSES.—Erection of 12 houses under the provisions of the Housing 1924, for the Swanage U.D.C. The Cler Council, Town Hall, Swanage. Deposit £1 1s.

NOVEMBER 9.—**Llandudno**.—DWELLINGS.—Erection of 28 dwellings for the Llandudno U.D.C. Engineer and Surveyor, Town Hall, Llandudno.

NOVEMBER 9.—**London**.—S.E.—DWELLING.—Erection of a block of dwellings on the Dickson Road, in brick, also alternative construction in reinforced concrete, for the Architect to the Council, The County Hall, No. 3, Westminster Bridge, S.E.1. Deposit £1 1s.

NOVEMBER 9.—**Macclesfield**.—ADDITIONS.—Additions and alterations at the Union Offices, 1, road, for the B.G. Whittaker & Bradburn, 19, King Edward-street.

NOVEMBER 9.—**Manchester**.—HEATING.—Apparatus at the Free Trade Hall, for the T. Architect. Deposit £1 1s.

NOVEMBER 9.—**Smallburgh**.—COTTAGES.—In the following parishes, viz.:—Honing, 2; for the R.D.C. F. Davies, Clerk, North. Deposit £1 1s.

NOVEMBER 9.—**Sutton-in-Ashfield**.—HOUSES.—Twenty houses in pairs, parlour type, and 28 pairs, non-parlour type, for the U.D.C. V. Bocock, architects and surveyors, Mansel. Deposit £2 2s.

NOVEMBER 10.—**Birkenhead**.—ALTERATIONS.—Alterations and additions to House Telephone Exchange. The Contracts M.H. Office of Works, King Charles-street. Deposit £1 1s.

NOVEMBER 10.—**Bolton-upon-Dearne**.—HOUSES.—Erection of seventy dwelling houses, together with road and surface water drainage on housing scheme sites, for the U.D.C. W. Adams, A.R.I.B.A., Council Offices, Bolton. Deposit £1 1s.

NOVEMBER 10.—**Near Sheffield**.—SCHOOL.—School for 200 children at Woodsetts, near Sheffield, West Riding E.C. Education Department, Hall, Wakefield.

NOVEMBER 10.—**Newton**.—HOUSES.—Twelve at Chudleigh, for the R.D.C. B. H. Palmer, L. 11, Union-street.

NOVEMBER 10.—**Northfleet**.—HOUSES.—Of 26 houses, or any less number as the may desire, on the house estate, for the Council Offices, High-street, Northfleet. £2 2s.

*NOVEMBER 10.—**Torbay**.—HOSPITAL.—and completion of a new hospital on the Heng near Torre Station, Torquay. Hon. Sec., Hospital, Sunshine, Babbacombe, Torquay.

NOVEMBER 11.—**Eccles**.—HOUSES.—Seven houses in Anson-street, Winton, for the T.C. Borough Engineer and Surveyor. Deposit £1 1s.

NOVEMBER 11.—**Essex**.—SECONDARY SCHOOL.—Erection of a secondary school at Brentwood pupils, for the Essex C.C. County Architect, field Old Court, Chelmsford. Deposit £2 2s.

NOVEMBER 11.—**Essex**.—SCHOOL.—Additions to the elementary school at Al for the E.C. Essex C.C. County Architect, £1 1s. to the County Accountant, Old Court field, Chelmsford.

NOVEMBER 11.—**Kirkburton**.—BYRES.—Cow the Storches Hall Mental Hospital, Kirkburton, Huddersfield, for the West Riding C.C. W. Burton, Architect and Engineer, West Riding Hospitals Board Office, Wakefield. Deposit £1 1s.

NOVEMBER 11.—**Manchester**.—WORKS.—Works required in the erection of the Levenshulm Schools for Girls, for the E.C. P. M. Heat Clerk. Deposit £2 2s.

NOVEMBER 11.—**Preston**.—HEATING.—Low hot water heating, at the District Manager (phones) Office for H.M. Office of Works, C. Branch H.M. Office of Works, King Charles-street, S.W.1. Deposit, £1 1s.

NOVEMBER 11.—**Swallowston**.—PLUMBING.—Replacement by copper pipes of the existing hot water pipes in the Scarlet Fever Ward, at the nearest Hospital, for the South Rotherham and park District Isolation Hospital Committee. Stryling, Clerk to the Committee, 6, North street, Sheffield.

NOVEMBER 12.—**Lambeth**.—S.W.2.—DEMOLITION.—Demolition of the Old Workhouse, Prince Kennington, the materials from which will be property of the contractor; and for the erection of vacant site of four blocks of dwellings, on 108 flats. Osmond Cattlin, Borough Engineer, 1, Town Hall, Brixton-hill, S.W.2. Deposit £3 3s.

NOVEMBER 14.—**Gargrave**.—STATION.—station at Gargrave, near Sipton, for the West C.C. P. O. Platts, A.R.I.B.A., County A. County Hall, Wakefield.

NOVEMBER 14.—**Wayland**.—HOUSES.—Ten for the R.D.C. A. A. Gompertz, Clerk, Norfolk.

NOVEMBER 16.—**Chipping Sodbury**.—HOUSES.—(1) eight at Stoke Gifford; (2) two at Puckle (3) six at Shortwood; (4) four at Watley Winterbourne; (5) four at Marshfield, for the Housing Inspector. Deposit £1 1s.

NOVEMBER 16.—**London**.—DWELLINGS.—Erection of a block of dwellings and the erection of a block on the Whitmore Estate (Ware-street) Shoreditch, for the L.C.C. Architect to the County Hall (Room No. 3), Westminster S.E.1. Deposit £2.

*NOVEMBER 18.—**Leigh-on-Sea**.—Erection of Office and Telephone Exchange. The C. Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s., payable to the Commis-

NOVEMBER 18. — London. — HEATING. — Re-arrangement of the central heating and hot-water services at St. Andrew's Hospital, Devon-road, Bow, for the plan B.G. Consulting Engineer. Deposit £2.

NOVEMBER 18. — Kitchdale. — SHELTER. — Tramways for the Butts, for the C.B. Borough Engineer.

NOVEMBER 19. — Middlesbrough. — EXTENSION. — Of Head Post Office, for the Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £15, payable to the Commissioners.

NO DATE. — Aylesbury. — NURSES' HOME. — Erection and completion of a nurses' home at the Union House, Taylor & White, 7, Bourbon-street, Architects to the landlords. Deposit £2 2s.

NO DATE. — Chatham. — CINEMA. — Cinema operating room on a site situated at the Kent County Mental Hospital. P. H. Arthur, Clerk and Steward, Chatham, or Canterbury.

NO DATE. — Hartlepool. — HALL. — New dance and assembly hall, for the T.C. J. H. Miers, Borough Engineer.

MATERIALS, etc.

NOVEMBER 2. — Dartford. — TAR. — 80,000 gallons of hydrated tar, for the R.D.C. E. J. Hobbs, Clerk.

NOVEMBER 6. — Belfast. — MATERIALS. — Slates, hard-are, broken stones and screenings, for the C.B. City Surveyor.

NOVEMBER 6. — Petersfield. — MAINS. — 1,460 yards of in. diameter cast-iron water main and specials, together with valves, fire hydrants, &c., for the U.D.C. Longbottom, Surveyor and Waterworks Engineer.

NOVEMBER 6. — Tadcaster. — ESCAPE. — Providing and fixing of iron fire escape at the Mental Block of the Guardians' Institution, for the B.G. C. A. Bromet, Clerk to the Guardians.

NOVEMBER 9. — Annan. — PIPES. — 351 tons of 7 in. diameter cast-iron pipes and special castings, for the Dumfriesshire C.C. Warren & Stuart, engineers, 94, Hope-street, Glasgow. Deposit £2 2s.

NOVEMBER 9. — Annan. — PIPES. — 464 tons of 8 in. diameter cast-iron pipes and special castings, for the Dumfriesshire C.C. Warren & Stuart, engineers, 94, Hope-street, Glasgow. Deposit £2 2s.

NOVEMBER 12. — Dublin. — MATERIALS. — Various materials, including cement, slates, bricks and tiles, for the Great Northern Railway (Ireland). J. R. Stephens, Secretary, Amiens-street Station.

NOVEMBER 12. — Wellington (New Zealand). — PIPES. — Of 4 in., 6 in., and 8 in. cast-iron pipes, bends, sluice valves, fire plugs, fire plug tees and risers, sluice valve surface boxes, tapered collars and hydrant balls, for the T.C. Department of Overseas Trade (Room 50), 35, Old Queen-street, London, S.W.1.

NOVEMBER 14. — Lewes. — MATERIALS. — Granite, granite binding gravel, ½ in. limestone chippings, and sand; tarred macadam, tar, for the East Sussex C.C. F. J. Wood, County Surveyor.

NOVEMBER 17. — London. — MATERIALS. — For (1) girder bridges, comprising 74 spans of from 4 ft. to 60 ft. clear, weight 1,216 tons approximately, and 84 large plates for girders, weight 7 tons approximately; (2) steel material, M.S. angles, flats, rounds, squares, sheets, &c., 1,161 tons approximately, for the Madras and Southern Mahratta Rly. Co. Directors, 25, Buckingham Palace-road, S.W.1. Charge £1 1s.

ENGINEERING. IRON AND STEEL.

NOVEMBER 2. — Southampton. — REPAIRS, &c. — For (1) alterations to the electrical equipment of the twelve existing cranes to make them suitable for a new system of supply; (2) provision and laying of certain cables, disconnecting boxes, &c.; (3) switchgear; (4) provision of two crane weighing machines, for the Harbour Board. W. G. Gubbins, Clerk. Deposit £5 5s.

NOVEMBER 6. — Denbigh. — BRIDGE. — Construction of a reinforced concrete trestle bridge and other works in connection with the proposed improvement of Cwm Alis Corner, situated about 4 miles north-west of Chirk on the Holyhead road, for the C.C. E. W. Jones, County Surveyor for Roads and Bridges (Eastern Division), Aelbybryn, Wrexham. Deposit £5.

NOVEMBER 6. — Durham. — TANK. — Construction of a small sewage tank, filter bed and catchpit, with 178 lineal yards of 6 in. sewers and 90 lineal yards of military palisade fencing in connection therewith between Burnburn and Quarrington, for the R.D.C. Geo. Gregson, Surveyor to the Council, 38, Saddler-street. Deposit £1.

NOVEMBER 9. — Manchester. — WIDENING. — Of the bridge at Crescent-road, Crumpsall, over the L.M. & S. Rly., for the T.C. City Engineer. Deposit £2 2s.

NOVEMBER 10. — Port Talbot. — DRIVING. — Pile driving and ferro-concrete foundations to a gasholder at the Aberavon Gas Works, for the T.C. A. J. Bond, Gas Engineer, Port Talbot.

NOVEMBER 16. — Worthing. — RESERVOIRS. — Construction of two covered reinforced concrete reservoirs each of 500,000 gallons capacity, for the T.C. T. & C. Hawksley, civil engineers, 34, Old Queen-street, Westminster, S.W.1. Deposit £3 3s.

NO DATE. — Worsborough. — REPAIRS. — Formation of bowling green, hard tennis court, children's playing corner, iron railing and gates, &c., for the Miners' Welfare Committee. C. F. Moxon, architect, Regent-street South, Barnsley.

ROAD, SEWERAGE, AND WATER WORKS.

NOVEMBER 2. — Beckenham. — SEWERS. — Widening of and the construction of soil and surface water sewers in Scotts-lane, for the U.D.C. J. A. Angell, Surveyor.

NOVEMBER 2. — Hendon. — MAKING-UP. — West-avenue, The Approach, Golden-rose, The Crest, Woodlands, and Woodlands-crescent, for the U.D.C. A. O. Knight, engineer and surveyor. Deposit £5.

NOVEMBER 2. — Hendon. — WIDENING. — Widening works, road and footpath construction in Lower Hale-lane, for the U.D.C. A. O. Knight, engineer and surveyor. Deposit £5.

NOVEMBER 2. — Normanton. — MAKING-UP. — For (a) Back Ellins-terrace, and (b) rebuilding boundary walls in Market-street, for the U.D.C. W. F. Copp, Surveyor.

NOVEMBER 2. — Wallington. — ROAD. — New road, approximately 5,000 ft. in length, to connect Sandy-lane and Plough-lane, Wallington, Surrey, for the M.T. Divisional Road Engineer (London Division), Ministry of Transport, 7, Whitehall-gardens, S.W.1. Deposit £20.

NOVEMBER 2. — Whitstable. — MAKING-UP. — Part of Tankerton-road, approximate length 838 yds., for the U.D.C. J. Dunn, Surveyor. Deposit £1.

NOVEMBER 3. — Ashton-upon-Mersey. — MAKING-UP. — Private streets and passages, for the U.D.C. F. Hutton, surveyor. Deposit £1 1s.

NOVEMBER 3. — Cowbridge. — REPAIRS. — For (1) construction of a proposed bridge and approaches at Ynysallan Ford; (2) for laying of a surface water drain at Pantrithin, for the R.D.C. G. E. Morris, surveyor. Deposit £3 3s.

NOVEMBER 3. — Ealing. — MAKING-UP. — Gloucester-road from Windermere-road to Dorset-road, Hereford-road from Bramley-road to No. 36 inclusive, Rosebery-gardens, Park-view-road, Weymouth-avenue from Bramley-road to Hereford-road, for the T.C. W. R. Hicks, Borough Engineer. Deposit 10s. 6d. each.

NOVEMBER 3. — Standish-with-Langtree. — SEWER. — Construction of a length of about 700 yards of sewer, 9 in. in diameter, in Pepper-lane, Standish, for the U.D.C. A. Clough, surveyor.

NOVEMBER 4. — Burntisland. — EMBANKMENT. — Embankment wall and other works at Rossend Bay, Burntisland, for the British Aluminium Co. C. S. Meik & Buchanan, engineers, 16, Victoria-street, Westminster, S.W.1. Deposit £5.

NOVEMBER 4. — Cardiff. — ROAD. — For (a) widening road near Castell Bach, Pendoylan, and (b) the construction of about 100 lineal yards of 9 in. earthenware pipe surface water sewer, with manholes, &c., at Heol-y-Felin, Whitchurch, for the R.D.C. W. Farrow, surveyor, Park House, 20, Park-place.

NOVEMBER 4. — Farnham. — DRAINAGE. — Construction of about 15 miles of 9 in., 7 in., 6 in., and 5 in. diameter stoneware and cast-iron sewers and pumping mains, together with manholes, ventilating shafts, and other appurtenant works, for the U.D.C. G. Midgley Taylor, of Messrs. John Taylor & Sons, engineers, Caxton House, Westminster, S.W.1. Deposit £5.

NOVEMBER 4. — Glamorgan. — ROAD. — Construction of a section of a new road, approximately 1½ miles in length, commencing at a point 340 yards south-east of Parc Colliery Upcast Shaft, near Cwmpare, proceeding via Bwlch-y-clawdd, and terminating at a point one mile north of Nantmole, for the C.C. T. M. Franken, Clerk of the C.C., Glamorgan County Hall, Cardiff.

NOVEMBER 4. — Glenelvie. — ROAD. — Diverting and constructing 958 lineal yards of the Laurencekirk turnpike, Route A 94, at Bridge of Mendynes, for the Kincardineshire C.C. A. Forbes, County Road Surveyor, County Buildings, Stonehaven. Deposit £2.

NOVEMBER 4. — Hove. — PAVING. — Making-up roadway, laying new paving and other works in connection therewith in Hallyburton-road, for the T.C. Borough Surveyor.

NOVEMBER 4. — Invercannie. — ROAD. — Diverting and constructing 624 lineal yards of the Aberdeen-Braemar road, Route A93, at Invercannie, for the Kincardineshire C.C. A. Forbes, County Road Surveyor, County Buildings, Stonehaven. Deposit £2.

NOVEMBER 5. — Bedford. — MAKING-UP. — Bradgate-road, Haynes-road, and part of Miller-road, for the T.C. N. Greenshields, Borough Engineer and Surveyor. Deposit £2 2s.

NOVEMBER 5. — Killin. — REPAIRS. — Overhaul of the sewage works, for the Committee. G. Thomson, 164, Bath-street, Glasgow. Deposit £1 1s.

NOVEMBER 5. — Skipton. — ASPHALTING. — At the Girls' High School, for the West Riding E.C. Education Department, County Hall, Wakefield.

NOVEMBER 6. — Durham. — MAKING-UP. — For the re-making of 318 lineal yards of roadway and footpaths and the construction of 716 lineal yards of 12 in., 9 in., and 6 in. surface water drains, with manholes and street gullies in connection therewith, at East Hetton Village, for the R.D.C. G. Gregson, Surveyor to the Council, 38, Saddler-street. Deposit £1.

NOVEMBER 6. — Penybont. — SEWERAGE. — Construction of a sewerage and sewage disposal scheme at Pont-rhydydd, Llangynydd, for the R.D.C. J. Simon Davies, Surveyor, 8, Wyndham-street, Bridgend. Deposit £5 5s.

NOVEMBER 7. — Southwick. — SEWERS. — Sewering portions of Southwick-street, Upper Shoreham-road, and Mile Oak-road, comprising about 1,500 yards run 8 in. glazed stoneware pipes, with manholes, automatic flushing apparatus and other appurtenant works, for the U.D.C. Geo. W. Watt, Surveyor. Deposit £1 1s.

NOVEMBER 9. — Annan. — PIPES. — Laying, jointing, and testing of about 4 1½ miles of 7 in. diameter cast iron water pipes, for the Dumfriesshire C.C. Warren & Stuart, engineers, 94, Hope-street, Glasgow. Deposit £2 2s.

NOVEMBER 9. — Annan. — PIPES. — Laying, jointing, and testing of about 3½ miles of 8 in. diameter cast-iron water pipes, for the Dumfriesshire C.C. Warren & Stuart, engineers, 94, Hope-street, Glasgow. Deposit £2 2s.

NOVEMBER 9. — Edinburgh. — SEWERS. — Construction of new sewers on the Saughtonhall housing area, for the T.C. Burgh Engineer.

NOVEMBER 9. — Sheeburness. — MAKING-UP. — Richmond-avenue (southern end), for the U.D.C. F. Gregson, Clerk, 46, Alexandra-street, Southend-on-Sea.

NOVEMBER 9. — Staffordshire. — WIDENING. — Widening of the Old Chester main road, from Little Aston cross roads to Brownhills, a length of about 4 miles, for the C.C. J. Moncur, County Surveyor, County Buildings, Stafford.

NOVEMBER 10. — Featherstone. — KERBING. — Kerbing, channelling, metalling on existing foundations, &c., in connection with about 160 houses, for the U.D.C. Samuel Chesney, A.R.I.B.A., surveyor. Deposit £2 2s.

NOVEMBER 11. — Erpingham. — EXTENSION. — Of the sewerage system at Mundesley, for the R.D.C. A. H. Plowright, Engineer. Deposit £3 3s.

NOVEMBER 14. — Eccles. — RECONSTRUCTION. — For (1) rock asphalt on concrete—Hampton-street, George-street, Henry-street, Leigh-street, Bright-road, Mather-street, Gorton-street, Boardman-street, Canal-side, Green-street; (2) tarred macadam—Andover-street, Franklin-street, South King-street, John William-street, Alexandra-road, Aldred-street, John William-street, Green-street; and (3) granite setts on concrete—Wellington-road, Cawdor-street, Trafford-road, Peel-street and Albert-street, for the T.C. Borough Surveyor. Deposit £2 2s. each.

NOVEMBER 14. — Kingston-upon-Thames. — ROADS AND SEWERS. — Construction of roads and sewers on housing estate, for the Corporation. Harold A. Winsor, Town Clerk, Municipal Offices, Kingston.

NOVEMBER 19. — Staffordshire. — WIDENING. — Widening of the Old Chester main road, from Little Aston Cross roads to Brownhills, a length of about 4 miles, for the C.C. J. Moncur, County Surveyor, County Buildings, Stafford.

NO DATE. — Preston. — SEWERS. — Construction of sewers and manholes in Liverpool-road, Pope-lane, Cop-lane, &c., for the R.D.C. H. Heaton, 41, Fishergate.

Competitions.

(See Competition News, page 622.)

Auction Sales, Tenders, etc.

*** NOVEMBER 2. — Broxbourne. —** William Dawes will sell, in the High-road, various building materials. Auctioneers, Broxbourne.

*** NOVEMBER 3. — Gospel Oak. —** Veryard & Yates will sell, without reserve, at 103A, Mansfield-road, Gospel Oak, timber and building materials. Auctioneers, 365, Norwood-road, S.E.27.

NOVEMBER 4. — Cranbrook, Kent. — Veryard & Yates will sell, without reserve, the valuable materials arising from demolition of "Glebe House," Cranbrook, removed (owing to a sale on the premises being prohibited), to "Rectory Farm" (in rear of the "White Horse" Hotel), timber and building materials, slates, &c. Auctioneers, 365, Norwood-road, S.E.27.

NOVEMBER 4. — Hayward's Heath. — Knight, Frank & Rutley will sell, as a whole or in 46 lots, by direction of Edward Huth, Esq., at the Goldings Hotel, Hayward's Heath Station, freehold residential, sporting and building property known as Wykehurst Park Estate (remaining portions), including The Stanley Mansion; also a private residence known as "Hazel-dean," about 380 acres. Auctioneers, 20, Hanover-square, W.1.

*** NOVEMBER 9. — Evesham. —** E. G. Righton & Son will sell, at the King's Head Hotel, freehold property belonging to the late Mr. Harry Cooper. Auctioneers, Evesham, Alcester and Pershore.

*** NOVEMBER 10. — Eltham. —** F. H. Clark will sell, at Timber Yard, Cinder-path, Well Hall-road, huts, timber and building materials. Auctioneer as above.

*** NOVEMBER 10. — Hackney. —** E. Joseph Hibbard & Sons will sell, without reserve, by order of Messrs. Haggis & Sons, preparatory to disposal of premises at Nos. 3 and 5, Pembury-place, Hackney Downs Station, E.5, stock of timber, piano parts, &c. Auctioneers, 15, Newington-green, Islington, N.16.

NOVEMBER 10. — Kent. — Hampton & Sons will sell, with vacant possession, at the St. James' Estate Rooms, 20, St. James'-square, S.W.1, freehold residential property between Chislehurst and Bromley, 300 ft. up, on dry gravel soil, the property known as "Mavelstone," Bromley, Kent, consisting of about 3½ acres; also two sites of about 2 and 6¼ acres, respectively. Auctioneers, 20, St. James'-square, S.W.1.

NOVEMBER 10 AND 11. — Hammersmith, W.6. — Henry Butcher & Co. will sell without reserve, at 237, Hammersmith-road, Hammersmith, W.6, woodworking machinery, builder's plant and stock, &c. Auctioneers, 63 and 64, Chancery-lane, W.C.2.

*** NOVEMBER 12. — Osterley. —** Tyser, Greenwood & Co. will sell, by order of Executors, five plots of land on the south side of the Great West-road. Auctioneers, 386, High-road, Chiswick, W.4.

Public Appointments.

NOVEMBER 5. — Huddersfield. — Building Inspector required in the Borough Architect's Department, for the Borough Council. J. Henry Field, Town Clerk, Huddersfield.

*** NOVEMBER 5. — Sunderland. —** Clerk of Works, with knowledge of heating engineering, required by the Governors of the Sunderland Royal Infirmary. S. C. Fryer, Secretary, at the Infirmary.

NOVEMBER 7. — Croydon, Surrey. — ARCHITECT. — Required by the Education Committee to superintend the erection of secondary school, also prepare plans. The Clerk to the Committee, Katharine-street, Croydon.

NOVEMBER 9. — Bradford. — Resident Clerk of Works required from January 1, 1926, to supervise the erection of new Freemasons' Hall, Manningham-lane, Bradford. H. E. Bower, 9, St. Andrew's-place, Bradford.

*** NOVEMBER 9. — Leicester. —** Two Assistants, also a Junior Architectural Assistant, required by the City Council in the Town-Planning Department. E. George Mawbey, Surveyor, Town Hall.

*** NOVEMBER 9. — Watford. —** Clerk of Works in connection with the erection of 96 houses required by the Corporation. W. W. Newman, Borough Engineer, Municipal Offices.

*** NO DATE. — Salisbury Plain. —** A qualified Quantity Surveyor is required at the Royal Engineer Office, Larkhill Camp. To Commanding Royal Engineer, 2A, Camp, above address.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ACTON.—The B.C. has recommended Mr. Middleton to submit amended plans to the Baths Committee and afterwards to the Works Committee, for the extensions to the Public Baths.—Messrs. Rydman, Street & Bridge have submitted an application to the B.C. for the acquisition of the whole of a substantial portion of the land still remaining at the East Acton housing estate, for the erection of houses.

ADWICK-LE-STREET.—The U.D.C. has decided that the Industrial Housing Association be approached with a view to the sale to the Council of land at Woodlands East, on which to build 180 houses.—Application is to be made to the M.H. for sanction to borrow £2,968 for wiring 350 Council houses.

ARLESEY (W. YORKS.).—The M.H. has sanctioned a scheme for the erection of 110 houses. Tenders are to be invited for the first portion of the contracts, comprising 52 houses.

AYLSBURY.—It is proposed to build an annexe to the Aylesbury Grammar School, to include new laboratories, cloakrooms, &c. Plans have been prepared by F. Taylor, 50, Bourton-street.

BAMBER BRIDGE.—The Parochial Church Council of St. Saviour's are to erect a war memorial hall.

BARDNEY.—A sugar beet factory is shortly to be erected at Bardney, near Lincoln.

BARNES.—The M.H. has sanctioned a loan of £32,000 for the erection, by the Surrey E.C., of a secondary school for boys.

BARNET.—The Governors of the Boys' Grammar School are considering the question of the erection of a new school or rebuilding the present one. An architect is to be appointed.

BARNLEY.—The M.H. has sanctioned a loan of £34,000 for the purchase of property for the central area improvement.—The question of accommodation at the cattle market is under consideration.—The Borough Engineer is to prepare plans for the lay-out of Churchfield as a recreation ground, including the provision of a bandstand.—The Borough Engineer is to obtain estimates for the construction of a paddling pool and a sandpit.—Tenders are to be invited for the erection of buildings at the Soughley pumping station.

BASFORD.—The B.G. has decided that application be made to the M.H. for consent to an expenditure of £1,905 in connection with the provision of new day rooms and a small ward at the institution.

BEDWAS.—A new secondary school is to be erected at Lower Machen, at a cost of £22,000; and a new infants' school on the Mary-street site at Bedwas.

BEEDE (SUSSEX).—The Committee of the Village Institute has decided to erect a new hall.

BIRMINGHAM.—The Corporation propose to undertake drainage works and extensions at various cemeteries and to construct a lodge at Cannon Hill, at a total cost of £14,000.—Extensions are to be carried out at the Rubery and Hollymoor mental hospitals, at a cost of £6,000.—Pavilions, conveniences, and improvements are proposed at various parks, at a total cost of £22,245.—A scheme has been prepared for the extension and rebuilding of the Rotton Park salvage depot, at a cost of £78,000.—Further contracts in connection with the Hockley Valley drainage, at a cost of £205,000, have been let, and it is proposed to arrange for the reconstruction of the Hockley main sewer, at a cost of £124,000, and the reconstruction of sewers at Summer-lane and Hockley-hill, at a cost of £35,400.—A sewerage scheme at King's Heath is to be undertaken, at a cost of £9,000.—The provision of further lavatory accommodation in various parts of the city is being considered.—A further extension at the Moseley secondary school is to be undertaken, at a cost of £25,000.—Another block is to be built at the Billesley elementary school, at a cost of £15,000.

BLACKPOOL.—The M.H. are to hold an inquiry into an important scheme for preserving the cliffs at North Shore, for the T.C., who want to borrow £73,600 for the purpose.

BOURNEMOUTH.—The Corporation have asked the Borough Engineer to prepare plans for the construction of a bathing jetty.—Tenders are to be invited for the enlargement of the Stourfield elementary school.—The E.C. are considering the erection of a new elementary school.—It is proposed to erect police barracks on a site adjoining the Lansdowne Council school.

BOSTON.—The M.H. has given sanction to the proposal of the Holland C.C. to build central offices in the Sessions-house yard. The estimated cost of the work is £30,000.

BRADFORD.—Twenty acres of the Clock House estate are to be leased by the Corporation to the trustees for the erection of a new grammar school.—The Board of Control are to be asked to give approval to the scheme for the proposed new institution for mental defectives at Westwood.—The M.H. have sanctioned a loan of £20,000 for the White Abbey improvement scheme.—A site adjacent to Bradford Moor has been purchased for a housing scheme and street works are to be undertaken, at a cost of £3,320.—The M.H. has sanctioned a scheme to cost £83,200, for the erection of 180 houses by direct labour, at the Thornton estate.—Land at Wrose-road is being acquired, at a cost of £8,748, for a housing scheme.—The City Architect has prepared the lay-out of the sixth section of the Ecclestone housing site.—A convenience is to be erected at Saint Green, Great Horton.—The Housing Committee are nego-

tiating with the Cleckheaton Colliery Co. for land adjoining the Bierley estate, for a housing scheme.

—The Housing Sub-committee has arranged with Mr. J. Bickerdyke, of Grove House, Bolton, for the erection of 200 houses on the Grove House Estate.—The M.H. has sanctioned borrowing powers for £74,052, for the erection of 166 working-class dwellings on the Lower Grange Estate.

BRAINTREE.—The R.D.C. has accepted tenders for the erection of houses in the following parishes: Stisted 12, Blackmore End, Wethersfield, 6; Wethersfield, 8; Terling, 8; Rayne, 8; Finchingfield, 6.

BRENTFORD.—Stables at Carville Hall are to be converted into three cottages, at a cost of £900.

BRIGHTON.—The M.H. has held a public inquiry into the T.C.'s application for sanction to borrow £100,000 for the purposes of improving the Spa and also the Parade.—The T.C. propose to erect a large concert hall and dancing room at the Spa and improve the cafe and ten lock-up shops facing Marine-drive.—On the Victoria-terrace estate, it is intended to construct a large concert and dancing hall, a cafe, bathing pool, and sunken gardens.

BRIDGE.—The U.D.C. has received a notice from the County Council that they will make provision for new schools.

BRIGHTON.—Funds are being raised for alterations, &c., to the Royal Alexandra Hospital for sick children. The cost of the work is estimated at £5,000.

BURNLEY.—The B.G. propose to alter and improve the kitchen at Primrose Bank Infirmary, at an estimated cost of £1,500.

CARSHALTON.—The United Methodists are to erect a new church in Ruskin-road.

CHADDERTON.—The U.D.C. propose to build fifty houses on the Burnley-lane site and twenty houses on the Denton-lane site, for which plans, submitted by the Surveyor, have been approved.—Plans submitted by A. Turner, architect, 11, Clegg-street, Oldham (on behalf of the Elk Mill Co.), for a new cotton mill, off Broadway, have been approved by the D.C.

CHEADLE.—The Rough Cast Building Co., 23, King-street West, Manchester, propose to erect a large number of new semi-detached houses on the Grange estate, Cheddle-road, Cheddle Heath.

CHERTSEY.—A new housing scheme at Pyrcroft-road has just been commenced, involving a sum of £25,430. Messrs. Lacey & Sons, of Luton, are the contractors; and Mr. W. J. Parker, the architect.

CHORLEY.—The Governors of Chorley Hospital have decided that a new site should be secured for the erection of a hospital, which is estimated to cost from £40,000 to £50,000, in lieu of a previous proposal to make an extension of the existing institution.

CHORLTON-CUM-HARDY.—The Manchester E.C. recommend the erection of a permanent and larger school to replace the temporary one at Oswald-road, to accommodate 480 scholars as against the present accommodation for 300 scholars, at an estimated cost of £14,000. Application is to be made to the M.H. for sanction to borrow the money.

COALVILLE.—The M.H. has given the U.D.C. sanction to borrow £46,000 for the erection of 76 houses and streets.

CORK.—The City Engineer recommends the T.C. to build a new concrete bridge at Carroll's Dock instead of repairing the old bridge, at a cost of £2,500. The Commissioner decided that sanction be asked from the Local Government Department to raise a loan for the purpose.

CORRY.—A school is to be erected in Corry, near Belleek, co. Fermanagh.

COVENTRY.—The Church of St. Barbara, Earlsdon, is to be extended, at an estimated cost of £20,000.

DAREFIELD.—West Riding E.C. has voted £7,500 for the provision of an elementary school for 250 scholars.

DAVENPORT.—Funds are being raised for the erection of new school buildings for St. Joseph's R.C. Church.

DAVENTRY.—The R.D.C. have received application for houses: Weedon, 14 non-parlour type; Byfield, 8 non-parlour and 4 parlour; Elora, 12 houses; and Long Buckley, 8 parlour and 4 non-parlour.

DOUGLAS (I.O.M.).—Tenders are to be obtained for the extension of lavatories, cloak room, &c., at the Villa Marina.—In connection with the proposed harbour works, the Corporation have decided that the work of first importance is the widening of the base of the pier to the Athol Hotel, and the provision of adequate shelter accommodation on the pier.

DOVER.—The Borough Engineer has been asked to report as to the cost of erecting a row of twelve four-roomed cottages, for rehousing purposes on the Crabble-hill improvement area.—The Housing Committee are arranging with Mr. F. G. Harvey for the erection of two further blocks of six houses on the Astor-avenue estate.—It is proposed to proceed with the first part of a scheme, to cost altogether £24,000, for the reconstruction or the isolation hospital.

DUBLIN.—A sum of £3,000 has been subscribed towards the erection of the proposed concert hall for Dublin.

EASTBOURNE.—Mr. Chatfield is to develop his estate at Brasseys-avenue.—Loans of £875 and £330 have been sanctioned for the erection of conveniences at Seaside and Old Town recreation grounds.—A loan of £2,780 is to be sought for works at the Corporation depot at Bedfordwell.

EPSOM.—The L.C.C. has sanctioned expenditure not exceeding (i) £750 for the adaptation and division of ward N at The Manor, into two sections, each to accommodate 64 male patients, and (ii) £400 in respect of the extension of a verandah at ward A for the accommodation of tubercular female patients.

EXMOUTH.—The U.D.C. is conferring with Mr. Ellis, architect for the reconstruction of St. Barnard's a private house adjoining the Manor grounds, Exmouth, which the Council propose to acquire for municipal offices.

FROME.—The R.D.C. has decided to proceed with the erection of 22 houses—eight at Kilmersdon, two each at Wanstraw and Rudge, and 10 at Haydon.

GATESHEAD.—The E.C. proposed to erect a school at the Carr Hill site, to accommodate about 800 children.

GLASGOW.—A site at Langlands is to be obtained for the erection of 66 houses. The Housing Director has been instructed to proceed with the roads on the Duke-street housing site.—The Water Committee are to consider the erection of houses for employees at Loch Katrine and Loch Arklet.—Additional accommodation is to be provided at the tramway workshops at Govan at a cost of £1,000.—The provision of new convenience at Springfield Park is under consideration.

GOALMING.—The Surrey E.C. propose to purchase about 11½ acres on the Ashstead Estate, Holloway Hill, as the site of the new secondary school.

GOLCAR.—The U.D.C. has received sanction from the M.H. to the borrowing of £16,386, £1,068, and £109 for the erection of dwelling-houses.

GOOLE.—An elementary school for 600 is to be provided by the West Riding E.C., at a cost of £18,000.

GOOSNARGH.—The congregation of the Wesleyan Church are to erect a new Sunday school to the plan prepared by B. Crabtree, architect, of 9, Winckley square, Preston.

GRANTHAM.—It is proposed to carry out a scheme of extensions at various church schools within the parish of St. Wulfrums, at an estimated total cost of £6,150.

GRAYS.—The National Omnibus and Transport Co. Ltd., 206, Brompton-road, S.W.3, are to erect a new omnibus garage and light repair workshops on a site in Argent-street, to a lay-out prepared by H. Cave, 9, Victoria-street, S.W.1.

GREAT PRESTON.—West Riding E.C. has voted £13,500 for the provision of a new elementary school for 450 scholars.

HARROGATE.—The T.C. has resolved to make application to the M.H. for sanction to the borrowing of £31,525 for the erection of 58 "A" type (non-parlour) houses on the Bilton Grange estate.—Application is to be made to the M.H. for sanction to the borrowing of £995, the cost of the erection of a veranda on the north and east sides of the Market Hall.—The Council has received sanction from the M.H. to a loan of £500 for sewerage on the Wedderburn estate.—The T.C. has decided on building a floral hall in the Valley Garden at a cost of £21,000.

HARTLEPOOL.—The B.G. has agreed to a new opening theatre at the Workhouse, at a cost of £1,000. It was also agreed to instal electric light at the Workhouse.—The Hartlepool Paper Works have now been purchased by a company, who propose carrying out extensive alterations and improvements.

HEANOR.—The Committee for the new Memorial Hospital have decided to proceed with the addition of the female ward, at a cost of £825.

HOLBOROUGH.—Arrangements have been made for a large extension of the works already erected and in operation, for the production of cement.

HORNSEY.—The E.C. has decided that the new school proposed to be erected on the Coldfall housing estate—Highgate, shall have accommodation for 810 scholars.

HUDDERSFIELD.—The T.C. has received sanction from the M.H. to the borrowing of £20,419 for the erection of forty-two houses at Laund-road, Salendine Nook.—Application is to be made for the erection of thirty houses.

HULL.—It is proposed to establish a school for Roman Catholic children, in Southcoates-lane.—Sketch plans are to be prepared for an elementary school on the Coppingham-road housing estate.—The M.H. has sanctioned a loan of £3,879 for the purchase of a site in Ings-road for the erection of a secondary school.—A clinic is to be established at Blenheim-street School, at a cost of £465 for alterations, fittings, and furniture.—Alterations are to be carried out at the Osborne-street and Villa-place schools, at a cost of £500.—The Corporation have decided to proceed with the new George-street improvement scheme.—The bridge at Beresford-avenue is to be improved, at a cost of £240.

KINGSBRIDGE (DEVON).—The U.D.C. has accepted a tender for 18 houses at Rock Park.

KIDFORD.—The County Architect of the West Sussex E.C. is preparing plans for a new school.

LEES.—The Corporation Improvements Committee has decided to proceed immediately with the widening of Burley-street, in order to provide for a double line of trams from Park-lane to Burley-road.—Funds are being raised for the restoration of the tower of Whitkirk Church, near Leeds. The cost is estimated at £1,000.

LEVENSHULME.—The Parochial Church Council of St. Peter's Church propose to erect an additional story to the Sunday School buildings and increase the accommodation for an additional 200 children. Plans are being prepared by Mr. F. Fenn, architect, Manchester.

LINCOLN.—The E.C. has acquired a site in Friars lane upon which it is proposed to carry out a scheme of extensions to the Rosemary-lane Wesleyan Schools.

LIVERPOOL.—The British Enka Co., it is stated, has agreed with the vendors of the Aintree Aircraft Factory to purchase the site for their new silk factory.

LLANDUDNO.—It has been decided to erect a new organ in Holy Trinity Church at a cost of nearly £3,000.

LONDON.—The L.C.C. has approved plans submitted for the erection of 204 houses.

LONDON (BETANAL GREEN).—The authorities of the Church of the Assumption have prepared plans for the

* See also our List of Contracts, Competitions, etc.

of a R.C. school for 300 children at Bonnerdon (BLACKWALL).—The L.C.C. recommend the erection of new workshop and store at Blackwall at £250.

ON (CITY).—The Corporation recommend the repairs and renovations to be carried out at the Mansion at a cost not exceeding £1,200.

ON (DEPTFORD).—The L.C.C. Education Committee recommend that the preliminary plans for the erection of a new central school for 400 boys and 400 girls at the Sprules-road site be approved.

ON (ELTHAM).—The L.C.C. has approved plans for houses in Westmount-road, Eltham, by J. H. & Sons, and 16 houses in Cadwallon-road, New Eltham, by Chatterton & Co.

ON (FULHAM).—The L.C.C. recommend the erection by the B.C. of £23,114 for housing purposes.

ON (HACKNEY).—The L.C.C. recommend that it be given to the erection, by the B.C., on a site at Victoria Park adjoining the Molesworth Gate, of a residence for men.

ON (HAMPSHIRE).—The L.C.C. Education Committee recommend that a portion of the south wall of the girls' and infants' playground of the Wood-street L.C.C. school, facing Kelson, be rebuilt.

ON (ISLINGTON).—Land has been purchased by the L.C.C. Education Committee in connection with the plan for remodelling the elementary school in the street.

ON (KENSINGTON).—The L.C.C. Education Committee recommend that the preliminary plans for the erection of the Sirdar-road elementary school be approved.

ON (LEE).—The L.C.C. has passed plans for houses in Dallinger-road, by G. Lansdown & Brown. ON (LEWISHAM).—The B.C. has decided to erect a Bill to authorise the building of a public house to hold 2,000 people, at Catford.

ON (MILE END).—The L.C.C. Education Committee recommend the erection of a school for about 100 children, and capable of enlargement by about 100, to be provided on a site in Cephass-street.

ON (NORWOOD).—The L.C.C. has purchased in Carnac-street, for the erection of a school.

ON (PADINGTON).—The L.C.C. recommend the borrowing by the B.C. of £15,750 for paving, drainage and sewer works.

ON (PECKHAM).—The L.C.C. Education Committee recommend that an estimate of £3,250 be submitted to the Finance Committee in respect of the erection of the site in Homestall-road for the erection of a secondary school for girls.

ON (POPLAR).—The L.C.C. Education Committee have prepared plans for a school on the Bromley-road site. The L.C.C. recommend the borrowing by the B.C. of £3,600 for an extension of depot buildings.

ON (PUTNEY).—The B.E. has agreed to the plan for the erection of a R.C. school for 200 children in Clarendon-road. The L.C.C. Education Committee recommend that the preliminary plans for the erection of a handicraft and science room at Untingfield-road L.C.C. school be approved.

ON (ROTTERHAM).—The L.C.C. Education Committee recommend that the plan submitted by the B.C. for All Saints' R.C. temporary non-provided school, for the enlargement of the playground and the widening of the offices be approved.

ON (SHOREDITCH).—The B.C. are to enlarge electricity station in Evelyn-road at a cost of £3,000. ON (SOUTHWARE).—The B.C. are to consider the provision of a municipal maternity home. The High Engineer has prepared a scheme for the erection of tenements at a cost of £17,000 on the Upper-street site. Sanction is to be obtained for the erection of the provision of tenements in Beresford-road at a cost of £8,000.

ON (STRAND).—The L.C.C. has recommended cleansing, watering and lighting of Waterloo railway bridge, at a cost of £550.

ON (VICTORIA).—The L.C.C. are to repair the site of Victoria mebankment at a cost of £500.

ON (WIMBORNE).—The L.C.C. recommend the permission be given to the City Council to erect the convenience for men in the enclosed garden or bury on the south side of Chelsea Embankment of Chelsea Bridge. The B.E. has approved plans of the managers for structural alterations and improvements at the St. Michael's non-provided school, George's, Westminster.

ON (WIMBORNE).—The Newport Corporation Housing Committee are considering an amended scheme of the Building Corporation for building 170 houses.

ON (WIMBORNE).—Plans have been prepared by the B.C. for a secondary school for girls at Leversham, at a cost of £62,876. Plans have been prepared for the adaptation of Platt Hall as a branch art gallery, at a cost estimated at £4,500.

ON (WIMBORNE).—A silk factory is to be erected upon a site in Sutton-road, for A. M. C. Flatua, of London.

ON (WIMBORNE).—The B.E. has approved plans submitted by the Surrey E.C. for the erection of an elementary school for 350 children, at a cost estimated at £12,600.

ON (WIMBORNE).—The U.D.C. are endeavouring to get the B.C. to agree to the construction of a new coast road in Furness, Millom and Whitehaven.

ON (WIMBORNE).—Arrangements have been made with the Works Loans Board for a loan of £30,685 for housing purposes.

ON (WIMBORNE).—The Surrey E.C. has received approval from the B.E. to plans submitted for the erection of a school for 300 girls, at a cost of £32,450.

ON (WIMBORNE).—A sewage scheme is under consideration, at a total cost being approximately £130,000.

ON (WIMBORNE).—The U.D.C. are applying to the M.H. for sanction for building fifty houses, at a cost of £10,000.

ON (WIMBORNE).—The T.C. has decided to make application to the M.H. for approval for the purpose of the erection of eleven pairs of houses on the Elm Grove side, at £10,750.

NORTHERN IRELAND.—The Northern Ministry of Home Affairs has purchased sites for the erection of a new police barracks at Ballinamallard, Cooneen, and Florencecourt Co. Fermanagh.

NORWICH.—The T.C. has agreed that sanitary accommodation be provided for men and women at Wensum Park, at an estimated cost of £367; and that a convenience be provided in the children's playground at Kett's Cave, at a cost of £120; and that women's lavatory accommodation be provided at the Lakenham Baths, at a cost of £113. The Council approved the purchase of a piece of land at Colman-road, for the purpose of an open-air school. Lavatory accommodation is to be provided inside Earham Hall, at an estimated cost of £509.

NOTTINGHAM.—The E.C. are considering the construction of a new covered market in King Edward-street, at an estimated cost of £70,000.

OADBY.—The U.D.C. has received sanction from the M.H. for a subsidy for 100 houses. Plans passed: 20 cottages and a memorial hall on the Stoughton-road.

OLDHAM.—The Borough Surveyor has submitted plans for the erection of 104 houses at Greenacres and 148 houses at Barrowshaw, in blocks of eight, six, four, and two.

OTLEY.—Extensions are to be undertaken at Otley Grammar School, at a cost of £18,208.

OXFORD.—The Surrey E.C. has received sanction from the B.E. to purchase a site for a school.

PAIGSTON.—Plans are to be prepared for a shelter and a convenience at Preston. The M.H. has held an inquiry into the proposal to borrow £71,000 for waterworks purposes. The Housing Committee has decided to erect bungalow type of houses at the Goodrington site.

PEMBROKE.—The U.D.C. has decided to erect a central branch library. Kaye, Parry & Ross are the architects.

PENISTONE.—The R.D.C. are to make application to the M.H. for approval of subsidies for forty houses.

PETERBOROUGH.—The R.D.C. has received sanction from the M.H. for the erection of 26 houses at Walton, the estimated cost being £14,839; and for 12 houses at Eves, the estimated cost being £5,288.

PLYMOUTH.—The M.H. has sanctioned the application to borrow £2,100 for the provision of a public convenience at Milehouse, and has also consented to the appropriation by the Council for the purpose of the convenience of certain land adjoining Alma-road vesting in the Council for the purpose of the tramways undertaking.

PLYMOUTH.—The C.B. approved the Borough Surveyor's plans for the proposed new conveniences at Phoenix-street, Stonehouse, and at Prince Rock, and recommend that application be made to the M.H. for sanction to borrow £755 for the work.

PLYMOUTH.—The Borough Surveyor submitted plans for the layout of 206 houses on the Higher Mount Gould Estate, which the Council approved. The Borough Surveyor submitted plans and estimate at £5,000 for the construction of a new culvert adjoining Cemetery-road, Pennycomequick.

PLYMOUTH.—The C.B. resolved that the plans be approved, and application be made to the M.H. for sanction to borrow £5,000 for the work. The M.H. has sanctioned the borrowing of £2,800 for the provision of a refreshment pavilion on the Hoe.

PLYMOUTH.—The Borough Surveyor submitted plan and estimate for the provision of a slipway at the Tannei Wharf. The C.B. has made application to the M.H. for sanction to borrow £1,195 for the conversion of three buildings on the site adjoining the Citadel, for the purpose of housing the working-classes.

PLYMOUTH.—The M.H. has consented to the appropriation of a site of 17,200 sq. ft. for the purpose of housing at Ptery Quay. The M.H. has sanctioned loans for widening and improvement of Embankment-road, at £30,425; and reconstruction of retaining wall at Clayton-road at £1,400.

PLYMOUTH.—The E.C. has approved the Governors of the College borrowing £7,000 for extensions. Plans passed: J. Downard & Son, ten houses, Lanhydrock-road; J. A. Blatchford, eight houses, Old Laira-road; The Corporation Tramways, addition to car shed, Milehouse, and tramway shelter, George-street.

PORT CARLISLE.—The inhabitants of Port Carlisle have decided on the erection of a new public hall.

PRESTON.—The C.B. passed plans: D. Ainsworth, ten houses, Raikes-road; A. Swarbrick, twelve houses, Rose-avenue; F. Howarth, sixteen houses, St. Gregory-road; J. Nightingale, fourteen houses, Plungington-road (two), Linton-street (eight), Sedbergh-street (four).

ROSCOMMON.—The C.C. has decided that the Boyle Workhouse buildings, or such portion of them as may not be required for the use of a hospital, be made available for use as an agricultural or technical school and that an industrial school for boys under the charge of some religious community be established in either Strokestown or Castlereagh.

ROXTON.—The Lancashire E.C. has sanctioned the erection of a school at a cost of £23,623.

RUXFORD.—The D.C. has approved plans prepared by the Surveyor for the erection of an assembly hall to the baths in Bridge-street, at an estimated cost of £950.

RUTHVEN.—The U.D.C. has received sanction from the M.H. to the borrowing of £18,500 for housing purposes.

ST. ALBANS.—The Herts E.C. has agreed that, subject to the approval of the B.E., the site of about 4 acres adjoining Hatfield-road be purchased from the St. Albans Grammar School Governors for £1,680, for the proposed central school.

SCARBOROUGH.—The T.C. has approved an expenditure of £14,180 for the construction of a sea wall and road way at the base of the cliff of the South Cliff Gardens on the South Bay.

SHEFFIELD.—The "Yorkshire Stingo" public house, Division-street, has been acquired for the Central fire station extension scheme. The Electricity manager is to prepare plans and estimates for canteen, stores and sewerage in connection with the Needsend generating station. Land in Orchard-place is to be acquired for the erection of a maternity and child welfare centre,

and the city architect is to prepare plans for a building to cost about £20,000. The West Riding E.C. propose the erection of a new school at Woodsetts for 200 children. Plans have been prepared for the erection of a new R.C. church at Frith Park. The T.C. has received formal sanction from the M.H. to the borrowing of sums of £4,275 and £75,392 for the purchase of land and the erection of houses, respectively. Authority has been given for certain repairs to houses being carried out, at an estimated cost of £110.

SIREWSBURY.—The Borough Surveyor is to prepare plans for forty houses to be erected at Crowmere-road. The bridge over Radbrook is to be widened at a cost of £825. A concrete retaining wall is to be constructed on the river promenade at a cost of £1,580.

SHIPLEY.—The U.D.C. are to find another site for the erection of cottage baths for the Windhill district.

SKEGBY.—The R.D.C. has received the M.H. approval of a loan of £17,000 for the proposed sewage disposal works at Bldworth. The M.H. has also approved plans for 30 houses.

SOUTHEAST-ON-SEA.—The C.B. passed various plans, including four shops, four flats and nine garages, and amended plan showing openings in party walls between proposed shops in London-road, for G. A. Spencer; eight houses, Victoria-road, for E. Wingrave; warehouse, Hildaville-drive, for G. A. Spencer; 11 houses, Coleman's-avenue, for R. Webster, and warehouse, rear of 111, 112 and 113, Eastern Esplanade, for Hood & Vale.

SOUTHPORT.—Inquiry has been held into the application by the Corporation for sanction to borrow £3,100 for the purpose of completing and re-modelling the Victoria Baths, on the Promenade, to the plans prepared by the Borough Surveyor.

SOUTH SHIELDS.—On behalf of Messrs. Henderson Bros., Mr. F. W. Newby has prepared the lay-out for the erection of 104 houses on an estate south of Harton-lane.

STOCKSBRIDGE.—The Education Sub-Committee has approved amended plans for the erection of a new elementary school at an estimated cost of £35,000.

STROKE-ON-TRENT.—The T.C. has accepted a tender amounting to £3,111, for the erection of six houses in Hill-street, Burslem.

STRETFORD.—The Lancashire E.C. has sanctioned the erection of a secondary school for boys, at a cost of £63,973.

SUNDERLAND.—The T.C. has approved the report of the Health Committee that application be made to the M.H. for sanction to the borrowing of £4,306 15s. for the construction by the Borough Engineer of the remaining seven of the 68 houses at Spark Farm. The Markets and Baths Committee recommend the building of a sea-water swimming pool on the rocks at Roker, in front of the new sea wall and promenade, at an estimated cost of from £25,000 to £30,000.

SWANSEA.—A site for the erection of a new Catholic church at Town Hill has been granted by the Corporation.

TAMWORTH.—An application is to be made to the Miners' Welfare Fund Committee for a grant towards the provision of pithead baths at Pooley Hall Colliery, Polesworth.

TOTNES.—The R.D.C. passed plans for a new chapel and other alterations at Morley House, South Brent, for Zion Abbey authorities, Chudleigh.

UPPINGHAM.—The R.D.C. has decided to erect 12 houses.

WALLASEY.—The Housing Committee has decided, subject to the approval of the T.C. and the M.H. to acquire a site in Somerville Ward on which they will be able to erect 270 working-class houses. Negotiations are also in progress for the purchase of another site on which 250 houses can be built.

WALSALL.—The Governors of Queen Mary's School, Walsall, have passed plans for a new school to be erected on the Mayfield estate, Sutton-road, on a site which has been acquired by the governors.

WANTSWORTH.—The L.C.C. recommend the borrowing by the B.C. of £3,325 for housing purposes.

WARWICK.—Messrs. F. P. Trepass & Son, architects, have prepared plans for extending the large hall at Myton School. Mr. Trepass, the architect, has been asked to prepare plans for the erection of sixty houses on the housing estate. Messrs. J. Margetts & Son are being asked to prepare plans for land at the entrance to the housing site, with a view to sale for the erection of shops. Mr. Trepass, the architect, has prepared plans for furnishing the new committee room at the Town Hall, and estimates are to be obtained.

WORKING.—The B.E. has approved sketch plans of the proposed new junior mixed and infants' school at Westfield, submitted by the Surrey E.C.

WOLVERHAMPTON.—The T.C. recommend that application be made to the M.H. for sanction to borrow £16,369 for the erection of 42 houses on the Old Heath Colliery estate. The T.C. resolved that the Housing Director be authorised to complete by direct labour the work under Poole Bros.' contract for the erection of 136 houses at Newbridge, at an estimated cost of £11,680.

WOLVERHAMPTON.—The Lightfoot Refrigeration Co., Ltd., are to prepare plans and specifications for the proposed new cold stores, abattoirs and ice-making plant. The Council also resolved that a piece of land containing 2 acres, situate at the Low Hill estate be offered to the E.C. of the Staffordshire C.C. as a site for the erection of a school. Plans passed: A. J. Gough, 12 houses, Marchant-road and Clark-road.

WORTHING.—During September plans for the erection of 47 dwelling houses and 21 other buildings, representing a total estimated constructional cost of £45,165, were passed by the Corporation.

Mr. N. Gerver, timber merchant and importer, of 8-10, Mare-street, Hackney, E.S., has just compiled a new list, No. 18. Builders writing for this will receive some "handy blotters."

PRICES CURRENT OF MATERIALS

[owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 13 6
Per 1,000, Delivered at London Goods Stations.	£ s. d.
Flettons, at	2 13 3
King's Cross	2 15 3
Do. grooved for plaster	3 8 3
Do. Bullnose	8 11 0
Best Stourbridge Fire brick—	
2½ in.	10 3 0
GLAZED BRICKS—	
Best White	D'ble Str'teh's 30 0 0
Ivory, and	D'ble Headers 27 0 0
Salt Glazed	One Side and
Stretchers	two Ends 31 0 0
Headers	Two Sides and
Quoins	one End 32 0 0
Flats	Splashed 29 10 0
Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Harl Glaze, £5 10s. extra over white.	

BREEZE CONCRETE SLABS.

Delivered London	£ s. d.
1 in. per yd. super	1 11 3
2 in.	2 4 3
3 in.	3 6 3
Thames Ballast	10 6 per yd.
Pit Sand	13 9
Thames Sand	14 6
Best Washed Sand	14 6
1 in. Shingle for Ferro-Concrete	12 9
1 in. Broken Brick	11 6
Pan Breeze	7 6
Per ton delivered in London area in full van loads.	
Best Portland Cement, British Standard Specification. Test £2 18 0 to £3 3 6	
5ls. alongside at Vauxhall in 80-ton lots.	0 10 0
Ferrocrete per ton extra on above.	4 3 0
Super Cement (Waterproof)	8 15 0
Roman Cement	5 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 10 0
Plaster, Coarse, Pink	3 0 0
" Fine	3 12 6
Sirapite, Coarse	3 9 0
Chalk Lime	3 17 0
Grey Stone Lime	2 11 9
Chalk Lime	2 11 9
Best Ground Blue Lias Lime	2 4 6
Hair	32 0 0
Granite Chippings	1 12 0
NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.	
Stourbridge Fireclay in sacks 35s. 0d. per ton at rly. dpt.	

STONE.

BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube.	2 9 1
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube.	2 11 1
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube.	4 4
Do. do. delivered on road wagons at above stations, per ft. cube.	4 5
White basebed, 3d. per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every foot over 20 ft. average, and ¼d. beyond 30 ft.	
HOTTON-WOOD STONE—	
Delivered at any Goods Station, London.	
Small random blocks, up to 10 ft. cube. P. ft. cb.	7 0
Random blocks from 10 ft. and over	17 0
Sawn two sides from 10 ft. and over	27 0
Sawn three or four sides	32 0
YORK STONE, BLUE—Robin Hood Quality.	
Delivered at any Goods Station, London.	
6 in. sawn two sides landings to sizes (under 30 ft. super.) Per ft. super	5 6
6 in. rubbed two sides, ditto	6 0
3 in. sawn two sides slabs (random sizes)	2 3 1
2 in. to 2½ in. sawn one side slabs (random sizes)	1 6 1
1½ in. to 2 in. ditto, ditto	1 4
HARD YORK—	
Delivered at any Goods Station, London.	
Scrapped random blocks	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super.) Per ft. super	5 1 1
6 in. rubbed two sides, ditto	6 10
4 in. sawn two sides slabs (random sizes)	2 1 1
3 in. ditto	2 1 1
2 in. self-faced random flags	9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.—Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£32 0	3 × 6	£23 0
4 × 9	28 0	3 × 11	28 0
4 × 8	26 0	2 × 11	23 0
4 × 7	25 0	3 × 9	23 0
3 × 7	24 0	2½ × 9	23 0
3 × 7	23 0	3 × 4½	23 0
2½ × 7	22 0	3 × 4	23 0
1 × 11	£32 0	1 × 9	£30 0

PLANED BOARDS.

1 × 11	£32 0	1 × 9	£30 0
--------	-------	-------	-------

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
21	11	32	16
23	11	37	16
25	11		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

Inches.	per sq.	Inches.	per sq.
25	16	25	16
32	20	25	16
37	25		

STAFFORDSHIRE "Marked"

Bars	£ s. d.	£ s. d.
Mild Steel Bars	11 0 0	12 0 0
Steel Bars, Ferro-Concrete quality, basis price	11 0 0	12 0 0
Hoop iron, Galvanised	31 0 0	32 0 0

Soft Steel Sheets, Black—	£ s. d.	£ s. d.
Ordinary sizes to 20 g.	13 10 0	14 10 0
" " 24 g.	14 10 0	15 10 0
" " 26 g.	16 10 0	17 10 0

Sheets Flat Best Soft Steel, C.R. & C.A. quality—	£ s. d.	£ s. d.
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	19 10 0	21 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g.	21 10 0	22 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 24 g.	23 10 0	24 10 0

Flat and Galvanised Corrugated Sheets—	£ s. d.	£ s. d.
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	18 10 0	19 10 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g.	19 10 0	20 10 0
Ordinary sizes, 6 ft. to 9 ft. to 24 g.	22 0 0	23 0 0

Sheets Galvanised Flat, Best quality—	£ s. d.	£ s. d.
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g.	22 10 0	23 10 0
Best Soft Steel Sheets, 22 g. and thicker	24 10 0	25 10 0
Best Soft Steel Sheets, 26 g. and thicker	26 0 0	27 0 0

Cut Nails, 3 in. to 6 in. (under 3 in. usual trade extras.)	£ s. d.	£ s. d.
Metal Windows.—Standard sizes, suitable for complete houses, including all fittings, painting, coats, and delivery to job, average price	1s. 4d. to 1s. 7d. per foot super.	

LEAD, &c.	£ s. d.	£ s. d.
(Delivered in London.)		
LEAD—Sheet, English, 4 lb. and up	51 10 0	
Lead in coils	53 0 0	
Soil Pipe	56 0 0	
Compo pipe	58 0 0	</

PRICES CURRENT OF MATERIALS (contd.)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
5 oz. fourths ..	3d.	32 oz. fourths ..	8d.
5 " thirds ..	4d.	32 " thirds ..	9d.
11 " fourths ..	4d.	Obscured Sheet, 15 oz. 1d.	
11 " thirds ..	5d.	21 " 5d.	
20 " fourths ..	5d.	Fluted 15oz. 6d., 21oz. 9d.	
20 " thirds ..	7d.	En'led 15oz. 5d., 21 oz 7d.	

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
Rolled plate	4d.
Rough rolled	5d.
Rough rolled	5d.
Figured Rolled, Baltic, Oceanic, Arctic, Stip- polyte, and small and large Flemish white ..	6d.
Ditto, tinted	9d.
Rolled Sheet	6d.
White Rolled Cathedral	5d.
Tinted do.	7d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

	Per Gallon.
Oak Varnish	Ontario 0 15 0
Fine ditto	ditto 0 15 0
Fine Copal	ditto 0 15 0
Pale Copal	ditto 1 0 0
Pale Copal Carriage	ditto 1 4 0
Best Ditto	ditto 1 12 0
Floor Varnish	Inside 0 15 0
Fine Pale Paper	ditto 0 15 0
Fine Copal Cabinet	ditto 1 2 6
Fine Copal Flattening	ditto 1 0 6
Hard Drying Oak	ditto 0 15 0
Fine Hard Drying Oak	ditto 0 19 0
Fine Copal Varnish	ditto 1 0 0
Pale ditto	ditto 1 2 0
Best ditto	ditto 1 12 0
Best Japan Gold Size	0 12 6
Best Black Japan	0 10 6
Oak and Mahogany Stain (water)	0 12 0
Brunswick Black	0 7 6
Berlin Black	0 14 0
Knorring (patent)	1 5 0
French and Brush Polish	0 17 0
Liquid Dryers in Terebinte	0 9 0
Chinese Black Enamel	0 7 0

TRADE NEWS

The D. and S. Saw Doctor's Handbook.

That it pays to purchase a good, and possibly expensive, saw is shown by the statistics of a year's working given in the "D. and S. Saw Doctor's Handbook," published by Messrs. Crabbe and Sanderson, Ltd., price 2s. 6d. Herein we find that the difference in running expenses of a 36s. and a 57s. saw amounts, even at a conservative estimate, to £24 10s. in a working year. The handbook is a comprehensive, practical guide and an authoritative treatise on the care, repair and fitting of saws of every description.

Mantels.

The wooden mantelpiece, period or otherwise, will have many devotees who consider that it possesses a touch of distinction which those of other materials can never have. In Book No 5 to Bath Artercraft, Ltd., illustrate a wide range of mantels in many charming styles, prominent among which are some Adam designs of delightful quality. The firm will be showing these and an entirely new range at the Building Trades Exhibition in Birmingham in February, but particulars can be obtained now from the studios in Lower Bristol-road, Bath.

Mastic Asphalt.

Mastic asphalt for road surfaces, roof coverings, dampcourses, &c., should be refined, never varying in consistency, and contain a correct proportion of bitumen in order to perform its function to the best advantage. Even with these merits it is essential that it should be laid by a specialist at the work. The Limmer and Trinidad Lake Asphalt Co., Ltd., is in the exceptional position of having fifty-four years' experience of asphalt work. The erection, extension, repair and reconstruction of buildings with which this company has been associated have provided ample opportunity to prove the most satisfactory methods of manufacture and application of mastic asphalt. Windsor Castle, and Buckingham Palace are among the list of buildings for which the firm has contracted. Particulars can be obtained from the Chief Offices at 34, Victoria-street, Westminster, W.1.

THE SCOTTISH BUILDER

HOUSING PROGRESS IN SCOTLAND

The following figures show the progress that has been made in State-aided housing schemes in Scotland to the 30th September, 1925:—

	Completed.	Under Construction.
1919 Act ..	25,043	495
Private Subsidy Schemes ..	2,324	—
Slum Clearance Schemes ..	1,747	3,226
1923 Act ..	4,435	5,945
1924 Act (Local Authority Scheme) ..	273	2,910
	33,822	12,576

Of the total number of houses completed and under construction under the 1923 Act, 3,148 are by the local authorities, and 7,232 by private enterprise.

NEW BUILDINGS IN SCOTLAND

Buckie.—HOUSES.—The Town Clerk has submitted a communication from the Board of Health approving of the erection of 48 £300 houses.

Aberdeen.—COTTAGES.—The District Committee has approved of a report by the Roads Sub-committee recommending the adoption of a scheme for the erection of six blocks of cottages at Belhelvie village, at a total estimated cost of £4,902.

Falkirk.—VARIOUS.—The Dean of Guild Court passed plans: The Falkirk Iron Co., Ltd., to erect at Bankside, at an estimated cost of £6,200, four flatted blocks, each containing four houses, and a girls' clubroom, costing £400, within their works. The Corporation secured warrant to reconstruct property in Manor-street, at a cost of £350, for an electric sub-station.

Stirling.—A contract will probably be placed in January for the building of the new blocks for the Stirling Royal Infirmary. An expendi-

ture of between £70,000 to £80,000 is provided for by the plans of Mr. James Miller, F.R.I.B.A., 15, Blythswood-square, Glasgow.

Paisley.—BANDSTAND.—Paisley Town Council has approved the application of the sisters of the late Bailie Andrew Fisher for the erection of a bandstand in St. James's Park in memory of their brother.

Bathgate.—PARK.—The Burgh Surveyor submitted to the Town Council lay-out plans of the new public park at Kirkton. The park extends to about 18 acres, and is situated near the Edinburgh-road. The total cost of the lay-out is estimated at £7,533.

Berwick-on-Tweed.—BRIDGE.—Work has begun on a new reinforced concrete bridge over the River Tweed. The cost is £160,000.

Aberdeen.—HOUSES.—The Plans Committee of the Town Council has approved plans, to the cost of £112,560, for the building of the Council's 268 dwelling-houses on the Hilton estate. Other plans were approved also for the erection of dwelling-houses and for alterations to existing buildings, to the value of £14,631.

Paisley.—HOUSES.—The Dean of Guild Court has passed plans, on the application of the Town Council, for 57 blocks of houses, comprising 214 houses, at Lochfield.

Leith.—EXTENSION.—For the purpose of converting an adjoining building into an addition to the college, the Leith Nautical College Committee has opened a building fund, to which £1,836 had been promised or paid.

Montrose.—BRIDGE.—A joint conference has been held between Forfar County Council and Montrose Town Council with regard to the provisional order for a new bridge.

Dunbar.—EXTENSION.—The Town Council has acquired additional land on Belhaven-road for an extension to the gas works. The undertaking will involve an outlay of £6,500.

Obituary.

The death has occurred at Hawick, Scotland, of Mr. Robert Blaikie, architect and master of works.

BUILDING TRADE WAGES IN SCOTLAND.*

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Brick-Flas- Masons' layers ters Labourers.
Aberdeen	1/8	1/8 1/2	1/8	1/8	1/8	1/3	1/7	1/0 1/2
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/8	1/3
Alexandria	1/8	1/8	1/8	1/8	1/8	1/3	—	1/2 1/2 to 1/3 1/2
Arbroath	1/7	1/7	1/7	1/7	1/7	1/7	1/5 1/2	1/1 1/2
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/8 1/2	1/3
Bathgate	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2	1/2 to 1/3
Blairgowrie	1/7	1/7	1/7	1/7 1/2	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Coatbridge	1/8	1/8	1/8	1/8	1/8	—	1/8 1/2	1/3 to 1/3 1/2
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Dumfries	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/2
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Falkirk	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/2 1/2
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Glasgow	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Gretnock	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hamilton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hawick	1/7	1/7	1/7	1/7-1/7 1/2	1/7	1/7	1/7	1/3 1/2 to 1/3 1/2
Helensburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Inverness	1/5	—	1/5	1/4	1/5	1/5	1/4	1/- to 1/2
Kilmarnock	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/-
Leamington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/- to 1/3
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Motherwell	1/8	1/8	1/8	1/8	1/8	1/8	1/8 1/2	1/3 1/2
Perth	1/8	1/8	1/8	1/8	1/8	1/8	1/8 1/2	1/3
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stirlingshire (Eastern District) ..	1/5-1/10	1/5-1/10	1/8	1/9	1/7	1/8	1/8 1/2	1/3 1/2
Wishaw	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3 1/2

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 643.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.				CARPENTER AND JOINER—continued.			
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep....				FRAMES.			
Add if in clay.....	per yard cube	11	0	Deal wrot moulded and rebated.....	per foot cube	14	0
Add for every additional depth of 6 ft.....	"	1	0	Plain deal jamb linings framed.....	per ft. sup.	1 7/8	1 1/2
Planking and strutting to trenches.....	per foot super	0	5	Deal shelves and bearers.....	"	1 1/4	1 1/8
Do. to sides of excavation, including shoring	"	1	0	Add if cross-tongued.....	"	2d.	2d.
CONCRETOR.				STAIRCASES.			
Portland cement concrete in foundation 1 to 6....	per yard cube	32	0	Deal treads and risers in and including rough brackets.....	1" 2 1/4 2 9/8	1 1/2 2 1/8	2 1/2 2 1/8
Add if in underpinning in short lengths.....	"	7	0	Deal strings wrot on both sides and framed.....	1 1/8 2/- 2/2	2 1/8 2 1/8	2 1/8 2 1/8
Add if in floors 6 in. thick.....	"	3	3				
Add if in beams.....	"	3	9				
Add if aggregate 1:2:4.....	"	10	0				
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.....	"	2	6				
BRICKLAYER.				FIXING ONLY IRONMONGERY (INCLUDING SCREWS).			
Reduced brickwork in lime mortar and Fletton bricks.....	per rod	30	0	6 in. barrel bolts.....	8 1/2 d.	Rim locks.....	2/-
Add if in stocks.....	"	7	10	Sash fasteners.....	11 1/2 d.	Mortice locks.....	4/6
Add if in Staffordshire blues.....	"	22	0	Casement fasteners.....	1/5	Patent spring hinges and Casement stays.....	1/2
Add if in Portland cement and sand.....	"	1	10	Cupboard locks.....	1/5	letting into floor and making good.....	19/-
FACINGS.				FOUNDER AND SMITH.			
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks.....	per ft. super	0	1 1/4	Rolled steel joists.....	per cwt.	16	0
POINTING.				Plain compound girders.....	"	19	0
Neat flat struck or weathered joint.....	"	0	0	Do. stanchions.....	"	21	0
ARCHES.				In roof work.....	"	27	0
Extra only to the price of ordinary brickwork :—				RAIN-WATER GOODS.			
Fair external in half brick rings.....	"	0	0	Half-round plain rebated joints..	ft. run	1/6 1/9 2/- 2/6	2/6 3/3
Axed in stocks.....	"	0	1	Ogee Do. Do.	"	1/9 2/- 2/7	—
Rubbed and gauged jointed in putty camber or segmental.....	"	0	6	Rain-water pipes with ears.....	"	1/9 2/7	—
SUNDRIES.				Extra for shoes and bends.....	each	4/4 5/11	—
Damp course in double course of slates breaking joint and bedded in Portland cement.....	"	0	1	Do. stopped ends.....	"	1/11 2/4 3/7	4/-
Setting ordinary register grates and stoves.....	each	1	0	Do. nozzles for inlets.....	"	2/2 2/7 3/10	4/6
Setting kitcheners, including forming flues, &c., with all necessary fire bricks.....	"	4	15	PLUMBER.			
ASPHALTER.				Milled lead and laying in flashings and gutters....	per cwt.	66	0
Half-inch horizontal damp course.....	per yard sup.	4	3	Do. Do. in flats.....	"	65	0
Three-quarter-inch vertical damp course.....	"	8	6	Extra labour and solder in coated cesspools.....	each	6	0
3/4 inch on flats in two thicknesses.....	"	6	3	Welf joint.....	per ft. run	1	0
Angel fillet.....	per foot run	0	3	Soldered seam.....	"	1	0
Skirting and fillet 6 in. high.....	"	1	2	Copper nailing.....	"	0	6
MASON.				Drawn lead waste per ft. run	1 1/2 1 9/8 2/- 3 3/4 4/-	—	—
York stone templates fixed.....	per foot cube	13	0	Do. service.....	1/8 2/2 2/7 3/10	—	—
York stone sills fixed.....	"	22	0	Do. soil.....	—	—	6/9
Bath stone and all labour fixed.....	"	10	6	Bends in lead pipe.....	each	—	3/3
Portland stone fixed.....	"	20	0	Soldered stop ends.....	1/2 1/8 2/1 2/10 3/6	—	—
SLATER.				Red lead joints.....	11d. 1/- 1/3 1/11 2/4	4/10	4/10
Welsh 16 in. x 8 in. 3 in. lap, including nails.....	per square	72	9	Wiped soldered joints.....	2/10 3/6 4/- 4/11 6/6	9/9	9/9
Do. 20 in. x 10 in. Do. Do.	"	80	9	Lead traps and cleaning screws.....	—	14/7 19/6	—
Do. 24 in. x 12 in. Do. Do.	"	90	0	Bib cocks and joints.....	6/4 9/7 15/4 41/-	—	—
CARPENTER AND JOINER.				Stop cocks and joints.....	15/4 17/2 25/8 64/-	—	—
Fir framed in plates.....	per foot cube	5	0	PLASTERER.			
Do. joists.....	"	5	6	Render, float and set in lime and hair.....	per yard sup.	2	4
Do. roofs, floors, and partitions.....	"	6	0	Do. Do. Shapite.....	"	2	7
Do. trusses.....	"	8	6	Do. Do. Keen's.....	"	3	7
Deal rough close boarding.....	per sq. 3 1/2 35/6 40/- 45/-	72/-	—	Add sawn lathing.....	"	1	7
Flat centering for concrete floor, including struts or hangers.....	"	50	0	Add metal lathing.....	"	2	6
Do. to beams.....	per ft. sup.	1	0	Portland cement screed.....	"	2	2
Centres for arches.....	"	1	6	Do. plain face.....	"	3	3
Gutter boards and bearers.....	"	1	0	Mouldings in plaster.....	per 1 girth	0	1 1/2
FLOORING.				One-and-a-half granolithic pavings.....	per yard sup.	5	9
Deal-edges shot.....	per sq. 3 1/2 44/6 53/- 60/6	65/-	—	GLAZIER.			
Do. tongued and grooved.....	"	49/- 57/6 65/-	—	21 oz. sheet plain.....	per foot sup.	0	8
Do. matchings.....	"	45/- 51/-	—	26 oz. Do.	"	1	0
Moulded skirting, including backings and grounds.....	per ft. sup. 1/6 1/9 2/0 2/6	—	—	Obscured sheet.....	"	1	1
SASHES AND FRAMES.				1/2 in. rolled plate.....	"	0	9
One-and-a-half moulded sashes or casements.....	per foot super. 1 10	—	—	1/2 in. rough rolled or cast plate.....	"	0	10
Two Do. Do.	"	2	1	1/2 in. wired cast plate.....	"	1	4
Add for fitting and fixing.....	"	0	3	PAINTER.			
Deal-cased frames with 1 in. inner and outer linings, 1 1/2 in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights; average size.....	"	3	9	Preparing and distempering, 2 coats.....	per yard sup.	0	9
DOORS.				Knotting and priming.....	"	0	7
Two-panel square framed.....	per ft. sup. 1 1/2 2 1/2 2 1/2	2/6 2/11 3/2	—	Plain painting, 1 coat.....	"	0	9
Four-panel Do.	"	2/5 2/8 2/11	—	Do. 2 coats.....	"	1	2
Two-panel moulded both sides.....	"	2/8 2/11 3/2	—	Do. 3 coats.....	"	1	9
Four-panel Do. Do.	"	2/11 3/2 3/5	—	Do. 4 coats.....	"	2	4

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1 1/4 should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

NEW COMPANIES

B. M. Co., LTD. (207,870). Registered August 14. 7, Victoria-street, S.W. Manufacturers of and dealers in cement, lime, plaster, bricks, stone, &c. Nominal capital, £500.

ACCRINGTON BRICK & TILE CO., LTD. (208,479). Registered September 19. Altham, Accrington. Nominal capital, £100.

WINSWORTH, COX & WAITING, LTD. (208,581). Registered September 24. Public works contractors, &c. Nominal capital, £1,000.

STLEY PAINTS, LTD. (208,508). Registered September 21. Paint manufacturers. Nominal capital, £1,000.

IRDSALL & DUNN, LTD. (208,849). Registered October 7. Builders and contractors. Nominal capital, £500.

BRACEY & CLARK, LTD. (208,512). Registered September 21. Builders and contractors. Nominal capital, £4,000.

BULL & CO., LTD. (208,901). Registered October 9. 10, King's-arcade, Doncaster. Builders and contractors. Nominal capital, £1,000.

C. CORNFORD & SON, LTD. (208,444). Registered September 17. 122, Forest Hill-road, Dulwich, S.E.22. Monumental masons, &c. Nominal capital, £2,000.

E. E. DALE & SONS, LTD. (208,610). Registered September 25. 35, Highgate, Cleethorpes. Builders, contractors, sanitary and general engineers, &c. Nominal capital, £1,000.

D. L. DILLON, LTD. (208,592). Registered September 24. 75, Duke-street, Liverpool. General contractors, joiners and cabinet makers. Nominal capital, £250.

ROSS MOOR CONCRETE CO., LTD. (208,274). Registered September 7. "Glencoe," Roche, Cornwall. Manufacturers of or dealers in concrete blocks, bricks, posts, &c. Nominal capital, £1,000.

FAREFIELD PLACE ESTATES, LTD. (208,634). Registered September 26. The Estate Office, Farefield-place, Uxbridge, Middlesex. Builders and contractors, and sand and gravel merchants. Nominal capital, £2,000.

HOME CONSTRUCTION CO., LTD. (208,543). Registered September 22. Builders and general contractors, &c. Nominal capital, £1,000.

JOHNSTON, JONES & CO. (LIVERPOOL), LTD. (208,615). Registered September 25. 6, Knight-street, Liverpool. General building contractors. Nominal capital, £1,000.

D. & C. EAMES, LTD. (208,442). Registered September 17. Builders and contractors. Nominal capital, £3,500.

LOYD & WHITE, LTD. (207,905). Registered August 15. "Henfaes," Rotherslade-ter, Mumbles, Swansea. Builders, contractors, masons, &c. Nominal capital, £1,000.

OWDELL'S, LTD. (208,870). Registered October 7. Railway-approach, Iwer, Bucks. Builders, contractors, auctioneers, &c. Nominal capital, £3,000.

WILLINGTONS, LTD. (208,819). Registered October 5. Builders' merchants, dealers in stone, turf, plaster, &c. Nominal capital, £500.

MORRIS & LAWSON, LTD. (208,872). Registered October 7. Church-road, Wavertree, Liverpool. Builders, contractors, &c. Nominal capital, £500.

V. G. ROBINSON, LTD. (208,676). Registered September 28. 240-242, Great Colmore-street, Birmingham. Builders, building contractors, &c., carried on at Great Colmore-street, Birmingham. Nominal capital, £2,000.

ELSTON HOUSING CO., LTD. (208,138). Registered August 29. Riddings, Derbyshire. Construct and improve dwellings for the king classes. Nominal capital, £10,000.

JOHN TURNER (BUILDERS), LTD. (208,433). Registered September 16. 105, Market-street, Chester. Builders, contractors, plumbers, &c. Nominal capital, £500.

UNITED SANES, LTD. (208,623). Registered September 25. Quarry masters, producers of or dealers in stone, sand and gravel, &c. Nominal capital, £1,000.

HINNEY HILL PLASTIC BRICK CO., LTD. (208,493). Registered September 19. Altham, Accrington. Brick, tile and pipe makers. Nominal capital, £100.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.
 * Denotes accepted. † Denotes provisionally accepted.
 ‡ Denotes recommended for acceptance.
 § Denotes accepted subject to modification.

ARDEE.—Houses, for the T.C.:—
 J. Wynne, Dundalk (concrete) each £390 0
 J. McGuinness (concrete) " 237 10
 Luke Madden, Creewood " 270 0
 J. Kerr, Ardee " 266 0
 D. Clarke, Ardee (stone) " 253 0
 Ditto (concrete) " 244 0
 *McEntegart Bros., Nobber (concrete) " 227 0

BIRMINGHAM.—The Corporation have made the following contracts for houses:—
 Tyburn-road, 86 parlour—
 Morris & Jacobs " £40,850
 Shortheth-road, 67 non-parlour—
 G. Stubbings " 27,805
 May-lane, King's Heath, 289 parlour—
 P. W. Cox " 138,286
 Berkeley-road East, 72 non-parlour—
 G. Stubbings " 29,880
 Clement's-road (Marlborough House Estate), 54 parlour—
 C. Hougham (in substitution for sixty houses eliminated from Contract 172) " 23,598
 Kathleen-road, 4 non-parlour—
 W. S. Hattrell " 1,700
 Kathleen-road, 4 non-parlour—
 Phormium Co., Ltd. " 1,740
 Deakin's-road, Hay Mills, 2 non-parlour—
 Wm. Griffiths, Sons & Cromwell, Ltd. 900
 Foxton-road and Hazelbeach-road, 74 parlour—
 W. J. Edwards, Contractors (Birmingham), Ltd. " 37,555
 Kathleen-road, 2 non-parlour—
 Baron Bonde " 850
 Kathleen-road, 2 non-parlour—
 G. & J. Weir, Ltd. " 800
 Dad-lane Estate, 144 parlour—
 W. J. Edwards, Contractors (Birmingham), Ltd. " 70,560
 Dad-lane Estate, 932 non-parlour—
 W. J. Edwards (Contractors (Birmingham), Ltd. " 386,780
 Mayfield House Estate, 78 parlour—
 Morris & Jacobs " 36,426
 Manor-road, Stechford, 12 parlour—
 Morris & Jacobs " 5,820
 Norton Boys' Home Estate, 344 non-parlour—
 Simms, Sons & Cooke, Ltd. " 143,448
 Norton Boys' Home Estate, 262 parlour—
 Simms, Sons & Cooke, Ltd. " 129,035
 Holder-road, Hay Mills, 22 non-parlour—
 Geo. Smith (Birmingham), Ltd. " 9,130

BLACKPOOL.—Alterations to premises in Red Bank-road, Bispham, for the Bispham Conservative Club, Ltd. Mr. H. Wade, architect, 2, Birley-street:—
 *J. England & Son, Bispham.

BOURNEMOUTH.—Alterations at Southbourne branch library, for the T.C.:—
 *Jenkins & Sons, Ltd. " £983

BOURNEMOUTH.—Rebuilding wall at cemetery, for the T.C.:—
 *Hawkins Bros. " £883

BOURNEMOUTH.—Stone and concrete retaining wall at St. Peter's Vicarage, for the T.C.:—
 *Mark Loader & Sons " £1,265 16

BRIGHTON.—Cleaning, &c., Portslade school, for the L.C.C.:—
 White & Son, Portslade " £1,140
 W. Willett, Ltd., Hove " 852
 *Saunders, Brighton " 784
 The architect's comparable estimate is £976.

BRISTOL.—Twelve flats in Eugene-street, for the T.C.:—
 *E. A. W. Poole & Son, Bristol " £6,911 12 8
 (Subject to M.H. approval.)

BRISTOL.—For (1) six parlour-type houses at Knowle and (2) 24 houses in Butler-road, Bedminster for the T.C.:—
 * (1) A. W. Norris, Bristol " each £430
 * (2) J. Moore, Nailsea " 440

BRISTOL.—Electric wiring 200 non-parlour houses on the Horfield site, for the T.C.:—
 *Gough Bros. " £875

CAMBRIDGE.—Public baths at Gwydir-street, for the T.C.:—
 Coulson & Son " £8,480
 A. Negus & Sons " 7,865
 Kidman & Son " 7,487
 †C. Kerridge " 7,331

CAVAN.—Ten brick houses in Tullymongan, for the U.D.C.:—
 *J. F. Conaty, Armagh " £3,250

COCKERMOUTH.—For 36 non-parlour type houses at Great Clifton, for the R.D.C. Mr. J. B. Wilson, Grecian Villa:—
 T. Wilkinson, Workington.
 *Thos. Armstrong & Co., Cockermouth.

COSTESSEY.—Six cottages, for the Forehoe R.D.C.:—

Mr. Collison, Reepham " £4,200
 Sissens & Bugdale, Costessey " 3,528
 H. C. Tofts " 3,278
 E. Gunton & Son " 2,997
 *Blyth & Son, Foulsham " 2,475

DIDCOT.—Alterations and additions to the Council school, for the Berkshire E.C.:—

J. Long & Sons, Ltd., Bath " £6,665 0 0
 Walden & Co., Swallowfield " 6,077 0 0
 W. F. Drew, Stroud " 5,545 0 0
 Boshers, Ltd., Chelsey " 5,478 6 5
 Froud & Barrett, Wokingham " 5,445 6 0
 Hoskings Bros., Newbury " 5,266 0 0
 Brasher & Sons, Wallingford " 5,134 17 11
 †Blake Bros., Didcot " 4,752 14 11

DONCASTER.—Mortuary buildings in the Guildhall Yard, for the T.C. Mr. R. E. Ford, Borough Surveyor
 *J. H. Metcalf, Doncaster " £1,128 19 5

DUBLIN.—Tenders accepted for September by the Commissioners of Public Works:—

Dublin Custom House (reconstruction of King's Warehouse Block)—J. & F. Stewart, 3, Hanover-quay, Dublin.
 Four Courts, Dublin (structural steelwork)—Brooks, Thomas & Co., Ltd., Dublin.
 Four Courts, Dublin (copper dome)—P. P. Kernan, Sons & Co., Ltd., Blessington-street, Dublin.
 Cork District (plumbing and gasfitting works and supplies for six months)—Charles McCarthy & Sons, Emmet-place, Cork.
 Ballincurrig ex-R.I.C. Barracks, Co. Cork (restoration)—Eugene Joyce, Main-street, Middleton.
 Ballinure ex-R.I.C. Barracks, Co. Tipperary (restoration)—Carroll Bros., Killaule, Co. Tipperary.
 Ballyduff ex-R.I.C. Barracks, Co. Waterford (restoration)—John McGrath, Dungarvan.
 Borris ex-R.I.C. Barracks, Leix (restoration)—P. Cordial, Crannagh, Mounttrath.
 Bunbeg Garda Síochana Station, Co. Donegal (restoration)—Daniel Dorian, Mountcharles Co. Donegal.
 Dromahaire ex-R.I.C. Barracks, Co. Leitrim (restoration)—W. White, Killavoggy, Dromahaire, Co. Leitrim.
 Killenagh ex-R.I.C. Barracks, Co. Waterford (restoration)—J. Dempsey, Cappoquin, Co. Waterford.
 Kilmoye ex-R.I.C. Barracks, Co. Mayo (restoration)—M. J. Dunleavy Bros., Kilmoye, Co. Mayo.
 Passage East ex-R.I.C. Barracks, Co. Waterford (restoration)—P. Costen, Waterside, Waterford.
 Central Model Schools, Dublin (provision of playground, &c.)—J. & F. Pemberton, Ranelagh-road, Dublin.

DUBLIN.—Steel handrails at the Pigeon House Works, for the Borough Commissioners:—

*Ross & Walpole, Ltd. " £415

DUNGARVAN.—Twelve houses at Dungarvan, and eight houses at Abbeyside, for the U.D.C.:—

*D. C. Stokes " £3,238

EPSOM.—Secondary school for girls, for the Surrey E.C.:—

*Bunning & Fitton-Adams, Ltd., Godalming " £35,161

FOREHOE.—Four cottages at Easton, for the R.D.C.:—

*E. Gunton & Sons, Costessey " £1,400

GLASGOW.—Extensions at Bellefield Sanatorium, for the T.C.:—

Wright work, &c.—

†D. Purdie & Sons, Ltd. " £8,263 16 8

Glazier work—

†Baillie & Telfer " 669 19 8

Slater work—

†W. Walker & Sons " 1,921 12 10

Plumber work—

†Hugh Twaddle & Son " 4,682 11 3

Plaster work—

†T. Glaister " 4,035 7 5

Tile work—

†R. Brown & Son, Ltd. " 1,623 9 6

GLASGOW.—Stone pillars at Glasgow Green entrance, for the T.C.:—

†Scott & Rae, Ltd. " £183

GLASGOW.—Alteration at pavilion at Ruchill Cape, for the T.C.:—

†M. Henderson, Ltd. " £1,059 3 2

GLASGOW.—Lavatory accommodation at fruit market, for the T.C.:—

†Archibald Watson & Co., Ltd. " £364 16 4

GLASGOW.—Erection of clinic at Elder Park, for the T.C.:—

Constructing the centre with terrazzo blocks—

†Brodie, Campbell & Co. " £2,534 2 2

Carpenter work—

†M. Millan & Gould " 1,153 19 0

Slater work—

†J. Cuthbertson & Son " 445 2 3

Plumber work—

†J. Paterson & Co., Ltd. " 502 2 8

Plaster work—

†W. Tanner & Son " 250 14 5

Heating installation—

†C. F. Howden " 244 4 8

Gates and railings—

†W. Mason & Co. " 233 17 8

Tile work—

†J. Youden & Son, Ltd. " 234 16 0

HEATH TOWN.—Ten houses in pairs in Tudor-road, for the U.D.C. Mr. A. W. Worrall, architect, 8, North-street, Wolverhampton:—

W. Sharratt, Ltd., Wolverhampton..	£5,370
*Perks & Sidebotham, Wednesfield..	4,850

HINGHAM.—Six cottages, for the Forehoe R.D.C.:—

Mr. Cordy, Hingham	£2,511
H. C. Tofts, Hingham	2,500
*Tennant & Son, Watton	2,385

LEEDS.—(1) Shed for filtration plant, and (2) school children's dressing room, at Holbeck Baths, for the T.C. Mr. W. T. Lancashire, City Engineer:—

(1) *H. & D. Leslie, Leeds	£780	6	4
(2) *Wm. Thompson & Sons, Leeds	646	0	0

LEEDS.—Provision and laying of jointless composition flooring at 40, Park-lane, for the T.C. Mr. W. T. Lancashire, City Engineer:—

*O. Toffolo & Co., Ltd., Hull.

LEICESTER.—Laying rising mains in connection with sewage disposal scheme, for the T.C.:—

*John J. Shardlow & Co., Leicester	£33,594	4	10
--	---------	---	----

LEITCHWORTH.—Sixty houses (31 "A" type and 29 "B" type) on the Hillbrow housing site, comprising groups "A," "B," "C" and "D," for the U.D.C.:—

60 houses—			
J. T. Openshaw Leitchworth ..	£38,678	0	0
Jeffs & Bigley Leitchworth ..	31,292	0	0
Pettingell & Clark, Leitchworth ..	30,655	0	0
John Ray, Leitchworth	28,970	0	0
*W. F. Bailey, Watford	27,371	11	2

Group "A" (11 houses)—

D. C. Pearce, Leitchworth	6,084	0	0
---------------------------------	-------	---	---

Groups "A" and "B" (18 houses)—

Seymour & Tooke, Stotfold ..	9,688	5	0
------------------------------	-------	---	---

Group "B" (7 houses)—

F. Newton, Hitchin	3,838	0	0
--------------------------	-------	---	---

Group "D" (23 houses)—

Bennett Bros., Leitchworth ..	12,080	0	0
-------------------------------	--------	---	---

(Subject to M.H. approval.)

LONDON.—Extensions at cleansing station, for the Stoke Newington B.C.:—

†W. H. T. Kelland & Sons, Ltd.	£350
-------------------------------------	------

LONDON.—Sub-structure of the London Central Markets, for the City Corporation:—

John Mowlem & Co., Ltd.	£10,121	7	6
Walter Lawrence & Son, Ltd.	9,745	0	0
L. & W. Whitehead, Ltd.	9,300	0	0
James Carmichael (Contractors), Ltd.	8,920	0	0
*Holliday & Greenwood, Ltd.	8,488	0	0

LONDON.—Two rooms for head teachers and the provision of a bicycle shed at Tollington-park central school, Islington, for the L.C.C.:—

N. Lidstone & Son	£570	0	0
Hooper & Hooper	563	0	0
S. Shaw	533	0	0
J. C. Mather	470	0	0
F. Cousins	460	2	2
Marchant, Hirst & Co.	457	0	0
J. D. Hobson, Ltd.	439	0	0
Whitbys, Ltd.	432	0	0
*Stevens & Sons	412	0	0

(All of London.)

The architect's comparable estimate is £419.

LONDON.—Additional sanitary accommodation at Ecclesbourne-road school, Islington, for the L.C.C.:—

Whitbys, Ltd.	£1,225
G. Keetch	1,155
S. Shaw	1,122
J. Groves & Son	1,103
W. Silk & Son, Ltd.	1,080
N. Lidstone & Son	991
W. M. Brand	989
Pitcher Construction Co., Ltd.	989
J. C. Mather	983
Stevens & Sons	958
J. Marsland & Sons, Ltd.	954
*C. P. Roberts & Co., Ltd.	890

(All of London.)

The architect's comparable estimate is £1,017.

LONDON.—Adaptation of Millburn House, 210, Knight's Hill, West Norwood, for use as a maternity home, for the Lambeth B.C.:—

A. G. Winters	£9,879	3	3
C. & R. Harding	9,172	10	9
Sabey & Son	8,752	0	0
Arthur Carter, Luton	8,630	0	0
William F. Blay, Ltd.	8,499	0	0
James Smith & Sons, Ltd.	8,493	0	0
Rice & Son	8,480	0	0
H. H. Hollingsworth & Son ..	8,336	0	0
Geo. Fosters	8,333	0	0
J. & C. Bowyer, Ltd.	8,269	0	0
W. Akers & Co., Ltd.	8,268	0	0
George Parker & Son, Ltd.	8,248	0	0
F. & H. F. Higgs, Ltd.	8,118	0	0
Edwin Peddle	8,112	0	0
John Upton	7,945	11	9
Alan W. Goad	7,777	0	0
F. Webster & Sons	7,611	0	0
†Arthur H. Inns, Ltd.	7,582	0	0

(All of London.)

LONDON.—Overhaul and renewal of the electric lighting installation at the South Poplar school, for the L.C.C.:—

G. Pratt & Co.	£420	0
J. G. Cox & Son	298	10
*J. G. Sneath	262	9

LONDON.—Room for the head teacher of the infants' department at Catherine-street school, Shore-ditch, for the L.C.C.:—

Pitcher Construction Co., Ltd.	£212	0
W. Silk & Son, Ltd.	180	0
S. Blow, Ltd.	169	0
G. Keetch	160	0
J. & C. Bowyer, Ltd.	157	0
W. Simms	154	10
Whitbys, Ltd.	153	0
G. Butters	152	0
G. Barker	148	0
*J. C. Mather	145	0

(All of London.)

The architect's comparable estimate is £158.

LONDON.—Improvements to the heating apparatus at the Medburn school, St. Pancras, for the L.C.C.:—

F. Cottrell, Ltd.	£188	0
Stevens & Sons	183	0
J. P. Williams, Ltd.	174	10
S. Shaw	166	0
J. Marsland & Sons, Ltd.	148	0
T. Carr	139	0
Lister & Co. (Builders), Ltd.	132	0
Whitbys, Ltd.	127	5
*W. T. Lawrence	125	15

(All of London.)

The architect's comparable estimate is £135.

LONDON.—Electric lighting at Beechcroft-road new secondary school, Balham and Tooting, for the L.C.C.:—

Pinching & Walton	£1,160	14	3
A. Hawkins & Sons	1,095	0	0
F. G. Minter, Ltd.	1,033	0	0
T. Clarke & Co., Ltd.	905	0	0
*H. J. Cash & Co.	875	0	0

(All of London.)

The chief engineer's comparable estimate is £990 5s.

LONDON.—Room for the head teacher, the removal of stepping, and the formation of a stockroom at East-lane school, Rotherhithe, for the L.C.C.:—

A. Logan	£359
S. Blow, Ltd.	298
R. Woollaston & Co.	286
H. King & Son	246
Triggs & Co.	238
T. D. Leng	227
W. T. Dixon & Son	219
E. C. Sames & Co.	198
*Castle Bros., Ltd.	195

(All of London.)

The architect's comparable estimate is £230.

LONDON.—Minor structural alterations, including the removal of stepping and the provision of a partition at the Kingsway evening institute, Holborn, for the L.C.C.:—

Lister & Co. (Builders), Ltd.	£313	0
J. Marsland & Sons, Ltd.	282	0
W. T. Lawrence	256	0
C. H. Boyd, Ltd.	250	0
Whitbys, Ltd.	247	0
W. S. Barton & Co.	243	0
Lole & Co.	224	0
Cole, Loasby & Co., Ltd.	222	10
Sims & Russell	205	0
Bostels	202	0
*Townsend's (Builders), Ltd.	191	0

(All of London.)

The architect's comparable estimate is £218.

LONDON.—Remodelling offices at the Oldfield central school, Stoke Newington, for the L.C.C.:—

F. Cousins	£804
W. M. Brand	736
G. Keetch	684
Whitbys, Ltd.	605
Stevens & Sons	592
W. P. Roberts & Co., Ltd.	550
*Bostels	550

(All of London.)

The architect's comparable estimate is £589.

LONDON.—Extending the low-pressure hot heating apparatus in connection with the enlargement of the Old Palace school, Bow and Bromley, for the L.C.C.:—

J. T. Meredith & Co., Ltd.	£1,020
Beaven & Sons, Ltd.	854
Haywards, Ltd.	842
Colley, Meikle & Co., Ltd.	833
W. Griffiths, Sons & Cromwell, Ltd.	785
*J. Combe & Son, Ltd.	697

(All of London.)

The architect's comparable estimate is £845.

LONDON.—Improvements to the heating apparatus at Middle-row school, Kensington, for the L.C.C.:—

Wembley Heating Co., Ltd.	£330	0
Buckleys (London), Ltd.	185	15
J. & F. May	177	10
Heywood & Bryant	153	0
National Heating Co., Ltd.	149	0
Beaven & Sons, Ltd.	129	0
Davis, Bennett & Co.	125	0
W. G. Cannon & Sons, Ltd.	122	0
Thames Bank (Blackfriars) Iron Co., Ltd.	117	0
J. Combe & Son, Ltd.	116	0
*John Biggs	116	0

(All of London.)

The architect's comparable estimate is £110.

LONDON.—Improvements to the heating apparatus at Wickham-lane school, Woolwich, for the L.C.C.:—

A. G. Shorter	£796
Griggs & Son	785
Lister & Co. (Builders), Ltd.	689
W. Mills & Sons (Builders & Contractors), Ltd.	667
*J. & C. Bowyer, Ltd.	647

(All of London.)

The architect's comparable estimate is £677.

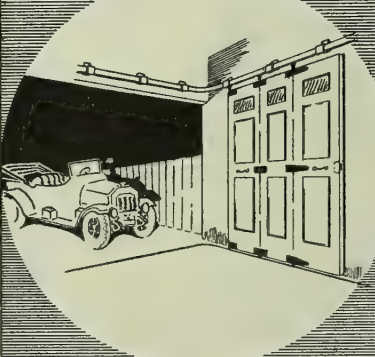
LONDON.—Tenders accepted by H.M. O. Works for September:—

Building Works.—Arbroath Coastguard Station—Excavator, &c.: Calder Bros., Arbroath. **Excavator, &c.:** Calder Bros., Arbroath. **Painter:** R. M. Meekins, Sons, Arbroath. **Plasterer:** Wm. Morrison, Arbroath. **Plumber, &c.:** T. R. Grant, Arbroath. **Slater:** J. Mitchell & Son, Arbroath. **Belfast, Spang, Plumber:** John Dowling & Sons, Ltd., Belfast. **Roof Tiling:** Ames & Finnis, London, W.C. **Birmingham Head Post Office—Extension of Lift Enclosure:** J. E. Harper & Son, Ltd., Birmingham. **Bridge over Coastguard Station—Painter, &c.:** G. S. Cathro, Montrose. **Plasterer:** Burness & Son, Montrose. **Plumber:** Fyfe & Hughes, Montrose. **Burgh Heath Telephone Exchange—Pre-cast concrete work:** Stuart's Grithic Co., Ltd., London, W.C. **Cambridge Telephone Exchange—Erection:** T. Swayne & Son, Guildford. **Clacton P.O.—Extension:** J. Noller, Ipswich. **Douglas Telephone Exchange—Glazier:** Malloch, Ltd., Glasgow. **Painter:** R. Ferguson & Son, Glasgow. **Plumber, &c.:** William Weir & Co., Glasgow. **Edinburgh Telephone Exchange—Copper work:** M. P. Galloway, Leith. **Joiner:** Bain & Brown, Ltd., Edinburgh. **Findon Coastguard Station—Excavator, &c.:** W. Smith & Co., Stonehaven. **Painter:** D. Law & Son, Stonehaven. **Plasterer:** B. A. Valentine, Stonehaven. **Plumber:** H. Bisset, Stonehaven. **Slater, &c.:** W. Malcolm, Stonehaven. **Grantham, Ministry of Pensions Hospital—Alterations, &c.:** Rudd & Son, I. **Grantham, Knutsford Post Office—Alterations, &c.:** J. H. Molyneux, Northwich. **Leeds, Ministry of Pensions Hospital—Covering roofs:** The Ruberoid, Ltd., London, W.C. **Letchworth Post Office—Alterations, &c.:** H. Hurst, Letchworth. **Levensham Employment Exchange—Erection:** James Ridgway Sons, Ltd., Ashton-under-Lyne. **Ludlow Post Office—Plasterer:** R. Hawkins, Ludlow. **Plumber:** A. Baird, Ludlow. **Maidstone Post Office—Asphalt London Asphalt Co., Ltd., London, E.C. Reinforced Bars for Ferro-concrete:** United Strip and Bar Co., Ltd., Sheffield. **Steelwork:** A. D. Dawney & Sons, Ltd., S.W. **Montagu House, S.W.—Asphalt:** Thomas Faldo & Co., Ltd., London, W.C. **Steelwork:** T. W. Palmer & Co., London, S.W. **Oxford Telephone Exchange—Extension:** A. Estcourt & Sons, Worcester. **Primrose Hill Temporary Telephone Exchange—Erection:** Jones Bros., London. **Rottingdean Telephone Exchange—Erection:** Lacey & Sons, Luton. **St. Albans Wireless Station:** W. H. Hudson, Luton. **Steelwork:** Lacey & Sons, Luton. **St. Albans, E.C. Shaw Office—Asphalter:** John Dickinson & Co. (Bolton), Bolton. **Steps and Landings:** Stuart's Grithic Co., Ltd., London, W.C. **Smethwick, R. street Employment Exchange—Erection:** H. Crump, Birmingham. **South Kensington New School Museum—Completion of Second Section:** Gallor Bros., Ltd., London, S.E. **Rooflight work, &c.:** W. Heywood & Co., Ltd., London, S.W. **Sunderland Tatham-street Employment Exchange—Painter:** Grabham, Sunderland. **Plumber:** Aitken & A. Sunderland. **Teddington, National Physical Laboratory Sub-Station—Extension:** F. D. Hidden & Sons, Ltd., Brentford. **Steelwork:** George Pauling, Ltd., London, S.W. **Trafalgar-square, W.C.—Repaving:** G. Percy Trenham, Ltd., London, W.C. **Tre Head Coastguard Station—Alterations, &c.:** Williams, Falmouth. **Wakefield Post Office, &**

THE "HENDERSON" SYSTEM

SLIDING DOOR GEAR

FOR FACTORIES, GARAGES, SCHOOLS, ETC..



"TANGENT JUNIOR" FOR LIGHT DOORS.
"TANGENT SENIOR" FOR HEAVY DOORS.

WRITE FOR BOUND CATALOGUE B.24 TO—
P.C. HENDERSON, LIMITED,
BARKING, ESSEX. PHONE, EAST HAM 247.

er: Hornby & Partners, Ltd., Bradford &c.: Charles Turner & Sons, Wakefield.	
r: Samuel Atkinson, Ltd., Wakefield. Wall-Telephone Exchange—Erection: Burnand & Co., Ltd., London, W.C. Windsor—Main-work: W. Goddard & Son, Eton.	
Engineering Services.—Bath, New Post Office, &c.—	
g: The Brightside Foundry and Engineering Ltd., Birmingham. Bethnal Green Museum—	
g: J. Combe & Son, Ltd., London, S.W. Post Office, &c.—Heating Extension: The Marble Works, Ltd., Leeds. Houses of Parliament Iron Ductwork, &c.: Wheeler & Sons (Engineering), Ltd., London, S.W. Rampton Station—Covering of heating mains, &c.: F. Leroy Manchester. Strand, W.C., Royal Courts of—	
Wiring: Electrical Installations, Ltd., E.C.	
ing.—W. G. Beaumont & Son, London, E.; Ltd., London, W.; Daniel Dowdle, Ormskirk; Abbott & Son, Croydon; J. Scott Fenn, London, W. J. Jennings & Co., London, W.; J. Marsland & Sons, Ltd., London, W.; F. Troy & Co., Ltd., N.W.	
DON.—Painting and/or cleaning of schools, L.C.C.—	
Hill Training College, Woolwich, W.—	
Painting's comparable estimate	£4,687 0 0
Painting's comparable estimate	4,290 0 0
sea Park-road, Battersea, N.—	
Hammond	1,835 0 0
Painting's comparable estimate	1,794 0 0
sea Secondary, Battersea, S.—	
Gibson	1,157 0 0
Painting's comparable estimate	1,187 0 0
y Institute, Lambeth, N.—	
L. Catterall & Sons, Ltd.	607 3 0
Painting's comparable estimate	677 0 0
field-road Elementary and Central, Woolwich,	
Scott Fenn	2,496 18 0
Painting's comparable estimate	2,531 0 0
ox, Ltd., Deptford—	
Painting's comparable estimate	685 0 0
Painting's comparable estimate	645 0 0
ngam-street, Islington, W.—	
archant Hirst & Co.	1,856 0 0
Painting's comparable estimate	2,083 0 0
le School, Chelsea—	
Thompson & Sons	509 18 0
Painting's comparable estimate	694 0 0
chool of Arts and Crafts and London Day	
ing College, Holborn—	
Pay & Co., Ltd.	847 0 0
Painting's comparable estimate	870 0 0
nd Whitechapel Day Continuation, Finsbury—	
ow, Ltd.	1,237 0 0
Painting's comparable estimate	1,275 0 0
n Hill, Deptford—	
eggs & Son	1,893 0 0
Painting's comparable estimate	1,660 0 0
y Secondary, Bermondsey, Bermondsey, W.—	
Scott Fenn	1,177 18 0
Painting's comparable estimate	1,193 0 0
y Secondary, Kentish Town, St. Pancras, N.—	
Prater & Son	305 0 0
Painting's comparable estimate	356 0 0
y Secondary, Plumstead, Woolwich, E.—	
Black & Son	1,550 0 0
Painting's comparable estimate	1,470 0 0
ney-road, Hackney, S.—	
Barker	2,723 0 0
Painting's comparable estimate	2,725 0 0
gton-road, Woolwich, W.—	
Black & Son	1,891 0 0
Painting's comparable estimate	1,849 0 0
reet, Limehouse—	
Vigor & Co. (Poplar), Ltd.	1,613 0 0
Painting's comparable estimate	1,557 0 0
mersmith School of Arts and Crafts and Trade	
ool for Girls, Hammersmith, N.—	
Colley & Sons, Ltd.	888 7 8
Painting's comparable estimate	1,052 0 0
stock Hill, St. Pancras, S.W.—	
ox, Ltd.	1,450 0 0
Painting's comparable estimate	1,488 0 0
ord-street, Limehouse—	
M. Brand	1,383 0 0
Painting's comparable estimate	1,278 0 0
ury County, Islington, E.—	
unham Brown, Bros.	1,890 0 0
Painting's comparable estimate	1,974 0 0
on Day Continuation, Islington, S.—	
archant Hirst & Co.	833 0 0
Painting's comparable estimate	890 0 0
ia-street, Battersea, S.—	
S. Ronald	1,556 0 0
Painting's comparable estimate	1,481 0 0
el Faraday, Southwark, S.E.—	
V. Goad	1,170 0 0
Painting's comparable estimate	1,270 0 0
lds-road and North Hackney Central, Hackney,	
toneley & Co.	2,470 10 0
Painting's comparable estimate	2,366 0 0
road, Southwark, S.E.—	
happell Bros.	2,075 0 0
Painting's comparable estimate	1,811 0 0
ood Technical Institute, Norwood—	
C. Bowyer, Ltd.	938 0 0
Painting's comparable estimate	907 0 0
ontague-street, Whitechapel and St. George's—	
ashby & Horner, Ltd.	1,304 0 0
Painting's comparable estimate	1,169 0 0
ello-road, Kensington, N.—	
Berger	1,570 14 4
Painting's comparable estimate	1,605 0 0
n-road, Bow and Bromley—	
Woolaston & Co.	1,914 14 0
Painting's comparable estimate	2,012 0 0
n Hill, Holborn—	
Carr	524 10 0
Painting's comparable estimate	652 0 0

St. Marylebone Day Continuation, St. Marylebone—	
*Burdett & Son	707 0 0
Architect's comparable estimate	810 0 0
Sayer-street, Southwark, S.E.—	
*C. Berger	1,543 11 3
Architect's comparable estimate	1,473 0 0
School of Building, Brixton—	
*J. Garrett & Son	4,886 0 0
Architect's comparable estimate	4,480 0 0
School of Photo-Engraving and Lithography, City of London—	
*F. Prater & Son	224 9 0
Architect's comparable estimate	242 0 0
Senrab-street, Mile End—	
*Turnbull & Son	1,415 0 0
Architect's comparable estimate	1,352 0 0
Shoreditch Technical Institute, Shoreditch—	
*F. Prater & Son	142 0 0
Architect's comparable estimate	266 0 0
Silwood-street, Rotherhithe—	
*Triggs & Co.	1,694 0 0
Architect's comparable estimate	1,690 0 0
Sleaford-street, Battersea, N.—	
*Triggs & Co.	2,467 0 0
Architect's comparable estimate	2,232 0 0
Sloane School, Chelsea—	
*C. Berger	1,261 18 6
Architect's comparable estimate	1,313 0 0
"Springfield," Kensington—	
*Sims & Russell	1,150 0 0
Architect's comparable estimate	833 0 0
Stowey House, Clapham—	
*B. Gibson	600 0 0
Architect's comparable estimate	682 0 0
Surrey-square, Southwark, S.E.—	
*A. V. Goad	1,510 0 0
Architect's comparable estimate	1,623 0 0
Trade School of Girls, Bloomsbury, Holborn—	
*Cole, Loasby & Co., Ltd.	569 7 0
Architect's comparable estimate	576 0 0
Victoria-place, Islington, S.—	
*Burdett & Son	1,187 0 0
Architect's comparable estimate	1,210 0 0
Westminster Day Continuation, Abbey, Westminster—	
*J. L. Catterall & Sons, Ltd.	898 0 0
Architect's comparable estimate	1,071 0 0
Westmoreland-road, Southwark, S.E.—	
*A. V. Goad	1,252 0 0
Architect's comparable estimate	1,358 0 0
Wilton-road, Hackney, C.—	
*C. P. Roberts & Co., Ltd.	2,653 0 0
Architect's comparable estimate	2,425 0 0
Woolmore-street, Poplar, S.—	
*R. Woolaston & Co.	972 0 0
Architect's comparable estimate	1,030 0 0
(All of London.)	
Hay Currie, Poplar, S.—	
*A. H. Inns, Ltd.	342 0 0
Architect's comparable estimate	409 0 0
Hugon-road, Fulham, E.—	
*Sims & Russell	475 0 0
Architect's comparable estimate	537 0 0
Medburn, St. Pancras, S.E.—	
*Stevens & Sons	757 0 0
Architect's comparable estimate	863 0 0
Netherwood-street, Hampstead—	
*J. D. Hobson, Ltd.	515 10 0
Architect's comparable estimate	681 0 0
Pritchard's-road, Bethnal Green, N.E.—	
*W. J. Clemens	280 0 0
Architect's comparable estimate	376 0 0
Redvers-street, Shoreditch—	
*G. Barker	469 0 0
Architect's comparable estimate	521 0 0
Rutland-street, Mile End—	
*R. Woolaston & Co.	1,095 0 0
Architect's comparable estimate	1,178 0 0
Saunders-road, Hammersmith, N.—	
*A. & F. Polden, Ltd.	360 0 0
Architect's comparable estimate	460 0 0
Scrutton-street, Shoreditch—	
*Vigor & Co. (Poplar), Ltd.	889 0 0
Architect's comparable estimate	911 0 0
Southwark Park School, Rotherhithe—	
*C. R. Harding	727 7 0
Architect's comparable estimate	917 0 0
Townmead-road, Fulham, E.—	
*Bevis & Sons	397 11 3
Architect's comparable estimate	465 0 0
Trundleys-road, Deptford—	
*W. Bailey & Sons (Builders), Ltd.	399 0 0
Architect's comparable estimate	464 0 0
Vicarage-road, Woolwich, E.—	
*D. C. Bowyer	449 17 2
Architect's comparable estimate	534 0 0
White Lion-street, Finsbury—	
*W. T. Lawrence	287 16 0
Architect's comparable estimate	287 16 0
LONDON.—Improvements to the low-pressure hot-water heating apparatus, for the L.C.C.—	
Ashburnham, The, Chelsea—	
*G. Davis	£1,458
Architect's comparable estimate	1,856
Holden-street, Battersea, S.—	
*Barrett & Wright, Ltd.	484
Architect's comparable estimate	546
Sussex-road, Norwood—	
*J. Coombe & Son, Ltd.	1,107
Architect's comparable estimate	1,209
LONDON.—Heating apparatus at the Downham (boys' and girls') school, Lewisham, for the L.C.C.—	
David Bennett & Co.	2,615 0
Thames Bank (Blackfriars) Iron Co., Ltd.	1,577 0
Colley, Meikle & Co., Ltd.	1,565 0
Beaven & Sons, Ltd.	1,562 15
The National Heating Co., Ltd.	1,548 0
The Central Heating Co., Ltd.	1,439 0
Billie Hobson & Co.	1,435 0
Brightside Foundry & Engineering Co.	1,425 0
*W. G. Cannon & Sons, Ltd.	1,360 0
(All of London.)	
The architect's comparable estimate	£1,507.

LONDON.—Improvements to the heating apparatus at East-lane School, Rotherhithe, for the L.C.C.—	
Tilley Bros., Ltd.	£2,357 19 6
B. Finch & Co., Ltd.	2,097 0 0
Barrett & Wright, Ltd.	2,027 0 0
Thames Bank (Blackfriars) Iron Co., Ltd.	1,945 0 0
Clark Hunt & Co., Ltd.	1,926 0 0
Brightside Foundry & Engineering Co., Ltd.	1,920 0 0
J. T. Meredith & Co., Ltd.	1,898 0 0
J. & F. May	1,895 0 0
W. G. Cannon & Sons, Ltd.	1,853 0 0
Fretwell Heating Co.	1,798 0 0
*Palowkar & Sons	1,793 0 0
(All of London.)	
The architect's comparable estimate	£1,914.
LONDON.—Alterations to South Lambeth-road central school, Kennington, for the L.C.C.—	
Markham & Markham	£4,449 0 0
J. Garrett & Son	4,429 0 0
G. Greenwood & Sons, Ltd.	3,804 0 0
J. Marsland & Sons, Ltd.	3,422 0 0
W. S. Barton & Co.	3,697 0 0
B. Colley & Sons, Ltd.	3,683 2 10
W. Akers & Co., Ltd.	3,603 0 0
H. H. Hollingsworth & Son	3,593 0 0
T. D. Leng	3,569 0 0
J. & C. Bowyer, Ltd.	3,254 0 0
*H. Groves & Son	3,214 0 0
(All of London.)	
The architect's comparable estimate	£3,313.
LONDON.—Painting and cleaning at Brewhouse-lane school, Whitechapel and St. George's, for the L.C.C.—	
G. Keetch	£1,094 0 0
Turnbull & Son	1,047 0 0
Ashby & Horner, Ltd.	1,008 12 0
R. Woolaston & Co.	974 9 6
W. Simms	911 10 0
Griggs & Son	627 0 0
*Vigor & Co. (Poplar), Ltd.	587 10 0
(All of London.)	
The architect's comparable estimate	£670.
LONDON.—Superstructure work of extension of the Hackney institute, for the L.C.C.—	
Holloway Bros. (London), Ltd.	£54,968 0 0
Wilson Lovatt & Sons, Ltd., Wolverhampton	53,123 6 11
W. J. Maddison, Ltd.	52,642 0 0
G. E. Wallis & Sons, Ltd.	52,334 0 0
J. Garrett, Ltd.	51,866 0 0
Griggs & Son	51,720 0 0
F. & H. F. Higgs, Ltd.	51,423 0 0
J. & C. Bowyer, Ltd.	49,993 0 0
Holliday & Greenwood, Ltd.	49,432 0 0
Prestige & Co., Ltd.	49,292 0 0
Fred. T. Thorne	49,291 0 0
Leslie & Co., Ltd.	49,125 0 0
W. Lawrence & Son, Ltd.	48,730 0 0
Allen Fairhead & Sons, Ltd.	48,679 0 0
A. Monk	48,462 0 0
J. Carmichael (Contractors), Ltd.	48,396 0 0
*L. H. & E. Roberts	47,304 0 0
(All of London.)	
The architect's comparable estimate	£48,401.
LONDON.—Elementary school for boys and handicraft centre on the Haimo-road site, Eltham, Woolwich, for the L.C.C.—	
W. Harris, Ltd.	£17,318 0
Prestige & Co., Ltd.	16,499 0
J. Garrett & Son	16,416 0
W. Mills & Sons (Builders and Contractors), Ltd.	16,395 0
Thomas & Edge	16,168 0
A. E. Symes	16,034 0
T. D. Leng	15,934 0
W. Akers & Co.	15,893 0
J. Marsland & Co., Ltd.	15,888 0
H. Kent	15,813 0
J. W. Ellingham, Ltd., Dartford	15,627 0
G. E. Wallis & Sons, Ltd., Maidstone	14,996 0
*F. & T. Thorne	14,849 6
(All of London.)	
LONDON.—Secondary school for girls at Eltham, Woolwich, for the L.C.C.—	
W. H. Gaze & Sons, Ltd., Kingston-on-Thames	£49,973 0 0
Holloway Bros.	46,735 0 0
W. J. Maddison, Ltd.	46,409 0 0
F. & H. F. Higgs, Ltd.	46,366 0 0
J. Garrett & Son	45,434 0 0
Griggs & Son	45,284 0 0
Thomas & Edge	44,976 0 0
J. & C. Bowyer, Ltd.	44,477 0 0
Holloway & Greenwood, Ltd.	42,994 0 0
W. Moss & Sons, Ltd.	42,536 14 7
Fred. T. Thorne	42,475 0 0
G. E. Wallis & Sons, Ltd., Maidstone	41,982 0 0
Galbraith Bros., Ltd.	41,858 0 0
Prestige & Co., Ltd.	40,924 0 0
*J. Carmichael, Ltd. (Contractors)	39,895 0 0
(All of London.)	
LONDON.—Low-pressure hot-water heating apparatus in connection with the extension of the St. Martin's school of art, Westminster, for the L.C.C.—	
Tilley Brothers, Ltd.	£53 17 6
J. & F. May	439 0 0
J. Biggs	404 0 0
J. Jeffreys & Co., Ltd.	398 0 0
Ashwell & Nesbit, Ltd.	390 0 0
J. Combe & Sons, Ltd.	387 0 0
Barrett & Wright	385 0 0
Heywood & Bryett	379 0 0
*Palowkar & Sons	363 0 0
(All of London.)	
The architect's comparable estimate	£386.



LONDON.—Central school at Downham, Eas
Lewisham, for the L.C.C.:—

*Holland & Hannen and Cubitts, Ltd... £34,500

LONDON.—Painting at Dulwich, Kennington and
Norwood Parks, for the L.C.C.:—

*R. Gibson, Barnes..... £344 10

MANCHESTER.—Extensions to the Relief Dept.
at the Union Offices, Green-lane, Patricroft, for the
B.G.:—

*J. F. Moore, Eccles.

MANSFIELD.—Fifty-eight houses on the Bull Farm
site, for the T.C. Borough Engineer and Surveyor:—

Flowitt & Gilbert, Doncaster..... £32,513

R. Moore, Mansfield 29,069

H. E. Whitehead, Mansfield 28,760

Sculley & Fuller, Mansfield 28,177

Blythe & Son, Mansfield..... 27,577

*Bodill & Sons, Ltd., Hucknall.... 26,932

MOLESEY.—Twenty-nine houses in Spreighton-
road, for the U.D.C.:—

*Triangular Construction Co., Thames
Ditton £13,441

NORTH WALSHAM.—Tanks and filter, and laying
sewers at the Outfall, for the U.D.C. Mr. A. E. Collins,
engineer, 10, Cambridge-road, Colchester:—

Mr. May, Norwich.

E. J. Edwards, Norwich.

*W. Church, Lowestoft.

PORTABLE PARQUET DANCE FLOORS

In OAK, or OAK and WALNUT.
For PUBLIC or PRIVATE DANCE ROOMS
As supplied to the leading Hotels, etc.

Writer Phone (Park 1885) for particulars to
TURPIN'S PARQUET FLOORING CO.
25 Notting Hill Gate, London. W.11

J. GLIKSTEN & SON

LIMITED

Specialities in

SEASONED
HARDWOODS

MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.

REGISTERED OFFICE AND WHARF

CARPENTERS RD.
STRATFORD
LONDON E.15

Telephone:
EAST 3771
(5 lines)

Telegrams
GLIKSTEN 'PHONE
LONDON

NORWICH.—New bottling stores, and alterations,
for Messrs. Steward & Patteson, Ltd., Pockthorpe
Brewery. Messrs. F. W. Skipper & Son, A.R.I.B.A.,
architects and surveyors, 55, London-street:—

T. Gill & Son £24,795

J. Youngs & Son, Ltd. 24,548

*F. R. Hipperson..... 22,787

PORTSMOUTH.—Reconstruction of "The White
Hart," for Messrs. Mew, Langton & Co., Ltd., Isle of
Wight. Messrs. A. E. Cogswell & Sons, architects,
Prudential-buildings. Quantities by the architects:—

*John Lay & Co.

PORTSMOUTH.—Stalls, &c., at Connaught Drill
Hall, for National Union of Teachers' Conference:—

*John Lay & Co.

PORTSMOUTH.—Construction of five garages at
Wisborough-road, for Mr. J. H. Welch. Mr. S. E.
White, architect, 73, Waverley-road:—

*John Lay & Co.

PORTSMOUTH.—Improved lavatory accommoda-
tion at the Coal Exchange, Bath-square. Messrs. A. E.
Cogswell & Sons, architects, Prudential Buildings:—

*J. Lay & Co.

REIGATE.—Secondary school for girls, for the
Surrey E.C.:—

*H. Taylor & Son, Epsom..... £35,774

RICHMOND (SURREY).—Installation of electric
light, wiring and fittings, at Grove-road Institution, for
the Board of Guardians. Mr. T. J. R. Kiernan,
consulting engineer, 17, Victoria-street, S.W.1:—

*Richmond (Surrey) Electric
Light & Power Co., Ltd.,

Richmond £609 4 4

ROTHERHAM.—Twenty houses on Calcliffe-lane
and Highfield-lane, for the R.D.C. Mr. J. Totty,
architect, Moorgate-street:—

Moody & Co., Rotherham..... £10,358 0

Thomson & Co., Rotherham 10,200 0

W. & F. Blair, Rotherham 9,925 0

Wm. Waud, Maltby 9,687 10

A. Thompson, Rotherham 9,600 0

R. Snell & Sons, Ltd., Rotherham 9,480 0

G. M. Payling 9,430 0

*Bramwell, Lighthall & Co.,

Treeton 9,400 0

SEACOMBE.—New steel swing bridge to replace
the old timber bridge, for the Mersey Dock & Harbour
Board:—

*Francis Morton & Co., Ltd., Garston.

SKEGBY.—Sewage disposal works, for the R.D.C.:—

*Ward & Tetley, Bradford £14,995

SWANSEA.—212 yards of iron railings and gates,
for Maesteg recreation ground, for the C.B.:—

*W. A. Baker & Co. (1910), Ltd.,

Newport, Mon. £491 13 6

WOLVERHAMPTON.—Forty-two houses on the
Old Heath Colliery estate, for the C.B.:—

*A. M. Griffiths, Wolverhampton £15,739 10

J. J. ETRIDGE, J. Ltd

SLATING AND TILING
SLATE MERCHANTS
CONTRACTORS.
Inspections and Reports made on
OLD or FAULTY ROOFS
in any part of the country.

Telephone: Bishopsgate 1944/5, or write,
Bethnal Green Slate Works,
BETHNAL GREEN, LONDON, E

BEST SEASONED

OAK FLOORING

AUSTRIAN
RUSSIAN
JAPANESE

PREPARATION TO ANY SECTION
CAN BE UNDERTAKEN AT ONCE

SYDNEY PRIDAY & SON

WAINSCOT OAK MERCHANTS (EST. 1899)

Phone
CLISSOLD
6254
(2 lines)

OAK WHARF
RAVENSDALE ROAD
LONDON, N.16.

FITZPATRICK & SON

Masons and Paviers,

455, OLD FORD ROAD, BOW, E.3

Phone: EAST 4808.

Granite Setts and Kerb (redressed and second
hand), York Paving Spur Stones, Granite
Chippings, and Granolithic and Sett Paving.

HIGH-CLASS

FLOORINGS

of every description in

WOOD BLOCKS. PARQUET
SEASONED T. & G. WAINSCOT OAK
TEAK AND MAPLE.
FACTORY AND ROADWAY PAVING

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASANT
WANDSWORTH, S.W.18.
(Phones: Putney 1700 & 2457)

School & Hospital Stoves

MAKERS OF

WRIGHT'S IMPROVED and also SHORLAND PATENT
WARM AIR VENTILATING PATTERNS.

GEO. WRIGHT & CO. (LONDON) LIMITED
19, Newman St., Oxford St., London, W.1
Burton Weir Works, Rotherham.

BRABY'S

GALVANIZED

WORKS:

LONDON

DEPTFORD

LIVERPOOL

BRISTOL

GLASGOW

FALKIRK



SATISFACTION GUARANTEED

Chief Offices:
352 to 364
EUSTON RD.
LONDON,
N.W.1

THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

XXIX.—No. 4,318

NOVEMBER 6, 1925

THE PRESIDENT'S ADDRESS

THE address of the President of the Royal Institute of British Architects in opening a new session is always the occasion for the stimulation of interest in the affairs of the Institute and the hope of arousing fresh interest in architecture as an art. The address is a "learned discourse" on the art to the neglect of more practical matters but none the less vital matters of great importance to the architect, or it may be the converse, and yet, again, a happy mixture of both—a practical address imbued with a spirit of enthusiasm for a great and dominating art. Those who had the pleasure of listening to Mr. Dawber's address last Monday may read it in our columns this week, will, we think, find that the President has risen to the occasion and in this address as President of the Institute he has performed a service to those he represents, as well as to the art he so dearly follows. Mr. Dawber appears to think—and if he is heartily agree with him—that the opening address of a session of a great and representative body of architects should not be confined to the consideration of æsthetic questions, but that the profession of which he is the titular head look to him for some statement on the general policy of the Institute at its last meeting. Be that as it may, the address not only gives some idea of the progress being made—and quite satisfactorily made, so far as we can judge—with matters of exceptional importance to a large body of practising architects, such as training and education, and with questions of considerable public importance, but it is an admirable contribution to the subject of the advancement of architecture as an art. On this subject the President is well entitled to speak, and his remarks will be widely read; and if, as he says—we agree with him—that two-thirds of mankind desire to be architects and are always on the look-out for a lead, his opinions on the subject of architectural art should be of real help in the cultivation of the public art sense which he believes is so important, if for no other reason—and, of course, there are other reasons—than to create greater interest and appreciation on the part of the public and new inspiration to the efforts of architects and craftsmen. Whether or not the "public" are beginning to take an interest in "architecture," as the President thinks, may be a question, though much depends on the "public" referred to—the "architectural public," and we should be glad to think that the general public are beginning to notice what they think the merits or failings of architecture, for this would be, as the President remarks, "one great step towards their not only obtaining but obtaining architecture worth having." What we, however, look for is more interest on the part of the public in well and economically planned and well-built structures of good as distinct from bad building—and if this is what the President means then we agree with him that amongst the business people, at any rate, an appreciation of architecture is being developed and we can hope that through them and by means of their improved taste of the general public and the better training of architects, we shall in time get better and better results in our towns and cities. In this improved taste, we can hope for much more, for we shall certainly find that the general public will not tolerate the disfigurement of town and country buildings, our villages and cities, our highways and byways with vulgar advertisements. What can be more ridiculous than the expenditure of time and money on the erection of advertisements in our towns and cities, which are immediately

disfigured and their architectural features hidden by signs and letters of any shape and size! As Mr. Dawber pertinently remarks: "A strident siren deafening our ears would not be tolerated for one moment, yet advertisements that equally offend the eye are accepted without protest." Surely we have a right to demand some control of such an offence against good taste! "Think," says Mr. Dawber, "what our streets would be if all the names and advertisements were confined to the fascia board only—all, so to speak—hung on the line! What a comparatively agreeable picture gallery they would become!" While the general public have shown a surprising apathy in the matter, it is the owners of buildings which are disfigured who are chiefly to blame, though we are glad to acknowledge that the more enlightened refrain from exercising their present right to disfigure their premises in this way. Should owners or tenants of buildings be allowed indefinitely to disfigure our streets and towns and offend public taste in this way? The mere statement of the case would appear sufficient to show the absurdity of such freedom, especially as the control or limitation of freedom to do as one pleases is part of the machinery of government when such freedom is inconvenient or undesirable, and is against the public well-being. Though we refer to the apathy of the general public towards this abuse, we may ask what action have architects taken to control this riotous freedom on the part of building owners and tenants to spoil our public buildings and offend public taste? There can be few architects worthy of the name who are not agreed that it is a monstrous abuse of the rights of ownership to disfigure our streets as they are disfigured to-day, and yet, beyond individual criticism, little has been done by the profession to control the evil. We believe public opinion would be largely sympathetic towards a movement directed by architects against the increasing disfigurement of our streets and buildings, and that the efforts which are being made to extend the public appreciation of architecture would be greatly accelerated by an appeal for the protection of our streets and buildings from uncontrolled and unlicensed advertising, which is "an offence to the eye and an outrage upon public taste." Mr. Dawber has certainly done his part, as President of the Institute, and we hope his year of office will see a rapid growth of the movement to control this form of advertising, even if we do not see the fulfilment of the complete hopes of most people of good taste and common sense.

With the President's remarks in reference to our villages and country towns we are in complete sympathy, and no one is better qualified to speak on the subject than Mr. Dawber. As he says, we build magnificent roads and we do many other things which make for the material comfort of life, and yet with all this we neglect the æsthetic side, the cultivation of the beautiful and all that gives real and lasting pleasure to those who dwell in the country. We may well marvel, with the President, at our folly in allowing old work which tells the history and tradition of our country in towns and villages throughout the land being swept away without protest. It is pathetic, it is ludicrous that magnificent trees should be cut down so that corners can be rounded and the entrance to our villages vulgarised by oil pumping stations and advertisements: it is pathetic because we cannot replace these remains of a past time, and it is ludicrous because there is no need for it. The need, as the President said, is for a lead, and we therefore welcome his wise and timely words.

NOTES.

Architectural Criticism.

WE do not know whether we correctly understood Sir Reginald Blomfield's remarks at the opening meeting of the R.I.B.A., in seconding the vote of thanks to the President, but we do not agree with him if, in referring to the "caustic criticism" by the younger brethren of work of their colleagues, he said it was "unprofessional and unsportsmanlike" to write articles for the Press with the object of educating the public. We know from personal experience something of the difficulty if not the impossibility of frank criticism of the work of living architects, and our contemporary *Architecture* has shown how meaningless criticism generally is when it is "safe," and how opinions cancel out when there is a nice balance of praise and blame. It may be, as Sir Reginald says, that the architectural critic is not always competent to criticise; but it is more likely to be well-informed and instructive, and therefore more useful, when it is undertaken by an educated architect instead of a layman. Unqualified praise or blame by the unqualified layman may be more acceptable to some, but surely there is nothing unsportsmanlike in the unbiased criticism of a trained architect! It is perhaps as well, moreover, to point out that it might be as unsportsmanlike to criticise the sayings of a professional critic as it is for the said critic to criticise the work of his professional brethren.

The Eisteddfod Competitions.

WITH Swansea as a place of meeting the Eisteddfod next year should be a great success. The developments in the two great Welsh towns Swansea and Cardiff have been amongst the best in the Kingdom, and a gathering like the

Eisteddfod should add something further to the prosperity of Swansea. A well-produced pamphlet just issued gives the programme of the festival and architects will find a special interest in it from the competitions announced for architectural subjects. For a design for a National Parliament House for Wales an award of £100 is offered to that placed first. For a design for a street façade to a large store £25 is the prize; the subject only applying to competitors up to 21 years of age, and the prize being given by the South Wales Institute of Architects, Western Branch. For a set of measured drawings of architecture, no age limit, £25 is to be the prize, and it is to be given by Mr. Ernest E. Morgan, A.R.I.B.A., the Borough Architect of Swansea. These competitions are to be settled by the award of Mr. Arthur Keen, F.R.I.B.A. It is to be hoped a good result will follow these announcements.

Waterloo Bridge.

WE are glad that Sir Reginald Blomfield took up the cudgels once more on behalf of Waterloo Bridge in his speech at the Institute on Monday. He did not qualify his admiration for it as one of our finest public monuments, and his earnest appeal for its preservation should add appreciably to the weight of opinion which its possible destruction has evoked. If anything were needed to emphasise its real beauty it would be found in the utilitarian structure put up to relieve its traffic and painted—such a green!

Restrictions on Tendering.

ON this subject we have received the following non-committal communication from the R.I.B.A., which, in view of its interest and importance, we give on this page: "Several requests having recently been received for advice as to the attitude which should be

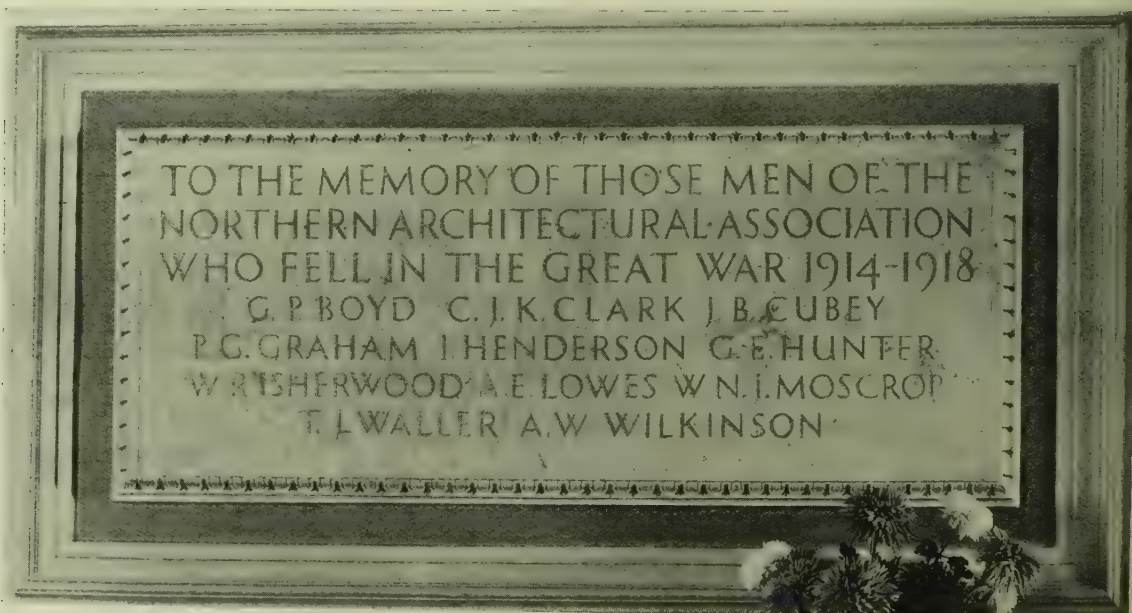
adopted by an architect when faced the restriction on tendering which from the refusal of contractors to be in competition with certain 'prescribed' firms, the Council of the R.I.B.A. recommend that the architect, when informed by a contractor or firm of contractor their tender is conditional upon omission of the names of certain 'scribed' firms from the list of invited to tender, should convey information to his clients and act upon instructions which he receives."

The Street Frontage Medal.

ONE of the most interesting features of last Monday evening's very successful opening meeting of R.I.B.A. was the presentation of the medal for the best London Street Frontage of the Year to Messrs. Greenaway & Berry, whose Auctioneers' and Estate Agents' Institute in Lincoln's Inn was selected for that distinction. We have already recorded our appreciation of this excellent building. Mr. Green acknowledged the award on behalf of himself and his partner in an appropriate speech in which he generously gave credit to his clients and the builders, whose whole-hearted co-operation, even the best of designs are liable to lose something of their quality.

Stained Glass in Old Churches.

IT is a pity that the preservation of old churches should become a subject of discussion. A correspondent of the *Times* deprecates even "the modern glass" being placed in churches, and quotes the late William Morris as having decided, after "a few new stained glass windows never to do another. This decision seeing the number of windows executed by the firm all over the country, certainly not adhered to. This s



The Northern Architectural Association War Memorial.

Designed by Mr. F. N. WEIGHTMAN, M.A. Executed by Mr. J. M. W. REID, A.R.C.A.

ous worship of the old becomes more
ess very tiresome, and has no justifi-
tion in ancient usage, when a healthier
tude, less distrustful of itself, did not
e its own contribution to beauty, as
een in the different periods of work
ented in our old churches. A good
ow is as desirable now to add beauty
an old church as it is to a new one,
we think the writer of the letter has
e acquaintance with the indifferent,
ventional glass with which some
our churches have been filled
n with the fine examples of modern
s now being produced. As a matter
act good modern glass will adorn any
rch whether new or old, and the
er, when we can get hold of it, is
ably better! There is no "funda-
tal truth" whatever in supposing
clear glass is better than fine trans-
nt stained glass, and the writer's
ys would appear to have been built on
depressing character of the glass
oduced into our churches in recent
s, instead of on the better artistry
e more personal work of the artist.

The Best Modern Glass.
We are disposed to think,
far from deprecating modern
glass, that now, when
methods of craftsmanship
so much improved and the art of
s becomes more and more distin-
hed from the poorer substitute, we
likely to see a great advance in the
through new vision and interpre-
on. With finer material resources at
disposal, and an artistry once more
fine and creative, we may expect to
the recovery of the tradition which
es the good work of any time, with
addition of all the new interest and
nture which our own time will
ess through it. If our ancient
ches are not to share in this, they
me mere relics of the past, and it is
ssary that the message of beauty
ld still flow through them lest, all
nuity of life having perished out of
s, they become mausoleums.

Metal Buildings.
THE recent disastrous fire
in premises at Wimbledon
having caused the corru-
iron part of the building to become
ot raises the question whether such
aterial should ever be allowed, even
or a temporary licence, for enclosing
try buildings. Corrugated iron is
missible under the London Building
as a roof, but it would be safer if it
allowed as a roof covering only
a roof of fire-resisting material.
is a point deserving the attention
ose engaged in drafting the proposed
for amending and consolidating the
ent Acts.

Printing the Interim Report.
THE Secretaries of the
National Painters' and
Decorators' Joint Council
point out, in a letter which
we publish this week (p. 679),
the public may help to alleviate the

severe unemployment which is experi-
enced in the painting trade at this time
of the year by putting in hand the
interior decorative work which is com-
monly held over to the spring. They
show convincingly that to commission
such work during the slack season is in
no sense an act of philanthropy; it is
good business policy. The suggestion
is a sound one, and we hope that it may
be widely acted upon.

The Sermon and Art.

THE recent criticism of the
Archbishop of Canterbury
on present day preaching,
which he regarded as often
betraying less knowledge than was pos-
sessed by the ordinary person, who was
better informed, has a direct bearing in
the case of art, where the clergy are often
less informed than the man in the street.
A correspondent writes: "The art
patronised by many of the clergy is often
deserving of as much criticism as the
sermon, and suffers from the same defect.
It is not at all unusual to-day to hear a
cleric commending the windows recently
erected in his church as so good because
the artist supplied him with fourteenth
and fifteenth century windows to order!
It is partly due to lifeless substitutes

for real vision and craftsmanship that
art has drifted away from the church and
the congregations along with it. What
a power art might be to the churches
again were windows and other ornaments
more often the work of artists! Yet it
is the case that first-hand experience and
imagination is often regarded as odd,
or even unsound."

Corrosion of Metals.
DR. R. S. HUTTON, Director
of a Research Association
for investigating the pro-
perties of metals, other than

iron, has offered to supply the R.I.B.A.
with concise digests of results of research
into the corrosion of metals by the
atmosphere. Such information cannot
fail to be of service to architects, who can
rarely find leisure for pursuing these
investigations. Roofs, gutters, water
fittings and other metal appliances used
in building deserve more scientific atten-
tion than they have generally received,
both for guidance in selecting materials
and means of preventing corrosion. The
Institute is to be congratulated upon
the success of this branch of research
which, it may be remembered, was
initiated by it some years ago.



New Premises for Spillers' Industries, Ltd., St. Mary Axe, London, E.C.:
Main Entrance. SIR EDWIN COOPER, Architect.

GENERAL NEWS

Resignation.

Sir Aston Webb, G.C.V.O., C.B., R.A., has resigned his position as an Alderman of the Royal Borough of Kensington, owing to the state of his health caused by the motor accident in which he was involved eighteen months ago.

Change of Address.

Mr. R. W. Knightley Goddard, architect, of 19, Buckingham-street, Strand, W.C.2, has removed to 12, Great Queen-street, Kingsway, W.C.2.

New Rhyl Bridge.

The plans of Mr. Whitley, the Flintshire County Surveyor, have been selected for a 40 ft. pier bridge at Foryd Harbour, Rhyl, joining Flintshire with Denbighshire.

Wooden Stands Surveyor.

The City Corporation, in order to ensure the stability of wooden stands and other erections provided for the accommodation of spectators during the procession on Lord Mayor's Day, has instructed Mr. G. H. Lovegrove, F.R.I.B.A., F.S.I., the Dangerous Structure Surveyor, to supervise their erection.

Tyne Tube Proposal.

Mr. E. W. C. Kearney, engineer and managing director of the Kearney High Speed Railway Co., Ltd., proposes to connect North Shields and South Shields by a tube railway under the Tyne at an estimated cost of half-a-million pounds.

Irthlingborough's New Bridge.

The Northamptonshire County Council has approved the plans of Mr. J. A. Gotch, F.R.I.B.A., for the new bridge to be constructed over the river and railway at Irthlingborough.

St. Thomas's Hospital Memorial.

The foundation stone of the new college house extension and students' club, which is being erected as a memorial to eighty-one students and members of the staff of St. Thomas's Hospital who fell in the war, was laid recently. Situated opposite the main hospital building in Lambeth Palace-road, the new club, in addition to affording opportunities for sport and recreation, will provide seventy-two bedrooms for the resident staff and students. Mr. W. H. Currey, F.S.I., L.R.I.B.A., of 37, Norfolk-street, W.C.2, is the architect.

Excavations at Knossos.

The reconstitution work on the site of the palace at Knossos, under the supervision of Sir Arthur Evans, has revealed an intricate plan and much highly artistic decorative work; the whole central section of the west wing has now been effectively restored. A sacristy is one of the remarkable features uncovered.

Welsh National Museum.

The National Museum of Wales, at Cardiff, is appealing for £55,000 for extensions.

Rolleston Hall.

Rolleston Hall, a seventeenth-century mansion near Burton-on-Trent, is to be pulled down. It has been acquired by a local farmer, who proposes to demolish it and with the material erect cottages which are badly needed in the district.

South-West of England University.

The University College of the South-West of England, Exeter, is appealing for £100,000 to build new premises on the Streatham Hall Estate.

St. Mary's Hospital, Plaistow.

£25,000 is wanted to provide a new out-patients' department at the above hospital.

New Ely Factory Opened.

A new beet sugar factory, erected at a cost of £300,000, was opened at Ely recently.

Ancient House Burned.

Built in the time of Cromwell, an old rectorial manor, known as Castle House, at Deddington, Oxon., was destroyed by fire recently. It was filled with valuable furniture of the period, and contained much genuine Tudor panelling.

Bolton War Memorial Fund.

Bolton War Memorial Committee are appealing for £10,000 to erect a sculptured memorial, 35 ft. high, in Victoria-square (to the selected design of Messrs. Bradshaw, Gass & Hope), and to convert the portico of the Town Hall into a Hall of Memories.

London Housing.

In a review of the housing activities of the London County Council it was recently stated that the Council had approved for purposes of subsidy the erection of 1,180 houses, and had themselves erected 9,638 houses since the war. The Council had authorised steps for the provision of 20,000 houses, apart from dwellings erected in connection with clearance schemes, and upwards of 12,000 houses were included in the programme of work now in hand. The Council had now in hand schemes for the clearance of nineteen unhealthy areas, comprising 88 acres; this involved the displacements of 25,000 people.

Paris Exhibition Awards.

The awards of the International Exhibition of Decorative Arts have been announced. France is first, Czechoslovakia second and Great Britain third with 14 certificates *Hors Concours*; 32 Grands Prix; 45 Certificates of Honourable Mention; 72 Gold Medals; 86 Silver Medals; 52 Bronze Medals, and 38 mentions.

The Mersey Tunnel.

Liverpool City Council has approved the transfer of the Pier Head baths site from the Baths Committee to the Mersey Tunnel Joint Committee. The site is to be immediately placed in the hands of the Mersey Tunnel engineers, who will prepare it for the first work of sinking a shaft.

Brighton Aquarium Plans.

Brighton Town Council has adopted amended plans for the reconstruction of the Aquarium, at a cost of £91,000. While retaining the main part of the existing tanks, new features, including a public hall, a Continental cafe and a series of terraces accessible from the Marine-parade above, are to be provided.

Designs for Marble Memorials.

The prizes in the different sections of the first competition for designs for marble memorials, promoted by the Marble Merchants' Association have now been announced as follows:—Wm. H. Bennett, 19, Collins-place, Edinburgh, 2nd prize, £3; A. Stokely, 7, Tissington-street, Rotherhithe, London, S.E.16, 3rd prize, £1 10s.; H. G. Towndrow, 4, Wareham-street, New North-road, London, N.1, 1st prize, £5, 2nd prize, £3; Alfred Borrowdale, Durham-road, Sunderland, 1st prize, £5, 2nd prize, £3, 3rd prize, £1 10s.; Fergus J. Currie, Dryfe-road, Lockerbie, 2nd prize, £3; J. H. Rudd, 7, Coronation-street, Barnstaple, 2nd prize, £3, 3rd prize, £1 10s.

Northern Architectural Association.

The Teesside branch of the Northern Architectural Association held their autumn meeting at West Hartlepool recently. The party first visited St. Hilda's Church, Hartlepool, and inspected the restorations now in course of progress, and then proceeded to Messrs. Robert Lauder & Co., Ltd.'s, joinery works. Colonel Reavell presented Mr. Forbes' prizes, the winners being C. E. Westmorland, Middlesbrough; L. W. Pool, Darlington; R. M. Archibald, Middlesbrough; and R. G. Bell, Middlesbrough.

The tablet of Hopton Wood stone which has been placed above the Library fire-place at the headquarters of the Northern Architectural Association, Higham-place, Newcastle, was recently unveiled by Colonel H. H. S. Morant, D.S.O., commanding Northumberland Infantry Brigade, and dedicated by Bishop Welldon, D.D., Dean of Durham. The tablet was designed by Mr. F. N. Weightman, M.A., Librarian of the Association, and executed by Mr. J. M. W. Reid, A.R.C.A., of Newcastle.

COMPETITION NEWS

Royal National Eisteddfod of Wales, Swansea.

We have received a copy of the program of the Royal National Eisteddfod of Wales, which includes particulars of the competition in the Architectural Section. Mr. Arthur K. F.R.I.B.A., is the assessor.

Design for a National Parliament House, Wales. No age limit. Prize £100.

Design for a Street Façade to a large street (Competitors not to be over 21 on January 1, 1926.) Prize £25, given by the South Wales Institute of Architects, Western Branch.

Set of Measured Drawings of 'Architect's Office', Swansea. No age limit. Prize £25, given by Mr. E. E. Morgan, A.R.I.B.A., Borough Architect, Swansea.

Intending competitors should send to the General Secretary of the Eisteddfod, Mr. Talog Williams, 24, Goat-street, Swansea, between May 1 and May 10, 1926, the entry form C, given in the Eisteddfod program.

The Incorporation of Architects in Scotland.

The Incorporation of Architects in Scotland will award the following prizes and students during 1926: (1) Rowand Anderson Medal, £100 for a design for a City Art Gallery Museum; (2) Rutland Prize of £50 for study of materials and construction; (3) of £10 to £15 for third year students at schools of Architecture in Scotland; (4) Maintenance scholarship of £50 per annum for 3 years in diploma courses at a Central Institution in Scotland. The leaflet of conditions is free on application to the Secretary of Incorporation, 15, Rutland-square, Edinburgh.

Competitions Open.

Particulars published in "Builder."	But in
Model Dwellings, Russia.	Sept. 4 . . . No
Town Hall, &c., Pretoria. Open to architects residing in South Africa or Registered under Architects' Act, of 1909, Transvaal. Assessor to be appointed by R.I.B.A. Premiums: £250, £150, £100.	— . . . No
Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply parties., 35, Old Queen-street, S.W.1	April 24 . . . Da
New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool	Aug 7 . . . J
Houses for Smaller Middle-Classes and Intellectual Workers. Held under auspices of International Federation of Building and Public Works. Prizes: 1st, 500 dollars; 2nd, 300 dollars; 3rd, 200 dollars. Write to Director-General of the International Federation, 17, Avenue Carnot, Paris	Oct. 30. . . J
Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London	Aug. 14 . . . A
Plan for construction of Conference Hall, for League of Nations, Geneva. International Competition. Sir John Burnet being British representative on Jury of Assessors. 100,000 Swiss francs to be divided among architects submitting best plans. Programmes will be deposited in due course with R.I.B.A., 9, Conduit-street, where intending competitors should apply. Single copies from Secretary-General, League of Nations, Geneva, on payment of 20 Swiss francs.	Jan. 2 . . .
Art Gallery and Museum, Birkenhead. Limited to competitors practising within 20 miles of Birkenhead since January 1, 1923. Premiums: £250, £175, £100. Sir Robert Lorimer, A.R.A., assessor. £22s. deposit. Apply Curator, Central Public Library, Birkenhead	Oct. 16 . . .
*Guilborough Proposed New Hospital	— . . .
*Competitions when "warned" or vetoed by the are started.	



New Premises for Spillers' Industries, Ltd., St. Mary Axe, London, E.C.: Chimneypiece in Board Room.

SIR EDWIN COOPER, Architect.



THE PRESIDENTIAL ADDRESS.

On Monday evening last, at 9, Conduit-street, Mr. E. GUY DAWBER, P.R.I.B.A., delivered his Presidential Address to the Royal Institute of British Architects. Having paid a graceful tribute to his immediate predecessors in office, Mr. J. Alfred Gotch and the late Mr. Paul Waterhouse, the President referred to the recent amalgamation of the R.I.B.A. and the Society of Architects, which, he said, was a measure long wished for, but long delayed, and which had at last given to the architectural profession one single and undivided body, which, with its great Federation of Allied Societies in all parts of the United Kingdom and the Empire, was now in a position to speak with authority on behalf of a united profession. Everyone who had had anything to do with this work acknowledged the tact and good feeling shown on both sides, and the generous spirit in which the Society of Architects (whose members they gladly welcomed into their ranks) had met them. The majority of architects in this country looked to Registration as a necessary measure for giving to qualified architects the same professional status and protection that were afforded to the other registered professions, and the first use to which their new organisations would be put was the attainment of Statutory Registration.

A Committee was now completing the draft of a Registration Bill, and after the necessary negotiations with other interests concerned were concluded it was the intention of the Institute to promote this Bill in Parliament with the utmost energy until it became law. They felt they could rely upon the cordial support of their members and their Allied Societies to see this through. Now that their differences were settled and a future policy agreed upon, the Institute could devote its energies "to the advancement of Civic Architecture," to quote the words of their Charter—and to education—aims so interwoven that it was difficult to separate them.

One of their most important duties was to maintain a high standard of education in the profession. The Institute was not a teaching body, but through their examination system they were in touch with the teaching given in the recognised schools, not only in Great Britain, but throughout the Empire. The duties of their Board of Architectural Education became every year more onerous, and a vast amount of time was given by its members to work which was little known or appreciated. The Board controlled the examinations, its members visited and reported upon the work of all recognised schools, and they arranged the competitions for the valuable bursaries, prizes and scholarships under the authority of the Royal Institute. During the past few years great changes had been made owing to the increasing number of Universities and Technical Colleges which now included architecture as one of the subjects for degrees and diplomas. In the old days the Institute relied upon external examiners to see that the school standard was equal to that of the Institute examinations, but latterly it had been found impossible to compare by this means the standards reached in various schools working

under different conditions. The Institute had therefore set up a small board of architects, who visited all the schools to report upon the staff, curriculum and equipment, and this had been found most helpful to the schools as well as to the Board of Architectural Education.

It was not their aim to mould all the schools after one type, but to encourage and develop the best features in their various courses, and they proposed to invite the great Universities, the Board of Education, the London County Council and other bodies to appoint representatives to sit upon the Institute Board of Architectural Education—to assist them in the non-technical side of their work with their experience. The Institute was convinced this was the right method to adopt if architectural education was to keep fully abreast of modern requirements. That these requirements were great he could not too strongly urge upon the young men taking up the study of architecture to-day. Genius alone might enable a man, to some extent, to avoid the pitfalls of ignorance; but the immense development of new methods of construction, the keen competition and the improving standards of education demanded on the part of the ordinary man the best general technical and artistic training that he could acquire if he was to attain a reasonable amount of success in making a livelihood. He felt very strongly, however, that with all this more or less theoretical training they must not neglect the more practical side of their profession. One of the methods proposed was for students after their course of school training to go direct into an architect's office. If they were to go instead for six months into the workshops and to spend a further period as clerks of works upon some large or even medium-sized building, they would gain practical knowledge and, in his opinion, be better qualified to start practice than by coming straight from the schools or even from an architect's office.

A country's history was written in its architecture, and to us it was absorbingly interesting to note how architecture crystallised the tendencies of an age and to mark the extent to which it might, and, indeed, must, express the culture of an entire generation. Architecture was not made; it grew out of the necessities and requirements of a nation, and the attitude of the public towards it was to a great extent the social reflex of contemporary civilisation. Without a love and care for art, no nation had ever arrived at any point of eminence.

Turning to the question of art and the public, the President observed: Some said that everything popular must be bad; some urged that the claims of commerce led to the neglect of good architecture; others that the noble tradition of architecture was being debased by its surrender to purely utilitarian considerations; but few, he was sure, would dispute that one of the most helpful aids towards a better appreciation of architecture to-day was that the great pioneers in trade and commerce were erecting some of the finest modern buildings. Could they, for instance, contemplate the new Bank of England, the Britannic House in Finsbury-square, the new Midland Bank in Cheapside, Lloyd's Exchange, the new Holt building in Liverpool, and many others in London and the provinces, without acknowledging that commercial architecture was rapidly taking a high place in their civic life? If we thought of the buildings that would have been erected for such purposes half a century ago, we need not be despondent about the future or fail to recognise that amongst our business people, at any rate, an appreciation of architecture was growing.

Some of their critics considered much that was being done in towns and cities was "ugly, coarse and soulless"—to quote from a letter in the *Times*—and cited the buildings at Wembley and Adelaide House and Wellington-street in the Strand as examples; but might we not, on the other hand, regard these typical specimens of buildings as an endeavour on the part of the designers to get away from the banalities of so-called period architecture and

the too slavish imitation of the past? Was not the fact that the public for so long been used to this sort of thing that attempt at originality or a departure from conventional was bound at first to meet with disapproval?

When we thought of the heated discussion we had had this year over the Hume Memorial and Epstein's "Rima" in H Park, on the one hand, and over Gilly's fountain and "Eros" in Piccadilly-circus, on the other, did it not make one sceptical as to the value of current opinion regarding work of art that was new and strange? Three years ago the Shaftesbury Memorial "Eros" was the butt of criticism, vehement as that levelled at "Rima" to-day. It was a "hideous structure," a "big satyr" an "incoherent mass of metal with neither simplicity nor purity of design," and more the same effect, though some few ahead of the crowd considered the memorial "beyond question a noble work of art," an opinion which had been fully endorsed by time. To-day "Rima" had been as severely criticised, in this case, he thought, more justly. Did all this inconsistency of expressed opinion make us wonder whether public taste existed as if it did, whether it was of any value at all? One was reminded of the remark of Tacitus: "The public is no real judge of what is good or bad."

With regard to architecture they should welcome criticism of their work, even friendly abuse, because it was evidence that the public were beginning to take an interest in architecture and to notice what they thought of its merits or failings, and this was one great step towards their not only demanding, but obtaining architecture worth having. We were living in an age of advertisement; the victim of vulgarity over decent reticence, once the great boast of this country, had of late years seemed to overstep all bounds. There was a place for everything and a right way of doing things: the place for advertisements was not on buildings and in positions where they were an offence to the eye and an outrage upon public taste. The right way of drawing attention to a product was to entice the sympathetic consideration of the potential purchaser and not to set his nerves on edge and shock his feelings by forcing the advertisement on him at all times and seasons in the crudest possible manner. In many of our towns, London in particular—fine buildings were effaced and architectural features entirely obliterated by signs and letters many feet high, out of scale with their surroundings, spoiling and vulgarising the whole façade. Think what our streets would be if all the names of advertisements were confined to the fascia boards only—all, so to speak, hung on the line! What a comparatively agreeable picture gallery they would become!

If this was the case in our towns and cities, what of the country? How continually we see roadsides and villages marred by notice boards advertising some patent medicine, tea, whisky, with a repetition that actually defeats its own object. A few years ago nobody would have dreamt of advertising in this manner, but to-day everybody was allowed, apparently without any control, to display hideous advertisements, spoiling the rural character of the land. But, happily, there were indications that matters were changing for the better. As an instance of what could be done, take the beautiful road beside the River Wye between Chepstow and Tintern, which for some years past had been greatly marred by advertisements actually plastered on the rocks and running the length of the typical English scene. This was Crown property, and one of our most public-spirited members in that district wrote to the Office of Woods and Forests urging that this disfigurement should be discontinued, with the result that the Commissioners issued instructions to the lessee that it should be stopped at once.

The great oil firms, owing to public protest, had to a great extent withdrawn their

ly hoardings from the fields, and at th, after many years of Parliamentary ulties, the Advertisements Regulation Act 1907 had been amended and this session had ived Royal assent. The new Act was the me of conferences between the Scapa ty and the advertising section of the don Chamber of Commerce, who acted for great billposting organisations throughout country, and it had been helped forward by friendly sympathy of the Home Office, the istry of Health and the County Councils ociation. In order that the charm of try prospects might no longer be destroyed he callous advertiser, it now remained for local authorities to use their powers to full extent and for country residents and farers to urge action. The thanks of the e community were due to the Scapa ty for their unremitting efforts in this tion, efforts which had now been crowned success.

seemed a pity that steps had not been n by the Ministry of Transport to safed- from the display of advertisements the t new roads that are now being con-cted, for here there was an opportunity of ing these highways, if free from hoardings, with houses and buildings well designed r-anged on either side, unique in their ty and beauty. More consideration should e given to their junctions with existing s, where splendid opportunities were being ed for fine traffic centres, planned with ified buildings around them. A tax on r-ishments, as in France and other coun- , would not only serve as a source of me to the State, but as a deterrent to many advertised in a vulgar manner. The whole ude towards this question was becoming h more hopeful, and in years to come we nt expect to see advertisements treated in oughly artistic manner.

hen we turned to our old villages and try towns the position was not so hopeful. often we saw villages, whose rustic ater was their chief charm and attraction, g spoiled by new erections that aped the t features of our city buildings and were usically out of place. Yet all this was g done under the mistaken idea that pro- was being made. England possessed ex- te old villages and country towns, some e most beautiful in the world. They are ique and priceless heritage, the admiration envy of all who visited our shores, that d be preserved at all costs; but it was aggeration to say that in half a century's , at the rate so-called improvements were g made, the destruction of almost all the ty and distinction with which our stors enhanced these towns and villages d be complete.

ere were, it was true, the town-planning rs conferred on local authorities by Mr. Burns. They had, however, been adopted slowly, and as regards matters of amenity had been used and administered with far uch timidity. During the last session of ament the statutes were consolidated in a Act embodying the various amendments e since 1909. The general effect of these e been to simplify procedure and extend the e of the original Act, while increasing the r of the Minister of Health to enforce its . It was to be hoped that the measure d to extend town-planning powers to the -up areas of towns, which the Minister expressed his intention of introducing, d be passed into law at an early date, with amendment found necessary to make the ent Act effective as a means of preserving amenities of a district.

the carrying out of their duties under the ing Acts, the various municipalities had a t responsibility. In many cases we saw es and layouts which were to be com- ed in every way, suitable to the district, ood local materials, comfortable, well ned and designed, and adding to the ities of the countryside. Those which ed this standard were, unfortunately, the

exception. Local authorities, who since 1923 had been freed from much central guidance and control in such matters, were too often neglect- ing to maintain a decent standard of design in their housing work. Certain it was that, either for lack of proper control, or through want of care or designing ability, whole districts were being disfigured by small buildings placed promiscuously by the roadsides, built without the slightest regard to their position or the character of the site, of inharmonious materials and inappropriate design.

We built magnificent roads, we paved our streets and had the most efficient and up-to- date systems of drainage; we laid on water, gas and electricity and all that made for the material comfort of life, and yet with all this we neglected the æsthetic side, the cultivation of the beautiful and all that gave real and lasting pleasure to those who dwelt in the country. When we thought that day by day, all over England, old buildings were being pulled down without protest, to make way for new buildings, the majority without the least beauty or fitness, it made us marvel at our folly in allowing to be swept away the old work which told the history and tradition of our country in every town and village throughout the land.

He felt we owed a debt of gratitude to the Society for the Protection of Ancient Buildings for the energetic action and protests they so consistently made against such vandalism. To what a state of apathy had we fallen in England to-day when we could allow without protest the gradual demolition of an old his- torical building like Warwick Priory, with all its traditions and associations, and the shell only to be rescued by an enterprising American who was pulling it down stone by stone for re-erection in America, where it might stand

as a lasting reproach to our crass indifference in parting with one of these irreplaceable heritages of the past.

Our old villages to-day, in every part of the country, had a constant succession of motor cars streaming through as if on business of life and death, their occupants regardless of the comfort and quiet of those who lived in them and not even troubling to look at the buildings they passed by. Speed, and yet increasing speed, seemed to be the cry, and everything apparently had to give way to this. The policy of the new road makers apparently was to sweep away everything that stood in the way of speed, the old winding picturesque lanes were widened and straightened, miles of un- necessary concrete curbing were laid on either side of the old grass bordered highways—for paths that had never been needed in the past—magnificent trees were cut down, so that corners could be rounded and the entrance to every village was vulgarised by oil pumping stations and advertisements, so as to enable greater speed and haste to be obtained by the motorist. Could it be wondered at that all regard for old buildings or villages was in danger of becoming a thing of the past.

He would like to quote here some recent words of Professor Lethaby, who truly said: "The England that we love is the England of old towns, tilled fields, little rivers, farms, churches and cottages. If by violently marring the fair country and vulgarising the shy old buildings, we obtain so much less to love, what shall it profit? Without an England to love we cannot remain stout of heart and enduring. Civilisation cannot be had merely as a word—it rests on foundations." He (the speaker) was sure the majority of people de- plored the changes to which he had referred, changes taking place so rapidly throughout



Portrait of Mr. J. A. Gotch, P.P.R.I.B.A.
From a Painting by Mr. T. C. Gotch.

the country, but a united and systematic effort on the part of architects and local authorities might do something to preserve the still remaining charm of the country.

In certain towns and districts there might be formed small civic committees, annually elected by the ratepayers, whose duty it would be to try and foster wider interests in their localities, their historical traditions, and their general amenities and architecture. They would enter on their task, not in any spirit of fussy interference, or the pushing of fads, but might help by suggestions and advice. The functions at first might be only advisory, but they would in time set up a sort of commission to which it would be a privilege and honour to belong. The annual elections would ensure that the work did not get into a groove, and the members would have no self-interested motives. On every committee there might be an architect, selected for his knowledge of the architecture and traditional buildings of the locality, and care should be taken to elect if possible only those who took an interest in their town or village, and were actuated by a sense of civic pride. In case of any matters of importance power should be given to call in the Commission of Fine Arts to give counsel. This might sound Utopian, but there were already many societies of this nature, acting without elected authority, who were doing admirable and most helpful work in Birmingham, Newcastle-on-Tyne, Norwich, Stratford-on-Avon, Coventry, and other places.

Many might say these things were too trivial to speak of—not worth the attention of a great Institute—but was it really so? Were they not, as architects, all keenly interested in the welfare of their country, in its beauty, its buildings and everything that tended to make it more attractive, more wholesome and and more joy giving?

DISCUSSION.

SIR FRANK DICKSEE, P.R.A., proposing a vote of thanks, said that the President's address had covered a wide field, and it was difficult to pick upon any one thing for comment. However, he would like to say a few words about education—not architectural education, but the education of the public. We were a democratic country, and it was desirable to educate our masters. Much was being done in this direction—by societies, magazines, newspapers, &c.—but much remained to be done. There was the evil of the outrageous and vulgar advertisement,

for instance. We suffered it—indeed, got hardened to it—in London, but it became very trying when, having got away from the town, we were assailed on every side by the evil we were trying to escape. Everything possible should be done to abate the nuisance. He remembered that some years ago Southampton Water was dominated by an enamelled-iron sign with lettering as long as the room they were in, advertising somebody's oats. When he returned home he gave strict orders that those oats were never to come into the house, and he hoped other people did the same. He could never understand why the taxation of advertisements was not adopted. Difficulties would no doubt be encountered, but if the tax were limited to posters it should be easy to impose. It was done in other countries by means, he believed, of a stamp.

SIR REGINALD BLOMFIELD, R.A., said it gave him great pleasure to second the vote of thanks and to congratulate his old friend on having attained to the highest rank that the Institute could offer. Mr. Dawber had given years of devoted service to the Institute as Hon. Secretary and in other capacities, and had fully earned the honour that had come to him. With regard to themselves, it was matter for congratulation that the hatchet had at last been buried and the controversies of two generations finally closed. Great credit was due to both bodies. He hoped that now they could go forward and devote themselves to the ideals expressed in their motto: *Usui Civium, Decor Urbium*. They must pull loyally together, not in the sense of a trade union, but as a team. He noticed that among their younger brethren there was a tendency to caustic criticism of the work of their colleagues. They could say what they liked among themselves, but articles were appearing in the Press addressed to the public, the justification of which was that they were intended to educate the public. He would like to say, first, that the public was not so ignorant as it was supposed to be, otherwise it would not employ the gentlemen in that room; in the second place, the writers of these articles were not always competent to criticise; and, in the third place, criticism of colleagues was unprofessional and unsportsmanlike, and that was what really mattered. That kind of thing could be done in the back office, but not in the market place. Continuing, Sir Reginald said that a tax on vulgar advertisements was extremely desirable. Those responsible for these things inflicted a great deal of annoyance on the community, and should be made to pay for it. He would like to see the tax extended to other forms of advertisement, but that, perhaps, was not within the range of practical politics. With regard to town interests, the Institute, the Society for the Preservation of Ancient Buildings, and other bodies had done much excellent work, but there was a great deal of leeway to be made up. It was not generally realised that architectural history did not end with the year 1700. Many buildings were put up in the eighteenth and nineteenth centuries which were as good as anything that had been done in the years before. Waterloo Bridge he held to be one of the noblest works of architecture in this country. He believed it to be the finest bridge ever built. The President of the American Institute of Architects had lately written to the Institute supporting the movement for the preservation of "a truly national monument." Waterloo Bridge was almost as essential a feature of London as St. Paul's itself. Would they, asked Sir Reginald, ever allow a sculptor to alter a great monument like Steven's Wellington Monument, or a painter to touch a great painting like Titian's "Bacchus and Ariadne"? They must not allow any alteration to Waterloo Bridge, for alteration would be tantamount to destruction. The Institute were making great efforts for its preservation, which he hoped would be successful. Turning to the question of the countryside, Sir Reginald said that they heard a lot about town planning, arterial roads, and so forth—all extremely important matters. The Ministry of Transport had a very difficult task, but he urged that the English countryside, unique in the world, should not be sacrificed

to the motor car. The whole countryside must not be Haussmannized.

The vote of thanks was then put to meeting and carried with acclamation.

The President briefly replied, and alluded to the services of the late President, Mr. J. Gotch, calling special attention to his work drawing London and non-London members into closer co-operation and comradeship through his position as the first—but not last—non-London President of the R.I.B.A. His term of office was marked by the successful completion of the amalgamation of the Society of Architects, whose President, Mr. A. J. Taylor, now F.R.I.B.A., had expressed his great regret at not being able to have the pleasure of being with them that night. The President unveiled the portrait of the late President, which has been so admirably painted by his brother Mr. T. C. Gotch. He moved a cordial vote of thanks to the painter.

Mr. J. A. Gotch seconded the vote of thanks to Mr. T. C. Gotch, the President put the vote to the meeting, and Mr. T. C. Gotch briefly replied.

The President then presented the R.I.B.A. Medal and Diploma for the Best London Street Frontage, 1924, to Messrs. Greenaway & Newberry, F.F.R.I.B.A., for their building—Auctioneers' and Estate Agents' Institute, Lincoln's Inn Fields. He congratulated the Council and members of the Auctioneers' and Estate Agents' Institute upon the acquisition of so beautiful and well-planned a building for their new home. It was based on eighteenth-century tradition, but was eminently suited for this purpose. They had with them that evening, he continued, Sir William Wells, President A.E.A.I., Mr. E. H. Blake, Secretary also Mr. F. H. May, a director of Messrs. Holla & Hannen and Cubitts, the builders of the new Institute.

Mr. F. H. Greenaway returned thanks on behalf of himself and his partner, Mr. J. Newberry.

The Hon. Secretary then announced that the next meeting will be held on Monday, November 16, at 8 p.m., when a paper will be read by Mr. Raymond Unwin, F.R.I.B.A., on "The Architect and His City."

Before the reading of the Presidential address the Hon. Secretary announced the decease of the following:—

Fellows.—William Morton Cowdell, elected Fellow 1906; Albert Howell, elected Fellow 1907; John Albert Gill-Knight, elected Associate 1891, Fellow 1913.

Retired Fellows.—James Jerman, elected Associate 1876, Fellow 1887, transferred Retired List 1923; Frederick William Tarr, elected Fellow 1890, transferred to Retired List 1923; Dr. Alexander Ross, elected Fellow 1893, transferred to Retired List 1923; Stephen Ernest Smith, elected Associate 1867, Fellow 1881, transferred to Retired List 1919.

Associate.—Ernest Thomas Jago, elected Associate 1906.

Licentiate.—Vere Calvert, elected Licentiate 1910; Alexander Caldwell Thomson, elected Licentiate 1912; Rowland Lloyd Jones, transferred to Licentiate Class, 1925; Miles Burt transferred to Licentiate Class 1925; Alfred Fitzherbert Haslewood, transferred Licentiate Class 1925.

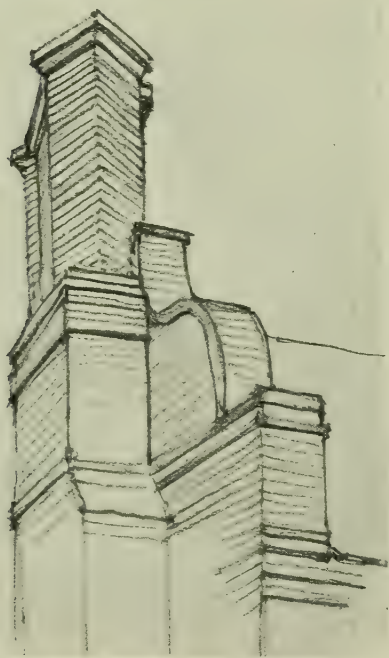
Retired Member of the Society of Architects.—Charles Newson.

Honorary Corresponding Members.—Commendatore Giacomo Boni, Director of the Excavations of the Roman Forum, Rome, elected Hon. Corresponding Member 1886; Jean Théop. Homolle, of Paris, elected Hon. Corresponding Member 1897.

The Hon. Secretary moved that the regret of the Institute for their loss be entered on Minutes and that a message of sympathetic condolence be conveyed to their relatives.

The President, having admitted a number of new members,

The Secretary announced that the candidates nominated for election November 30, 1925, were as follows:—As Fellows, 97; as Associates, 62; as Hon. Associates, 3; as Hon. Corresponding Members, 5. The names, having been published, were taken as read.



Brick Chimney Stack at Adisham, Kent.

ARCHITECTURAL SOCIETIES

Berkshire Society of Architects.

READING a paper on Wednesday last before Berkshire Society of Architects at Reading, "The Works and Influence of Sir Christopher Wren," Professor A. E. Richardson said in view of all that had been said in written of the career of Sir Christopher Wren it would be superfluous to recapitulate which are common knowledge. We had gained some idea of Wren as a man and respect for his extraordinary career; and in spite of the comments of some foreign architects who failed to understand his merits, in spite of our knowledge it was not surprising to find that many sides of Wren's personality had yet to be discovered. Dates, and statistics were useful as markers, especially when the career of a personage outside the ordinary was entered upon; but helpful such facts were, they did little to explain dominant tendencies. The complete life of Wren had yet to be written. So far we had been collecting data. It was, however, encouraging to know that the Wren Society was working with an authentic collection of drawings, and that these might form the basis of a work of authoritative nature.

The English collectively named Inigo Jones Sir Christopher Wren, yet the bias was towards the popularity of the latter. In building circles Wren's name stood for modern England. That he was a scientist of no mean order was universally acknowledged, but it was wide of the truth to name him as a scientific architect. Inigo Jones was a restorer; Wren, on the other hand, was an innovator, to which position he was helped by education and opportunity. Had he not been a great architect he would have carried a marshal's baton with equal skill.

Wren did not originate a style; no man was good enough to do that. His earliest works followed the manner of Inigo Jones, which he changed after the famous visit to Paris. It is also to be remembered that the mediæval tradition of craftsmanship was still in being. There were master bricklayers, master masons, master carpenters who, thanks to their training and the system of apprenticeship, were capable of undertaking buildings of fair quality.

The influx of ideas from Holland, France, and the commercial rival, and from France, the spiritual home of the Royalists, in turn introduced ideas which filtered down through the various levels of society until they in turn reached the minor branches of art. As Wren had experience as a builder, so he was able to invent; and to aid in this achievement, he was helped by the conditions of his time, he drew freely from the line illustrations of books published in Italy, France, and Holland. All the available information of mediæval architecture was obtained at second-hand. The wonder was not so much on account of the imperfections of the detail as at the high standard of ordinary work. The mediæval impulse, however, was so strongly imbedded in the mind of the architect, as it was in the minds of those who worked for him, that the planning of buildings invariably received the first consideration. In France, on the other hand, the greatest study was given to composition on the most vast scale.

Wren's plans, by contrast, had all the force of direct statement, but in some cases lacked the subtle grace never absent from French works of similar character. There was a marked difference between contemporary French and English work. Wren realised the value of using brick as well as stone. The French showed a preference for stone. Wren was careful regarding questions of economy and did not embark on anything which could not be constructed. For this reason the period of Wren's activity could justly be called the period of compromise between the mediæval impulse for building which was instinctive and natural, and the imitation of detail of a quasi-classical

character from foreign sources. As this subject was pursued the inner action of the vernacular could also be discerned; especially was this the case with the smaller type of house. Wren must be considered the first of the modernists. He was not only responsible for the design of buildings, but, as in the case of Chelsea Hospital, Greenwich, and the Blue Coat School, he drew up rules for the running of the establishment. With such a man, cause always ruled ultimate effect. To Sir Christopher Wren could be traced the rules and regulations for making London fireproof, which had since been followed and formed the basis of the London Building Act. In the years succeeding the Fire, Londoners who had seen the gabled buildings of mediæval character in every street gradually became accustomed to the plain brickwork and sashed windows of flat-fronted houses in which the design of the roof was inconspicuous.

There had been tenement buildings in the days of Elizabeth, and it was interesting to note that under the regime of the later Stuarts this system of close building was continued. Such examples as the chambers in the Inns of Court and at the Universities of Oxford and Cambridge could be quoted as contributions to the new system. To the far-seeing wisdom of Wren could be assigned the grouping of houses into different categories such as first-, second-, third- and fourth-class houses. We must not forget the powerful influence in house design which came from the Netherlands.

A few years after the Fire the new character of London had its counterpart in the provincial towns, with the difference that the use of local material imparted an added freshness to the standard types. Thus it could be assumed that for a hundred and fifty years after Wren's death geographical considerations aided local expression in the sphere of building. Research had proved that no country had evidenced such regard for tradition.

BRISTOL SOCIETY OF ARCHITECTS

The Bristol Society of Architects opened their programme of meetings for the winter session with the President's conversazione, at the Royal West of England Academy, on October 29th. Mr. R. C. James, F.R.I.B.A. (the new President) referred with deep regret to the death of Colonel Fry (of Weston-super-Mare), after an operation. He then touched upon the history of the society, and gave figures illustrating the progress of the past ten years: 1915—Fellows, 32; associates, 22; students, 11. 1925—Fellows, 58; associates, 37; students, 33. That result had only been obtained through strenuous work and organisation. The latter started with the parent body, the R.I.B.A., and ran throughout the whole of the allied societies. The organisation of the R.I.B.A. was achieving results of incalculable benefit to the profession. Arising from this organisation was the Bristol Architectural School, which was now well established, thanks to the energy of several practising members of the society, among them the President of the Wessex Society of Architects (Mr. G. C. Lawrence). The school was progressing most favourably, under the headmaster (Mr. Gordon Hake) and his assistant (Mr. Button).

Mr. Gordon Hake, F.R.I.B.A., said the school did not aim primarily at the production of fine draughtsmen, but chiefly at giving the fundamental teaching and discipline of the art, science, theory and history of architecture, which, supplemented by work in an architect's office, would qualify the student for an independent practice of his profession.

The Council and Officers for the Session 1925-6 are as follows: President: R. C. James, F.R.I.B.A. Vice-President: W. S. Skinner, F.R.I.B.A. Fellow Members of Council: Mowbray A. Green, F.R.I.B.A., R.W.A.; G. C. Lawrence, F.R.I.B.A., R.W.A.; Sir George Oatley, LL.D., F.R.I.B.A., R.W.A.; W. J. Stenner, A.R.I.B.A.; and B. F. G. Wakefield, F.R.I.B.A.

Associate Members of Council: B. F. Brueton, A.R.I.B.A.; and C. H. White, A.R.I.B.A. Hon. Treasurer: T. A. Skinner, A.R.I.B.A. Hon. Secretary: G. D. Gordon Hake, F.R.I.B.A.

HISTORICAL TOWN PLANNING

THE third lecture on town planning, given by Mr. William Haywood, F.R.I.B.A. at Birmingham University, carried the record of historical town planning down to the beginning of the nineteenth century. In these lectures the gradual development of formal planning from 2500 B.C. onwards has been contrasted at each stage with modern practice, in order to emphasise the character of past performance.

Progress in the past, said Mr. Haywood, had been fitful. Highly important methods of planning, displayed where their influence might well be thought irresistible, had sometimes been strangely neglected by later designers—as when both the Greeks and Romans ignored the dramatic possibilities of the axial association of road and building which the Egyptians had so well demonstrated in the ceremonial approaches to their temples.

The Roman method of grouping temples with their fora was not to be regarded as equivalent to the practice of the Egyptians referred to above, nor to the association of buildings with public squares in later periods. The authority of Vitruvius—who classed the forum as a building—was so strongly supported by their known use for ceremonial, business and communal purposes, that the axially arranged temple might here be regarded as the inner sanctuary of a larger building; built, it was true, without a roof, but not differing greatly in that respect from the hypæthral treatment of the forensic basilicas of the period.

It was to Rome during the Renaissance that we must turn for the next appearance of a consistent effort to group roads and buildings together as one composition; and the gradual emergence of this dominant factor in town planning coincided with the slow development of the Piazza del Popolo from a mere junction of two ancient roads (the Via di Repetta and the Corso Umberto) to a symmetrical triple junction by the planning of the Via del Babuino in 1516, and later to a great traffic centre of multiple routes fully clothed with appropriate architectural character.

Before the Piazza del Popolo had assumed its final appearance, however, Sir Christopher Wren had carried the principles of town planning far beyond all contemporary design in his wonderful plan for the rebuilding of London after the Great Fire. Wren's plan was remarkable for the freedom with which he varied the alignment of his streets to suit practical needs and architectural effects: there was no greater lesson in town planning history than the loss suffered by London from the absence of legal powers at a time of great opportunity.

Paris at this time (1666) had taken no step forward in the new progress, and the present eminence of her town plan was by no means the outcome of a preconceived ideal. Paris was a brilliant example of sectional opportunities put to good use. The "Grande Boulevards" of the north bank of the Seine were a legacy from the conversion of the north line of fortifications in the third quarter of the seventeenth century; the "Boulevards Extérieurs" replaced the old customs wall removed by Hausermann; and the semi-military clearance scheme of the mid-nineteenth century gave excellent opportunities for re-planning the congested areas in the centre of the town.

Fortunately for Paris, the political significance of fine building had always been fully appreciated by her rulers; and the flair of the people themselves for an imaginative treatment of practical needs had given an extraordinary impetus to the finely adequate plan for which Paris was famous. The pride of citizens in their own city must always be a powerful influence for good in town development.

WILL IT COME TO THIS?

By A PROPHET.

MR. WHIP, of the well-known firm of architects, Messrs. Whip and Wrinkle, who had slumbered peacefully through a series of committee meetings extending over a period of ten short years, found himself on April 1st, 1936 (a day which most of us will remember as one of some importance), sitting on the same comfortable chair, at the same handsome table, in the same luxurious room, for the same somewhat hazy purpose for which he and other good men and true had first assembled somewhere in 1926.

It will be recalled that in that year, following a General Election, fought entirely upon the question of Waterloo Bridge, the King's Speech revealed the gratifying fact that His Majesty, upon the advice of his Labour Ministry, referred the whole matter to the Trade Union most concerned; and so prompted, the Royal Institute of British Architects, recently amalgamated with the Architecture Club and affiliated to the Plumbers' Union, had appointed a committee to deal with the whole question. Hence, one evening a week for the past ten years Mr. Whip, among others, had faithfully spent his after dinner nap at Conduit-street instead of by his own hearth. On the evening above referred to, this worthy gentleman, probably for some gastronomic reason, was suffering acutely from insomnia, and as a consequence the proceedings appealed to him as something quite fresh and interesting. Looking curiously around upon his fellows, he was impressed by the distinguished, learned and amiable tone of the assembly. It was perfectly evident that to take any individual member haphazard and dress him really well would never disguise an eminent architect from the simplest country cousin. Learned also were they all, some being far too clever to build; and amiable they must have been or how else was harmony maintained?

The opening formalities were much as usual, Mr. Whip himself fulfilling his usual duty in moving the first proposition down on the agenda, which read as follows:—

"That this Committee, being fully alive to the pressing nature of the need for a solution to the Waterloo Bridge problem, and realising that the time is ripe for such a solution to be found, is resolved to take immediate steps to find it."

When this motion had been seconded there was a scene of intense enthusiasm, such as one would expect from any meeting of men of action like these.

The first of a series of amendments was then moved by the most business-like of the members (not that he was not also thoroughly professional). The amendment was as follows:—

"That this committee, having doubts as to the pressing nature of the Waterloo Bridge problem, and realising that this is an age of progress, and that little more than a century can pass before all traffic is air-borne and will cease to burden our streets and bridges, deprecates any squandering of public funds, and is resolved to recommend that Waterloo Bridge be raked out and pointed in Portland cement and sand (1 to 3), and coated with a petrifying solution, and that sightseers be charged a small entrance fee, the proceeds from which shall be placed to credit of the Architects' Benevolent Society."

Another member, of probably wider experience, rose to support this amendment, but thought that it should be definitely stated that the Portland cement should be up to standard specification, and that the petrifying liquid should be specified. It can be imagined how impressed was Mr. Whip by this evidence of the technical detail into which the committee was prepared to enter, and though the amendment failed even in its revised form the moral effect was great.

Then followed possibly the least distin-

guished member of the committee, with yet another amendment in the following form:—

"That this committee, realising the pressing nature of the Waterloo Bridge problem, both upon the public conscience and upon the Thames mud, is resolved to co-opt the services of the L.C.C., that their experts may so strengthen the foundations of the bridge that the piers may settle a few feet to restore alignment with that so treated in 1925."

There is little doubt that this amendment would have received considerable support had it not been patent that the mover held strong "low-level" predilections, whereas the majority of the meeting held "high-level" views on this subject, and for that matter upon all others.

The next amendment was moved by the most learned member of the assembly, and possibly the most amiable, though he had quite a lot of friends. It was worded with ability, and though it was difficult to apply in any practical direction, its value to the proceedings can well be imagined. It read as follows:—

"That this committee, being fully alive to the impossible state of confusion of thought into which have sunk all modern ideas upon matters architectural, is resolved to recommend that Rennie's unfortunate essay in a dead style be entirely swept away, in order to open up a clear view of the so-called temporary bridge alongside, thus giving the public an opportunity of becoming educated up to a sense of appreciation of its clean, honest lines and of the delightful craft of the rivetters."

The meeting was obviously embarrassed, having nothing to say upon the matter, until the chairman came to the rescue by tactfully ruling the amendment out of order, pointing out that the temporary bridge was outside the scope of their deliberations.

The next member to rise to his feet was one of great distinction. One felt that it was really extremely good of him to be there at all, and the applause with which he was greeted was thoroughly respectful, though hearty. In sonorous tones he moved the following:—

"That this meeting, though fully alive to the pressing nature of the need for a solution to the Waterloo Bridge problem, and admitting that Rennie's design is not at all bad, is nevertheless convinced that A Man could be found, who, given the opportunity on a neighbouring site now encumbered with a monstrosity in the way of railway architecture, would give the community something worth having in bridge design; and it is, therefore, resolved to recommend that consideration of the Waterloo Bridge Problem be postponed *sine die*, or until such time as more important problems have been settled."

How this motion would have been received it is difficult to guess, for hardly had the distinguished voice ceased when there arose a great uproar in the streets outside. Enquiries elicited the startling news that Waterloo Bridge had collapsed and entirely disappeared.

The chairman then rose and addressed the meeting as follows:—

"Gentlemen,—After our many careful deliberations a final solution to the problem which we have been called upon to solve has at last been found. Without in any way boasting of our services, I ask you to put to yourselves one or two questions. Have we squandered any public funds in expensive works upon the bridge? Have we in any way mutilated Rennie's masterpiece? Have we done anything to make worse the traffic confusion which existed when we commenced session? Have we done anything to offend any single individual or section of the community? If you answer these questions as I expect you to, I am sure you will agree with me in feeling that we are much to be congratulated, and

that when we meet for the last time on day week to draft our report to the Council we can with justice claim that something tempted, nothing hastily done, has earned further repose. Gentlemen, good-night."

When I met our friend Mr. Whip on way home across Hungerford Bridge, after meeting, he was in a somewhat dazed state of mind, but he gave me an outline of the proceedings as I have set them down in pages, and they may therefore be taken as authentic and semi-official.

"My only fear, dear fellow," said he, as he said good-night, "is that some meddler suggest re-building the bridge, and then we are we?"

SINGAPORE REGISTRATION BILL FOR ARCHITECTS

WE have received the following statement from the Institution of Structural Engineers:

The Institution (which took up the matter as a protest against the proposed provisions of the Singapore Registration Bill for Architects) now received a further communication from the Colonial Office, offering a saving clause which is suggested may meet with the objection raised by the Institution and by a number of other powerful professional bodies who associated themselves with a similar protest.

This clause is to the effect that "Nothing in this Ordinance . . . shall be construed so as to prevent any civil, structural, . . . engineer, performing any function or exercising any power which he might lawfully have performed if he were an engineer as such engineer if this Ordinance not been passed."

The Institution of Structural Engineers does not accept this clause as it stands, but would be prepared to do so if the following words were added to the end of the clause:—"Notwithstanding that the performance of such function or the exercise of such powers may include the submission of plans, &c., under the Registration Act, 1925." The Institution of Structural Engineers points out that, failing this clause, in the event of a member of that Institution endeavouring to submit plans under the Registration Bill, there might, and probably would, be an endless legal argument as to whether or not he was a structural engineer, and what were not the proper functions of a structural engineer; and this might apply to the other professions named.

The main point which this Bill has served to bring into prominence is that present-day architects must cease to delude themselves or the public with the old-fashioned belief that an architect can do everything—design, plan, construct, specify, prepare plans for steelwork, and everything else. The architect is becoming more and more the master-designer, and he must invoke the assistance of the specialist on every important work. Any Registration of the future—and we believe that this has been endorsed by a politician of very high standing—is foredoomed to failure unless the professions of architecture, surveying and engineering are united as to their powers and visions. The case of the Singapore Bill provides one where the architects have endeavoured to act alone, and lengthy arguments—fortified by so far clear of recriminations—have so far produced the only result.

Roman Villa in Danger.

The Villa Atrium, one of the most important landmarks of Rome, has been threatened by a building society for demolition and reconstruction. In the course of the preliminary excavations, however, another wall of stones was discovered; this has been identified as a further stretch of the original wall of Rome, built by Servius Tullius round the Palatine Hills. Behind that again there has been discovered a network of architectural features marked with first-century characteristics.

LOADING CONTENTS. PAGE

PRESIDENT'S ADDRESS	655
PETITION NEWS	658
ARCHITECTURAL SOCIETIES	663
HISTORICAL TOWN PLANNING	663
WHAT COME TO THIS?	664
WELL-ROAD BRIDGE, WELWYN GARDEN CITY	671
MR. WEBB AND HIS WORK.—X	672
CORRESPONDENCE	675
ARCHITECTS' AND BUILDERS' INQUIRY	675
UNEMPLOYMENT PROBLEM	679
COMMERCIAL MOTOR EXHIBITION	682

ILLUSTRATIONS

New City Offices.

A new building for Messrs. Spillers' Milling and Associated Industries, Ltd., has lately been completed in St. Mary Axe from the designs of Sir John Cooper. It occupies one of those ward sites that are characteristic of the City—a corner site, with a frontage width of about 100 ft. and a depth of about 156 ft. Irregular in shape, it is reduced at the rear, for about half its length, to a width of just over 40 ft. Within this space Sir Edwin has planned a series of very convenient offices. The principal entrance, which is in the centre of the St. Mary Axe frontage, leads through a short length of corridor to the entrance hall, which gives access to the staircase and lifts. The corridor is continued on the further side of the entrance hall, where its left-hand wall abuts on to adjoining property, while opening off the right-hand side is a series of offices, lighted from the side street, which is called Bury-court. At the rear is a secondary staircase and lift. The accommodation generally provided is as follows:—Lower ground—heating chamber and strong-room; ground, and first floor—general offices; second floor—board room, committee room, and chairman's and directors' rooms; the third, fourth and fifth floors are all occupied by offices. The building is of steel-frame construction, faced with Portland stone, and the floors are of reinforced concrete. The general contractors for the work were Messrs. Higgs & Hill, while the sub-contractors were as follows:—Electric, J. Whitehead & Sons, Ltd.; electrical work, Higgins & Griffiths; heating and ventilation, Mumford, Bailey & Preston; steelwork, Mann, Long & Co., Ltd.; asphalt, J. A. Ford & Co.; locks and ironmongery, James Jones, Ltd.; sanitary fittings, A. Emanuel Jones, Ltd.; plumbing, Matthew Hall & Co.;

fibrous plaster, F. De Jong & Co., Ltd.; fireplaces, G. Matthews, Ltd.; lifts, Smith, Major & Stevens, Ltd.; wrought-ironwork and bronze work, Wm. Smith; carving, George Haughton (part); furniture, J. P. White & Son; parquet flooring, wood block, Hollis Bros. & Co., Ltd.; fire-resisting glazing, Luxfer Prism Syndicate, Ltd.; paint supplied by Sir W. A. Rose & Co., Ltd. The clerk of works was Mr. H. G. Rule.

Almshouses and Workmen's Club, Thorpe-ness.

The Margaret Ogilvie Almshouses and the Alexander Ogilvie Workmen's Club, Thorpe-ness, Suffolk, form part of the development which is taking place there. Old-world characteristics are being retained where these do not clash with modern requirements, and the County Sports Club, which contains bedrooms for 100 members, to which is being added a special wing containing large refectory, playroom and sleeping accommodation for members' children and their attendants, is being completed in the same style as the buildings here illustrated. Concrete is employed largely in the construction of these and other buildings now in course of erection. The half-timbering is of English oak, old hand-made Suffolk tiles being used on the roof of the Workmen's Club. The facing bricks, all carefully selected for colour and texture, and the cement rendering on the outer walls, are of the type common to much of the old Suffolk work. The architect is Mr. W. G. Wilson, F.R.I.B.A.

Design for a Main Road Inn.

This design is being exhibited at the Brewers' Exhibition at the Agricultural Hall. The building has been set back from the road so as to provide a forecourt for parking motor-cars; and it has been so designed that the saloon and public bars can be cut off from the rest of the inn during unlicensed hours. In addition to the accommodation shown on the ground plan, provision has been arranged on the upper floors for bedrooms for 12 guests and eight staff, with bathrooms, &c. The building is estimated to cost £10,000 and would be carried out in the simplest manner, with brick walls whitewashed on the exterior, the roof being covered with pantiles. The architects are Messrs. A. B. Hayward, L.R.I.B.A., P.A.S.I., D. C. Maynard, A.R.I.B.A. (Author of "Old Inns of Kent"), and C. A. Farey, A.R.I.B.A.

Liberal Jewish Synagogue.

We are asked to state with regard to this building, that the floors, galleries and staircases in reinforced concrete were the work of Messrs. Caxton Floors, Ltd., and the staircases were designed by their engineer, Mr. G. S. Marsh, A.M.Inst.C.E.

BOOK REVIEW

Scientific Paradoxes and Problems, and Their Solutions. By A. S. E. ACKERMANN, B.Sc. With an Introduction by PROF. C. V. BOYS, F.R.S. (London: The Old Westminster Press.) 1925. Price 5s. net.

There are many people possessing considerable mathematical ability who take a great interest in solving curious problems, and it is to those that this book is addressed. It contains a large number of questions, many of which are of great interest, followed by the author's solutions. There are many which may be easily solved by those possessing some knowledge of equations containing two or more unknowns; but there are other problems which need the exercise of considerable dexterity and reasoning power before they can be reduced to the equation form for solution. Whilst some of the problems are "old chestnuts," there are many more that have fresh interest for the reader, and the subject matter embraced by the questions is very wide. Some of the statements of the problems are long, and will tax the memory somewhat to hold and appreciate the plot and data so far as regards those of average mathematical ability; for example, 16 lines (half-page) of matter are required to state a problem concerning Arthur, Frederick and Herbert, who together with Gertrude, Margaret and Rosamund, had been investing their loose cash in botanical specimens, and the reader is then given some data concerning the number of specimens bought, and finally it is required to find the name of each man's wife! A solution is given, the credit for which is attributed to Prof. Hummel, of Queen's University, Belfast.

We cordially commend this little book to our readers, and anticipate that they will derive amusement combined with much valuable instruction in the use of their intuitive powers.

Books Received.

THE GOLDEN AGE OF THE MEDICI. By Selwyn Brinton. (London: Methuen & Co., Ltd.) Price 15s. net.

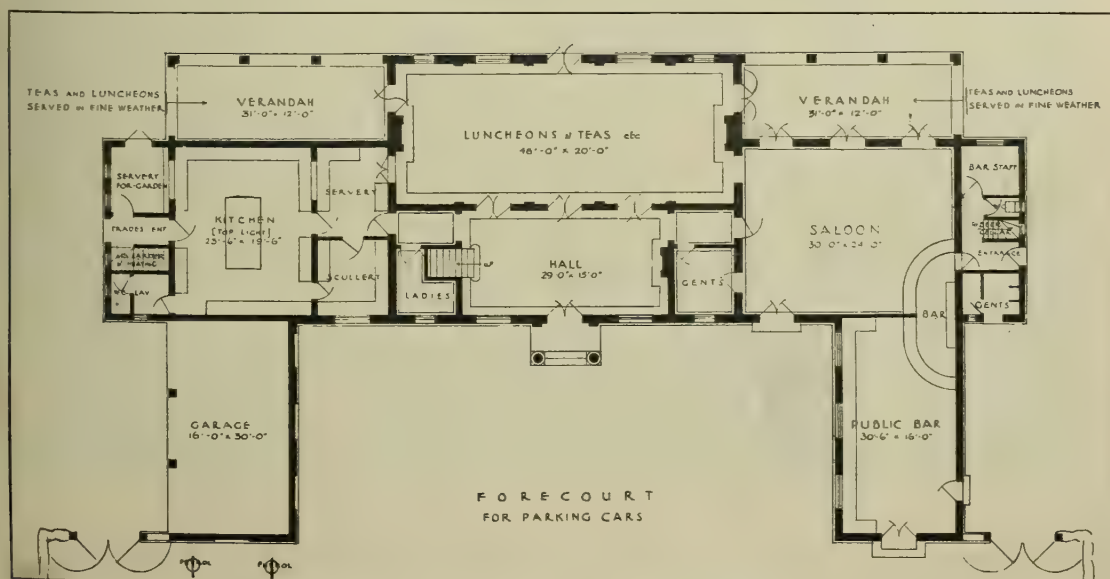
REINFORCED CONCRETE IN PRACTICE. By A. ALBAN H. SCOTT. (London: Scott, Greenwood & Son.) Price 8s. 6d. net.

BLACKS AND PITCHES. By H. M. LANGTON. (London: Ernest Benn, Ltd.) Price 15s. net.

CELLULOSE ESTER VARNISHES. By F. SPROXTON. (London: Ernest Benn, Ltd.) Price 15s. net.

UNIVERSITY COLLEGE CALENDAR, 1925-26. (London: Taylor & Francis.)

All these books may be purchased through *The Builder* Office, 4, Catherine-street, Aldwych, W.C. 2.

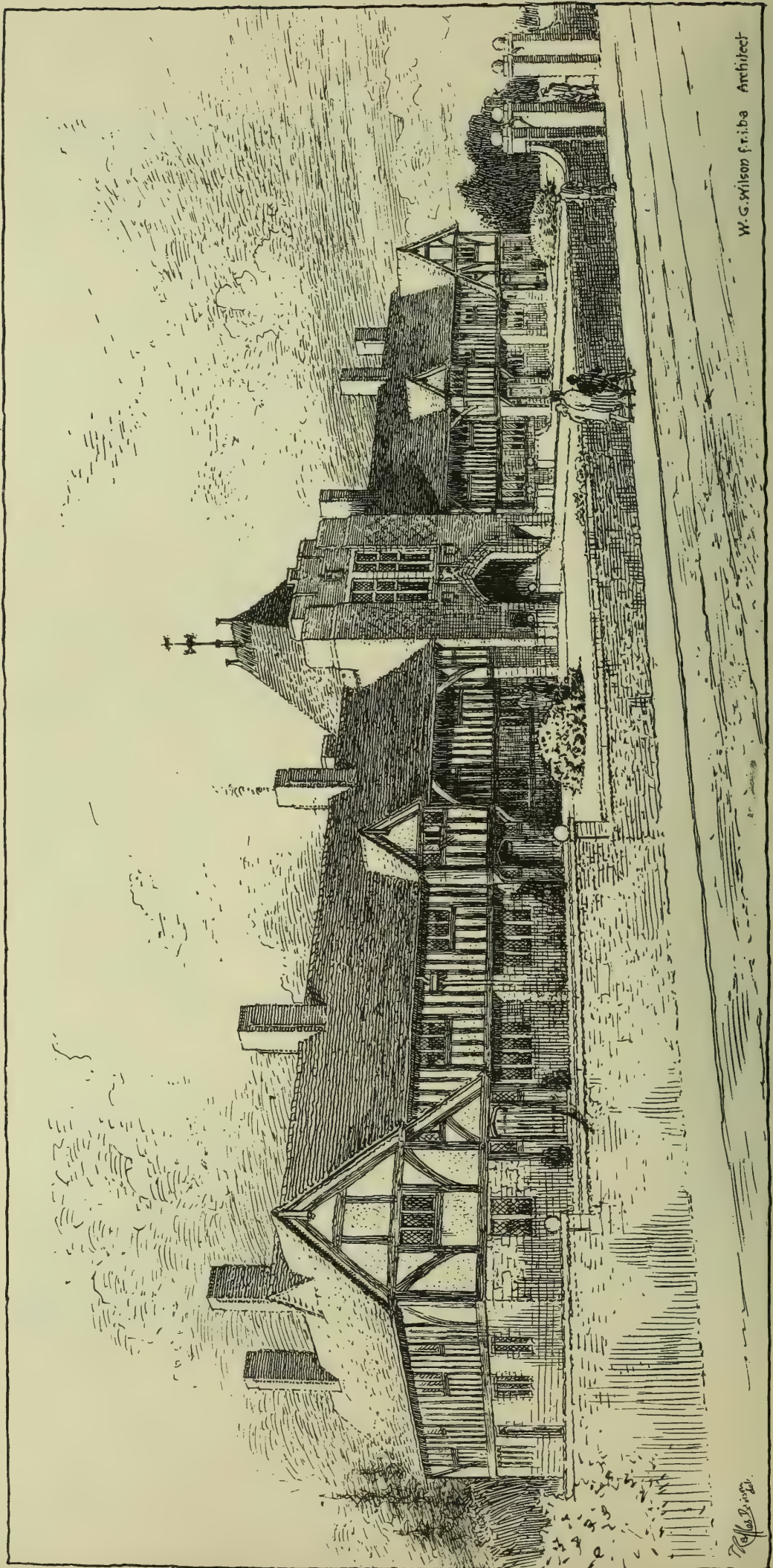


Design for a Main Road Inn: Ground Floor Plan.

MESSRS. A. B. HAYWARD, L.R.I.B.A., P.A.S.I., D. C. MAYNARD, A.R.I.B.A., and C. A. FAREY, A.R.I.B.A., Architects.



Design for a Main Road Inn.



W. G. Wilson F.R.I.B.A. Architect

MARGARET OGILVIE ALMS HOUSES, THORPENESS, SUFFOLK.
MR. W. G. WILSON, F.R.I.B.A., ARCHITECT.



New Premises for Spillers' Industries, Ltd., St. Mary Axe, London, E.C.

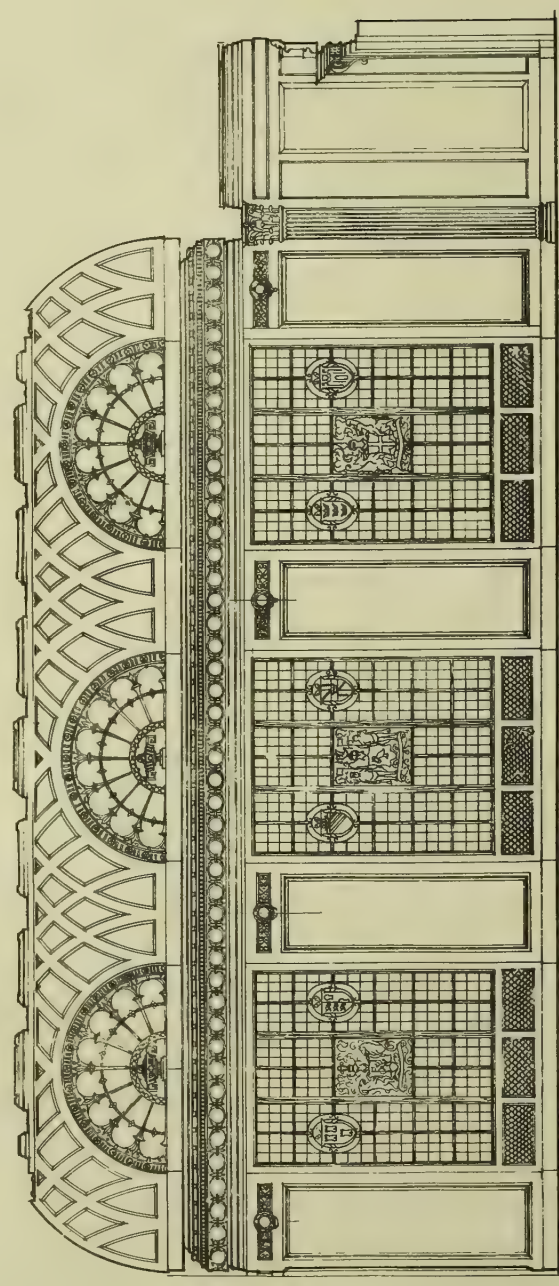
SIR EDWIN COOPER, Architect.



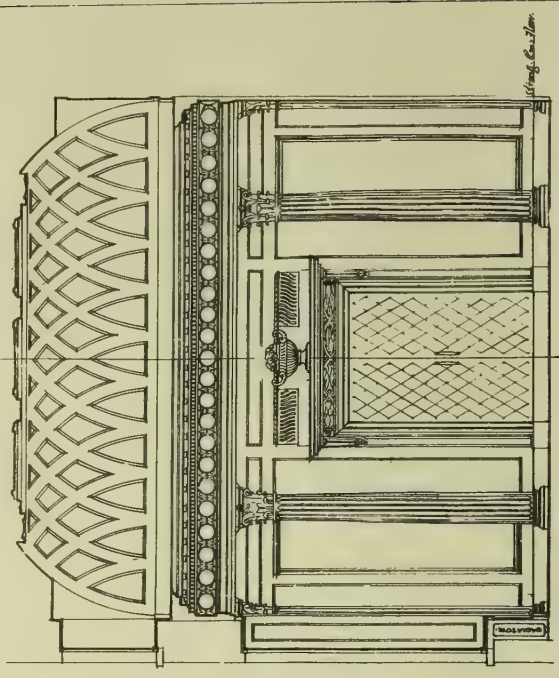
New Premises for Spillers' Industries, Ltd., St. Mary Axe, London, E.C.: Board Room.

SIR EDWIN COOPER, Architect.

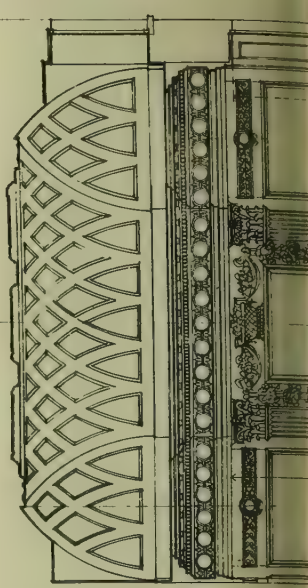
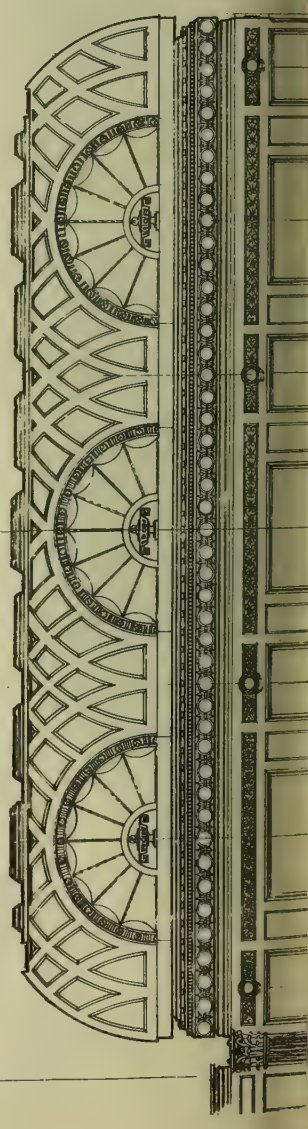
Architectural drawing showing a section of a building facade with a large arched window and decorative elements.



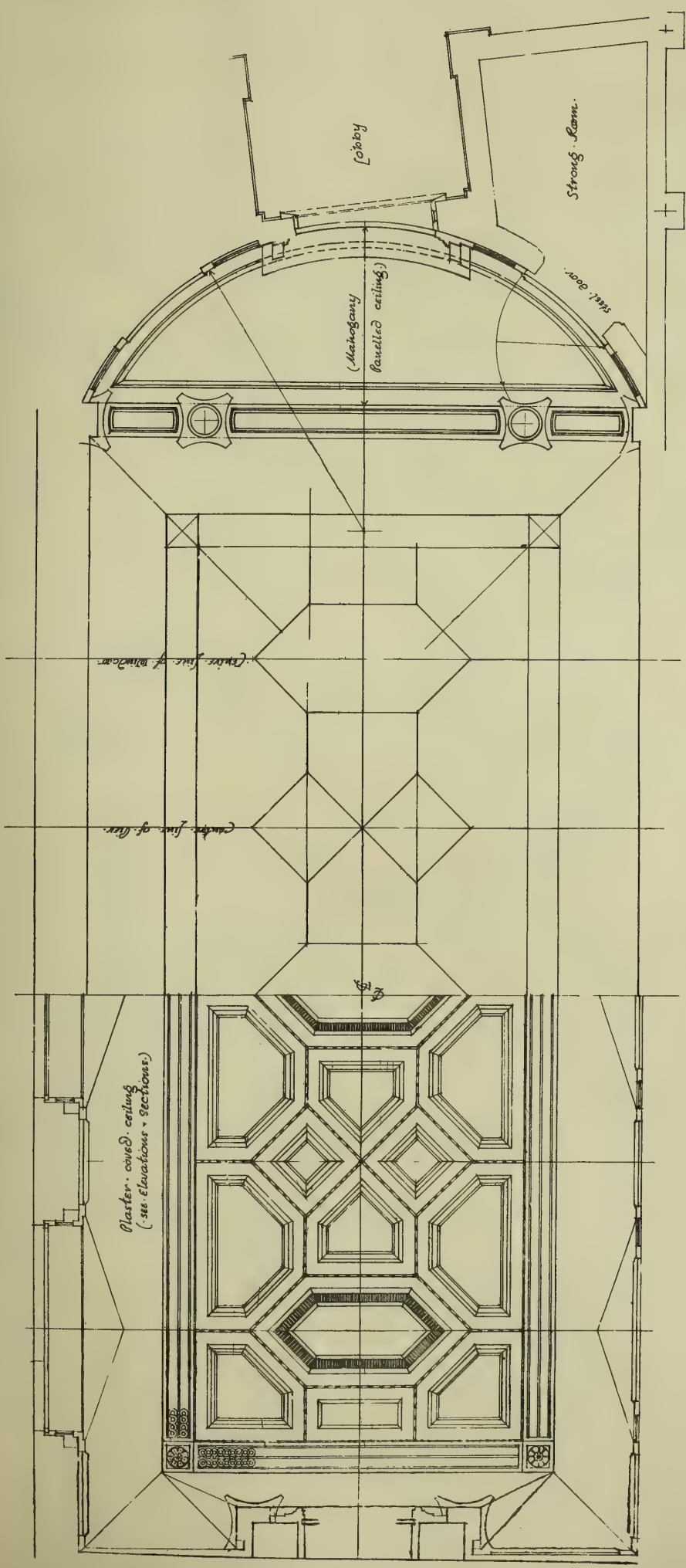
Elevation towards windows (section A.A.)



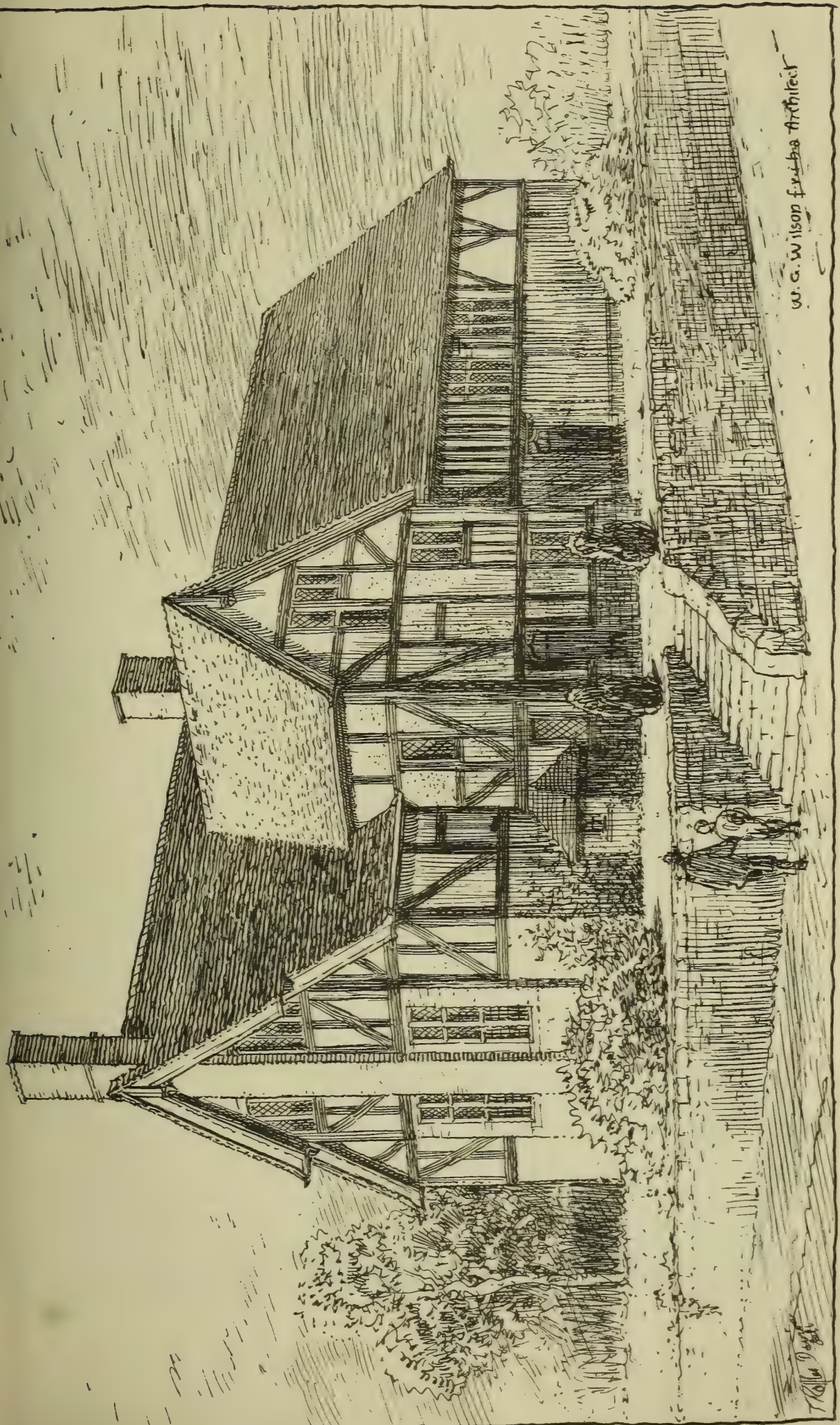
Elevation towards Entrance Doors



SECTION OF ST. MARY'S CHURCH, WEST DOOR SECTION. 1112



NEW PREMISES FOR SPILLERS' INDUSTRIES, LTD., ST. MARY AXE, E.C.
SIR EDWIN COOPER, ARCHITECT.



W. G. Wilson F.R.I.B.A. Architect

ALEXANDER OGILVIE WORKMEN'S CLUB, THORPENESS, SUFFOLK.
MR. W. G. WILSON, F.R.I.B.A., ARCHITECT.



New Premises for Spillers' Industries, Ltd., St. Mary Axe, London, E.C.,
SIR EDWIN COOPER, Architect.



New Premises for Spillers' Industries, Ltd., St. Mary Axe, London, E.C.: Ground-Floor Corridor.

SIR EDWIN COOPER, Architect.

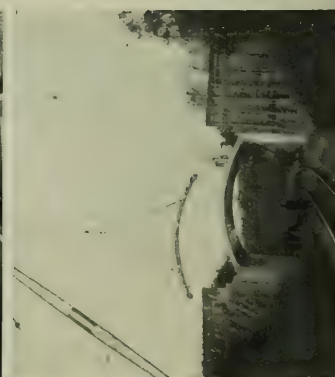
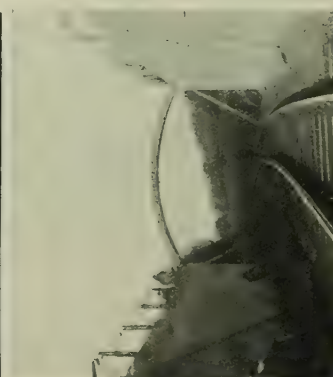
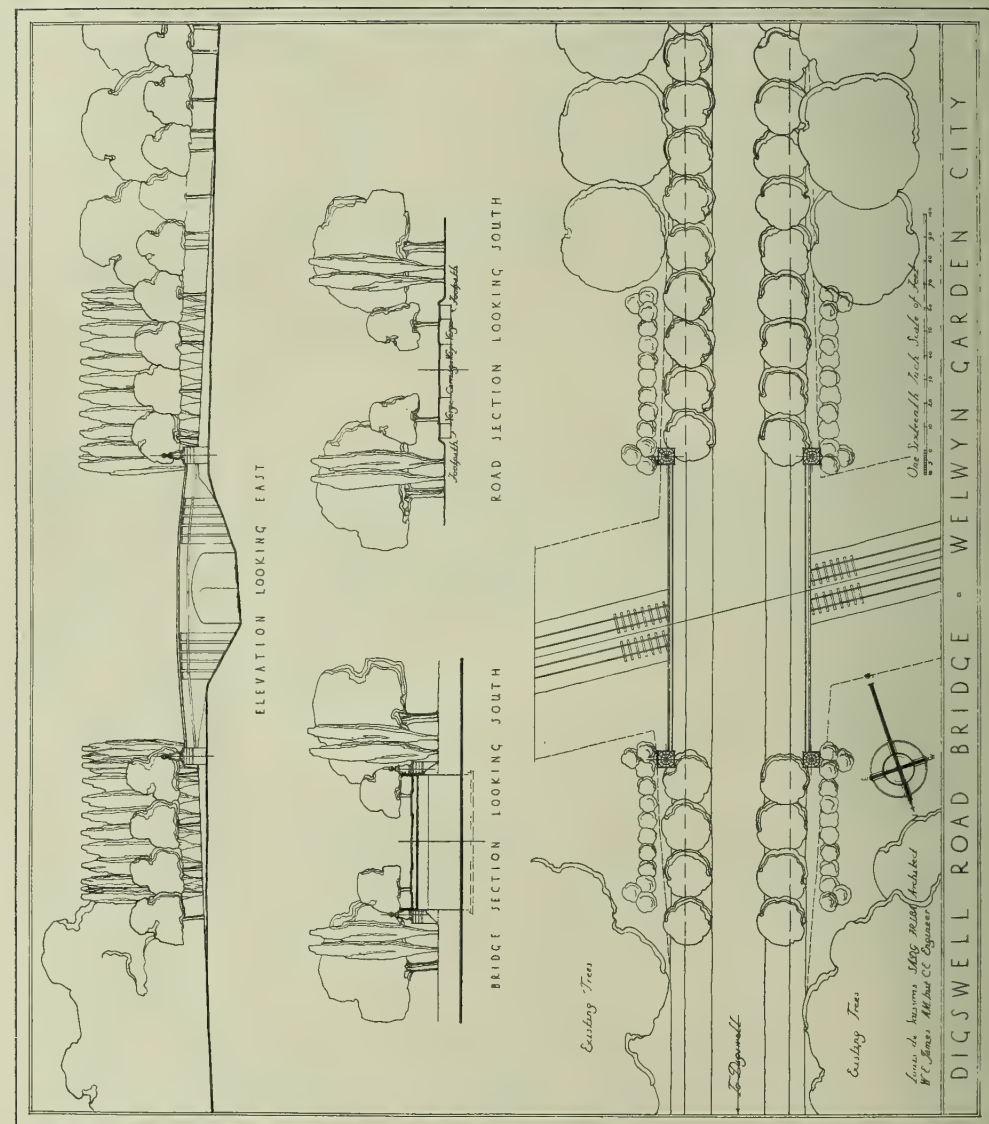


APSIDAL END OF BOARD ROOM.



THE ENTRANCE HALL.

New Premises for Spillers' Industries, Ltd., St. Mary Axe, London, E.C.
SIR EDWIN COOPER, Architect.



DIGSWELL ROAD BRIDGE, WELWYN GARDEN CITY

bridge, which was opened on Tuesday the new Digswell-road over the Luton of the London & North-Eastern Railway, about a quarter-of-a-mile from its with the main line at Welwyn Garden tion. It stands on the main axis of the and forms the connecting link between central shopping and business area and the stem of the new residential and park comprising the north-western quarter of n. It gives also important access to h Garden City from the north, replacing level crossings. The bridge is based dations of mass concrete, but the struc- self is designed in ferro-concrete on the l-Hennebique system. It is 132 ft. th and 56 ft. wide between parapets, constructed to carry with a large margin y the heaviest loads running on English The railway, at the point of crossing, ew to the centre line of the bridge in a utting on a heavy gradient and a sharp These conditions required special care gning to provide sufficient width and for the swing of the railway coaches and y for the future doubling of the railway. ew span of the arch is 29 ft. 4 in.

whole of the structural work was carried r the Garden City Company's Works ation (Messrs. Welwyn Builders, Ltd.). ay be congratulated on the successful tion of the bridge without accident and t the slightest interference with the rail- traffic, fifty-nine trains passing through ork daily during the whole period of uction. The general structural plans for dge were prepared by Capt. W. E. James, st.C.E., Engineer to the Garden City y; the details of parapets, terminal and lamp pylons being designed by their t Mr. Louis de Soissons, F.R.I.B.A.;

and the ferro-concrete details by Messrs. L. G. Mouchel & Partners, of Westminster. The whole of the ferro-concrete aggregate was quarried on the estate and prepared in the Garden City Company's washing and screening plant (Messrs. Herts Gravel & Brickworks, Ltd.). The attractive colouring of the parapets and terminal pillars was obtained by the use of white cement. The total cost of the bridge (not including the approach roads), was about £6,000, towards which contributions of £500 each will be made by the Ministry of Transport, the Hertfordshire County Council, the Welwyn Rural District Council, and the London & North-Eastern Railway Company, the remaining £4,000 being contributed by the Garden City Company.

The isometric diagram shows a portion cut from the middle of the bridge and is intended to make clear the method of construction. The curtain walls and foundation slabs of the abutments are seen in section, and two pairs of the abutment counterforts are included, there being seven pairs in all. Carried on the counterforts, the heavy abutment beams are shown, these being designed to distribute the thrust of the ribbed arch evenly over the counterforts, which are spaced at 10 ft. centres, the beam action being partly horizontal and partly vertical. It will be observed that the cellular design of the abutments makes use of the dead weight of the earth filling to give the stability which, in ordinary construction, is only obtained by building massive abutments of masonry and concrete at great cost. The same principle is employed in the design of the spandrils and the retaining walls which support the raised approaches to the bridge on either side. As no scaffolding or centering could be erected over the railway some other means of constructing the arch had to be devised, and it was ultimately decided to erect the centering on the level

ground near by and to cast the arch in the form of separate trough-shaped ribs of reinforced-concrete, lying side by side and each 2 ft. in width. Thus the arch was under construction during the period of building the abutments, a considerable saving of time being effected by this means.

When the abutments had been brought to springing level, the arch ribs, thirty-one in number and weighing nearly three tons each, were lifted by an electrically-operated crane with a 90 ft. jib and swung into position over the railway, this operation being carried through within nine hours on Sunday, March 8. The diagram shows ten ribs in position and another being lowered on to its seating. The arch having been thus rapidly completed, the abutment counterforts were continued to their full height and tie-beams were laid above the arch to link up each pair of counterforts, so as to take up the horizontal component of the thrust. A sectional view is given of one of these ties and the adjacent ribs, the crown of the arch being shown as cut away for the sake of clearness.

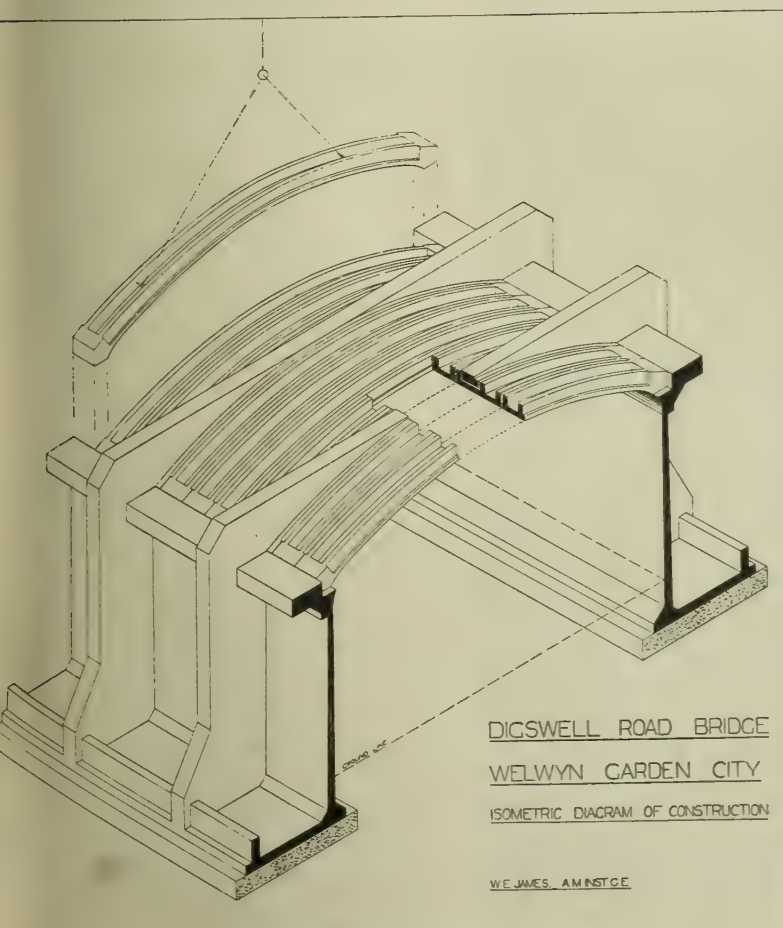
The reinforcement throughout is composed of round bars of mild steel conforming to the revised British Standard Specification, No. 15, the heaviest reinforcement occurring, as would be expected, in the abutment counterforts and in the tie-beams, the stress in the latter being wholly tensional. The bridge is calculated to sustain a live load of two 22-ton tractors, each hauling a loaded boiler wagon weighing 48 tons, moving in opposite directions and crossing on the bridge. This loading was adopted, though considerably in excess of normal requirements, to provide for the possibility of heavy plant and machinery being brought into Welwyn Garden City by road from the north.

Funchal's Proposed Port.

A contract has been signed by the Portuguese Government and Messrs. W. Muirhead, Macdonald, Wilson & Co., Ltd., of Parliament-street, W., for the construction of a new port at Funchal, involving £1,500,000 of British capital and the employment of British engineers.

Bequest to Victoria and Albert Museum.

The Victoria and Albert Museum has received an important accession to its collections of mediæval and renaissance art by the bequest of the late Mrs. George Cowell. Her son, Mr. Athelstan Riley, has generously renounced a life interest in the bequest, and the objects are now on exhibition in the Central Court of the Museum. Among the mediæval objects are several ivory carvings—a Byzantine relief of the Raising of Lazarus, dating from the eleventh or twelfth century; a leaf of a diptych (the other leaf of which is already in the Museum), with the Death of the Virgin and the Adoration of the Magi, and a relief of the Martyrdom of St. Thomas of Canterbury, both French work of the fourteenth century; and a series of fifteenth-century panels mounted as a cabinet, German or Flemish, with scenes from the life of Christ. The centrepiece of an altar cross and a pyx are characteristic examples of Limoges champlevé enamel of the thirteenth century. The sixteenth-century painted enamels of Limoges include a fine Virgin and Child by the painter, now known as the "Master of the Orleans Triptych," and a plaque of Herod receiving the Head of St. John the Baptist, from the atelier of Nardon Pénicaud, both showing the strong but harmonious colouring which gives their distinctive beauty to the enamel paintings of this early period. A polychrome Crucifixion of the school of Pierre Reymond is also worthy of mention. Several pieces of majolica of first-rate importance are also included. Among these is an Urbino dish with the subject of the Devotion of Mucius Scaevola, exemplifying the work of Nicola Pellipario in his middle period; and another painted by Francesco Zanto with lustre enrichments added at Gubbio.



PHILIP WEBB AND HIS WORK.—X.

By W. R. LETHABY.

THE OFFICE AND MINOR WORKS.

THE chambers in Gray's Inn which Webb occupied for nearly forty years were on the second floor of No. 1, Raymond Buildings (south side of stair). His office and "keeping-room," as he would have named it, overlooked the gardens which he called "my seven acres of city paradise." The trees rose before the windows like a tapestry, and on spring mornings they seemed to boil with busy little birds, while the rooks and the woodpigeons were constant delight. The chief things in the living-room office were a solid oak table with scrubbed top, a big book-case in which seemed to be ranged the picked literature of the world, and before the window his long drawing table. There were few things on the walls; a small copy by Fairfax Murray of Caraccio's St. George, photographs of the painted vaults of the Sistine Chapel, small casts of the Night and Morning figures, and a little portrait print of Michael Angelo are all I can remember. No "architectural drawings" appeared here or elsewhere, none of a show nature had ever been made. Two small Burne-Jones landscapes—studies for the background of "The Merciful Knight" in water-colour—"too solidly and beautifully handled to be looked on as sketches," were in the little entrance hall; Rossetti's water-colour of the meeting of Dante and Beatrice in Paradise, a lovely Boyce water-colour of a Border Castle, and Madox Brown's small cartoon of Christ stilling the storm were in the bedroom.

In 1889 Webb had a severe attack of rheumatic fever. "The nurse" (Mr. Jack says), "was a woman of strong sense and purpose; she could talk, and asked about the portraits—

Michael Angelo and Melancthon—and books. She went and fetched books from the shelves on minute instructions as to their exact places. When Webb was convalescent Morris used to come frequently, usually about lunch time;

head of Michael Angelo at Oxford, save for a battered nose, reminds me of Webb. In days he dressed well and "correctly"; later wore almost a uniform of brown tweed, but few things were still of the very best. "I would always have the best of everything, although his needs were carefully restricted. In all things he was "very particular." His walking-stick was an ordinary stout stick, but its head had to be well curved when he had to get a new one he had it hollow so that it should have a slightly



FIG. 2.—PIANO, DETAIL.

Webb, Morris and Nurse sat down to the meal and it was pleasant to hear the laughter."

Philip Webb was rather tall and had a stern face, kindly, but certainly stern. The bronze

section against his hand. His manners, as I might judge, were really fine and he was one time quite a diner out. He had the correctness of the Early Victorians with obvious sincerity. As Miss Morris says, "A certain dryness of manner in ordinary intercourse veiled a kindness easily divined by those who knew him."

The later works of Webb for the craft have been mentioned now. His "inventions" for more ornamental arts would, I believe, be more remarkable to most people than his architectural designs. If I threw over this general account of his work concentrated on his "decorations" and his drawings a greater impression of his work would probably be made. Such work has come from book-plates to important monuments. A great number must be quite unrecorded. A note shows that he designed the cloth cover for Morris's *Story of the Volsungs*. In the years of the "Firm" he designed an altar for Llandaff Cathedral, to go, I believe, with the reredos painted by Rossetti. Of things of this sort, I saw in progress a beautiful altar for the Deaconesses Institution, Clapham Common, designed by Miss May Morris in 1897, and I remember the bright delicacy of the vine pattern, with leaves and small round grapes; also the gold thread in different directions. A cover was made for the same altar from his design by Mr. Catterson Smith; it was of thin metal patterned in repoussé and laid down on a wooden core. The Chapel itself as well as its furniture was Webb's work, and one of the latest.

A piano decorated by Miss Faulkner in 1895 has been mentioned. I have little doubt that Webb designed it, as he certainly did all the piano undertaken some ten years later. Jack tells me that he believes this one was designed for Mr. A. Ionides. "It was I think, all Webb's design. I know he drew the bird at the Natural History Museum, and Miss Faulkner transferred it to the piano and did the gesso work and painting." I saw parts of it when in progress about 1895; the whole surface was covered with the most delicate fretted patterns. I can remember, and as the photographs reproduce here recall, it is simply the most beautiful of modern ornamental work known to me. I doubt if a better trellis of vine than that which covers the top (Fig. 1) has ever been seen. Notice here again the little wild bird

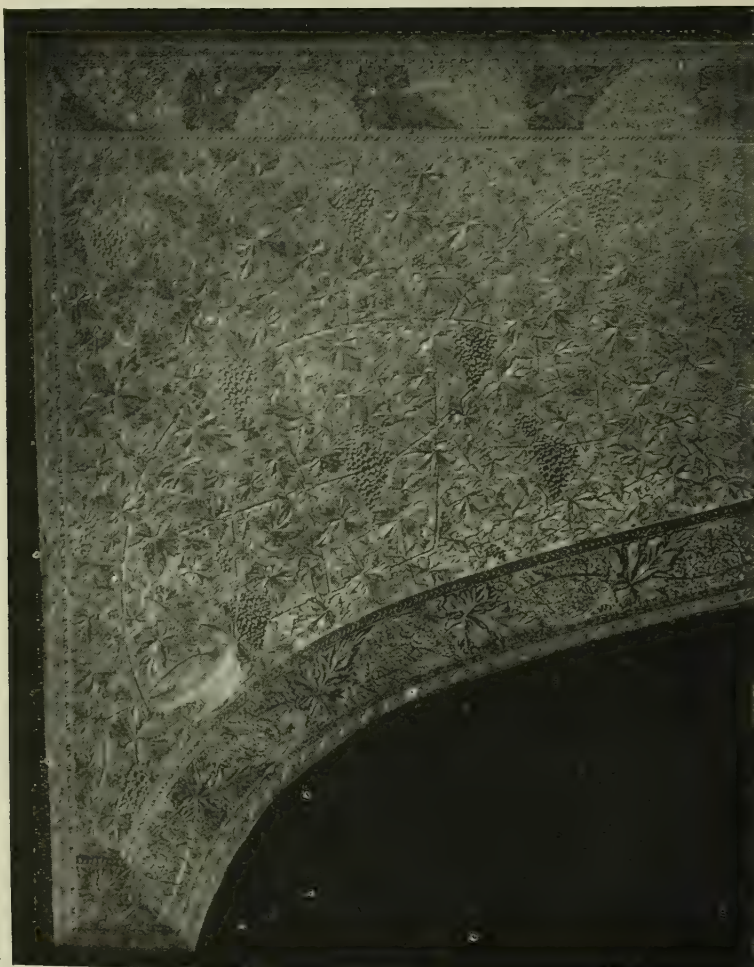


FIG. 1.—PIANO, PART OF TOP.



FIG. 3.—PIANO, DETAIL.

which arouse no question as to how pound they would cost, and the perfect which the stems wander over the surface ; too, as a modern piano has a dumpy that by means of a wide border on three only a more slender central space is which does much to carry on the face of form ; notice further the painted background of the lovely leaf scroll and the sharp contrasting change of metrical framework of Fig. 3.

dos at Whitelands College, King's-road, was made in 1886. This is the school

Ruskin was interested and where he ed the May Queen festivals. The east he chapel including the glass of three indows, was decorated by Morris & Co., ornamental work of the reredos was Miss Faulkner from Webb's drawings. plain square panelling, filling the whole low the windows, covered with gesso-work, silvered and lacquered. Each ntains a circular scroll of foliage except the centre on which is a vertical stem hich the scrolls on either side spread out, e forming a sort of tree. In four of the re symbols of the Evangelists. The well as the panels have pattern work, he cornice band is a big inscription in ven or eight inches high. A very hand- ce of work it is, interesting and some- look at, yet quiet. "It was a joint fr. Jack tells me ; "a world of helpfu- is part and no pay. I believe he drew ected the execution of the symbols as e ornament, but I think Morris did the option—at least, designed it. It is a thing and should be better known."

the original drawings for it are pre- the collection of Webb's designs in the m at the Victoria and Albert Museum. minor works, objects in cast-iron must eal mention. His cast-iron grates ack dignity and delicacy to a material een so vulgarised that redemption opeless. One little, quite cheap and grate that was sold for a great number y Longden & Co. in Oxford-street was d quite perfect. I wonder what has

become of the patterns ? Mr. Jack suggests that the Carron Iron Co. may have it. Among the drawings now at the Victoria and Albert Museum is a design made in 1865 for a "Conduit," or fountain, in this material for Battersea Park. In these things in cast-iron, as in all that he did, he seized on the essential character of material and craftsmanship ; refinements, adjustments, meaning, plays, "symbolisms" followed, but the main principle was *construction and craft character*. The table glass made for him about 1858 has the perfection of bubbles

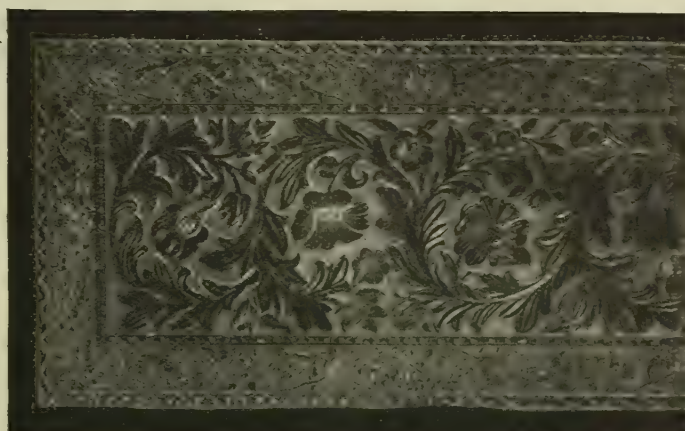


FIG. 4.—PIANO, DETAIL.

blown in glass. In saying "symbolism" I am reminded that when a friend asked him to draw a book-plate Webb enquired whether he could think what was his special aptitude—"Procrastination."

In the new method of electric lighting he saw at once that instead of the rigidity of gas something fragile and swaying might be obtained, and he designed several delightful fittings ; one of these was put into the Webb Room at Wembley last year. In a letter about some

thing else Mr. Jack happens to add : "Webb took a great interest in this the then new way of lighting and devised several fittings which were, I think, on right lines, for such things—that is in regard to the appearance and a kind of poetic aspect of the lights. He insisted on slightness—fairy-like treatment—using silken cords with amber and other large beads for decoration ; never a large cluster of lights in one fitting, nor a powerful light in one bulb."

At South Kensington are designs for a set of fire-irons, for a mosaic pavement at No. 1, Holland Park (1879), and for many tombs and memorials. Iron beds, fenders, candlesticks, and other things have been mentioned before.

Of the animal drawings of later days five large, carefully-wrought studies of beasts and birds which were prepared for Morris' tapestry must be spoken of. These cartoons, made about 1886, were "finished water-colour drawings worked into with oil colour brushes, the Hare, Fox, Lion and Raven done in large, the Peacock smaller, done with attention to their purpose without shadow, but as living things ; the wools hold the light so that sober tones look quite bright." The living creatures were set among Morris's "splendid scrolled leafage" in grey-green. Above on two labels are the lines, "The beasts that be in woodland waste, now

sit and see, nor ride nor haste." "It's handy" (Webb said), "to keep a poet on the premises." The lion is in the middle. Of drawing lions I remember he remarked, "Either you make them look like yourself or Mr. Gladstone." The hare has lifted ears sharp as sabres—it is the embodiment of listening—the raven is what the illustration shows. The drawings were finished with the stiff brushes "to keep the lights" in the colouring, a point which he thought necessary in water-colour practice.

The pen drawing of an earlier time of a Lion sniffing the air at Dawn, now in the keeping of Mr. Cockerell, is in tone rather than line—"painting with a pen," as he called it—and of amazing force and delicacy. The method was doubtless founded on Ruskin's exposition in *Elements of Drawing*.

Modelled hares and dogs at South Kensington and the carved bird returning to her nest on the fireplace breast at Clouds have been mentioned. The latter was suggested by a carved moulding in Bologna. At Rounton, by the porch, is sculptured a hawk ; and I remember a drawing for a memorial to a little girl with an exquisitely tender lamb in a panel.

In his sketch books are many delightful drawings of animals and birds, "Actions of Clyde Gulls," "A Partridge Getting Away," "Recollections of Flight of a Kingfisher," "Flight of June Martins," "Head of Rook in Gray's Inn Gardens," "Swan, Cambridge Backs," and many creatures from the Zoological Gardens. In one little note book are two portrait heads drawn while listening to a lecture, small, but remarkably true and penetrating. Until quite a late time he continued to draw flowers. Several architects of Webb's genera-

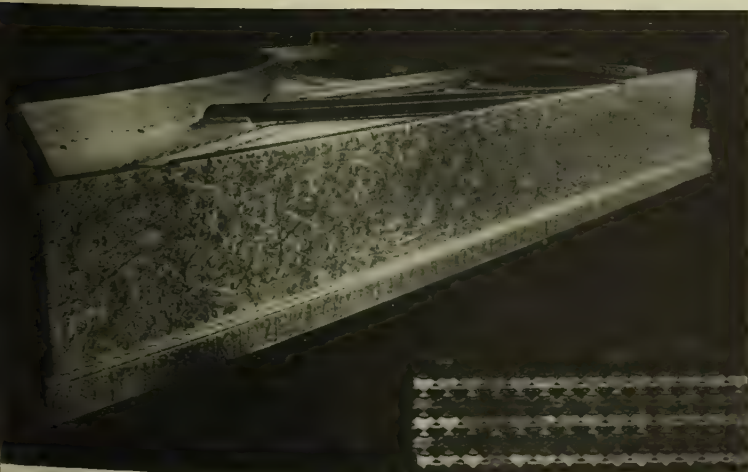


FIG. 5.—PIANO, THE BACK AND A DETAIL.



tion had a reputation as "brilliant architectural draughtsmen," but all that is mostly a matter of office tricks—real drawing is different. Webb could draw truly and tenderly. He had a special interest in recording moving things—fire flames in his grate, the wind-blown flag of Holborn Town Hall as seen from his office window.

He was an early member of the Hogarth Club. In later years, he would not belong to any art or professional association whatever, seeming to look on them all as formed for the advantage of the group and the individual against Society. I found out once that Street had in earlier days offered to put him down for the R.A. He joined the Sanitary Institute, as that was for scientific research; and he helped to found the Society for the Protection of Ancient Buildings. All specialised professionals—"bottle-heads"—were disliked. Greed, he thought, was the chief root of our ills. When he was called on the jury to investigate the Jameson raid, Burne-Jones remarked, "He'll do his duty."

He found in himself a person he could experiment with. Wine was delightful and he was a good judge of quality, but he was better with little or none. Snuff he took, because he was of an igniting temperament, and taking it, he said, had often given him the moment for reflection. He required regular walking, and made it a habit. Mr. Jack sends me this note: "When he went to visit one of his 'jobs,' and had to stay in a big house, he took his dress suit in a carpet bag. He would say, 'This bag I charge down as £15.' He would allow no one to carry it downstairs for him. He appeared to have an inexhaustible supply of cigars; every time Weir or I had to make a journey, he produced a handful, although he himself did not smoke. Also, he had laid down a stock of wine in his early days—no doubt, very modest, but characteristic of his old-fashioned hospitality. On a very hot day—that of the Duke of York's wedding—Webb produced a bottle of his precious claret and glasses. . . . His Socialist leanings used to



FIG. 6.—TAPESTRY CARTOON.

tickle Sir Lowthian Bell and Mr. Percy Wyndham. They never lost a chance of goading him into an argument on the subject. . . . He was the best Socialist in the real sense I ever knew. It is strange how little I can recall about the old

life. It is like trying to remember past—it pleases and passes, but it also makes to grow, and herein Webb was like shine, and as little recognised and than Of all things, taking pains, with h with himself, with his reading, with o was his chief characteristic—his secret. one might take pains." A visitor to the Gallery saw him in front of Michael "Entombment"—a much-loved p "smelling it all over."

"The only time Morris ever lied to when he said I didn't pay attention thing he told me, and I did!"

MEETINGS

FRIDAY, November 6.

Institution of Structural Engineers (Branch).—Mr. H. B. Cronshaw on "Drying Machinery and Practice in the Making Industry." At Birmingham.

SATURDAY, November 7.

Institution of Structural Engineers (Branch).—Visit to brickworks in Stoke At 3 p.m.

MONDAY, November 9.

Surveyors' Institution.—President's At 12, Great George-street, S.W.1.

TUESDAY, November 10.

Westminster Technical Institute.—Capt Creswell on "Building and Engineering tracts." At 7 p.m.

WEDNESDAY, November 11.

Edinburgh Architectural Association. Swarbrick on "Work of Robert Adam 15, Rutland-square. 8 p.m.

Institution of Structural Engineers (Lancashire and Cheshire Branch).—Mr. Ewart S. on "A Critical Study of Regulations Governing the Design of Steel Framed Buildings in Manchester.

Royal Academy of Arts.—Professor Laurie on the "Theory of Colour and its Application to Painting." At Burlington House 4 p.m.

Liverpool Architectural Society.—Mr. Miller on "Modern Church Architecture." 13, Harrington-street.

THURSDAY, November 12.

Sheffield, South Yorkshire and District Association of Architects and Surveyors.—Captain Creswell on "Disputable Building Contracts." At Sheffield University.



FIG. 7.—TAPESTRY CARTOON.

CORRESPONDENCE

We are glad to publish letters on professional matters of interest to our readers, it must be that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express as briefly as possible.]

Leeds Parish Church.

This church was built according to plans under the supervision of Mr. Chantrell, architect, and was consecrated in 1841. The plan of the church is interesting, and the treatment of the interior is worth study. I have been entrusted with the duty of writing a short architectural history in order to put it in the hands of visitors, and cannot trace any drawings made by Mr. Chantrell. If any of your readers have information on the subject I should be glad if they could communicate with me direct.

E. KITSON CLARK.

Woodside, Leeds.

Registration of Architects.

The Builder has always proved itself impartial in topical discussions, and I am glad to submit my views on the matter of the newly incorporated Association of Architects. It is the rigid exclusiveness of the Association, and the air of mystery and secrecy which the provisions of the Registration Bill has resulted in the formation of the group.

Registration is absolutely essential, and the Association should have proved its desire for the public by throwing open the non-examination of Licentiatees to all architects and assistants, instead of limiting it to the old Licentiatees and the old Licentiatees, of whom are fellow assistants of equally uneducated but unattached men.

"UNATTACHED, BRIGHTON."

We are not aware of any "air" of mystery and secrecy pervading the provisions of the Registration Bill as alleged. Obviously it cannot be published till it is written, and it is not yet written. We have the opinion of the President that the moment the Bill is completed it will be published. The effect of the proposed Bill on the "unattached" has been clearly indicated in Major Barnes's letter of the 10th or two ago. The question of whether the R.I.B.A. ought to throw its doors open to all without examination is a large one and has been discussed *ad nauseam* for six years. The opinion of the great majority of the profession appears to be in favour of the R.I.B.A.'s policy.—Ed.]

"Non-Member" need be under no apprehension. Under the old Registration Bill of the Society of Architects, with the exception of which I had much to do nearly 20 years ago, and on which the new measure was founded, all reasonable vested interests were considered and safeguarded. I am confident that no Bill would have the least chance of passing into law which was not absolutely and even generous, in this regard. I am very confident that this is recognised by those now leading.

G. A. T. MIDDLETON.

Association of Architects and Surveyors.

My attention has been directed to a letter which appeared under the above title in the Builder of October 24.

I desire to point out that the Association of Architects, Surveyors and Technical Assistants in connection whatsoever with the organisation referred to by Major Harry Barnes. My attention is content with the steps it has taken to protect the interests of its members under the scheme of registration which may be adopted.

JOHN MITCHELL,

General Secretary.

Letters by "Zonam Perdidit" and "Unemployment Problem" is given on page 674.—Ed.]

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting!—Ed.

Internal Finish for Exposed Walls.

[REPLY TO "SUBSCRIBER," OCTOBER 30.]

SIR,—To make a thorough job of the internal walls, one must first treat the external walls to give the desired result. Treat concrete first with a stucco which contains a waterproofer, powder or liquid, or, if brickwork, build in a good red engineering brick, which should make an impervious wall. The internal walls can then be finished with Keene's on a Portland cement backing, and then treated with a matt finish paint.

G. W. H.

Crushed White Granite.

SIR,—If any reader could let me know the source of supply of crushed white granite I should be grateful. I am not looking for it as "waste," but in a form that will not require a great deal of washing and treatment before use.

"ANXIOUS."

Plans and Local Authority.

[REPLY TO "SURVEYOR," OCTOBER 30.]

SIR,—Section 158 of the Public Health Act, 1875, is in force in every urban district, but it is also in force in every rural district where the local authority has adopted Part III of the Public Health Act, 1890. Also in many rural districts or parts of districts in pursuance of orders made by the Local Government Board or Ministry of Health, in combination with Section 157 of the Act of 1875. In all these cases, the rural authority must likewise approve or disapprove plans within one calendar month, and there is no power under the by-laws to extend this period.

"LEGAL."

Size of Radiators.

SIR,—Can you inform me what is a sufficient size for an ideal classic radiator in a room 22 ft. 6 in. by 11 ft. 6 in. by 8 ft. high? The intention is not to heat the room entirely by this, but to be able to warm it sufficiently with the aid of a gas fire when necessary. I should also like to know what percentage of cubic area should be allowed.

"A COMFORT."

Corrosion of Roof Shed.

[REPLY TO "QUERIST," OCTOBER 23.]

SIR,—"Querist" would do well to concentrate entirely on reinforced concrete trusses, purlins and glazing bars, and to span the purlin with corrugated asbestos cement roofing in large sheets. The first cost will doubtless be heavy, but it will be permanent and will need no painting. Asbestos cement rainwater goods can also be obtained, and this material is most suitable for all work subject to attack by acid fumes.

"PERMANENT."

SIR,—The many high-class paint manufacturers that advertise in The Builder would suggest to "Querist" the right acid-resisting paint, but if the building is too far gone for the paint stage, I would suggest building in reinforced stanchions, concrete trusses, with reinforced concrete glazing bars. Heavy wood bars are recommended with asbestos cement corrugated sheets, with reinforced purlins for roofs and walls. Avoid all metal inside.

G. W. H.

SIR,—Form principals of pitch pine, with all ironwork, such as nails, straps, bolts, &c., exposed to fumes. Apply boiled linseed oil, then take out and let dry in the air. A good coating of oil will protect the ironwork. Ammonia will attack cement, such as sheeting, &c., but if these be tarred, this will prevent corrosion by ammonia.

A.

Cement Mortar.

[REPLY TO "BRICKLAYER," OCTOBER 23.]

SIR,—If the cement mortar be gauged with lime putty, say one of putty to six of mortar,

the effect is to give a much better spread to the mortar, while the strength of the latter is barely affected. In works where extreme soundness of construction is not required, a little gauge of clay in the mortar will do much to bring the same state of affairs about.

S.

Concrete Bricks.

SIR,—There is no reason why concrete bricks should not be produced to compare favourably in all respects, with the best claybricks. The proportion mentioned (6-1) is quite usual and satisfactory if the aggregate is of a suitable nature. If properly graded, mixed, and made, the resulting brick should absorb less than 10 per cent. of its own weight in water. As concrete is alternatively charged with (1) absorption, (2) condensation, it must be evident that the way in which the materials are handled is responsible for bringing about such widely differing results. Fifteen years' experience in the manufacture of concrete bricks and the study of concrete products generally, has convinced me that hand tamping is the most satisfactory method of consolidation for this type of product.

A. G. STEDMAN.

"Prong-lock Bar."

SIR,—I should be obliged if any of your readers could furnish me with the address of the makers of the "Prong-lock" bar for supporting metal lathing of plaster ceilings.

EXPORT.

By-law Questions.

SIR,—(1) Will Ruberoid, Vulcanite, corrugated iron, felt and asbestos slates fulfil the requirements as roofing materials for (a) a shop, (b) a dwelling house, (c) a store, (d) a factory, under the L.C.C. Building By-laws, &c.; also under the model by-laws?

(2) Will it be in order, under the model by-laws, to divide existing shops, dwelling houses, or combined shops and dwelling houses by means of timber partitions, so as to adapt them for separate occupation? Would not such partitions function as party walls except for weight carrying?

(3) What thickness of external wall would be required for a one-story building? Height of wall from floor level to upper surface of flat roof being 11 ft. 10 in., and depth of roof 8 in. model by-laws assumed?

(4) Into which class would you put a small garage for a motor car—"Domestic Building" or "Warehouse Building," assuming it has been built to let to anyone in the neighbourhood who may need it?

(5) Will it be in order to adapt the ground floor or part of the ground floor of a dwelling house at a garage for a motor car without fireproofing the floor over it; that is, the first floor? If, instead of a dwelling house, you assume the ground floor of a stores, will it alter the requirements under model by-laws, or Locomotives on Highways Act?

"DURBAN."

[Will "Durban" send his name and address, not for publication, but as a guarantee of good faith?—Ed.]

Subsidy Houses.

SIR,—I recently built and completed two bungalows. For roof covering I used Marseilles tiles, with chimneys roughcast, and cement skewing instead of lead flashing. I applied for subsidy in the usual way, and got a verbal sanction for occupation. One of the houses is sold, and both have been completed for over six months. I have now received notice from local surveyor that the building committee cannot recommend the payment of subsidy on houses which are not provided with suitable lead flashing to roofs. Has the committee the power to refuse subsidy after so long a period?

"J. L. I."

Water Heater; Waterproofing Material; Ventilator Light.

Inquiries on these subjects have been answered direct.

THE BUILDING TRADE.

THE NEW PUBLIC HEALTH ACT, 1925

THE Public Health Act, 1925, which came into force September 8 last, is a comprehensive measure touching upon a great variety of subjects, and thus may be described as an "omnibus" Act. A very useful Memorandum or summary of its provisions has been issued by the Ministry of Health, but a consideration of some of the most important sections may be of service to our readers.

Subject Matter of the Act.

The Act is divided into nine Parts. Part I, Preliminary; Part II, Streets and Buildings; Part III, Sanitary Provisions; Part IV, Verminous Premises; Part V, Watercourses, Streams, &c.; Part VI, Recreation Grounds; Part VII, Infectious Disease and Hospitals; Part VIII, Miscellaneous; Part IX, Baths and Washhouses. Section 1 subsection (2) enacts that Parts I to VIII and the Public Health Acts 1875 to 1907, may be cited together as the Public Health Acts, 1875 to 1925, and Part IX and the Baths and Washhouses Acts, 1846 to 1899, may be cited together as the Baths and Washhouses Acts, 1846 to 1925. Subsection (3) prescribes that the Acts thus grouped shall respectively be construed together.

The wording of subsection (2) is not quite clear, for when it speaks of "Parts II to VIII" this might mean Parts II to VII inclusive, but so far as we can see when both the Act and the memorandum thus name the Parts to be included the meaning is that the numbers mentioned are inclusive.

Application of the Act.

The Act applies only to England and Wales but not to the administrative county of London save as expressly provided (see Section 2 subsection (1)). The effect of this provision and subsection (4) is that only Part I and Part IX apply to London.

By section 2 subsection (2) "Parts II, III, IV and V are adoptive, and shall extend in so far as they may be adopted to any district for which they are adopted in accordance with the provisions of this Act."

But there is a proviso to this subsection: "Provided that where powers are conferred on a county council by any section in Part II of this Act those powers may be exercised by the council without an adoption by them of the provisions of that section."

By subsection (3) Part VI shall extend to any area in which Part VI of the Public Health Acts (Amendment) Act, 1907, is in force at the commencement of this Act and may be applied to any district by an order of the Minister of Health in the same manner as Part VI of the said Act of 1907 may be applied. This Part is not adoptive, and Part VII is also not adoptive and Part VIII operates without adoption.

In connection with the adoption of provisions of this Act, it is important to observe that by Section 1 subsection (4) it is provided: "The expression 'the commencement of this section' when used in any provision in Parts II to V of this Act means the date on which that section comes into operation within the district of the local authority by virtue of an adoption of that provision or of an order of the Minister of Health."

Adoption by Urban Authorities.

By section 3 it is provided that any urban authority may adopt all or any of the sections contained in Parts II, III, IV and V, with this proviso, that where the district contains a population of less than 20,000 according to the latest published census, the consent of the Minister is necessary for the adoption of the following provisions set out in the First Schedule: (a) section 21 (Water flowing on footpath), section 22 (Washing of soil into streets), section

44 (Offensive trades or businesses), or (b) any provision in Part V (Watercourses, streams, &c.).

Adoption in Rural Districts.

Section 4 provides that a rural district council may adopt all or any of the provisions of Parts II, III, and IV of the Act except the sections in Parts II and III, which relate to the following matters set out in the Second Schedule, viz., sections 17 to 19 (Naming of streets), section 21 (Prevention of water on footpaths), section 22 (Washing of soil into streets), section 24 (Projections in streets), section 35 (Power to vary width of carriageway and footway upon making up private street), section 39 (Notice of intention to re-construct or alter drains), section 44 (Offensive trades or businesses).

By subsection (2) the Minister may apply by order to any rural district or contributory place therein any provisions in Parts II to V or Part VIII in the same manner as provisions of the Public Health Act, 1875, which apply to urban districts may be applied to rural districts or contributory places therein, and section 276 of that Act is extended accordingly. But by subsection (3) an additional condition is imposed, for before an application is made to the Minister to exert this power notice of the application specifying the provisions of the Act in respect of which an order is desired shall be inserted by the applicants for the order once at least in one or more newspapers circulating in the area to which the application relates in each of two successive weeks.

The Ministry's Memorandum contains a valuable note on this section for it points out that a rural district council cannot adopt a provision of the Act for a portion only of the district, and therefore where the council desire that a provision should be applied to a contributory place or places only, within their district an application must be made to the Minister under subsection (2) of this section.

Method of Adoption.

The method of adoption where local authorities adopt any of the provisions of Parts II to V of the Act is prescribed by section 5. It is to be by resolution passed in accordance with the provisions contained in the Third Schedule. Section 6 enables the Minister on the application of a local authority by order to make such amendments or adaptations of any local Act as may appear to him necessary to bring the provisions of that Act into conformity with the provisions of this Act, and any order so made shall operate as if enacted in this Act. At first sight this would appear rather a startling power, but a note on page 7 of the Memorandum of the Ministry explains it thus:—Under section 11 of the Public Health Acts (Amendment) Act, 1907, as applied by section 7 of this Act, the powers given to a local authority are to be deemed to be in addition to, and not in derogation of, any other powers conferred upon the local authority by Act of Parliament, law or custom. Thus, if the local authority possesses powers directed to the same object as any provision of this Act, those powers are not affected by this Act, but if the authority desires to come under the general law this section enables the Minister to bring the local Act or provisional order into conformity with the provisions of this Act.

Section 7 applies certain provisions and definitions contained in the Public Health Acts (Amendment) Act, 1907, set out in the Fourth Schedule to this Act and in subsection (2) defines "local Act" as including Acts for confirmation of provisional orders and those orders as confirmed, and subsection (3) defines the expression "Statutory undertakers."

[The concluding Parts of the Act will be dealt with in succeeding issues.]

PREMIUMS UNDER THE RENT ACTS

FOR some time there has been an abundance of reported cases relating to the taking of premiums under the Rent Acts, a practice rather by sub-tenants than landlords in the past, but an interesting point was in the case *Rush v. Mathews* (The Times, October 24), which, so far as we are aware, has not come before the Courts hitherto.

The appellant in this case went to a room that had been advertised to apparently unfurnished, although the rent was not specific as to this, and he saw the tenant's daughter, who told him that the rent was 25s. a week, but as this rent could be charged under the Rent Acts a lease was granted for 14 years, under which the appellant would pay a weekly rent of 13s. 6d. and a premium of 11s. 6d., and there would be a premium of £10 down. It must be remembered that section 8 of the Rent Act, which prohibits premiums in sub-tenancies, enacts, "This section shall not apply to a grant of renewal or continuance for a term of years or upwards of any tenancy."

The appellant agreed to the terms of the lease, and on October 26, 1922, paid the £10, and two days later signed the lease and also the document, which related to the weekly rent. "In consideration of your having granted a lease for 14 years from October 30, 1922, of a top flat comprising four rooms at a weekly rent of 25s., the option to me to determine the same lease at any time by giving notice I hereby undertake to pay the sum of 11s. 6d. weekly by way of premium commencing on the thirtieth day of October 1922.—Signed, Walter A. Mathews." The option, it must be noticed, was that the tenant alone, the landlord having no right under the lease to determine the lease at any time.

The appellant paid the rent and premium for five or six weeks, but after that period, he was advised that he was only liable to pay the rent, tendered that sum, which was accepted. On October 9 the respondent in proceedings claimed possession of the premises, but the appellant claimed for the rent which had been tendered.

The subsequent proceedings, as reported, are a little difficult to follow. It appears that the County Court Judge in these first proceedings found that the standard rent was 10s., but he granted an order for possession, staying operation so long as the tenant paid 10s. and 5s. arrears of rent. The material point, however, is that in February, 1925, the respondent brought an action to recover one premium (11s. 6d.) due December 18, 1924, in these proceedings the County Court Judge had held that the amount could be recovered under the agreement and was not within the provisions in subsections (1) and (2) of section 8, but exempt from the prohibitions contained by virtue of subsection (3).

It appears that in the court below a good deal was made of the fact that the two documents—the lease and the agreement—gave different rights. The rent could be recovered by distraint, and non-payment would give a right of re-entry, whereas the agreement for payment of the premium conferred only a personal obligation enforceable neither by distraint nor by re-entry, and therefore, on appeal, the Divisional Court held that the two documents should be considered together to ascertain the whole of the transaction—that is, whether the sum was not in reality rent. The Court, reading these two contemporaneous documents together, came to the conclusion that the premium was the £10 paid at once and the whole sum mentioned in the two documents apart from this premium was but rent, and therefore, under the Rent Act, 1920, irrecoverable from the tenant.

It is to be noticed that the decision

to refer to the question whether the be paid were rent or premium, and to no reference as to the point as to this was an agreement for over 14 years subsection (3) of section 8, but we may t that any decision on this point was ary, for the provision contained in sub- (3) as to grants for 14 years or over only to premiums and not to rent; , directly it was found that the sums under the two documents were really not premium, that also concluded any under subsection (3).

HOUSING AND THE MUNICIPAL ELECTIONS

ceived too late for publication in our e a communication on this subject from F. Darbyshire, President of the National ion of House Builders. In view of the interest of the statement, we give a y of it below.

housing question naturally takes a pro- ple in the election addresses of the tes (says Mr. Darbyshire), for there are vards in some towns where the housing y is the most important question. ears strange that although the local ties have erected some 200,000 houses he war, the shortage is almost as acute ; but the fact is that they have spent all rgy and many millions of the taxpayers' in providing homes for a class of people e quite capable of providing themselves ouses with the assistance of the grant mer occupiers which is provided by the ng Acts.

re is a local authority which has 7,000 on its housing register—admittedly requiring the smaller houses. The council ling houses on eight estates, but on only the estates do the rents appear as low as l. On two other estates, the rents run 6s. 7d. per week; whilst on five, the rent is 18s. 7d. This authority has erected 4,800 houses, at rents up to . per week, and its Public Health Com- has actually passed a resolution that ould be set aside for the erection of ' motor houses. The hundreds of acres s and semi-slums are as densely packed

Federation, at the half-yearly meetings cently, passed the following resolutions ference to the future programme of the authorities:—

That all local authorities' housing s should be confined to the erection of to be let at economic rents, not exceeding 10 shillings per week, inclusive of rates, after ng the subsidy from the Government and al authority; and that the Government ested to refuse to sanction the erection local authorities of houses at higher r for sale, until the requirements of the paid working classes have been met."

That in the opinion of this meeting, e should be brought to bear by the ment on the local authorities to make and to advance capital on mortgage he provision of the Housing Acts to the per cent. permitted under those Acts, enabling a thrifty working man to se his house."

D LORD'S LIABILITIES

SE reported in the *Times*, October 17, v. Pillet, illustrates the serious liabilities s are under in respect of their premises, h very often they cannot obtain posses- them. The landlord, the defendant, was er of a house let on lease to the plaintiff, November 8, 1908, under which the d covenanted to keep the exterior of dding and the walls, &c., in good and tial repair. The length of the lease is ated. On April 2, 1924, the plaintiff ritten to the landlord as follows: "I his house wants painting and the steps front door want attention. These

matters can be attended to at or before the painting. It is useless, I take it, to think of them so long as everybody is employed at Wembley, or on strike there, which comes to much the same. July would suit me very well if that is a possible month, as I see no reason why it should not be. Perhaps you will let me hear from you in due course."

On April 5 the defendant communicated with a firm of builders saying that he understood the steps to the front door needed attention, and on April 8 they replied that the steps were in a dangerous condition, and they obtained an estimate from a mason of what was required to be done. The steps were repaired on April 16, but in the meantime, on April 14, when the plaintiff, an old man, was leaving the house by the front door, the top step and several others collapsed, and he fell into a cellar below, sustaining serious injuries for which he brought this action.

The case was tried without a jury, and the Judge awarded the plaintiff £1,200, of which sum £400 was special damages, with costs. The Court held that the letter of April 2 from the plaintiff was a notice sufficient to put on the landlord the responsibility of ascertaining the necessity of immediate repairs, and, in any event, on April 8 he knew from the letter from his builders that the steps were dangerous, and a reasonable time had elapsed to enable the landlord to do the repairs before the accident occurred. The learned judge intimated that if he were wrong in holding that a reasonable time had elapsed, then he held a duty was imposed upon the landlord to take temporary measures for protection, and if the letter of April 2 was not a notice of the dangerous condition of the steps, yet the defendant on the receipt thereof had a right of entry to enable him to inspect the condition of the premises, and this would prevent his relying on the allegation that

he had no actual knowledge of the condition of the steps. The report states that the Court referred to the authorities in support of this judgment, but at present they are not available as they are not given in this report. We gather from the judgment, as reported, that the Court intimated that there was no authority upon the point whether the letter of April 2 was sufficient to put the landlord on inquiry, but that it decided this point as a matter of principle apart from any decided case.

The case raises very interesting points, but we must defer detailed consideration of it until it is reported in full. That a landlord is not liable until he receives notice of want of repair was decided in *Torrens v. Walker* (1906, 2 Ch. 166), and if that notice called attention to a dangerous state of the premises, no doubt immediate action would be called for. The letter in this case did not suggest any immediate necessity for action, but, as the Court held, the communication from the builder did inform the landlord of the dangerous condition of the premises. This point was raised in *Cockburn v. Smith* (1924, 2 K.B. 119; *The Builder*, August 29, 1924) where communication to a builder was relied upon, but Lord Justice Bankes said: "Mere communication to a builder is not enough to exonerate the defendants. If the builder takes the work in hand the employer may be absolved on the principle of *Blake v. Woolf* (1898, 2 Q.B. 426), but that case has no application where the builder does nothing, and where the employers know that their communication is having no result I have no difficulty in finding they are negligent."

The Court found that the plaintiff had no knowledge of the dangerous condition of the steps when he wrote his letter, but that this letter put the defendant to the duty of making immediate inquiry and even of at once inspecting the premises.

COMPARISON OF PRICES OF BUILDING MATERIALS IN OCTOBER, 1925, WITH CURRENT PRICES.

Material.	Oct. 1925.	Nov. 1	Rise.	Fall.
	£ s. d.	£ s. d.	%	%
Bricks—				
Best Stocks	4 3 6	4 3 6	—	—
Flettons	2 13 3	2 13 3	—	—
Glazed	21 10 0	21 10 0	—	—
Thames Ballast	0 10 6	0 10 6	—	—
Thames Sand	0 14 6	0 14 6	—	—
Shingle (½ in.)	0 12 9	0 12 9	—	—
Portland Cement	2 18 0	2 18 0	—	—
Ground Blue Lias Lime	2 4 6	2 4 6	—	—
Grey Stone Lime	2 11 9	2 11 9	—	—
Bath Stone	0 2 9½	0 2 9½	—	—
Portland Stone	0 4 4	0 4 4	—	—
Good Sound Building Timber—				
4 in. x 11 in.	32 0 0	32 0 0	—	—
3 in. x 11 in.	28 0 0	28 0 0	—	—
2 in. x 11 in.	28 0 0	28 0 0	—	—
3 in. x 9 in.	25 0 0	25 0 0	—	—
3 in. x 7 in.	23 0 0	23 0 0	—	—
3 in. x 4 in.	23 0 0	23 0 0	—	—
Slates—				
24 in. x 12 in.	37 12 6	37 12 6	—	—
22 in. x 12 in.	34 0 0	34 0 0	—	—
20 in. x 10 in.	25 12 6	25 12 6	—	—
16 in. x 10 in.	17 12 6	17 12 6	—	—
16 in. x 8 in.	13 15 0	13 15 0	—	—
R.S. Joists	13 10 0	13 10 0	—	—
Iron—				
Common Bars	13 10 0	13 10 0	—	—
Mild Steel Bars	11 0 0	11 0 0	—	—
Steel Bars	11 0 0	11 0 0	—	—
Cut Nails	19 10 0	19 10 0	—	—
Sheet Lead	52 10 0	50 10 0	—	—
Glass—				
15 oz. Sheet	0 0 3½	0 0 3½	—	—
21 oz. Sheet	0 0 4½	0 0 4½	—	—
26 oz. Sheet	0 0 5	0 0 5	—	6.52
Raw Linseed Oil	0 3 10	0 3 8	—	4.35
Turpentine	0 6 10	0 6 8	—	2.44
Ground English White Lead	61 15 0	59 15 0	—	3.24
White Lead Paint	82 15 0	80 15 0	—	2.42
Red Lead	56 0 0	55 10 0	—	0.89

NEW BUILDINGS IN LONDON.

Acton.—Work has started on the site of a new factory, four stories high, to be erected for Messrs. Landis & Gyr, Ltd., electric meter manufacturers, and designed by Mr. R. F. Bargman, A.R.I.B.A., 67, South-street, Dorking. Messrs. Edwards' Construction Co., Ltd., contractors, 86A, High-street, Eltham, S.E.9.

Barking.—A site at Creekmouth has been purchased by the Barking Town U.D.C. for the erection of an electricity sub-station. Mr. C. J. Dawson, Clock House Chambers, Barking, Council's architect.

Barnet.—New almshouses are to be erected in Wood-street by Messrs. J. Pearson & Son, 62, Stratford-road, Barnet. Messrs. Caroe & Passmore, 3, Great College-street, S.W.1, architects, acting for the Eleanor Palmer's Charity.

Battersea.—An elementary school is to be built in Meteor-street, S.W., by the L.C.C. to plans prepared by Mr. G. Topham Forrest, F.R.I.B.A., County Hall, S.E.1.

Becontree.—It is proposed to erect permanent buildings in Vallance-avenue in place of the temporary premises at the L.C.C. Housing Estate. Plans by H.M. Office of Works, Storey's-gate, S.W.1.

Billiter-street.—At Nos. 17-18, Billiter-street, E.C.3, a modern block of offices is to be built, designed by Messrs. Gunton & Gunton, Finsbury House, Blomfield-street, E.C.2. Messrs. F. G. Minter, Ltd., contractors, Ferry Works, Putney, S.W. Messrs. Archibald D. Dawnay & Son, Ltd., steelwork, Steelworks-road, Battersea, S.W.

Bishopsgate.—Messrs. Dorman, Long & Co., Ltd., Central Buildings, Westminster, S.W.1, are engaged upon the first sections of the steelwork for the new offices in St. Helen's-place, E.C., for Messrs. Hudson's Bay Co. Messrs. Dove Bros., Ltd., Clouesley-place, Islington, contractors. Messrs. Mewès & Davis, 22, Conduit-street, W.1, architects. Mr. F. Henneker, quantity surveyor. Dr. Oscar Faber, O.B.E., consulting engineer.

Brentford.—Plans are to be prepared by the engineering staff at Paddington, W.2, of the Great Western Railway, for a large goods warehouse, which will be equipped with electrical machinery.

Catford.—A new petrol service station, garage, &c., is to be erected in Bromley-road, S.E., for Messrs. F. Pilmore-Bedford & Co., 108, Bromley-road, S.E.6.

Croydon.—A proposal is being considered for the erection of a large dance hall in London-road, to the design of Messrs. Burdwood & Mitchell, 80, George-street, Portman-square, W.1.

Erith.—Messrs. Sidney Bacon Pictures Syndicate, Ltd., are to build a cinema theatre to accommodate about 1,200 persons. Messrs. G. H. Gunning & Son, Westminster Bank Chambers, High-street, Erith, contractors. Messrs. Lambhill Ironworks, Ltd., steelwork, Lambhill, Glasgow. Messrs. Hathern Station Brick & Terra Cotta Co., Ltd., glazed bricks, Loughborough. Messrs. Percy L. Browne & Son, Pearl Building, Newcastle-on-Tyne and London, architects.

Euston-square.—The Associated Hotels, Ltd., 57, Farringdon-road, E.C.1, propose to build a new wing at the Northway Hotel, 70, Euston-square, N.W.1, so doubling the accommodation. Messrs. Murrell & Piggott, architects, 44, Bedford-row, W.C.

Fleet-street.—Messrs. Wyman & Co., Ltd., printers, Fetter-lane, E.C.4, have purchased a site in New Street-square, E.C.4, where they propose to build a new warehouse.

Fulham.—A site in Britannia-road, S.W., has been purchased by the L.C.C. for a new elementary school. Mr. G. Topham Forrest, F.R.I.B.A., County Hall, S.E.1, architect.

Gray's Inn-road.—The second section of the large printing works and distribution warehouse for the *Daily Sketch* is being put in hand by the general contractors, Messrs. Holland & Hannen and Cubitts, Ltd., 258, Gray's Inn-road, W.C.

Mr. A. Rangeley, architect, 4, Cathedral Gate, Manchester.

Hackney.—New shop and showroom premises are to be erected at Nos. 372-374, Mare-street, E., for Messrs. Montague Burton, Ltd., wholesale clothiers, Leeds, to the design of Mr. Harry Wilson, 12, Victoria Park-road, Kirkstall, Leeds. Messrs. Lansdowne Building Co., builders, Lansdowne Works, Lambeth, S.W.8. Messrs. Archibald D. Dawnay & Sons, Ltd., steelwork, Steelworks-road, Battersea, S.W.11.

Kensington.—A number of Georgian houses, consisting of two and three reception rooms, lounge hall, eight bed and dressing rooms, maids' bedrooms, &c., are being built in Ilchester-place, W., by Messrs. The Mayfair Construction Co., Ltd., 296, High Holborn, W.C. Mr. Leonard Martin, F.R.I.B.A., architect, 17, Waterloo-place, S.W.1.

King William-street.—Messrs. Trollope & Colls, Ltd., 5, Coleman-street, E.C.2, are excavating for the new head offices in King William-street, Nicholas-passageway and Nicholas-lane, E.C.4, for the London Life and Clergy Mutual Assurance Co. Mr. W. Curtis Green, A.R.A., architect, 5, Pickering-place, S.W.1.

King William-street.—Steelwork is being erected for the extension of the premises of the Standard Bank of South Africa, Ltd., fronting on to Clement's-lane, E.C. Messrs. Lindsay's Paddington Ironworks, Ltd., steelwork, 15, North Wharf, W.2. Messrs. Walter Lawrence & Son, Ltd., contractors, Finsbury-square, E.C.2. Messrs. Meakin, Archer & Co., architects, 73, King William-street, E.C.

Lambeth.—Premises adjoining Guy's Hospital in St. Thomas's-street, S.E.1, are to be converted into an up-to-date school of dentistry, with an X-ray department, at a cost of £20,000. Adaptation planned by Messrs. Thompson & Walford, Leadenhall Buildings, Leadenhall-street, E.C.3. Messrs. James Carmichael (Contractors), Ltd., contractors, 331, Trinity-road, Wandsworth, S.W.

Lambeth.—The contract for the rebuilding of the first section of the Borough Polytechnic in Borough-road, S.E.1 (which is to be entirely reconstructed and enlarged at a cost of £80,000) has been awarded to Messrs. George Potton & Sons, Gainsford-street, S.E.1. Mr. W. Courtenay Le Maitre, F.R.I.B.A., architect, 133, Moorgate, E.C.2.

Lewisham.—At the L.C.C. Downham Housing Estate the contractors, Messrs. Holland & Hannen and Cubitts, Ltd., 258, Gray's Inn-road, W.C., are to build a new central school at a cost of £34,500. Mr. G. Topham Forrest, F.R.I.B.A., architect, County Hall, Westminster Bridge, S.E.1.

Leytonstone.—Alterations are to be carried out to the Central Receiving Home in Union-road, E.11, for the Board of Guardians, to the plans of Mr. S. M. Spoor, F.R.I.B.A., 1, Staple Inn, Holborn, W.C.1. Mr. John Upton, 105, Amity-road, E.15, contractor. Mr. A. R. Evans, 11, Gray's Inn-place, W.C., quantity surveyor.

Piccadilly.—In our last issue we stated that Messrs. Dorman, Long & Co., Ltd., were the contractors for the steelwork to the new building for Messrs. Swan & Edgar, Ltd., at the corner of Regent-street, W.1. This is incorrect. The contractors were Messrs. Moreland, Hayne & Co., Ltd., 80, Goswell-road, E.C.1.

Putney.—Messrs. Bower & Gibbs, 14, Riding House-street, W.1, have prepared plans for new branch premises in Putney High-street, S.W., for Messrs. Meakers, Ltd., outfitters.

Regent-street.—Demolition will shortly be put in hand on premises in Regent-street, W.1, which include the large Imperial Restaurant, owned by M. Oddenino. New premises of six stories have been designed by Mr. T. H. Smith, 17-18, Basinghall-street, E.C.2.

Richmond.—Messrs. Soole & Son, Ltd., Dunstable Works, Sheen-road, Richmond, are the contractors for alterations to premises in Hill

Rise for the National Provincial Bank. Mr. F. C. R. Palmer, F.R.I.B.A., 15, 1/2, gate, E.C.3.

St. Pancras.—It is hoped to start shortly upon the site of the proposed Western Polytechnic Institute, which mated to cost £112,000. Mr. W. E. F.R.I.B.A., M.Inst.C.E., architect (Messrs. & Glanfield), 6, Raymond Buildings, Inn, W.C.

St. Paul's.—Messrs. Searle & Searle, architects, Paternoster House, Paternoster-row, have designed a new block of shops and rooms for Messrs. Hitchcock, Williams & drapers.

Sanderstead.—A new church of St. Mary, to be erected, the first section to cost about Messrs. George Everitt & Son, Ltd., Syon-road, North Croydon, contractors. Greenaway & Newberry, F.F.R.I.B.A., and Parliament Mansions, Victoria-street, S.

Shoreditch.—Extensions, estimated at £10,000, are to be carried out to the Whiston generating station of the Shoreditch B.C. Newton Russell, M.Inst.C.E., Coroner, N.1, consulting engineer.

Snow-hill.—The Snow-hill Police Station is to be pulled down and reconstructed by City of London Constabulary, at a cost of £80,000. Messrs. John Mowlem & Co., Ebury Bridge-road, S.W.1, contractors. by City of London Corporation Surveyors.

Stamford-street.—Messrs. G. E. W. Sons, Ltd., Broadmead House, Pantiles, W.1, have started excavation for a new block of offices for Messrs. Cornwall Press, Ltd., at a cost of about £25,000. Mr. T. J. Fox, architect, 1, Museum-street, Bloomsbury, W.C.

Strand.—The Vaudeville Theatre repairs and extensions are to be carried out by Bovis, Ltd., 43, Upper Berkeley-street, by the direction of Mr. Robert Atkinson, F.R.I.B.A., 36, Bedford-square, W.C.1.

Tottenham.—Plans are being prepared for the development of the remaining portion of the Borough Council's housing estate, involving the building of about 300 houses. Mr. E. Monson, F.R.I.B.A., 120, Moorgate, architect.

Upper Brook-street.—Messrs. J. Ashtor & Son, 109, Stoke Newington-road, N., are pulling down the old buildings at the corner of Upper Brook-street and Carlos-place, S.W.1, where a block of residential flats is to be erected to the designs of Messrs. Edmund Wimperis, & Guthrie, 61, South Molton-street, W.1.

Walham-green.—Messrs. The Westminster Bank, Ltd., propose to build a new office at the Broadway, S.W. Mr. F. Dawber, 18, Maddox-street, W.1, Prestige & Co., Ltd., contractors, Cannon Wharf, Grosvenor-road, S.W.1.

Walworth.—Funds are being raised for improvements at St. Peter's Church, including a new organ, new bells, electricity, heating, repairs to roof and interior exterior redecoration. Mr. J. Rawlinson, architect, 11, Adam-street, Strand, W.C.2.

Wandsworth.—The Central Board of Education of the Church of England have bought a site of 12 acres at West-hill, S.W., where it is proposed to build a training college for clergy and laymen to accommodate for 220 students.

Wandsworth.—The St. Mary's Church at Summerstown, S.W., have decided to build a Sunday school, at an estimated cost of £10,000. Mr. Godfrey Pinkerton, F.R.I.B.A., 2, Inn-square, W.C.1, architect.

West Ham.—A secondary school is to be erected in Cumberland-road for the West Ham E.C. Mr. John H. Jacques, Lic.R.I.B.A., West Ham-lane, Stratford, E.15, architect.

Westminster.—New head offices for the Transport and General Workers' Union are to be erected in Smith-square, S.W.1, to the design of Messrs. Culpin & Bowers, 27A, lane, Cannon-street, E.C.4.

THE UNEMPLOYMENT PROBLEM

ONE WAY TO HELP.

R.—Some little time ago you were good enough to publish a letter which drew attention to the phase of the unemployment problem, the remedy for which lies entirely in the hands of the public. At this period of the year there is a considerable distress in the painting trade, and at the present time there are approximately ten thousand painters unemployed. This state of affairs arises solely from the habit which the public has acquired of putting in hand decorative work at one time of the year only. When the season arrives there will be acute competition for the services of painters who are now walking the streets solely because of a habit of mind on the part of the average housewife.

There is no sound reason why painting work should not be done in the winter months. We submit that there are many very good reasons why it should be, among them the following:—(a) The householder who puts work in hand in the slack season gets the best men, and hence the work is done better; (b) the master decorator has time to give individual attention and supervision, which is not possible during the "rush" season; (c) the state of business must inevitably have an effect upon estimates, to the advantage of the householder who places work in the winter; (d) it is bad business to pay (as we all must) to support men on the "dole" when there is work plenty for them to do and it is only a matter of a rearrangement of dates and a little forethought to keep them busy. This point should be dealt with especial force to public bodies.

It will be noted that we make no appeal on philanthropic grounds. Interior decorative work in winter is sound business, and our object is to get the public to see it. The fact that it relieves the distress of a body of citizens is incidental.

WILL MELLOR, Employers' Secretary.

J. A. GIBSON, Operatives' Secretary.

National Painters' and Decorators' Joint Council.

Failure of Steel Houses.

Birmingham Corporation, which built several steel houses as an experiment, has decided to build no more. The House Building Committee reported to the City Council recently that they had been found to be more costly than brick and concrete houses.

Influence of Aggregates on the Strength and Properties of Concrete.

On Monday, November 2, Mr. G. O. Case (President), A.M.E.I.C., read a paper on the subject to the Society of Engineers.

The paper began with a short account of the reasons which led its author to try to discover a form of concrete free from the disadvantages of ordinary concrete made with aggregates of sand and gravel. He said that in 1912 he read a paper before the Society of Engineers in which the results were given of the reinforcement of concrete with rods of wood and examples of the fact that wood embedded in cement or mortar was practically everlasting. Ordinary concrete and mortar possessed many disadvantages when used for the construction of sea defence works. The concrete was heavy and could not be easily nailed, or spiked. The timber decayed and was subject to the ravages of insects. The author had experienced these disadvantages and was thus led to make experiments in which sand and small wood chips were used as aggregates in the place of sand and gravel.

The chief difficulty to be overcome was the shrinkage in volume which took place in the wood when it had been embedded in the cement, a shrinkage resulting in the loss of adhesion, or, if the wood was sawdust, had been previously saturated, the breakage of the bond between the aggregate and the cement. If used dry, the set was retarded. The final result of these experiments was the patenting of the process known as the mineralisation of sawdust. This method prevented contraction on expansion of sawdust when mixed with cement and water, and at the same time rendered it fireproof.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Bricklayers.	C'pters Joiners.	Plasterers.	Slaters.	Plumbers.	Painter.	Labour.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bath	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bedford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Birkenhead	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bournemouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Brentwood	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bridgwater	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Brighton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Burton-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Cambridge	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Chatham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Chelmsford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Cheltenham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Colchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Crewe	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dudley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
E. Glam.(Mon. Vail.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Eastbourne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Exeter	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Folkestone	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Gloucester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Grantham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Grays	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Grimsbey	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Great Yarmouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Guildford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hallifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Harrrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hartlepool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hastings	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hereford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Leamington Spa	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Lichfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Liverpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Llanelli	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
London { 12 m. radius	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
London { 12-15 m. radius	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Luton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Maidstone	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Newport Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Northampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Norwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Oakham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Oxford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Portsmouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Reading	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Rochester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Rugby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
St. Albans	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Scarborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Shrewsbury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Southampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Southend-on-Sea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stroud	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Swindon	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Taunton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Torquay	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Tunbridge Wells	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Walsall	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Windsor	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Worcester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3

(For rates of wages in the Building Trade in Scotland, see page 686)

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

NOVEMBER 9.—BASFORD.—CONVERSION.—Conversion of pail closets to water closets, in the parish of Colwick, for the R.D.C. S. Maylan, engineer and surveyor. Deposit £1 1s.

NOVEMBER 9.—BRIDLINGTON.—WALLS.—Construction of concrete walls, foundations and drainage works, &c., in connection with the Spa Improvement scheme, for the T.C. Blackmore, Sykes & Co., architects, Ruskin Chambers, Scale-lane, Hull. Deposit £2 2s.

***NOVEMBER 9.—BULKINGTON.—SCHOOL.**—Erection of school for 250 infants, for the E.C. A. C. Bunch, F.R.I.B.A., County Architect, 27, Binswood-avenue, Leamington Spa. Deposit £2 2s.

NOVEMBER 9.—CLUTTON.—HOUSES.—Twelve houses at Clutton, for the R.D.C. W. T. Hawker, architect, Council Houses, Temple Cloud, near Bristol. Deposit £3 3s.

NOVEMBER 9.—DARTMOUTH.—HOUSES.—Block of four houses on a site known as Avery's Meadow, Victoria-road, for the T.C. Coudrey & Son, architects, Palace-avenue, Paignton. Deposit £2 2s.

NOVEMBER 9.—DRAYTON MILL.—COTTAGES.—Four cottages and four sets of farm buildings, near Drayton Mill, for the Berks C.C. Director of Agriculture, 11, Abbot's-walk, Reading.

NOVEMBER 9.—DUNMOW.—HOUSES.—Forty-six houses, as follows:—Twenty houses at Chelmsford-road Great Dunmow; six at Church End, Great Dunmow; four at Broxted; four at Bambers Green, Takeley; two at Mole Hill Green, Takeley; four at High Easter; six at Stebbing; two at Little Easton; two at Aythorpe Roothing; two at Barnston; two at Bardfield Saling, for the R.D.C. J. Plumley, Sanitary Surveyor, 58, New-street.

NOVEMBER 9.—EDINBURGH.—BUILDING.—Demolition and reconstruction of part of Inglston Farm buildings, house and dairy, and demolition and reconstruction of double cottage, smithy, and cartwright's shop at Gogar, for the T.C. D. A. Donald, Chief Engineer, Edinburgh-Glasgow Road, 271, Alexandra-parade, Glasgow.

NOVEMBER 9.—FOWEY.—VICARAGE.—New vicarage at Fowey. C. W. Parkes Lees, architect, 27A, Fore-street. Deposit £2 2s.

NOVEMBER 9.—HERSTON.—HOUSES.—Erection of 12 houses under the provisions of the Housing, &c., Act, 1924, for the Swanage U.D.C. The Clerk to the Council, Town Hall, Swanage. Deposit £1 1s.

NOVEMBER 9.—LLANDUDNO.—DWELLINGS.—Erection of 28 dwellings for the Llandudno U.D.C. The Engineer and Surveyor, Town Hall, Llandudno.

NOVEMBER 9.—LONDON, S.E.—DWELLINGS.—Erection of a block of dwellings on the Dickens estate, Bermondsey, in brick, also alternative tenders for construction in reinforced concrete, for the L.C.C. Architect to the Council, The County Hall (Room No. 3), Westminster Bridge, S.E.1. Deposit £2 to the Cashier.

NOVEMBER 9.—MACCLESFIELD.—ADDITIONS.—Alterations and additions at the Union Offices, Prestbury-road, for the B.G. Whittaker & Bradburn, architects, 19, King Edward-street.

NOVEMBER 9.—MANCHESTER.—HEATING.—Heating apparatus at the Free Trade Hall, for the T.C. City Architect. Deposit £1 1s.

NOVEMBER 9.—OSWESTRY.—HOUSES.—Eighteen houses at Weston Rhyn Site 2, and the construction of roads, footpaths, sewers, &c., for the R.D.C. Berlington & Son, architects, Prudential Chambers, Lichfield-street, Wolverhampton. Deposit £2 2s.

NOVEMBER 9.—SMALLAUGH.—COTTAGES.—Cottages in the following parishes, viz.:—Honing 2; Paston 2, for the R.D.C. F. Davies, Clerk, North Walsham. Deposit £1 1s.

NOVEMBER 9.—SUTTON-IN-ASHFIELD.—HOUSES.—Twenty houses in pairs, parlour type, and 28 houses, in pairs, non-parlour type, for the U.D.C. Warner & Bockock, architects and surveyors, Mansfield-road. Deposit £2 2s.

NOVEMBER 10.—BIRKENHEAD.—ALTERATIONS AND ADDITIONS.—Alterations and additions to Roland House Telephone Exchange. The Contracts Branch, M.H. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

NOVEMBER 10.—BELFAST.—WORKS.—Repairs to shelter &c., in Dunville Park, and plumbing work at the Central Fire Brigade Station, Chichester-street, for the C.B. City Surveyor.

NOVEMBER 10.—BRISTOL.—FOUNDATIONS.—Construction of foundations for the No. 17 turbo alternator at the Feeder-road power station, St. Philip's, for the T.C. H. Faraday Proctor, Chief Engineer and General Manager, Electricity Offices, Colston-avenue. Deposit £2 2s.

NOVEMBER 10.—BOLTON-UPON-DEARNE.—DWELLING HOUSES.—Erection of seventy dwelling houses, together with road and surface water drainage works, on housing scheme sites, for the U.D.C. William H. Adams, A.R.I.B.A., Council Offices, Bolton-upon-Deerne. Deposit £1 1s.

NOVEMBER 10.—MANCHESTER.—PAINTING.—Interior painting work at the Gorton, Leaf-street, Levenshulme, Mayfield, Osborne-street, and Victoria baths, for the T.C. City Architect. Deposit £1 1s.

NOVEMBER 10.—NEAR SHEFFIELD.—SCHOOL.—New school for 200 children at Woodsetts, near Sheffield, for the West Riding E.C. Education Department, County Hall, Wakefield.

NOVEMBER 10.—NEWTON.—HOUSES.—Twenty houses at Chudleigh, for the R.D.C. B. H. Palmer, L.R.I.B.A., 11, Union-street.

NOVEMBER 10.—NORTHFLEET.—HOUSES.—Erection of 26 houses, or any less number as the tenderer may desire, on the house estate, for the U.D.C. Council Offices, High-street, Northfleet. Deposit £2 2s.

NOVEMBER 10.—TORBAY.—HOSPITAL.—Erection and completion of a new hospital on the Hengrave site, near Torre Station, Torquay. Hon. Sec., New Torbay Hospital, Sunshine, Babbacombe, Torquay.

NOVEMBER 10.—WEST DERBY.—BUILDING.—Proposed receiving room at Smithdown-road Institution Laundry, for the B.G. E. B. Bailey, L.R.I.B.A., F.S.I., 9, Cook-street, Liverpool.

NOVEMBER 11.—ECCLES.—HOUSES.—Seven type "B" houses in Anson-street, Winton, for the T.C. T. Elce, Borough Engineer and Surveyor. Deposit £2 2s.

NOVEMBER 11.—ESSEX.—SECONDARY SCHOOL.—Erection of a secondary school at Brentwood for 275 pupils, for the Essex C.C. County Architect, Springfield Old Court, Chelmsford. Deposit £2 2s.

NOVEMBER 11.—ESSEX.—SCHOOL.—Alterations and additions to the elementary school at Rainham, for the E.C. Essex C.C. County Architect, Deposit £1 1s. to the County Accountant, Old Court, Springfield, Chelmsford.

NOVEMBER 11.—GOOLE.—HOUSES.—Forty-six "B" type houses on the Westfield-avenue site, for the U.D.C. J. H. Castle, Engineer and Surveyor. Deposit £2 2s.

NOVEMBER 11.—KIRKBYTON.—BYRES.—Cow byres at the Storches Hall Mental Hospital, Kirkbyton, near Huddersfield, for the West Riding C.C. W. E. H. Burton, Architect and Engineer, West Riding Mental Hospitals Board Office, Wakefield. Deposit £1.

NOVEMBER 11.—MANCHESTER.—WORKS.—Several works required in the erection of the Levershulme High Schools for Girls, for the E.C. P. M. Heath, Town Clerk. Deposit £2 2s.

NOVEMBER 11.—PRESTON.—HEATING.—Low pressure hot water heating, at the District Manager's (Telephones) Office for H.M. Office of Works. Contracts Branch H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s.

NOVEMBER 11.—SWALLOWNEST.—PLUMBING.—Replacement by copper pipes of the existing hot and cold water pipes in the Scarlet Fever Ward, at the Swallow-nest Hospital, for the South Rotherham and Kiveton-park District Isolation Hospital Committee. A. H. Stryling, Clerk to the Committee, 6, North Church-street, Sheffield.

NOVEMBER 12.—DARLINGTON.—HOUSES.—Pair of semi-detached houses adjoining the Alderman Leach Council School, for the C.B. Borough Surveyor. Deposit £1 1s.

NOVEMBER 12.—DRUNE.—HOUSES.—One block of four two-apartment houses, type "A," and one block of three-apartment houses, type "B," for the T.C. Simpson M. Michael & Davidson, architects, Stirling. Deposit £1 1s.

NOVEMBER 12.—HULL.—LONGE.—Porter's lodge at the Cottesingham Castle estate, for the T.C. City Architect. Deposit £2 2s.

NOVEMBER 12.—LAMBETH, S.W.2.—DEMOLITION.—Demolition of the Old Workhouse, Prince's-road, Kennington, the materials from which will remain the property of the contractor; and for the erection on the vacant site of four blocks of dwellings, comprising 108 flats. Osmond Cattlin, Borough Engineer, Lambeth Town Hall, Brixton-hill, S.W.2. Deposit £3 3s.

NOVEMBER 14.—BALLYMAUGH.—REPAIRS.—Repairs, &c., at Holywell, Ballymaugh, County of Cavan, for the Rev. F. J. McCabe. M. Grace, Old-castle.

NOVEMBER 14.—BOTTLE.—ALTERATIONS.—New roof, dressing boxes, gymnasium floor, boiler house and chimney foundations at the Marsh-lane Open-air Swimming Baths, for the C.B. Borough Engineer. Deposit £1.

NOVEMBER 14.—GARGRAVE.—STATION.—Police station at Gargrave, near Skipton, for the West Riding C.C. P. O. Platts, A.R.I.B.A., County Architect, County Hall, Wakefield.

NOVEMBER 14.—MILDEN.—BUNGALOW.—Bungalow on the recreation ground, for the T.C. Borough Engineer. Deposit £1 1s.

NOVEMBER 14.—SEAHAM HARBOUR.—HOUSES.—Fifty-six houses on the Carr House estate, for the U.D.C. J. B. Abbey, Surveyor. Deposit £2 2s.

NOVEMBER 14.—WAYLAND.—HOUSES.—Ten houses, for the R.D.C. A. A. Gompertz, Clerk, Watton, Norfolk.

NOVEMBER 16.—BRISTOL.—CONVENIENCE.—Public convenience at Cheltenham-road, for the T.C. L. S. McKenzie, City Engineer and Surveyor, City Engineer's Office, 63, Queen-square. Deposit £2 2s.

NOVEMBER 16.—BRISTOL.—CONVERSION.—Old married quarters into assistant Medical Officer's quarters and sewing room, also the conversion receiving block into nurses' cubicles, &c., at South Hospital, for the T.C. Thos. S. Lamb, Clerk Guardians, St. Peter's Hospital.

NOVEMBER 16.—CHIPPING SUDBURY.—HOUSES.—(1) eight at Stoke Gifford; (2) two at Puckled (3) six at Shortwood; (4) four at Watley's Winterbourne; (5) four at Marshfield, for the Housing Inspector. Deposit £1 1s.

NOVEMBER 16.—GALASHIELS.—ALTERATION.—Hillside Mills, Edinburgh-road, for the Un-operative Society, Ltd., Manager.

NOVEMBER 16.—LIVERPOOL.—ADDITIONS.—Additions and additions to the Hightown school, T.C. Land Steward and Surveyor.

NOVEMBER 16.—LONDON.—DWELLINGS.—Erection of a block of dwellings and the erection of a block on the Whitmore Estate (Ware-street, Shoreditch, for the L.C.C. Architect to the Council, The County Hall (Room No. 3), Westminster, S.E.1. Deposit £2.

NOVEMBER 16.—MARKHAM.—SCHOOL.—Public elementary Council school, to provide accommodation 500 children at Markham Village, for the Mon-shire E.C. J. Bain, F.R.I.B.A., County Hall, Nottingham. Deposit £2 2s.

NOVEMBER 16.—SHEFFIELD.—HOUSES.—Fifteen houses on the Wybourn estate, Cricket Inn-road, for the T.C. F. E. P. Edwards, F.R.I.B.A., Architect. Deposit £2.

***NOVEMBER 16.—WOMBWELL.—HOUSES.**—Erection of 66 type "A" and 20 type "B" houses of near King's-road, for the U.D.C. D. H. R. L.R.I.B.A., Park-street, Wombwell. Deposit £2 2s.

NOVEMBER 17.—BARNSELY.—HOUSE.—Building pump house and attendant's bungalow, at Soughley-lane, near Wortley, for the C.B. Works Engineer, Doncaster-road. Deposit £3.

NOVEMBER 17.—BIRKENSHAW.—LIGHTING.—Erection of electric lighting in 22 houses on the housing site in Old-lane, for the U.D.C. N. I. Clerk to the Council.

NOVEMBER 17.—EAST BARNET.—CENTRE.—Instruction centre at Victoria-road C.C. Girls' for the Herts C.C. Lt.-Col. A. Ernest, B. County Surveyor and Architect, County Survey Office, Hatfield. Deposit £1 1s.

NOVEMBER 17.—NEWCASTLE-ON-TYNE.—PLUMBERS' AND SMITHS' WORK.—In the Newcastle-district, for H.M.O.W. Contracts Branch, H. Works, King Charles-street, London, S.W.1. Deposit 10s. 6d.

NOVEMBER 17.—PLYMOUTH.—EXTENSION.—Central Police Offices, for the C.B. J. W. Borough Engineer and Surveyor. Deposit £2.

NOVEMBER 17.—THURNESE.—HEATING.—Heating apparatus at Thurnese new school, for the West Riding E.C. Education Department, County Hall, Wakefield.

NOVEMBER 18.—HEMSWORTH.—RENOVATING.—terior of the Children's Home, Barnsley-road, B.G. W. T. Lynam, Guardians' Offices, Hems-worth near Pontefract.

NOVEMBER 18.—LEIGH-ON-SEA.—ERECTION.—Office and Telephone Exchange. The Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s., payable to the Commissioners.

NOVEMBER 18.—LONDON.—HEATING.—Replacement of the central heating and hot-water service at the St. Andrew's Hospital, Devons-road, Bow, for the B.G. Consulting Engineer. Deposit £1.

NOVEMBER 18.—MANCHESTER.—SCHOOL.—Erection of the Newton Heath Technical School, for the E.C. P. M. Heath, Town Clerk. Deposit £2 2s.

NOVEMBER 18.—ROCHDALE.—HOUSES.—Fifty houses on the Clarke's-lane estate, or the C.B. Morgan, Borough Surveyor. Deposit £2 2s.

NOVEMBER 18.—ROCHDALE.—SHELTER.—Temporary shelter in the Butts, for the C.B. Borough Engineer and Surveyor. Deposit £2 2s.

NOVEMBER 19.—MIDDLESBROUGH.—EXTENSION.—The Head Post Office, for the Contracts Branch Office of Works, King Charles-street, S.W.1. £1 1s., payable to the Commissioners.

***NOVEMBER 20.—BROMLEY, KENT.—DWELLING ACCOMMODATION.**—Construction of dwelling accommodation over the Central Fire Station, Church-road, Orpington, for the R.D.C. Council's Survey Park House, Bromley. Deposit £1 1s.

NOVEMBER 20.—CHIPPENHAM.—EXTENSION.—Boys' office accommodation at the district school the Governors. P. R. Jones, Clerk to the Governors.

NOVEMBER 20.—HOLYWOOD.—RESTORATION.—Hollywood ex-R.I.C. barracks, co. Wicklow, for Commissioners of Public Works. J. J. Healy, Secy. Oifig Oibreach Puibli (Office of Public Works), Atha Cliath. Deposit £1.

***NOVEMBER 20.—IPSWICH.—NURSES' HOME.**—Erection of a Nurses' Home for 57 nurses at St. Andrew's Hospital, Melton, for the Visiting Committee, East Suffolk County Council. Brown & B. architects, 9, Arcade-street, Ipswich. Deposit £1.

NOVEMBER 20.—LONDON.—HALL.—Hall for the Committee. H. R. Mosely, Hon. Secy. for the Committee.

***NOVEMBER 21.—BEXHILL.—HOUSES.**—Erection of 24 houses in London-road, for the Corporation, Ball, A.M.Inst.-E.C. Town Hall. Deposit £1 1s.

NOVEMBER 21.—HURROGATE.—ROOM.—Parade at the West Riding Police Station, for the C.C. Platts, A.R.I.B.A., County Architect, County Hall, Wakefield.

NOVEMBER 21.—STAINFORTH.—STATION.—Station at Stainforth, near Doncaster, for the West Riding C.C. P. O. Platts, A.R.I.B.A., County Architect, County Hall, Wakefield.

NOVEMBER 23.—CLUTTON.—HOUSES.—Ten houses at Farrington Gurney, for the R.D.C. Mr. Hawker, architect, Council Houses, Temple Cloud. Deposit £1 1s.

NOVEMBER 23.—CLUTTON.—HOUSES.—Twelve houses at Chew Magna, for the R.D.C. Mr. Hawker, architect, Council Houses, Temple Cloud. Deposit £1 1s.

NOVEMBER 23.—**Epping.**—**COTTAGES.**—Plans and elevations and approximate prices required for the construction of (1) a terrace of six cottages, and (2) a pair of detached cottages for the U.D.C. G. J. Reed, Epping.

NOVEMBER 23.—**Sunderland.**—**SCHOOLS.**—Secondary school on the Barnes estate, Durham-road, for the V. & T. R. Milburn, architects, 19, Fawcett-street, Sunderland. Deposit £5.

NOVEMBER 24.—**Malden.**—**HOUSES.**—Twenty-four new dwellings, for the R.D.C. Wm. Almond, Malden and Surveyor.

NOVEMBER 26.—**Epping.**—**HOUSES.**—Erection of houses for the Epping R.D.C. Messrs. Tooley & F.R.I.B.A., architects, Backhurst Hill, Essex.

NOVEMBER 26.—**Stamford.**—**HOUSES.**—Twenty-two new houses on the New Cross-road housing site, for the Borough Engineer. Deposit £3 3s.

NOVEMBER 28.—**Wakefield.**—**HOUSE.**—Garage and outbuildings for the West Riding C.C. Architect, Wakefield.

NOVEMBER 30.—**Wandsworth, S.W. 18.**—**BATH, &c.**—Erection of a new swimming bath and appurtenant buildings in connection therewith, on the High-road, S.W. 15, for the Borough Engineer. Deposit £2 2s.

NOVEMBER 30.—**High-road, S.W. 17.**—**Deposit £2 2s.**

NOVEMBER 30.—**Millerston.**—**HOUSES.**—Fifty-two houses for the Lanarkshire C.C. Jas. A. Miller, District Clerk, 15, West George-street, Glasgow.

NOVEMBER 30.—**Wortley.**—**HOUSES.**—Six non-parlour houses at Hagg Stones, Oughtibridge, for the F. Thurlby, Engineer and Surveyor, Grenoside, Sheffield. Deposit £2 2s.

MATERIALS, etc.

NOVEMBER 9.—**Annan.**—**PIPES.**—351 tons of 7 in. cast-iron pipes and special castings, for the Westmorland C.C. Warren & Stuart, engineers, 94, Hope-street, Glasgow. Deposit £2 2s.

NOVEMBER 9.—**Annan.**—**PIPES.**—464 tons of 8 in. cast-iron pipes and special castings, for the Westmorland C.C. Warren & Stuart, engineers, 94, Hope-street, Glasgow. Deposit £2 2s.

NOVEMBER 9.—**Leeds.**—**MATERIALS.**—16,000 tons of broken and screened Craven limestone; also 100,000 tons of clean screened gravel, for the T.C. Geo. A. Sewage Engineer.

NOVEMBER 10.—**Bridlington.**—**MAINS.**—Cast-iron mains and specials:—40 tons of 3 in. internal diameter cast-iron water pipes, 9 ft. long; 35 tons of internal diameter cast-iron water pipes, 9 ft. 2 in. of special pipes, for the T.C. W. Thompson, Engineer, Marton-road.

NOVEMBER 10.—**Leatherhead.**—**PIPES.**—2,000 yards of high-quality glazed stoneware pipes of various sizes for surface water drains, for the U.D.C. S. R. Drake, Leatherhead.

NOVEMBER 10.—**Northfleet.**—**GRANITE.**—1,800 tons of broken granite and 600 tons of 1 in. to 1 in. 6 in. broken granite, for the U.D.C. J. A. Mitchell, District Surveyor.

NOVEMBER 11.—**Dublin.**—**MATERIALS.**—Building materials and timber, castings, electrical fittings, &c., for the United Tramways Co. G. Marshall Harris, 11, Manager, 59, Upper Sackville-street.

NOVEMBER 11.—**Cambridge.**—**MATERIALS.**—Broken granite, basalt, slag and tarred macadam, for the C.C. Peake, County Surveyor, County Hall.

NOVEMBER 12.—**Bristol.**—**MATERIALS.**—Cement, pipes, castings, ironmongery, paints, lead pipes, plumber's sundries for the T.C. City Engineer, Bristol. Deposit 10s.

NOVEMBER 12.—**Dublin.**—**MATERIALS.**—Various slates, including cement, slates, bricks and tiles, for the Northern Railway (Ireland). J. R. Stephens, 17, Amiens-street Station.

NOVEMBER 12.—**Wellington (New Zealand).**—**PIPES.**—1 in., 6 in. and 8 in. cast-iron pipes, bends, sluice fire plugs, fire plug tees and risers, sluice valve boxes, tapered collars and hydrant balls, for the Department of Overseas Trade (Room 50), 35, Queen-street, London, S.W. 1.

NOVEMBER 13.—**London.**—**MATERIALS.**—For (1) artion, (2) cement, (3) granite (broken), (4) plumb-rs, and (5) tarring roads, for the Wandsworth C.C. D. A. Nicholl, Town Clerk, Council House, Wandsworth, S.W. 18.

NOVEMBER 14.—**Lewes.**—**MATERIALS.**—Granite, binding gravel, 1 in. limestone chippings, and tarred macadam, for the East Sussex C.C. Wood, County Surveyor.

NOVEMBER 16.—**West Hartlepool.**—**MATERIALS.**—14th and road materials, sewer pipes, metal slates, Portland cement, and disinfectants, for the Francis Durkin, Borough Engineer.

NOVEMBER 17.—**London.**—**MATERIALS.**—For (1) bridges, comprising 74 spans of from 4 ft. to 12 ft., weight 1,216 tons approximately, and 84 plates for girders, weight 7 tons approximately; (2) material, M.S. angles, flats, rounds, squares, &c., 1,161 tons approximately, for the Madras Southern Railway Rly. Co. Directors, 25, Abchurch Lane, London, E.C. 4.

NOVEMBER 17.—**Norfolk.**—**MATERIALS.**—Tar spray and bituminous materials, tarred slag macadam, for the C.C. S. H. Warren, County Surveyor, Queen-street Chambers, 9, Queen-street, Norwich.

NOVEMBER 18.—**Manchester.**—**MATERIALS.**—Buff sand, for the Newton Heath Technical School, E.C. P. M. Heath, Town Clerk. Deposit £2 2s.

NOVEMBER 23.—**West Sussex.**—**MATERIALS.**—For open granite, quartzite, or other approved stone (chippings); also tarred macadam; (2) picked surmounts and pit flints, and washed shingle or sand for surface tar treatment; also binding material for the C.C. H. W. Bowen, County Surveyor, Surveyor's Office, Southgate House, Chichester.

NOVEMBER 23.—**West Sussex.**—**TAR.**—200,000 gallons for the C.C. H. W. Bowen, County Surveyor, Surveyor's Office, Southgate House, Chichester.

ENGINEERING, IRON AND STEEL.

NOVEMBER 9.—**Manchester.**—**WIDENING.**—Of the bridge at Crescent-road, Crumpsall, over the L.M. & S. Rly., for the T.C. City Engineer. Deposit £2 2s.

NOVEMBER 10.—**Port Talbot.**—**DRIVING.**—Pile driving and ferro-concrete foundations to a gasholder at the Aberavon Gas Works, for the T.C. A. J. Bond, Gas Engineer, Port Talbot.

NOVEMBER 12.—**Rockbeare.**—**BRIDGE.**—Reinforced concrete bridge of 22 ft. span and approach roads at Rockbeare, near Exeter, for the Devon C.C. F. E. Simpson, County Surveyor, 21, Southernhay West, Exeter. Deposit £5 5s.

NOVEMBER 12.—**Sheffield.**—**WIDENING.**—Reconstruction and widening of bridge over the Sheffield and Tinsley Canal at Shirland-lane, near Attercliffe-road, for the T.C. Improvement Surveyor. Deposit £5.

NOVEMBER 13.—**London.**—**STEELWORK.**—For (1) steelwork for bridges, and (2) C.I. pipes and valves, for the South Indian Railway Co. A. Muirhead, Managing Director, 91, Petty France, S.W.

NOVEMBER 16.—**Dodworth.**—**SEWERAGE.**—New sewage disposal works, comprising detritus pits, No. 2 Dortmund tanks, No. 2 percolating bacterial filter beds, humus tanks, mud-drying beds, and other appurtenant works, for the U.D.C. W. H. Radford & Son, engineers, Albion Chambers, King-street, Nottingham. Deposit £2 2s.

NOVEMBER 16.—**Loughborough.**—**WIDENING.**—Reconstruction and widening of the bridge over the Wood Brook, Bridge-street, for the T.C. W. Granger, Borough Surveyor. Deposit £2 2s.

NOVEMBER 16.—**Worthing.**—**RESERVOIRS.**—Construction of two covered reinforced concrete reservoirs each of 500,000 gallons capacity, for the T.C. T. & C. Hawksley, civil engineers, 34, Old Queen-street, Westminster, S.W. 1. Deposit £3 3s.

NOVEMBER 17.—**Manchester.**—**BRIDGE.**—Bridge, carrying road No. 49 over the L.M. & S. Rly., Didsbury, for the T.C. City Engineer. Deposit £3 3s.

NOVEMBER 18.—**Rochdale.**—**RECONSTRUCTION.**—Of Town Mill bridge to reinforced concrete, for the C.B. Borough Engineer.

NOVEMBER 19.—**Hammersmith.**—**IRON FENCING.**—Supply and erection of wrought-iron unclimbable fencing at Ravenscourt Park, Hammersmith, for the L.C.C. Chief Officer (Parks Dept.), The County Hall, Westminster Bridge, S.E. 1.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 19.—**Maesglas.**—**SHED.**—Carriage shed and other works at Ebbs Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W. 2. Deposit £2 2s.

NOVEMBER 11.—**Erpingham.**—**EXTENSION.**—Of the sewerage system at Mundesley, for the R.D.C. A. H. Plowright, Engineer. Deposit £3 3s.

NOVEMBER 11.—**Plymouth.**—**SEWER.**—9 in. sewer on the North Houndscombe building estate. D. Ward & Son, 11, The Crescent.

NOVEMBER 11.—**Plymouth.**—**MAKING-UP.**—Of a new road, to be known as Hillcrest-avenue, situate on the North Houndscombe building estate. D. Ward & Son, 11, The Crescent.

NOVEMBER 12.—**Birkenhead.**—**ROAD.**—Making and completing of Highpark-road and a portion of Park Hill-road, for the C.B. C. Brownridge, Borough Engineer and Surveyor. Deposit 10s.

NOVEMBER 12.—**Carsethorn.**—**PIPES.**—Supplying and laying about 4 miles of iron water pipes from 4 in. diameter downward, and other relative work, for the special water supply district of Carsethorn, for the Stewartry of Kirkcudbright C.C. G. Thomson & Son, engineers, 164, Bath-street, Glasgow. Deposit £2 2s.

NOVEMBER 12.—**Hendon.**—**SEWERS.**—Widening and improvement of Hale-lane, Edgware, including the construction of 12 in. and 9 in. soil and surface-water sewers (approximately 400 yards of 12 in. and 170 yards of 9 in. soil sewer; 740 yards of 9 in. surface-water sewer); 1,500 yards of kerbing; 6,750 yards super. tarmacadam roadway; and 750 yards super. of tar-paved footways, for the R.D.C. H. W. Rackham, engineer and surveyor. Deposit £3 3s.

NOVEMBER 12.—**London.**—**FENCING.**—Supply and erection of wrought-iron fencing to enclose swings in gymnasias at certain parks and open spaces under its control, for the L.C.C. Chief Officer, Parks Department, County Hall, Westminster Bridge, S.E. 1.

NOVEMBER 12.—**Middlesbrough.**—**SUBWAYS.**—Construction of about 1,000 lin. yds. of subways and trenches in concrete and brickwork, for heating and hot-water mains at the Institution, for the Holgate Committee. D. Balfour & Son, civil engineers, 3, St. Nicholas Buildings, Newcastle-on-Tyne. Deposit £5.

NOVEMBER 13.—**Southampton.**—**PIPES.**—Laying and jointing about 36,800 yds. of 15 in. to 6 in. diameter C.I. spigot and socket pipes along various routes in the Corporation's area of supply, for the T.C. Waterworks Engineer, 21, Shirley-road. Deposit £3 3s.

NOVEMBER 14.—**Eccles.**—**RECONSTRUCTION.**—For (1) rock asphalt on concrete—Hampton-street, George-street, Henry-street, Leigh-street, Bright-road, Mather-road, Gorton-street, Boardman-street, Canal-side, Green-street; (2) tarred macadam—Andover-street, Franklin-street, South King-street, Bridgewater-street, Alexandra-road, Aldred-street, John William-street, Green-street; and (3) granite sets on concrete—Wellington-road, Cawdor-street, Trafford-road, Peel-street and Albert-street, for the T.C. Borough Surveyor. Deposit £2 2s. each.

NOVEMBER 14.—**Kingston-upon-Thames.**—**ROADS AND SEWERS.**—Construction of roads and sewers on housing estate, for the Corporation. Harold A. Winsor, Town Clerk, Municipal Offices, Kingston.

NOVEMBER 16.—**Haslemere.**—**SEWERS.**—For (1) 320 lineal yards of 6 in. diameter salt glazed stoneware pipe sewer, together with inspection chambers and manholes, on the Graywood-road, and from the rear of premises on the west side of Graywood-road; and (2) 423 lineal yards of 6 in. diameter salt glazed stoneware pipe sewer, and 335 yards lineal of 4 in. diameter salt glazed stoneware pipe drain, together with inspection chambers, manholes, &c., on Courts Hill-road, for the U.D.C. C. A. Best, Surveyor. Deposit £1 1s.

NOVEMBER 17.—**Lees.**—**MAKING-UP.**—Dixon-street, Smith-street, Back Dunham-street, between Smith-street and Dixon-street, Back Dunham-street behind Nos. 2-8, Dunham-street, Back Stamford-road behind Nos. 119-123, Stamford-road and Back Huddersfield-road behind Nos. 14-22, Huddersfield-road, all off Dunham-street, for the U.D.C. W. J. Lomax, engineer. 11, Fold-street, Bolton. Deposit £5.

NOVEMBER 17.—**London.**—**MAKING-UP.**—For (a) Hanbury-road, (b) Hollington-road, (c) Honeysett-road, (d) Rosebery-avenue, (e) Thackeray-avenue, for the Tottenham U.D.C. Engineer.

NOVEMBER 18.—**Rochdale.**—**SEWERS.**—Construction of roads and sewers on the Clarke's-lane estate, for the C.B. Borough Surveyor.

NOVEMBER 19.—**Carlisle.**—**PIPING.**—Low-pressure cast-iron piping for condensing water system, for the T.C. Chas. W. Salt, City Electrical Engineer. Deposit £1 1s.

NOVEMBER 20.—**Bognor.**—**ROAD.**—3,000 square yards of reinforced concrete carriageway, together with surface water sewer, gullies, &c., required in the reconstruction of Sudley-road, for the U.D.C. J. Draper, Surveyor. Deposit £1.

NOVEMBER 21.—**Scalby.**—**SEWERS.**—1,150 yards of 12 in. diameter and 1,900 yards of 9 in. diameter stonework pipe sewers, together with manholes, lampholes, and other incidental works, for the U.D.C. J. A. Iveson, engineer, 14, Dean-road, Scarborough.

Competitions.

(See Competition News, page 658.)

Auction Sales, Tenders, etc.

NOVEMBER 9.—**Evesham.**—E. G. Righton & Son will sell, at the King's Head Hotel, freehold property belonging to the late Mr. Harry Cooper. Auctioneers, Evesham, Alcester and Pershore.

NOVEMBER 10.—**Eltham.**—F. H. Clark will sell, at Timber Yard, Cider-path, Well Hall-road, huts, timber and building materials. Auctioneer as above.

NOVEMBER 10.—**Hackney.**—E. Joseph Hibbard & Sons will sell, without reserve, by order of Messrs. Haggis & Sons, preparatory to disposal of premises at Nos. 3 and 5, Pembury-place, Hackney Downs Station, E.5, stock of timber, piano parts, &c. Auctioneers, 15, Newington-green, Islington, N. 16.

NOVEMBER 10.—Kent.—Hampton & Sons will sell, with vacant possession, at the St. James' Estate Rooms, 20, St. James'-square, S.W.1, freehold residential property between Chislehurst and Bromley, 300 ft. up, on dry gravel soil, the property known as "Mavelstone," Bromley, Kent, consisting of about 3½ acres; also two sites of about 2 and 6½ acres, respectively. Auctioneers, 20, St. James'-square S.W.1.

NOVEMBER 10 AND 11.—Hammersmith, W.6.—Henry Butcher & Co. will sell without reserve, at 237, Hammersmith-road, Hammersmith, W.6, woodworking machinery, builder's plant and stock, &c. Auctioneers, 63 and 64, Chancery-lane, W.C.2.

NOVEMBER 11.—Hull.—Mr. W. H. Pickard, F.A.I., without reserve, timber (about 800 standards), in the City Hotel, Lowgate, at 11 a.m. precisely. Auctioneer, Hull.

NOVEMBER 11.—Merton.—Messrs. Vervard & Yates will sell, at High-street, useful building plant and materials, &c. Auctioneers, 365, Norwood-road, S.E. 27.

NOVEMBER 12.—Osterley.—Tyser, Greenwood & Co. will sell, by order of Executors, five plots of land on the south side of the Great West-road. Auctioneers, 386, High-road, Chiswick, W.4.

NOVEMBER 14.—Leiston.—Stanford, Broom & Stanford will sell, at the Brickworks, Leiston, Suffolk, brickmaking effects. Auctioneers, Halesworth, Suffolk.

NOVEMBER 16.—Swaffham.—W. S. Hall & Palmer will sell building materials dismantled from the Old Swaffham Workhouse. Auctioneers, Watton, Norfolk.

NOVEMBER 17.—London, S.W.—Messrs. Vervard & Yates will sell, at 255, Clapham-road, excellent timber and building materials, &c. Auctioneers, 365, Norwood-road, S.E. 27.

NOVEMBER 17.—Surrey.—Messrs. Charles R. Davis & Co. will sell, under a deed of arrangement, by order of the trustee, at Merstham, stock-in-trade, plant, machinery, and rolling stock, &c., of a builder and contractor. Auctioneers, 285, Borough High-street, S.E. 1.

NOVEMBER 17 AND 18.—London, S.W.—F. H. Clark will sell, without reserve, at the Tooting House, Church-lane, Tooting, seasoned timber and building materials. Auctioneers, Railway Wharf, York-road, Wandsworth, S.W., or on the site.

NOVEMBER 18.—Ramsgate.—Messrs. Vervard & Yates will sell, at 1, Chatham-street, excellent timber and building materials. Auctioneers, 365, Norwood-road, S.E. 27.

NOVEMBER 26 AND 27.—Sussex.—Perry & Phillips, in conjunction with Douglas Killick & Co., will sell, on the premises, Maresfield Park (unless previously disposed of), interior and exterior fixtures and fittings, the fabric of the mansion, lead, stonework, &c. Auctioneers, P. & P., High-street, Bridgnorth, D. K. & Co., High street, Uckfield.

Public Appointments.

NOVEMBER 9.—Bradford.—Resident Clerk of Works required from January 1, 1926, to supervise the erection of new Freemasons' Hall, Manningham-lane, Bradford. H. B. Bower, 9, St. Andrew's-place, Bradford.

NOVEMBER 9.—Leicester.—Two Assistants, also a Junior Architectural Assistant, required by the City Council in the Town-Planning Department. E. George Maybey, Surveyor, Town Hall.

NOVEMBER 9.—Watford.—Clerk of Works in connection with the erection of 96 houses required by the Corporation. W. W. Newman, Borough Engineer, Municipal Offices.

NOVEMBER 10.—Brighton.—Architectural Assistant, experienced in Housing and Estate Development required by the B.C. David Edwards, Borough Engineer, Brighton.

NOVEMBER 14.—London, S.W. 1.—ARCHITECTURAL DRAUGHTSMAN.—Required in the Mines Department. Under Secretary for Mines, Establishment Branch, Mines Department, Dean Stanley-street, London, S.W. 1.

NOVEMBER 14.—Oldham.—CLERK OF WORKS.—Required by the B.C. in connection with concrete foundations and piling for the new generating station. Borough Electrical Engineer, Greenhill Electricity Offices.

NOVEMBER 16.—Kingston-on-Thames.—Fully-qualified Quantity Surveyor required to prepare Bills of Quantities in connection with erection of a Nurses' Home and other buildings at the Hospital, Kingston Hill, for the Guardians. W. Taylor, Clerk, Union Offices.

NOVEMBER 17.—Enfield.—Clerk of Works in connection with about 150 cottages required by the U.D.C. H. R. Crabb, M.Inst.C.E., Engineer and Surveyor, Public Offices, Enfield.

NOVEMBER 17.—Glamorgan.—(1) Temporary Assistant Quantity Surveyor, (2) temporary junior Assistant Quantity Surveyor required by the Education Committee. W. James Nash, F.R.I.B.A., County Architect, Midland Bank Chambers, Neath.

NOVEMBER 17.—Notis.—GENERAL MANAGER.—Required by the Mansfield Woodhouse U.D.C. to supervise the erection of houses by direct labour. A. Mayhall, Clerk, Council Offices, Station-street, Mansfield Woodhouse.

NOVEMBER 19.—Clacton.—Temporary Architectural Assistant required by the U.D.C. Geo. T. Lewis, Clerk, Council Offices, Clacton-on-Sea.

NOVEMBER 21.—Kingston-on-Thames.—QUANTITY SURVEYORS.—Required by the Surrey Education Committee, to work on Commission. The Secretary, county Education Office, Kingston-on-Thames.

No DATE.—Kenya Colony.—Inspectors of Works (2) required by the Government of Kenya Colony, for the Engineering Dept. Uganda Colony, for a tour of twenty to thirty months' service, with possible extension. Crown Agents for the Colonies, 4, Millbank, London, S.W. 1, quoting "M/13768."

THE COMMERCIAL MOTOR EXHIBITION

In our last issue we published particulars of some notable makes of lorries on show at the Commercial Motor Exhibition at Olympia. Below we give some further notes on vehicles which should be of interest to the building and allied trades. The exhibition closes to-morrow, November 7.

The Leyland Exhibit.

The number of Leyland motors on the road to-day is sufficient proof of their worth, and in no branch of industry have they proved so eminently satisfactory as in the building trade. In engine, chassis and body they are alike efficient and reliable. The "P.H.2," which we illustrate, is the goods model of the 5-ton group, and can be fitted with a large variety of goods-carrying bodies. By means of an ample fabric-to-metal clutch a substantial four-cylinder engine drives to a sliding pinion type of four-speed gear-box. The "Leyland Spherical Thrust," which has proved unfailingly successful since its introduction many years ago, is a noteworthy feature of the chassis. A feature of the engine is that accessibility has not been sacrificed to its compact and excrescence-free design, which renders thorough cleaning a rapid and easy operation. Other models of interest include a 4-ton three-way tipper and an 8-tonner fitted with an all-steel tipping body.

Dennis Bros. Exhibit.

Messrs. Dennis Bros., Ltd., are exhibiting several vehicles which should prove of interest to builders and contractors. Among these is the "E" type, low loading, with worm-drive and over-type chassis, the price of which, with a complete equipment of tools and a gear-driven speedometer, is £885. Where stone, girders, or any heavy material is transported in large quantities a lorry of this type is called for. As the height of the platform is only 24 in. above the ground, the number of foot-pounds of work saved is a very large percentage of the total. The wheel-base is 16 ft., a length equal to carrying anything but an "outsized" run of girdering, piping, &c. The tyres are 36 in. by 6 in., straight-sided pneumatics; hand-brakes work independently on the rear wheels, there being six in all.

The Harris & Hassell Exhibit.

Messrs. Harris & Hassell, Ltd., are exhibiting on Stand 2 their "Reo" three-way tipping speed wagon, price £380. This compact, vehicle develops 38 h.p. and carries the useful load of 25 cwt. The side and end-tipping body, operated by Walter's patent worm and screw

tipping gear, is easily manipulated by hand. The bolster frame is fitted behind the driver's canopy for carrying poles, timber, &c. The body is approximately 8 ft. long by 5 ft. 6 in. wide, 1 ft. 6 in. deep, and mounted on angle steel frame; the corners are plated, the uprights welded and reinforced; the bearers are of the sides of elm; the floor is strengthened with steel stays.

Dunlop Tyres Exhibit.

At Stand 227 the Dunlop Rubber Co., Ltd. are showing a representative range of wheels, disc, wire and artillery type. The Dunlop pneumatic tyres are being widely used for commercial vehicles on account of their great resiliency and wear-resisting power, though the ordinary pneumatic and solid tyres still retain a large vogue. The firm has experimented on and improved the latter in regard to possessing non-skid properties and at the same time not losing any of its durability.

On September 22 Mr. John F. Duff, racing his Bentley car at Monthery Speedway, broke the world's 24-hour record at an average speed of 95.02 miles per hour. The total miles covered was 2,280. Dunlop cord tyres were fitted and used throughout the twenty-four hours.

The Leyland and Birmingham Rubber Co., Ltd.

This company is exhibiting three types of well-known "Palatine" tyres—the solid rubber band tyre, guaranteed for 12,000 miles; the "Super," constructed specially for light vans to 2 tons weight, and guaranteed for 10,000 miles; and the large air cushion tyre. Their "Tholite" brake and clutch linings of pure metal asbestos, for motor and general engineering work, are also on view. Another product of interest exhibited on the stall is their sea-wagon and radiating hose. There are also samples of their rubber flooring in pleasing colours and marble patterns.

London Docks Improvements.

The Port of London Authority announce that the Government has now agreed to grant financial assistance for improvement schemes at the Tilbury, West India, and Millwall Docks. The work at Tilbury includes a new entrance lock, 1,000 ft. long, and a new dry dock 750 ft. in length. When the India and Millwall Dock improvements are completed, the largest vessel capable of coming so far up the river will be able to enter the south-west India Dock, the new lock, 550 ft. long and 80 ft. wide, to proceed by means of the passages to be constructed to any part of this system, which comprises a water area of 127 acres.



The "P.H.2" Leyland Lorry.

PROPOSED NEW BUILDINGS & OTHER WORKS*

On these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work, plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.W.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

BARROW.—The R.D.C. propose the erection of bridges over the brook at Cribyn, at a cost of £370.
BIRMINGHAM.—Plans have been approved by the Corporation for a three-story building at Ewham Works, for the use of a key-note, and for 11 houses in Queen's-road, Edgbaston. Spencer.
BIRMINGHAM.—The P.C. are recommending a site in the street-road for the erection of 50 houses.
BIRMINGHAM.—Hampshire E.C. has voted £642 for the erection of Wykeham House as a hostel in connection with the Andover's secondary school.
BIRMINGHAM.—Lancashire E.C. are acquiring premises for purposes of a school clinic.
ESSEX.—The R.D.C. has given sanction to the erection of 100 cottages.
GLoucester.—Lancashire C.C. has decided to spend bridge, at a cost of about £3,000.
GLoucester.—A site is being purchased by the shire E.C. for the erection of a new grammar school.
GLoucester.—Mr. C. F. Moxon, architect, Regent-street, South, has prepared plans for the erection of a school block for women and children at the Beckett and Dispensary, at an estimated cost of about £1,000. The Corporation are taking steps to acquire 35 acres near Pontefract-road for a housing site. Another housing site off Carlton-lane is being acquired. Outbuildings at the central school are to be erected at a cost of £700. The E.C. has decided to alter the B.E. that it is necessary to carry out certain alterations at St. Mary's School.
GLoucester.—Hampshire E.C. has arranged to re-erect the Council school, at a cost of £2,500.
GLoucester.—The L.C.C. recommend that, subject to the approval of the M.H., a site on the Dagenham estate, of Becontree, about half an acre in extent, be sold to the Council of the Baptist Union for the erection of a church.
GLoucester.—Higgins & Co., brewers, Bedford, propose to build an extension to the "Fox and Hounds" house, to plans prepared by Mr. E. H. C. Inskip of Liddington-road.
GLoucester.—The U.D.C. are to make application to the M.H. for sanction to a loan of £32,165 in connection with the erection of 66 houses on the Chilton's-lane estate.
GLoucester.—Land for a housing scheme is to be sold on the Vynor estate and the Borough Engineer is instructed to prepare plans for houses for the classes of tenants. In regard to the development of the Dell estate the Borough Engineer is to prepare plans for flats, with shops on the ground floor, to be obtained for a police station at South Offices for the water department are to be erected, at a cost of £1,500, on the reservoir site. A question of providing an open-air school is under consideration. The Borough Surveyor has requested to prepare plans of Corporation houses to be on the Hoylake-road.
GLoucester.—A new cinema, to seat about 1,500 persons, is to be erected in Stratford-road, Hall Green, as prepared by Mr. H. E. Farmer, F.R.I.B.A. (S. Hickton Farmer & Farmer), 57, Colmore-row, Birmingham.
GLoucester.—The Corporation have decided to retain the services of Mr. E. D. Dennis, architect, Clifton, in connection with the scheme for the erection of 100 houses on land at Hoo Hill. Messrs. Pollard, builders, Central-drive, have purchased land for the Corporation for the erection of 19 houses at Dagers Hall. The Blackpool Co-operative Society have a scheme in hand for erection of premises on Albert-road, Shepherd-street and Station-street. Mr. F. G. Russell proposes to erect a restaurant and shops on a site with frontages to Cornmarket and Bank-street. Messrs. Whitaker, architects, Burley-street, are preparing plans for houses on the Stoneyhill estate for Mr. W. H. A. start is shortly to be made on the site of a new church of St. Mark's, at Layton, which Mr. E. D. Dennis, architect, of Clifton, has prepared the plans. The T.C. are considering a suggestion that the Winter Gardens estate be used as a site for the Blackpool's new hall. The T.C. passed plans: Nine houses, shops and two garages, Park-road, for A. E. H. seven houses and stable, Layton-road, for Mr. Kerfoot; seventeen houses, Sharow-grove, for Mr. & Allen; nine houses, Queen Victoria-road, for F. White.
GLoucester.—The M.H. has held an inquiry into the front of the T.C. to borrow £17,000 for extending the front promenade.
GLoucester.—The Borough Engineer has prepared plans for a ram shelter and sanitary convenience at the junction of Ivy and Chorley Old-roads.
GLoucester.—The U.D.C. are proposing to erect 36 houses on Priory-road. Plans prepared by Halliday, and Agate, architects, 14, John Dalton-street, Manchester.
GLoucester.—The Baths Committee have considered preliminary sketch plans of district baths for Thornton negotiating with the Mental Deficiency Com-

mittee for the transfer of a piece of land abutting upon Thornton-road as a site for the proposed baths. The Corporation has arranged with Mr. J. Bickerdike, of Grove House, Bolton, to erect 200 subsidy houses on the Grove estate. The M.H. has sanctioned a loan of £74,052 for the erection of 166 dwellings on the Lower Grange estate. The L.N.E.R. has agreed to remove the railway bridge carrying Shotcliffe-lane over the disused railway cutting and fill up the cutting to make a roadway. The Heaton (Bradford) Estates Co., Ltd., are to erect fourteen houses in Duchy-drive. Amended plans are to be prepared by the City Architect for tramway loading barriers and shelters in Forster-square, at a cost of £2,000. The City Engineer has been asked to secure a site for the erection of new buildings, for the Thornton Grammar School. The Board of Control has promised the provision of additional accommodation for mentally deficient on the Westwood estate.
BRIGHTON.—The T.C. recommend that the modified sketch plans, now submitted, for the erection of a Junior Mixed school on the Hodshrove Meadow site, involving an increase in the estimated cost of the school from £12,310 to £13,660, be forwarded to the B.E. for approval, and that the Town Clerk make application to the M.H. for the loan. Details of the proposed open market has now been submitted to the Open Market Sub-Committee. The scheme prepared by the Borough Surveyor provides for the erection of 54 stalls. The cost is estimated to be £15,465. A big property purchase has been made within the past few days by the Council. It comprises the well-known range of drapery shops, seven in number, known as the Bon Marche, Western-road. The price is £55,000. Plans and estimates are being prepared for the proposed tidal bathing pool, which is estimated to cost £65,000. Including this scheme and the £100,000 Aquarium reconstruction scheme, the borough surveyor's department has now in hand works estimated to cost £571,210.
BURNLEY.—The C.B. is to apply to the M.H. for sanction to borrow £20,000 for the purpose of erecting shops and business premises on the land belonging to the Corporation in St. James's-street between Bethesda-street and Brown-street.
BURNLEY.—Lancashire E.C. are seeking consent to borrow £11,600 for the erection of an elementary school.
BURNLEY.—The T.C. has resolved to apply to the M.H. for permission to raise a loan of £7,000 to purchase Peak Hydro, and to effect necessary alterations and repairs for use.
CAULSHEAD.—Lancashire E.C. are purchasing a site at a cost of £1,250, for the erection of an elementary school.
CHADLE.—A new elementary school is to be provided in the Long-lane area.
CHESTERFIELD.—The E.C. are to provide three additional classrooms at Hasland Eyre-street Council school. The B.E. has given provisional approval to the scheme for the proposed school in Highfield-lane. The Corporation are negotiating with the Miners' Welfare Committee regarding a site for baths at Hasland Green. Wagstaff. Sons have been instructed to prepare plans for houses on the Racecourse estate. The Borough Engineer is to prepare plans for further development of the Highfield Hall housing estate.
CHORLEY.—The Borough Engineer has been asked to prepare a scheme for 76 houses on a site near Brindley-street. The E.C. suggest the provision of open-air classroom accommodation at the proposed Highfield Council school. The new gas showrooms are to be equipped at a cost of £300. The managers have prepared a scheme of improvements at the Parochial School.
CLANFIELD.—A site is being acquired by the Hampshire E.C. for the erection of an elementary school.
COALVILLE.—The U.D.C. has received sanction from the M.H. for a loan of £46,000 for the new housing scheme.
COULSDON.—Compulsory powers are to be sought by the Coulsdon and Purley U.D.C. for the purchase of a site in Brighton-road, Purley, for the erection of public offices and a fire station. A committee has been asked to secure a site for a depot. Plans are to be prepared for a ferro-concrete bridge at Foxley Hill-road.
CROMPTON.—The U.D.C. have approved plans for the erection of a new cotton warehouse for Messrs. John Clegg, Ltd., Sandy-lane Mills.
DAGENHAM.—The School Buildings and Supply Committee of the Essex E.C. have approved plans submitted by the County Architect for two new schools at an estimated cost of £29,000 each. The Special Sub-Committee recommended that schools Nos. 4 and 5 be proceeded with at once by direct labour under the supervision of the County Architect.
DERBY.—The C.C. have submitted plans to the B.E. for the erection of a temporary school, Langwith-road, Shirebrook. Plans are in the hands of the Surveyor for a proposed secondary school at Eckington.
DUKINFIELD.—The T.C. propose to enter forthwith into contracts for the purchase of land and erection of the houses to be erected in Zetland, Combermere and Spencer-streets.
EARSDON.—The U.D.C. is to erect 300 houses on the Earsdon Park site, at an estimated cost of £397 each.
EASTBOURNE.—A large arcade of shops and flats is to be erected in Victoria-place. Plans have been pre-

pared by North, Robin & Wilsdon, 35-39, Maddox-street, W.1.
EAST HAM.—The B.C. passed plans: Five houses, Flanders-road, for A. & H. Stokes; 18 houses, Little Ilford-lane and Trevelyan-avenue, for Herapath Bros.; 34 lock-up garages, near Broadway Cinema, High-street South, for F. W. Buen.
EAST SUSSEX.—The C.C. has decided to erect fifteen cottages for police and roadmen in various districts.
EWGARE.—Land adjoining the council school has been purchased by the Middlesex E.C. for an enlargement scheme.
EXETER.—The T.C. approved the report of the Governors of the Royal Albert Memorial with reference to a proposed new public library and mummies room in the Rougemont Grounds, at an estimated cost of £45,000, towards which the Carnegie Trustees would make an increased grant of £18,700. As a memorial to the late Provost Hobson the Church of the Sacred Heart is to be completed by the building of a tower. Plans have been prepared by Messrs. Stokes & Drysdale, F.R.I.B.A., 17, Buckingham-street, Adelphi, W.C.2.
FAIRSWORTH.—Lancashire E.C. are seeking sanction for a loan of £10,300 for proposed extensions at the Manor-street Council school.
FARNBOROUGH.—Hampshire E.C. are to adapt the Convent School into a secondary school.
FINELOW.—Northamptonshire C.C. has decided to carry out a scheme for widening the bridge and approaches, at a cost of £4,000.
FOLESHILL.—The M.H. has given sanction to the R.D.C. for a loan of £11,232 for an advance to Messrs. Merry & Cunningham, Ltd., for houses. Plans passed: 16 houses, Wheelwright's-lane, for A. Ward.
FOLKESTONE.—Mr. J. L. S. Dahl, F.R.I.B.A., Radnor Chambers, Chertsey-place, is preparing designs for the extension of the Royal Victoria Hospital. The Governors propose to spend £12,000 on providing 24 beds and staff accommodation.
GOSWALD.—The T.C. has purchased a site for the erection of houses under an owner-occupier scheme.
GOLBORNE.—The U.D.C. are to invite tenders for the erection of 20 houses to the plans of Mr. J. Ford, architect.
GOLCAR.—The M.H. has sanctioned erection of a number of houses at an estimated total cost of £17,556.
GUILDFORD.—The E.C. are obtaining a site at Slyfield for the erection of an elementary school. The Committee are negotiating for nine acres in Bell Fields-road for the erection of a new school.
HAILEAM.—The R.D.C. are applying for sanction to borrow £4,100 for the building of the eight houses in South-road.
HANWELL.—An elementary school for 400 children is to be erected by the Middlesex E.C. in Boston-road.
HARTLEPOOL.—The T.C. is considering the erection of a further 50 houses.
HEBBEN BRIDGE.—The U.D.C. has considered the question of a proposed public library.
HENDON.—The M.H. has held an inquiry with reference to the construction of the section of the Watford by-pass road connecting Hendon Central Station and Colindale-lane, via Queen's-road, by the D.C.
HETTON.—The U.D.C. has received sanction from the M.H. to the borrowing of the sum of £7,490 for the erection of 19 houses at Easington-lane. The architect has submitted to the Housing Committee the lay-out of the Hetton site, and plans of houses of A2 and A3 bungalow type for approval.
KENILWORTH.—The U.D.C. has received the sanction of the M.H. to erect 26 houses on the Cemetery-road site.
KINGSTON.—The T.C. has received from the M.H. sanction for the borrowing of £25,500 for the erection of 50 houses.
KIRKHAM.—A scheme is on foot for the enlargement of St. Joseph's Catholic church at Wesham.
LANCASTER.—The Corporation are to widen Ripley bridge over the I.M.S. railway, at a cost of £9,000.
LEICESTER.—The Corporation have agreed with Major Winstanley for the purchase of the Braunstone estate, comprising 1,064 acres, including the hall and park, for £15,000.
LIXDEN.—The Colchester E.C. has decided to purchase 34 acres of land as a site, for the proposed new school.
LEYTONSTONE.—On the recommendation of the School Buildings and Supply Committee of the Essex E.C. it was agreed that the proposal for the erection of a gymnasium at the County High School for Girls to be included in the building programme for 1926-27.
LIMEHURST.—The R.D.C. has decided to construct a bridge over the river Medlock, at a cost of £1,900.
LITTLEBOROUGH.—Rockley House is to be adapted at a cost of £355, by the Lancashire C.C. as a welfare centre.
LIVERPOOL.—Plans have been prepared for a new tramway waiting room to be erected at the junction of Smithdown-road, Eastfield, and Penny-lane. Funds are being raised for the extension of the Hall for women students, Holy-road, Fairfield.
LONDON.—The L.C.C. recommend that repairs to the zinc flat over the art room at Harper-street L.C.C. school be carried out at £140.
LONDON (BALHAM).—The L.C.C. recommend that a room for the head of the evening institute and a lobby be formed at the Fircroft-road L.C.C. school, at a cost of £164 sanctioned for the purpose; and that tenders be invited for the work.
LONDON (CAMBERWELL).—The L.C.C. has purchased 62, 64, 66 and 68, Lomond-grove, for the rebuilding of Lomond-grove school.
LONDON (KENSINGTON).—The B.C. has received a scheme in response to an invitation for the acquisition and demolition of large blocks of property in the borough and the erection of improved dwellings on the

*also our List of Contracts, Competitions, etc.

cleared areas. The capital expenditure involved is given as £294,500.

LONDON (LEWISHAM).—The B.C. has authorised the District Valuer to enter into negotiations for the acquisition of the 43 acres of land in Grove Park which has been suggested suitable for the purpose of a housing site.

LONDON (PADDINGTON).—The L.C.C. recommend that the plans submitted by the managers of the St. John's temporary school, Titchborne-row, for the reconstruction of the boys' offices, be approved.

LONDON (PECKHAM).—The L.C.C. recommend that, subject to the approval of the B.E., expenditure not exceeding £182 be sanctioned for the adaptation of the disused chemical laboratory at Collier-road L.C.C. school, to form two classrooms, one to accommodate 24 myopic children and one to accommodate 20 myopic children.

LONDON (SOUTHWARK).—The B.C. has considered as to the possible utilisation of a site in Beresford-street for housing purposes. The site is owned by the L.C.C. The L.C.C. will dispose of the site for housing purposes for £1,800.—The L.C.C. Education Committee recommend that £375 be spent on improvements to Holland-street Council school.

LONDON (STAMFORD HILL).—The L.C.C. recommend that the work of extending the electric lighting at Stamford Hill stores depot be executed by direct labour.

LONDON (WESTMINSTER).—The Middlesex C.C. are to provide increased seating accommodation, at a cost of £350, at the Council Chamber of the Guildhall.

LUTON.—The T.C. has approved plans by the Borough Engineer for the erection of the dressing rooms, &c., on the Russell Rise playing field site, at an estimated cost of £535.—The Council has obtained property in Church-street, for improvements to the Highways depot.—Plans passed: J. T. Garrett, 12 houses, Farley-hill; W. D. Dyer, 10 houses, Argyl-avenue.

LYTHAM ST. ANNES.—A tram shelter is to be erected at the junction of Headroomgate and Highbury-road. The Corporation is to apply for sanction to borrow £2,000 for the provision of medical baths to be included in the Public Baths scheme.

MANCHESTER.—The Corporation Housing Committee are seeking sanction for 1,000 more houses.

MATLOCK.—The M.H. has sanctioned the application of the U.D.C. for a loan of £13,268 to construct 22 houses on the Lyn Holmes site. The clerk reported that the Ministry had also sanctioned a further loan of £1,375 for granting subsidies.

NEELSON.—Plans have been approved for the erection of a mixing room and store room at premises in Peter-street, for J. Spencer, and for a showroom and workshop in Charles-street, for Mr. W. Wood.

NORTHAMPTON.—The Northants C.C. has voted an expenditure of £500 on the provision of premises as temporary headquarters for the county library.—The governors of the Northampton Town School has prepared a scheme for the erection of a block of buildings.—The Northants. C.C. are considering the provision of another secondary school for boys.

NOTTINGHAM.—The Markets and Fairs Committee of the Corporation are contemplating the construction of a covered market in King Edward-street.

OLDHAM.—The C.B. passed plans for 32 houses in Lyndhurst-road, for F. Lord.

PORTSHEAD.—The R.D.C. are to erect 18 houses in Bristol-road, at an estimated cost of £500 each, and six houses in Woodill-avenue, at a cost of £600 each. Sanction has been received from the M.H.

PORTSMOUTH.—The T.C. is to buy White Hart Barracks from the Government for £4,500 for conversion into flats.

REGATE.—The Borough Engineer has prepared plans for houses on the Lodge estate, and tenders are to be invited. A housing site is being acquired at South Park.

ROTHERHAM.—Application is to be made to the M.H. for sanction to borrow £36,652, being the estimated cost of the erection of 66 houses on the East Dean estate. Plans have been approved for the new Cattle Market in Corporation-street.

ROWLEY REGIS.—The U.D.C. resolved to approve the lay-out of the site at Wheland-place and King-street, Cradley Heath, prepared by the surveyor, providing for the erection of 20 houses.—It was decided to obtain prices for the erection of four cast-iron houses at Hill-road, Tivdale.

ROXTON.—The Industrial Co-operative Society has purchased adjoining property to their establishments with a view to extensions.

RUXFORD.—The local branch of the British Legion has obtained land in York-street for the erection of their new club premises. The plans have been prepared by Mr. J. Wilding, the District Surveyor.

RUSHLEN.—Northants. C.C. are to adapt the North End infants' school as a practical instruction centre and laboratory.

ST. HELENS.—The Council has approved a resolution of the Water Committee which directed the Engineer to report on the proposal to establish slipper baths and washhouses at three centres in the borough. It is proposed to borrow £2,600 for the purchase of land in Rainford-road for an open-air school. A tender for the erection of an additional 50 houses at Windlehurst has been accepted subject to the approval of the M.H. It has been agreed that 100 steel houses shall be erected on sites to be selected.

SALFORD.—The C.B. recommend that application be made to the M.H. for sanction to subsidise a further 100 houses, and sanction to borrow £10,000 for the work.—The Council propose to borrow £1,318 to cover the cost of the erection of a steel-framed shed at the Central Car Depot, Pendleton, to be used for garaging motor omnibuses.

SHEFFIELD.—Work on the plans for the new memorial buildings and public hall, which are to cost approximately £300,000, is now in hand. The architect is Mr. E. Vincent Harris, F.R.I.B.A., 29, St. James's-square, S.W.1.—The E.C. has approved of plans for the erection of a new elementary school at

Stocksbridge. The school will accommodate 350 children. The estimated cost of the building is £35,000.

SHOREHAM.—The Shoreham and Lancing Sea Defence Commissioners are to raise the river bank from Old Shoreham Bridge to the railway bridge.

STAFFORD.—The T.C. has approved, on the recommendation of the Housing Committee, tenders for the erection of 30 municipal houses on the Littleworth estate, between Tixall and Weston roads.

STOURBRIDGE.—The Highways and Improvements Committee has passed plans for a sub-station at the corner of Foster-street and Birmingham-street for the Midland Electric Corporation for Power Distribution, Ltd.

STRABANE.—The R.D.C. has decided to have the Warden Bridge, Legfordum, rebuilt.

STRETFORD.—Lancashire E.C. are seeking sanction to borrow £64,000 for the erection of a boys' secondary school.

SUNDERLAND.—A deep water quay costing £250,000 is to be constructed in Sunderland harbour, if a Government grant can be obtained.

SWANSEA.—The Borough Engineer and Surveyor has been instructed to carry out repairs to the public convenience at Little Wind-street.—The B.E. has approved the establishment of an Orthopaedic Clinic in Dynevor-place.—Application is to be made to the Joint Asylum Committee with a view to that Committee considering the question of proceeding with the erection of the asylum at Swansea.—The C.B. are proposing to erect 112 houses on the Morriston housing site.—The Council has approved the erection of 100 houses in the Penderly Ward.—The Borough Engineer and Surveyor is to prepare plans for a new public convenience at the corner of Bridge-street, Prince of Wales-road, and Neath-road, adjoining the Aberdyerthi Bridge, at Hafod, at a cost of £1,050.—A convenience is to be erected at Phillips-parade to plans prepared by the Borough Engineer. Application is also to be made to the M.H. for sanction to borrow the monies.—The C.B. recommend that, subject to the approval of the B.E., the Borough Architect prepare plans to substitute water closets for the present bucket system, at the estimated cost of £550, at Peniel Green Council school.

TAVISTOCK.—The Council are asking for money necessary to increase the accommodation of Tavistock Hospital. The scheme will cost £8,000.

TROONE.—The C.C. propose to erect two elementary schools, one at Moordens and a boys' school facing North Eastern-road.

TONBRIDGE.—The M.H. has approved of the R.D.C.'s housing schemes, which are for two at Paddock Wood, eight at Capel, fourteen at Pembury, ten at Hadlow, and three at Hildenborough. They also approved of the tenders of £915 5s. for two at Brenchley, and £3,621 10s. for eight at Capel.

TOTTENHAM.—The U.D.C. are to improve the Moselle brook, at a cost of £1,600, by the construction of a new invert and side walls.

TYNEMOUTH.—The Housing Committee has recommended the architect to prepare a plan of land at Cullercoats, and also a plan for the provision of fifty parlour houses, together with a detailed estimate of the total cost.

UXBRIDGE.—The Middlesex E.C. has decided to erect an elementary school for 400 children, and also to use the buildings of the County School, the Greenway, for elementary school purposes.

WALLOP.—A site has been purchased by the Hampshire E.C. for the erection of an elementary school.

WALTHAMSTOW.—The Essex C.C. propose to erect a swimming bath at the County High School for Girls.

WANDSWORTH.—The L.C.C. recommend the borrowing by the B.C. of £24,875 and £1,624 for paving new streets.

WARRINGTON.—The Golf Club has adopted the plans submitted by A. Warberton, architect, 2, Bold-street, for the erection of the new Club-house at Appleton, which provides accommodation for 300 members, and is estimated to cost from £4,500 to £5,000.—Funds are being raised by the members of St. Oswald's Church, Winwick, for the renewal of the heating apparatus, the installation of electric light, and the repair of the roofs, and stonework of the church generally, the estimated cost of the work is £2,600.

WEMBLEY.—Notice is given by the Middlesex E.C. to provide an elementary school at North Wembley for 400 children.

WHITEHAVEN.—The E.C. are to purchase the infirmary property in Howgill-street for conversion into a central school.—Plans have been approved for new conveniences at the baths, Duke-street, and the reconstruction of the convenience adjoining the market hall.—The Whitehaven Aged Miners' Homes Committee are to erect twenty-five houses at Arrowthwaite.

WIMBLEDON.—The Corporation are to obtain further land for the site selected for the new swimming bath.

WORKSOP.—The U.D.C. has decided to lend £40,000 to the Wigan Coal & Iron Co. for the building of houses at Manton.

YIEWSLEY (MIDDLESEX).—An £11,000 Wesleyan mission hall is to be built.

YORK.—The Streets and Buildings Committee of the City Council recommend that the British Reinforced Concrete Company be asked to prepare a scheme for a new ferro-concrete bridge across the River Ouse for submission to the M.T.

TRADE NEWS

Messrs. E. Parkinson (London), Ltd., contractors and slate and tile merchants, removed to larger premises at Nos. 189 and 191, High-road, South Tottenham, N.15. A number of their advertising campaign they are sending out humorous monthly calendars. These will be sent regularly on application to the above address.

Mr. Burnup, of Messrs. Incell & Silcock, Calcutta, arrives in London on November 6, and is desirous of arranging agencies for sanitary plumbing, and general engineering goods in India and Burma. Reference can be made to the Hong Kong and Shanghai Banking Corporation and the Imperial Bank of India, interviews arranged at the office of the Local Agents, Messrs. S. C. Clark & Co., Ltd., 1, Abchurch-lane, E.C. 4.

Bucks Road Resurfacing

Under the supervision of Mr. E. W. M. Inst. C.E., County Surveyor, Messrs. W. Shepherd & Sons, Ltd., are carrying out the resurfacing of a section of the American Wycombe road, making use of their asphalt.

Woodworkers' Tools and Machines.

We have received a catalogue (No. 25) from Messrs. R. Melhuish, Ltd., of 1, Abchurch-lane, Holborn-circus, E.C. 4. It is most complete—there are 1,100 illustrations; every tool for woodworkers of the latest pattern embodied in the list. The cost is 2s., but the amount is refunded on receipt of the first order of 10s. or more.

Hollow Chalk Bricks.

Hollow chalk bricks are now being manufactured that can be sold for 30s. per thousand. Such bricks were used in the building of quarters in France during the war. They have been carried out which show that such bricks will stand an average crushing weight of 2,100 lb. It is claimed that buildings constructed of this material are warm, dry, clean, and that in France they show no signs of deterioration and kept out the weather with walls 2½ in. thick. The bricks are manufactured at any chalk quarry.

"Harco" Chimneys and Cows.

Those who have had trouble with chimneys know to the full how capricious and obstinate they can be, and may perhaps come to the conclusion that the only remedy is to rebuild the whole flue—a costly operation. Messrs. G. A. Harvey & Co. Ltd., claim to have solved the difficulty by the introduction of a patent double-action smoke ejector, "The Harco," which, they say, has proved efficient in preventing down-draught and increasing draught in troublesome chimneys. The Harco is mounted on a steel frame supporting a centre bearing and oil reservoir, in which a specially tempered steel spindle is fitted. The interior framework offers no hindrance to sweep in cleaning the flue, but at the same time protects the spindle, oil reservoir and bearing from damage during this operation.

Carving.

To emphasise a door, mantelpiece or other feature, as a centre of interest in itself, or in contrast to plain surfaces, the value of carving is universally appreciated. Its function, being to attract attention, it is obviously better to dispense with it altogether than to have bad workmanship; the execution must be entrusted to a trained craftsman to produce a result that will satisfy the discriminating eye. The illustrations in the brochure were received from John Daymond & Son, together with the list of architects for whom they have executed such work, are a sufficient guarantee of their capabilities in this branch of craftsmanship. Messrs. Daymond & Son, carving in stone, marble, granite, alabaster, plaster and wood, and execute work in allied crafts as wood inlay, scale modelling, etc. The firm's offices are in Edward-street, Victoria-square, S.W.1.

Obituary.

The death has taken place at the age of 67 of Mr. Thomas James Pritchard, head of James Pritchard & Son, builders, of Finsbury.

PRICES CURRENT OF MATERIALS (contd.)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
15 oz. fourths ..	3d.	32 oz. fourths ..	8d.
16 " thirds	4d.	32 " thirds ..	9d.
21 " fourths	4d.	Obscured Sheet, 15 oz.	4d.
21 " thirds	5d.	Fluted 15oz. 6d.	21 " 5d.
26 " fourths	5d.	En'led 15oz. 5d.	21 oz 7d.
26 " thirds	7d.		

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
1/2 Rolled plate	4d.		
1/4 Rough rolled	5d.		
1/4 Figured Rolled, Baltic, Oceanic, Arctic, Stip- polyte, and small and large Flemish white..	6d.		
1/4 Ditto	9d.		
1/4 Rolled Sheet	6d.		
1/4 White Rolled Cathedral	5d.		
1/4 Tinted do.	7d.		

Cast Plate is same price as rough rolled.

VARNISHES, &c. Per gallon.

	£ s. d.
Oak Varnish	0 14 0
Fine ditto	0 18 0
Fine Copal	0 18 0
Pale Copal	1 0 0
Pale Copal Carriage	1 12 0
Best Ditto	0 13 0
Floor Varnish	0 13 0
Fine Pale Paper	1 2 6
Fine Copal Cabinet	1 0 6
Fine Copal Flattening	0 13 0
Hard Drying Oak	0 19 0
Fine Hard Drying Oak	1 0 0
Fine Copal Varnish	1 2 0
Pale ditto	1 12 0
Best ditto	0 12 6
Best Japan Gold Size	0 10 0
Best Black Japan	0 12 0
Oak and Mahogany Stain (water)	0 7 6
Brunswick Black	0 14 6
Berlin Black	1 5 0
Knotting (patent)	0 17 0
French and Brush Polish	0 9 0
Liquid Dryers in Terebine	0 7 0
Cuirass Black Enamel	

THE PUBLIC WORKS EXHIBITION

The biennial "Public Works, Roads and Transport Congress and Exhibition" is to be held in the Royal Agricultural Hall, London, from November 19 to 26. Stress is laid on the fact that this is primarily a Congress, to which delegates from all over the kingdom are invited to hear papers read on developments in the public services, and to take part in the discussions which follow. At the same time an Exhibition is held, at which the principal engineering and other manufacturing firms of the country display the latest improvements in every form of machinery in use in the public services, so that delegates find the Congress of the greatest educational value in both the theory and practice of their professional calling.

The arrangements for the forthcoming Congress and Exhibition are now complete. Two sessions will be held on every day of the Congress, the first at 11.30 in the morning, and the second at 2.30 in the afternoon. The chairmen who have consented to preside at these sessions are all known as high authorities on the papers to be read. The subjects of these papers will be as wide in range as the activities of the delegates demand, but special attention will be given to road work and sewage problems. On the opening day, papers will be read on "The Partial Purification of Sewage by Activated Sludge"; "Activated Sludge Experiments at Bradford"; "Sewage Disposal in Rural Areas both from an Engineering and Economic Aspect"; and "Sludge Disposal." On roads and road engineering, papers will be read on "The Use of Tar in the Construction of Roadways"; "Road Corrugation"; "Repair of Roads against Tramway Tracks"; "Rural Roads"; "Mains in Public Highways"; and "The Strengthening and Widening of Bridges." Other sessions will be devoted to papers and discussion on Town Planning, Small Holdings, Housing, Gas Supply, Electricity Supply, Water Supply, and Refuse Collection and Disposal. Some 60,000 square ft. of space has already been applied for and allotted, so that the display of machinery, plant and materials will be larger and more comprehensive than ever before.

THE SCOTTISH BUILDERS

NEW BUILDINGS IN SCOTLAND

Aberdeen.—EXTENSIONS.—The Town Council has agreed to borrow on mortgage the sum of £125,000, under the authority of the Aberdeen Corporation Order, 1922, to meet capital expenditure already, or about to be, incurred, on behalf of the tramway undertaking. For the construction of buildings, £49,600 is to be spent and the rest on various works.

Edinburgh.—Plans have been prepared by Mr. W. J. Walker Todd (Messrs. Dick, Peddie & Walker Todd), 8, Albany-place, Edinburgh, for the adaptation of Colinton House into an annexe for the Murchison Castle School.

Edinburgh.—VILLAS.—The Dean of Guild Court has passed plans for the erection of 38 villas at Wardie, Granton-road, for J. W. Rough, per plans by G. Simpson, architect.

Edinburgh.—VARIOUS.—The Dean of Guild Court has granted the City Corporation permission to erect various types of houses of three, four, and five apartments each. A number of firms are concerned in the scheme, and the prices of the houses are to be from £390 to £509. Two houses designed by Principal Laurie, of Edinburgh, to cost £380 each, are also to be erected, as well as an Atholl house. There will be five blocks of houses in all.

Dundee.—GYMNASIUM.—It is proposed to proceed with the rebuilding of the gymnasium in Ward-road, the cost being £2,500. Mr. R. Gibson is the architect.

Greenock.—ALTERATIONS.—The Dean of Guild Court has passed plans for alterations to the premises at the corner of Sugarhouse-lane and Hamilton-street, for Messrs. Boots, chemists.

Currie.—CONVENIENCE.—The Calder D.C. of the Midlothian C.C. has decided to erect a public convenience at an estimated cost of £163 14s. 6d.

Bathgate.—WATER SCHEME.—The West Lothian County Council has sanctioned the negotiating of a loan of £362,000 for the purposes of a new enlarged water scheme for the Bathgate district of the county.

Lanarkshire.—HOUSES.—The Middle District Committee of the County Council decided to erect an additional 1,600 throughout various parts of the county new houses will be built at Strathaven, Blannochside, Viewpark, Uddingston, hill, Holytown, New Stevenston, Chapelhall, Newarthill, Cambuslang, New Torbothie, Netherthorn, Larkhall, Dalsert, Burn, East Kilbride, Busby, Meikle Edd, Ferniegair, Glenmavis, Caldercruix, Gl. Calderboig, Carmyle, Baillieston, Broom Bargeddie, Shotts (Dykehead), Harthill Stonehouse.

Perth.—WATER SUPPLY.—The Perth Council has received a report that in connection with the proposed water scheme from Loch Ordie amount to £218.

Cupar.—STEEL HOUSES.—The Town Council has fixed upon a site within the burgh for fifty steel houses which they have ordered.

Greenock.—HOUSES.—During the year were passed at the Dean of Guild Court dwellings, the great majority being for under the Corporation building schemes estimated value of new buildings, additional alterations authorised by the Court amount to £256,067, compared with an estimated of £139,200 in the previous year.

Calder.—STEEL HOUSES.—The D.C. Midlothian C.C. has agreed to build 6 houses on various sites, and also apply for new Government subsidy.

Steel Houses Deadlock.

An effort has been made at a private meeting in Glasgow by representatives of the authorities, Messrs. J. & G. Weir, Catholic the Federation of Building Trade Operatives remove the existing deadlock in regard to erection of steel houses. The position was discussed, and proposals submitted by parties engaged in the dispute, but no agreement it is understood, was reached. The difficulty in the negotiations appears to be question of piece-work and payment by which Messrs. Weir declare to be an essential part of their scheme for steel house building.

BUILDING TRADE WAGES IN SCOTLAND

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for any error that may occur.

	Masons.	Brick-layers.	Car-penters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Brick-layers' Labourers.
Aberdeen	1/8	1/8 1/2	1/8	1/8	1/8	1/3	1/7	10 1/2
Aldrie	1/8	1/8	1/8	1/8	1/8	1/3	1/7 1/2	1 1/2
Alexandria	1/8	1/8	1/8	1/8	1/8	1/3	1/7 1/2	1 1/2
Arbroath	1/7	1/7	1/7	1/7 1/2	1/7	1/3	1/6 1/2	1 1/2
Ayr	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1 1/2
Bathgate	1/8	1/8	1/8	1/8 1/2	1/8	1/3	1/6 1/2	1 1/2
Blairstown	1/7	1/7	1/7	1/7 1/2	1/7	1/3	1/6 1/2	1 1/2
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1 1/2
Coatbridge	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1 1/2
Dumfries	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/3 1/2	1/6 1/2	1 1/2
Dundee	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1 1/2
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1 1/2
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1 1/2
Falkirk	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/3	1/6 1/2	1 1/2
Fort William	1/6	1/6	1/6	1/6	1/6	1/3	1/6 1/2	1 1/2
Glasgow	1/7	1/7	1/7	1/7	1/7	1/3	1/6 1/2	1 1/2
Greenock	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1 1/2
Hamilton	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1 1/2
Hawick	1/7	1/7	1/7	1/7 1/2	1/7	1/3	1/6 1/2	1 1/2
Helensburgh	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1 1/2
Inverness	1/5	1/5	1/5	1/5	1/5	1/3	1/6 1/2	1 1/2
Kilmarnock	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1 1/2
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1 1/2
Kirkwall	1/5	1/5	1/5	1/5	1/5	1/3	1/6 1/2	1 1/2
Lanark	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1 1/2
Leith	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1 1/2
Motherwell	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1 1/2
Perth	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1 1/2
Stirling	1/3	1/3	1/3	1/3	1/3	1/3	1/6 1/2	1 1/2
Strathgordon	1/3-1/2	1/3-1/2	1/3	1/3	1/3	1/3	1/6 1/2	1 1/2
Wishaw	1/8	1/8	1/8	1/8	1/8	1/3	1/6 1/2	1 1/2

The information given in this table is copyright. The rates of wages in the various towns in Scotland are given on page 679.

CURRENT PRICES FOR BUILDING WORK IN LONDON

EXCAVATOR.				CARPENTER AND JOINER—continued.			
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep....				FRAMES.			
per yard cube	11	0		Deal wrot moulded and rebated.....	per foot cube	14	0
dd if in clay.....	"	1	0	Plain deal jamb linings framed	per ft. sup.	1/7	1/8
dd for every additional depth of 6 ft.....	"	0	6	Deal shelves and bearers.....	"	1/4	1/6
Blanking and strutting to trenches.....	per foot super	0	5	Add if cross-tongued	"	2d.	2d.
Do. to sides of excavation, including shoring	"	1	0	STAIRCASES.			
CONCRETOR.				Deal treads and risers in and	1"	1 1/2"	1 1/2"
Portland cement concrete in foundation 1 to 6..	per yard cube	32	0	including rough brackets.....	2/1	2/4	2/9
dd if in underpinning in short lengths.....	"	7	0	Deal strings wrot on both			
dd if in floors 6 in. thick.....	"	3	3	sides and framed.....	1/8	2/-	2/2
dd if in beams.....	"	3	9		2/8	2/8	—
dd if aggregate 1:2:4	"	10	0				
dd for hoisting not exceeding 10 ft. beyond the	"						
first 10 ft.....	"	2	6	Housings for steps and risers.....	each	0	11
BRICKLAYER.				Deal balusters, 1 in. x 1 1/4 in.....	per ft. run	0	9
Reduced brickwork in lime mortar and Fletton	per rod	30	0	Mahogany handrail: average 3 in. x 3 in....	"	6	0
bricks	"	7	10	Add if ramped.....	"	11	10
dd if in stocks.....	"	22	0	Add if wreathed	"	23	9
dd if in Staffordshire blues.....	"	1	10	FIXING ONLY IRONMONGERY (INCLUDING SCREWS).			
dd if in Portland cement and sand.....	"	1	10	6 in. barrel bolts.....	8 1/2 d.	Rim locks	2/-
FACINGS.				Sash fasteners	11 1/2 d.	Mortice locks.....	4/6
Extra for facing in English or Flemish bond for				Casement fasteners	1/5	Patent spring hinges and	
every 10s. per 1,000 over the price of the				Casement stays.....	1/2	letting into floor and	
common bricks.....	per ft. super	0	0	Cupboard locks.....	1/5	making good.....	19/-
POINTING.				FOUNDER AND SMITH.			
Flat flat struck or weathered joint.....	"	0	0	Rolled steel joists	per cwt.	16	3
ARCHES.				Plain compound girders	"	19	0
Extra only to the price of ordinary brickwork:—				Do. stanchions	"	21	9
air external in half brick rings.....	"	0	0	In roof work.....	"	27	6
red in stocks.....	"	0	1	RAIN-WATER GOODS.			
ribbed and gauged jointed in putty camber or	"	0	6	Half-round plain rebated joints.. ft. run	3"	4"	5"
segmental	"	0	6	Ogee Do. Do. ..	1/6	1/9	2/-
SUNDRIES.				Rain-water pipes with ears	1/9	2/-	2/6
Damp course in double course of slates breaking				Extra for shoes and bends.....	each	4/4	5/11
joint and bedded in Portland cement.....	"	0	1	Do. stopped ends	1/11	2/4 1/2	3/7
Setting ordinary register grates and stoves....	each	1	0	Do. nozzles for inlets	2/2	2/7	3/10
Setting kitcheners, including forming flues, &c.,	"	4	15	PLUMBER.			
with all necessary fire bricks	"	15	0	Milled lead and laying in flashings and gutters....	per cwt.	65	0
ASPHALTER.				Do. Do. in flats	"	64	0
Half-inch horizontal damp course	per yard sup.	4	3	Extra labour and solder in coated cesspools.....	each	6	9
Three-quarter-inch vertical damp course	"	8	6	Welf joint	per ft. run	0	6
inch on flats in two thicknesses.....	"	6	3	Soldered seam	"	1	6
Angel fillet	per foot run	0	3	Copper nailing	"	0	6
Painting and fillet 6 in. high.....	"	1	2	DRAWN LEAD.			
MASON.				Drawn lead waste per ft. run	1/2	1/9	2/-
Work stone templates fixed	per foot cube	13	0	Do. service	1/8	2/2	2/7
Work stone sills fixed	"	22	0	Do. soil	—	—	—
Path stone and all labour fixed	"	10	6	Bends in lead pipe	each	—	—
Portland stone fixed.....	"	20	0	Soldered stop ends	1 2	1/8	2/1
SLATER.				Red lead joints	11d.	1/-	1/3
Velsh 16 in. x 8 in. 3 in. lap, including nails	per square	72	9	Wiped soldered joints	2 10	3/6	4/-
Do. 20 in. x 10 in. Do. Do.	"	80	9	Lead traps and clean-			
Do. 24 in. x 12 in. Do. Do.	"	90	0	ing screws ..	—	—	—
CARPENTER AND JOINER.				Bib cocks and joints ..	6/4	9/7	15/4
Timber framed in plates.....	per foot cube	5	0	Stop cocks and joints ..	15/4	17/2	25/8
Do. joists	"	5	6	PLASTERER.			
Do. roofs, floors, and partitions	"	6	0	Render, float and set in lime and hair	per yard sup.	2	4
Do. trusses	"	8	6	Do. Do. Sirapite	"	2	7
Deal rough close boarding	per sq.	35/6	40/-	Do. Do. Keen's	"	3	7
Flat centering for concrete floor, in-	"	45/-	72/-	Add sawn lathing	"	1	7
cluding struts or hangers	"	50	0	Add metal lathing	"	2	6
Do. to beams	per ft. sup.	1	0	Portland cement screed	"	2	2
Centres for arches	"	1	6	Do. plain face	"	3	3
Butter boards and bearers	"	1	0	Mouldings in plaster	per 1 girth	0	1 1/2
FLOORING.				One-and-a-half granolithic pavings	per yard sup.	5	9
Deal-edges shot	per sq.	44/6	53/-	GLAZIER.			
Do. tongued and grooved	"	49/-	57/6	21 oz. sheet plain	per foot sup.	0	8 1/2
Do. matchings	"	45/-	51/-	26 oz. Do.	"	1	0
Moulded skirtings, including back-				Obscured sheet	"	1	1
ings and grounds	per ft. sup.	1/6	1/9	1/2 in. rolled plate	"	0	9
SASHES AND FRAMES.				1/2 in. rough rolled or cast plate.....	"	0	10 1/2
One-and-a-half moulded sashes or casements	per foot super.	1	10	1/2 in. wired cast plate	"	1	4
Two Do. Do. Do.	"	2	1	PAINTER.			
dd for fitting and fixing	"	0	3	Preparing and distempering, 2 coats	per yard sup.	0	9
Deal-cased frames with 1 in. inner and outer				Knottting and priming	"	0	7
linings, 1 1/2 in. pulley stiles tongued to linings,				Plain painting, 1 coat	"	0	9
hard wood sills with 2 in. moulded sashes in				Do. 2 coats	"	1	2
squares, double hung, double hung with pul-				Do. 3 coats	"	1	9
leys, lines and weights: average size	"	3	9	Do. 4 coats	"	2	4
DOORS.				Graining	"	2	3
Two-panel square framed	per ft. sup.	2/1	2/4	Varnishing twice	"	1	9
Four-panel Do.	"	2/5	2/8	Sizing	"	0	3
Two-panel moulded both sides	"	2/8	2/11	Flattening	"	0	7
Four-panel Do. Do.	"	2/11	3/2	Enamel	"	1	1
		2/11	3/2	Wax polishing	per foot sup.	0	6
				French polishing	"	1	2
				Preparing for and hanging paper	per piece, 2/- to 4/-		

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1 1/2% should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

NEW COMPANIES

THE particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 and 118, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

CROSSWAYS LAND CO., LTD. (207,451). Registered July 23. The Nurseries, Merstham, Surrey. Manufacturers of an dealers in sand, cement, lime, plasters, whiting, clay, gravel, &c. Nominal capital, £200.

NIGERIAN PORTLAND CEMENT SYNDICATE LTD. (207,866). Registered August 13. Burnett-avenue, 151, High-street, Hull. Manufacturers of and dealers in cement, limes, &c.

CONCRETE HOUSES, LTD. (207,895). Registered August 15. Adelphi-terrace House, Adelphi, W.C.2. To acquire certain patents and rights relating to construction of buildings from E. W. Roberts. Nominal capital, £10,000.

CONCRETE MANUFACTURING CO. (BATTERSEA), LTD. (207,931). Registered August 17. 317, High Holborn, W.C.1. Concrete manufacturers. Nominal capital, £1,000.

JAMES CROSBY & SONS, LTD. (208,484). Registered September 19. Hazel Mount, 426, Buxton-road, Stockport. Builder and building contractor. Nominal capital, £1,000.

HURST BUILDERS, LTD. (208,448). Registered September 17. Builders, decorators and general contractors, &c. Nominal capital, £100.

J. L. INGRAM & SONS, LTD. (208,391). Registered September 14. Builders, decorators, &c. Nominal capital, £500.

THOMAS HILES & SONS, LTD. (208,650). Registered September 26. Builders, contractors, painters, &c.

A. BRAITHWAITE & CO., LTD. (208,835). Registered October 6. 4, Albion-street, Leeds. Builders, contractors, painters, decorators, &c. Nominal capital, £20,000.

HENRY L. COOPER & CO., LTD. (208,777). Registered October 3. Stone and granite merchants. Nominal capital, £10,000.

SHERIFF & CO., LTD. (208,796). Registered October 3. 444, Gipsy-lane, Leicester. Builder and contractor. Nominal capital, £2,500.

C. H. HOUGHTON & CO., LTD. (208,725). Registered October 1. 23, Park-road, Cheriton, Kent. Builder and contractor. Nominal capital, £2,000.

BANKS & WOOD, LTD. (208,882). Registered October 8. 4, Dudley-road, Tunbridge Wells. Timber and builders' merchants. Nominal capital, £10,000.

USWORTH BRICKS, LTD. (209,159). Registered October 21. Manufacturers of bricks, tiles, slabs, &c. Nominal capital, £12,000.

FAIROAK BRICK CO., LTD. (209,143). Registered October 21. Manufacturers of and dealers in bricks, tiles, &c. Nominal capital, £3,600.

CURRALL, LEWIS & MARTIN, LTD. (209,141). Registered October 21. 83, Colmore-row, Birmingham. General contractors, constructional engineers, &c. Nominal capital, £7,500.

SADLER BROS. (BUILDERS), LTD. (209,222). Registered October 24. Byker Village, Newcastle-on-Tyne. Builders and contractors. Nominal capital, £1,000.

T. F. NASH, LTD. (209,262). Registered October 26. Kenton Park Estate Office, Kenton-road, Kenton, Middlesex. Builders and contractors, &c. Nominal capital, £25,000.

ALDRED, WILLIAMS & CO., LTD. (209,086). Registered October 19. Builders' merchants, engineers, &c. Nominal capital, £100.

MONO CONCRETE COMPANY, LTD. (209,107). Registered October 19. Manufacturers of concrete pipes and articles. Nominal capital, £8,000.

BRADSHAW (NEWCASTLE), 1925, LTD. (209,090). Registered October 19. 2, Palmerston-avenue, Walker Gate, Newcastle-on-Tyne. Builders, contractors, &c. Nominal capital, £1,000.

BRITISH GYPSUM CO., LTD. (209,091). Registered October 19. Manufacturers of and dealers in cement, plaster of Paris and bricks, quarry and mine masters, clay workers, &c. Nominal capital, £2,000.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes accepted. † Denotes provisionally accepted.

‡ Denotes recommended for acceptance.

§ Denotes accepted subject to modification.

ACCRINGTON.—Eighty-one houses of the "A" type and 31 houses of the "B" type on the Dunnyshop Farm site, for the Corporation. Mr. F. J. Newton, F.R.I.B.A., Borough Surveyor:—

*J. & J. H. Boothman, Brierfield.... £54,690

ACTON.—Construction of bridges to carry the road over the L.M. & S. Rly. and Southern Junction Rly. and the G.W. Rly. between Acton and Uxbridge, for the Middlesex C.C.:—

J. Garratt & Son	£39,952	0	0
W. & C. French	38,369	14	4
L. J. Spreight, Ltd.	37,875	1	3
Yorkshire Hennebique Contracting Co., Ltd.	35,590	0	0
Holloway Bros., Ltd.	34,196	0	0
Grays Ferro-Concrete Co.	31,853	0	0
Sir Lindsay Parkinson & Co.	31,778	0	0
*A. Jackaman & Sons, Ltd. ..	30,514	0	0

BECKENHAM.—Alterations at Electricity Show-rooms, for the U.D.C.:—

*J. Elliman & Son, Ltd. £136 19

BILLINGHAM.—For (1) 46 parlour, and (2) 26 non-parlour type houses, on the Chilton's-lane site, for the U.D.C.:—

*J. McCrston, North Ormesby (1) £448 each; (2) £432 each

BIRMINGHAM.—Installation of electric light at the new extension of the Nurses' Home at the Selly Oak Hospital, for the B.G. Mr. N. W. Greenway, consulting engineer, Lloyds Bank Chambers, New-street:—

*Thomas Glover, Birmingham..... £1,070

BIRMINGHAM.—Pavilion and two isolation blocks at the City Hospital, Little Bromwich, for the T.C.:—

*C. Bryant & Sons, Small Heath £28,970
(Subject to M.H. approval.)

BOSTON (LINGS).—Additions to the Grammar School, for the Holland E.C. Messrs. Scooter & Gamble, architects, Bank-street Chambers, Lincoln:—

Thos. Bow, Nottingham ...	£25,400	0	0
Bosworth & Lowe, Nottingham	22,797	0	0
Adam Eastwood & Sons,			
Warsop	18,975	0	0
Jackson & Oates, Goole ..	18,422	0	0
Wallhead Bros., Ruskington ..	18,200	0	0
Stapleton & Co., Spalding ..	17,587	0	0
*W. & H. H. Vamplew, Boston	17,188	17	6

BOURNEMOUTH.—Enlargement of the Malmesbury Park Council School, for the C.B. Borough Engineer:—

*Jenkins & Sons, Ltd. £3,765

BOURNEMOUTH.—New department at Stourfield Council School, for the C.B.:—

*J. Drewett & Son £11,370
(Subject to M.H. approval.)

BOURNEMOUTH.—Stone-faced concrete retaining wall at the lower end of Sea-road, Boscombe, for the C.B.:—

*F. A. Grigg & Sons..... £895

BRIGHTON.—Constructing a store room in the roof of the garage adjacent to the new switchroom at the North-road works, for the T.C.:—

*Field & Cox..... £239

BUCKFASTLEIGH.—Alteration to business premises, for the Co-operative Society. Messrs. Bridgman & Bridgman, F.A.R.I.B.A., architects, 9, Fleet-street, Torquay:—

Harris Bros., Exmouth	£2,350	0	0
Love & Boyer, Totnes	1,370	10	1
F. J. Badcock, Ashburton ..	1,355	0	0
*The Torquay Building Co.,			
Torquay	1,172	10	2

BURNHAM-ON-SEA.—Twenty-two houses, for the U.D.C.:—

*Clare's Glastonbury Construction Co. £10,152

BUXTON.—Internal painting and decorating of the large hall, staircase (Market-place entrance), and the magistrates' retiring room at the Town Hall, for the T.C.:—

*Stevens & Son, Buxton.

CHORLEY.—Tiling work on the houses on the Preston-road, for the T.C.:—

*J. W. Lee & Co

CHORLEY.—Pavilion at Astley Park, for the T.C.:—

*J. W. Lee & Co.

CONGLETON.—Extensions to the Mill for Messrs. W. A. Lowe & Co., Ltd. Mr. J. H. Walters, L.R.I.B.A., architect, Moody Chambers:—

*T. & E. Cooke, Congleton..... £700

CONGLETON.—Alterations to the furnishing department, for the Congleton Co-operative Society, Ltd. Mr. J. H. Walters, L.R.I.B.A., architect, Moody Chambers:—

Co-op. Wholesale Society, Ltd.,			
Building Depart., Manchester ..	£679	0	
T. & E. Cooke, Congleton	545	0	
*A. J. & G. Worrall, Congleton ..	448	18	

CROYDON.—Foundations for a No. 5 alternator, at the generating works, for the C.

J. Crewdson	£5,268	15
Sir J. Payne Galloway Co., Ltd.	4,963	6
Foundation Co., Ltd.	4,870	19
L. J. Speight, Ltd.	4,398	8
Yorkshire Hennebique Contracting Co., Ltd.	3,795	19
*Peter Lind & Co.	3,465	0

CULMSTOCK.—Houses, for the R.D.C.:—

*T. Tremlett, Culmstock £525 e

EASTBOURNE.—Alteration at Manor Ho

*J. Bodle Ltd

EASTBOURNE.—Extension of motor 'bu

for the T.C.:—

A. E. Watson & Co.	£16
W. R. Andrews & Co.	16
J. Bodle, Ltd.	14
J. W. Woolnough, Ltd.	14
Peerless, Dennis & Co.	13
*Miller & Selves	13

EXETER.—Pavilion at the Heavitree Re

Ground, for the T.C.:—

*Soper & Ayres.....

EXETER.—For (1) Six houses, and (

houses, on the Buddle-lane estate, for the

(1) *Loman & Sons £476 e

(2) *O. Bond

FROME.—For 18 houses at Faulkland, 4 at

St. Philip, 16 at Coleford, 6 at Nunney, for the

Quantities by Mr. J. A. Beynon, Nunnery-ro

*Coles Bros., Bath..... £22

GLASGOW.—Reinforced concrete linage i

mond Park, for the T.C.:—

*W. T. Aikenhead

HAMBLETON.—Construction of bridge to

Carr Bridge, for Lancs C.C.:—

*James Horrocks, Westhoughton £3,895

HARTLEPOOL.—Provision of new slate

over boys' and girls' dressing rooms attach

gymnasium, at the Henry Smith secondary

for the Durham C.C. Mr. F. Willey, F.R.

County Architect, 34, Old Elvet, Durham:—

†R. J. Marshall, Hartlepool..... £222

HAVERTON HILL.—Alterations and a

also rebuilding the east boundary wall

Council school, for the Durham C.C. Mr. F.

F.R.I.B.A., County Architect, 34, Old Elv

ham:—

†W. Pearson & Son, West Hartlepool.. £4

IRTHLINGBOROUGH.—Ten houses,

U.D.C.:—

*W. Thompson, Irbthlingborough..... £4

LEAMSIDE.—For (1) sub-structure; (2)

structure; and (3) tilers' work at the new

school, for the Durham C.C. Mr. F. Willey, F.R.

County Architect, 34, Old Elvet, Durham:—

†(1) J. W. White, Sunderland .. £4,519 0

†(2) G. W. Lazenby & Co. 5,758 0

†(3) J. Hewitson, Newcastle-on-

Tyne

LONDON.—Interior painting and cleaning

St. Mary Abbot's school, Kensington, for the

nors and the L.C.C.:—

*W. Nash

*F. Brown, Ltd.....

LONDON.—Play shed in the play

boys' department at Enfield-road sc

for the L.C.C.:—

W. Simms

W. M. Brand

H. C. Horswill

C. P. Roberts & Co., Ltd.

G. Barker

Whitbys, Ltd.

S. Shaw

J. C. Mather

G. Keetch

*R. Woollaston & Co.

(All of London.)

The architect's comparable estimate is £1

LONDON.—Additional office accommodation

infants' department at Rhyl-street school, St. I

for the L.C.C.:—

Hooper & Hooper

B. Colley & Sons, Ltd.

Pitcher Construction Co., Ltd.

Whitbys, Ltd.

J. D. Hobson, Ltd.

F. Cottrell, Ltd.

J. Marsland & Sons, Ltd.

C. P. Roberts & Co., Ltd.

Stevens & Sons

*C. H. Boyd & Son, Ltd.

(All of London.)

The architect's comparable estimate is £30

NDON.—Alteration in connection with the
sion of further accommodation for patients at
laternity Home, for the Greenwich B.C. :—

Night & Handiside	£1,298 0
fred. & T. Thorne	1,219 0
E. E. Everitt & Sons, Ltd.	1,197 0
Jouglasse Halse & Co., Ltd.	1,149 0
Wm. Bailey & Sons (Builders), Ltd.	1,140 0
Thomas & Edge	1,138 0
I. Groves & Son	1,095 0
E. Dyke	1,080 0
N. Mills & Sons (Builders and Contractors), Ltd.	1,059 0
W. Bickerton	930 10

(All of London.)

NDON.—Stabling and messroom accommodation
e Wood-lane Depot, for the Kensington B.C.
ugh Engineer :—

Wheeler Bros.	£675
D. & H. Head, Ltd.	647
P. Williams, Ltd.	635
N. Watts, Ltd.	618
Colley & Sons, Ltd.	587
W. Heath, Ltd.	560

NDON.—Construction of an aqueduct, consisting
42 in. main from Belsize-road to Woburn-place,
36 in. main from Woburn-place to St. John's
Clerkenwell, for the M.W.B. :—

Sir W. G. Armstrong, Whit- worth & Co., Ltd.	£144,009 7 0
John Mowlem & Co., Ltd.	81,551 6 1
Whittaker Ellis, Ltd.	81,164 4 4
Wm. Press & Son	78,848 16 6

NDON.—Head teachers' rooms and stock-
in the girls' and infants' departments of Myrde-
school, Mile End, for the L.C.C. :—

Hether Construction Co., Ltd.	£153 0
H. C. Horswill	150 0
N. Simms	142 0
ister & Co., Ltd.	137 0
J. Butters	130 0
S. Keetch	122 0
S. Blow, Ltd.	119 0
J. C. Mather	117 0
P. Roberts & Co., Ltd.	112 0
S. B. Farrar & Co.	102 5

(All of London.)

The architect's comparable estimate is £136.

NDON.—Formation of a room for the head
er and removal of stepping in the boys' depart-
of North Hackney school, for the L.C.C. :—

J. Butters	£260
F. Cottrell, Ltd.	253
S. Keetch	245
tevens & Sons	225
P. Roberts & Co., Ltd.	223
ster & Co., Ltd.	218
S. Blow, Ltd.	212
Whitbys, Ltd.	209
I. & C. Bowyer, Ltd.	188
W. Silk & Son, Ltd.	186
J. C. Mather	179

(All of London.)

The architect's comparable estimate is £201.

NDON.—Removal of stepping from five rooms
e "Cyril Jackson" school, Limehouse, for the
C.C. :—

Ashby & Horner	£258 0
G. Barker	245 0
S. Blow, Ltd.	221 0
Turnbull & Son	210 0
I. & C. Bowyer, Ltd.	204 0
Vigor & Co. (Poplar), Ltd.	198 10
Whitbys, Ltd.	185 0
fred. & T. Thorne	166 0
W. S. Sharpin	166 0
N. Simms	159 0
W. J. Dixon & Son	149 0

(All of London.)

The architect's comparable estimate is £183.

NDON.—Three rooms for the head teachers and
alterations at Compton-street school, Finsbury,
e L.C.C. :—

S. Keetch	£756 0 0
P. Pollard & Co., Ltd.	653 0 0
W. Silk & Son, Ltd.	645 0 0
Whitbys, Ltd.	642 0 0
S. Blow, Ltd.	595 0 0
S. Shaw	579 0 0
ole, Loasby & Co., Ltd.	574 12 9
ister & Co. (Builders), Ltd.	573 0 0
I. & C. Bowyer, Ltd.	563 0 0
tevens & Sons	518 0 0
W. T. Lawrence	507 0 0
J. C. Mather	492 0 0

(All of London.)

The architect's comparable estimate is £596.

NDON.—Construction of a store-room on the
of vacant land adjoining the baths, for the
ington B.C. Borough Engineer :—

P. D. & H. Head, Ltd.	£355 0
N. Watts, Ltd.	325 10
W. Heath, Ltd.	320 0
P. Williams, Ltd.	284 0
Colley & Sons, Ltd.	275 0
Wheeler Bros.	249 0

NDON.—Enlargement of the boiler flue at the
ington Technical Institute, for the L.C.C. :—

ole & Co.	£667
N. Watts, Ltd.	618
ovis, Ltd.	617
Marlsand & Sons, Ltd.	586
Colley & Sons, Ltd.	572
Whitbys, Ltd.	530
H. Boyd & Sons, Ltd.	483
architect's comparable estimate	474

(All of London.)

LONDON.—Construction of a pipe subway beneath
the eastern side of St. Martin's-le-Grand and the
southern side of Gresham-street, for the City Cor-
poration :—

A. Vigor, Ltd.	£35,229 5 10
Thomas Muirhead & Co., Ltd.	34,446 4 8
G. P. Trentham, Ltd.	30,513 15 9
Mitchell Bros., Son, & Co., Ltd.	28,581 13 10
D. R. Paterson, Ltd.	27,821 12 7
† Daniel T. Jackson	27,088 18 7

LONDON.—Interior decorating of 79 houses on the
Casimir, Cleveleys and Gunton-roads housing site,
for the Hackney B.C. :—

Runham Brown Bros.	£1,919 0 0
E. Setchell	1,736 6 6
C. Plumley & Co.	1,596 1 11
G. Stoddart & Sons	1,394 8 6

MANCHESTER.—New dairy in Bosworth-street,
Openshaw, for the Beswick Co-operative Society.
Mr. A. H. Walsingham, architect, 62, Market-street,
Manchester. Quantities by architect :—

Building work, &c. :—	
Wooller & Sons, Eccles	£10,180 0 0
Peace & Norquoy, Manchester	9,436 0 0
S. Heath & Son, Newcastle, Staffs	9,394 14 3
Co-op. Wholesale Society, Man- chester	9,243 0 0
G. & W. Smith, Manchester	8,970 0 0
Tinker & Young, Manchester	8,569 0 0
A. Fenton, Manchester	8,370 0 0
*C. H. Godfrey & Sons, Man- chester	7,183 5 6

Concrete and Asphalt work—	
Phoenix Co., Manchester	4,890 0 0
Brunswick Co., Manchester	3,663 0 0
Limmer Trinidad Co., Man- chester	3,485 0 0
*Co-operative Wholesale Society Building Dept., Man- chester	3,415 0 0

Steelwork—	
Heenan Froude & Co., Man- chester	869 0 0
Banister Walton Co., Man- chester	838 0 0
Redpath, Brown Co., Man- chester	825 0 0
Dorman Long Co., Manchester	825 0 0
J. Parkes & Son, Northwich	785 0 0
*Edward Wood & Co., Man- chester	757 0 0

Terra-cotta work—	
Doulton & Co., Manchester	541 6 0
*Leeds Fireclay Co., Leeds	439 17 0

MANCHESTER.—Retaining wall in Barlow-road,
Levenshulme, for the T.C. :—

*Moston Brick and Building Co., Ltd., Manchester.

MANCHESTER.—Building work in the super-struc-
ture of the Manchester Ship Canal new offices, situate
on the west side of King-street. Mr. H. S. Fairhurst,
A.R.I.B.A., architect, 14, Chancery-lane :—

*J. Gerrard & Sons, Ltd., Swinton.
Masonry—*F. M. & H. Nuttall, Whitefield.

MANCHESTER.—104 houses on the Moston estate,
for the T.C. :—
*Leach & Unsworth, Blackpool.

MANCHESTER.—Plastering of houses on Blackley
estate, for the T.C. :—
*Carmichael & Duke.

CHAIRS
FOR ALL PURPOSES
STRONG & INEXPENSIVE.



GEO. M. HAMMER & CO. LTD
CROWN WORKS, ST. JAMES'S RD.,
BERMONDSEY, LONDON, S.E. 16

MANCHESTER.—Various works, for the T.C. :—

*Gorton & Blakemore, Ltd., Atherton: Wrought
iron fencing and gates at land, Fog-lane,
Didsbury.
*Critchlow & Barton, Manchester: Repairs and
pointing at Clayton Old Hall.
*Moston Brick & Building Co., Ltd., Manchester:
Footballers' dressing huts in various parks.
*C. H. Normanton & Son, Ltd., Manchester:
Conveniences in Grey-street Recreation
Ground.
*John Bailey & Co. (Builders), Ltd., Manchester:
Refreshment kiosks, in various parks.
*F. Heys, Manchester: Shelter in Boggart Hole
Clough, and also for re-roofing shelters in
Brookdale Park and Platt Fields.
*F. Goodyear & Sons, Manchester: Conveniences in
Broadhurst Park.

MIDDLESBROUGH.—Institute at corner of
Bishopston and Dene-roads, for Marton Grove Estate
Association :—

*C. P. Mundell & Co., Ltd., Middlesbrough.

MONKTON.—New Council school for the Durham
C.C. Mr. F. Willey, F.R.I.B.A., County Architect,
34, Old Elvet, Durham :—
†J. Young & Co., South Shields..... £8,608

NEWRY.—Steel bridge over the canal, for the
Canal Co. :—
*Sir W. Arrol & Co., Ltd., Glasgow.... £1,660

NEWMARKET.—Twelve houses at Laureate Pad-
docks site, for the U.D.C. Mr. W. H. Eley, surveyor,
Godolphin House :—

A. Plummer, Bury St. Edmunds	£8,275 0
A. Monk, London	7,980 0
Hervey & Olson, Aldeburgh	7,621 12
J. Edmondson & Son, Newmarket	7,577 0
H. C. Tofts, Attleborough	7,553 0
W. P. King, Newmarket	6,898 15
F. Tucker & Son, Ely	6,776 10
*W. Barnes, Newmarket	6,390 0

OLDHAM.—Construction of culvert and storm over-
flow at the sewage works, for the T.C. :—
*F. G. V. Freeman.

PRESTON.—Bowls pavilion at Frenchwood, for
the T.C. :—
*L. Titterton, Preston..... £700

REIGATE.—Foundation works at generating
station, for the T.C. :—
*Ailkins & Potter..... £933

RETFORD.—Forty non-parlour type houses on the
Corporation housing estate, for the T.C. :—
*J. Swanack.

RIPON.—Twenty-six houses, for the T.C. City
Engineer :—

King & Sons, Ltd., Middlesbrough	£16,779
Shepherd, Ltd., York	16,570
Jackson & Oates, Goole	15,900
Randle & Co., Sunderland	14,522
*Robinson Bros., Ripon	13,850

ROCHDALE.—(1) Repairs, alterations and additions
in basement, together with conveniences, at the Town
Hall, and (2) timber ventilating turret on the Assembly
Hall roof at the Town Hall, for the C.B. Borough
Surveyor :—

(1) H. Tattersall, Ltd., Rochdale.
(2) R. Kay, Rochdale.

ROCHDALE.—Houses, for the T.C. :—
*Summerscales & Waterhouse, Luddendenfoot
—82 houses.
*Yates & Lomas, Ashton-under-Lyne—36
houses.

*S. Benn, Rochdale—22 houses.

ROSSINGTON.—Caretaker's house at the cemetery,
&c., for the P.C. Mr. J. B. Richardson, architect,
Doncaster :—

*Flowitt & Gilbert, Doncaster £961 18

ROWLEY REGIS.—Twenty-two houses on the
site at Dudley-road, for the U.D.C. :—

*J. Harper & Sons, Blackheath..... £11,125

SALFORD.—Steel-framed shed, at the Central Car
Depot, Frederick-road, Pendleton, for the C.B. :—
*T. Blackburn & Sons, Ltd., Preston.. £13,318

SALTAIRE.—Extensions to the Sir Titus Salt's
Hospital, for the Governors :—

Mason—
*W. Pitts & Sons £3,446 0 0

Joiner—
*F. Dibb & Sons 881 0 0

Plumber—
*Wigglesworth & Crossley..... 465 6 6

Plasterer—
*W. Pitts & Sons..... 829 0 0

Slater—
*M. Livesley 208 19 4

SCOTSWOOD.—New United Methodist Church and
Sunday school. Messrs. Marshall & Tweedy, archi-
tects, Newcastle :—
*Wm. Hall, Gateshead.

SEAHAM HARBOUR.—Alteration and extensions
to the heating apparatus, at the Council school, for
the Durham C.C. Mr. F. Willey, F.R.I.B.A., County
Architect, 34, Old Elvet, Durham :—
†J. Laidler & Sons, Durham..... £346 5

SHIPLEY.—Alterations at Saltaire Institute, for
the U.D.C. :—
†S. Webb & Son £229 10

SIBSEY.—Reinforced concrete bridge over the
Hobhole Drain, for the Lincolnshire (Holland) C.C.
Mr. W. A. Rogerson, County Surveyor, Sessions
House, Boston :—
*Wm. Wright & Son (Lincoln), Ltd.,
Lincoln £4,170

SMETHWICK.—202 houses on the Slatch House estate, for the T.C.:

*Eadie, Towers & Co.

STIRLING.—Sixty-six houses on the Bannockburn-road housing site, for the T.C. Mr. A. H. Goudie, Burgh Surveyor:

Builder work—

*B. Reynolds & Son £8,253 5 1½

Joiner work—

*Wm. McPherson & Son 6,962 2 3

Plumber work—

*Robt. Prater 3,642 2 8½

Slater work—

*Wm. Milne & Co. 1,590 10 9½

Glazier work—

*Arch. Walls 183 6 0½

Electrical work—

*Alex. Brewster 497 19 0

Painter work—

*Law and Macfarlane 551 2 11½

Garden work—

*Wm. McPherson & Son 127 19 2

Ranges and Grates—

*Wm. Somerville & Valentine.. 724 2 0

Plaster work—

*Chas. Anderson & Son 1,292 5 10

*Alex. Dick & Sons 1,304 6 5

Cement and Rough-cast work—

*Chas. Anderson & Son 508 17 6

*Alex. Walls 497 14 0

SUDBURY.—Bridge over the railway, for Middlesex C.C.:

*Peter Lind & Co. £12,461 14 9

SWANSEA.—212 yds. of iron railings and gates required for Maesteg Recreation Ground, for the C.B.

*W. A. Baker & Co. (1910), Ltd.,
Newport, Mon. £491 13 6

THORNBURY.—Eight parlour-type houses at Redwick, Pining, for the R.D.C.:

E. Lowe, Bristol £5,134 0 0

W. H. Sansone, Shirehampton.. 4,588 0 0

A. Dowling & Son, Bristol 4,467 16 0

E. W. Dimery, Berkeley 4,237 7 6

J. Pugsley & Son, Bristol 4,190 0 0

P. G. Hawkins, Thornbury 3,893 0 0

R. A. Pitcher & Sons, Olveston 3,875 0 0

*F. Ranger, Yate 3,800 0 0

THURNSCOE.—Fifty houses, for the U.D.C. Messrs. Carby Hall & Sons, architects, Prudential buildings, Park-row, Leeds. Quantities by the architects:

W. H. Fuller, Wath-on-Dearne £29,048 6 0

B. Groves, Goldthorpe 28,372 19 8

W. Marlow & Son, Sheffield .. 27,536 14 8

E. Oakland & Co., Barnsley 26,570 0 0

A. Bull & Co., Doncaster 26,515 12 6

A. Plunkett, Thurnscoe 26,189 0 0

C. Wilson, Thurnscoe 26,081 0 0

Randall, Ltd., Sheffield 26,028 0 0

C. Potts, Edlington 25,697 10 0

Leadley, Firth & Whittington,
Doncaster 24,272 10 8

*J. Jackson, Thurnscoe 24,252 0 0

(Subject to approval of M.H.)

TURSDALE.—Installation of electric light at the Council School, for the Durham C.C. Mr. F. Willey, F.R.I.B.A., County Architect, 34, Old Elvet, Durham:

*F. Reid Ferens & Co., Sunderland £112 16 6

UXBRIDGE.—New reservoir, for the U.D.C.:

*Leslie & Co., Ltd., Kensington..... £5,729

WAKEFIELD.—Sixteen houses in blocks of two, on the Painthorpe housing estate, Hall Green, Cigglestone, for the U.D.C. Messrs. Massie & Holdsworth, architects, Wakefield:

*D. R. Snowden & Sons, Barnsley.

WAKEFIELD.—Thirty-four parlour houses in blocks of two on the housing site off Main-street, Crofton, for the U.D.C. Messrs. Massie & Holdsworth, Architects, Yorkshire Buildings, Wood-street:

*W. J. Kendall & Co., Ltd., Leeds.

WALLASEY.—Gatekeeper's lodge, at Mill-lane, for the C.B. Borough Engineer and Surveyor:

*R. I. Leary, Wallasey £832 2

WOODLANDS (YORKSHIRE).—Forty-six houses, for the Adwick-le-Street U.D.C.:

*A. Bull & Co., Ltd. £22,897

WATFORD.—Painting and cleaning at Gish House school, for the L.C.C.:

F. Cottrell, Ltd., Crouch-hill £579

C. Miskin & Sons, Ltd., St. Albans 568

G. & J. Waterman, Ltd., Watford 547

W. King & Sons, Watford 534

G. Wigg & Son, Watford 510

Marchant, Hirst & Co., Highgate 498

Stevens & Sons, Crouch-hill 486

Clark Bros., Ltd., Watford 486

Clifford & Gough, Watford 476

*Payne Bros., Watford 458

The architect's comparable estimate is £512.

PARQUET & WOOD-BLOCK
FLOORING supplied and fixed in any locality.
Post, or, none (Park 1885), Particulars of requirements to
TURPIN'S PARQUET FLOORING CO.,
25, NOTTING HILL GATE,
LONDON, W.11
ESTD. 1866

J. GLIKSTEN & SON

LIMITED

Specialities in

SEASONED

HARDWOODS

MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.

REGISTERED OFFICE AND WHARF

CARPENTERS RD.
STRATFORD
LONDON E.15

Telephone:
EAST 3771
(5 lines)

Telegrams
GLIKSTEN 'PHONE
LONDON

J. J. ETRIDGE, J. Ltd

SLATING AND TILING
SLATE MERCHANTS
CONTRACTORS.

Inspections and Reports made on
OLD or FAULTY ROOFS
in any part of the country.

Telephone: Bishopsgate 1944/5, or write,

Bethnal Green Slate Works,

BETHNAL GREEN, LONDON, E.



GRANITE AND MARBLE

We supply all classes of
polished Granite and Italian
Marble Memorials.

Specialists in Carvings and
Statuary, War Memorials,
etc.

All enquiries promptly attended to

**WM. EDWARDS
& SON,**
Pittodree St. Aberdeen

HOWELL J. WILLIAMS Builders Ltd.

High-Class Building
and
Joinery Work

11/17, BERMONDSEY STREET,
LONDON BRIDGE, S.E.1

Telephone:
HOP 202

Builders of very many well-known Banks, Office
and Business premises. Our works especially
convenient for City Building and fittings.

School & Hospital Stoves

MAKERS OF

WRIGHT'S IMPROVED and also SHORLAND PATENT
WARM AIR VENTILATING PATTERNS.

GEO. WRIGHT, LIMITED (LONDON)
19, Newman St., Oxford St., London, W.1
Burton Weir Works, Rotherham.

FITZPATRICK & SON

Masons and Paviers,

455, OLD FORD ROAD, BOW, E.3.

Phone: EAST 4808.

Granite Setts and Kerb (redressed and second
hand), York Paving Spur Stones, Granite
Chippings, and Granolithic and Sett Paving.

Telegrams: 'Frolle, Liverpool' Phone 228 B&N

E. B. BURGESS & CO

6, CASTLE ST., LIVERPOOL.

**WOOD BLOCK FLOORING
AND PARQUETRY.**

OGILVIE & CO.,

Midway Works, Midway Avenue, Islington.

EXPERTS IN HIGH-CLASS JOINERY.

ALTERATIONS AND DECORATIONS.

THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

CXXIX.—No. 4,319 WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

NOVEMBER 13, 1925

WAR MEMORIALS AND SYMBOLISM

THE exhibition of so great a number of War Memorials in the War Museum at South Kensington gives one cause for wonder as to the point of view from which they have been designed. We are inclined to think that as the public generally look for something as good as possible for the funds at disposal, that the designers generally have had before them two or three alternatives: first, that of making some sort of symbolism the dominant feature; secondly, that of displaying chiefly the identity and names of certain war heroes or victims; or thirdly, that of combining the two in some sort of equal proportion. Of the methods is most definitely popular it is hard to say. Judging from the great array of models and designs now in the Museum, it is clear enough that the outlay on memorials of the war must have been enormous; in one town it was estimated something like one hundred thousand pounds had been spent upon them. When we remember that in every town and numberless villages throughout the country there is something to memorialise the war we must realise an enormous total of cost has been incurred, and it may be asked whether the results have justified the outlay.

From the point of view of the earnest critic it must be said that a great proportion of the total number of executed memorials have been indifferent or worse. A large number of designs exhibited only show what to avoid, and many are little more than execrable. We note that designs of the more pretentious sort mostly adopted are quite foreign to our traditional architectural design, and few indeed compare in the sense of fitness and adaptability to their surroundings with the charming memorial for the county borough of Wigan, by Sir Giles Scott. In some cases where the squarely outlined memorial looks well enough in the model, its effect as seen with a background of buildings is woefully poor. The Gothic style is perhaps on the whole the most successful. The designers, too, generally make a better show than the architects. It is a delightful work by Messrs. W. Reid Dick, Gilbert and Richard Goulden, Sir Hamo Thornycroft, Messrs. W. G. Ridsden and John Cassidy, Mrs. Meredith Williams and Mr. F. Clapperton.

The exhibition is one our readers should see, for any notice of it would be of little interest to them, however genuine. Several of the models are already familiar, and invite very definite criticism. Several memorials, even if they bring no genuine thrill of feeling, are at least well designed and pleasingly decorative, many of the panel designs are wholly satisfactory, such as the panels from French battle scenes, by Lt.-Col. Lafontaine and Mr. Reginald Hallward, the incised official headstones by Mr. MacDonald Gill. But the more striking effects are the impressive bronze memorial against a stone background at Heywood, by Mr. W. G. Ridsden; the fine sculptured work in the figure of the lion at the base of the memorial, by Mr. W. Reid Dick (the lion looking too large for the pedestal); and the graceful stag on a well-designed pedestal, by Sir Aston Webb & Son, at Hertford. An excellent

and sensible design is Sir John W. Simpson's memorial block, with wide-spreading seats at either side; such a design as this combines a certain useful beauty with a grand simplicity of treatment as a memorial of national grief.

With all its pronounced emphasis of failure and limitations, we cannot but admit evidences of much artistic skill on such things as Sir John Burnet's memorial chapel at Jerusalem; Sir Robert Lorimer's work at Paisley; and the simple and graceful treatment in some of Sir Edwin Lutyens's designs. Sir Reginald Blomfield, Harold Gibbons, Lawrence Turner, W. Reynolds Stephens and others help to maintain the better aspects of art, but for all we can see or feel the exhibition as a whole is a somewhat melancholy record of lost opportunities.

Criticism is cheap—it may be very cheap—but it is an inevitable and sometimes a useful function. It would be manifestly unfair to say that our architects and designers generally had failed to give signal evidence of their ability when this unprecedented opportunity has occurred for the display of their powers. But is it possible to say that anything which has been done has evoked a thrill of sincere emotion amongst us all? There are some which perhaps come near this, such as a fine figure of Nurse Cavell held aloft, with the simple wording, "Courage, Fortitude and Devotion"; but Sir George Frampton, with outstanding ability, has overloaded his subject and overstated his case.

But to turn from the commemoration of the individual to the symbolism of the universal expression of heroism and devotion which united the record of the lowliest soldier with those of the highest rank, the devoted labour of the humblest nurse with the overwhelming responsibilities of the statesman or general, who shall say that we have obtained a great memorial of universal appeal? A figure of Sorrow, such as the beautiful example produced by Mr. Reid Dick; a triumphant figure of Hope and Victory, supported by symbols of Strength, Patience, Valour, Enterprise, and Skill—yes, it sounds simple enough! But have we learnt the fine art of symbolism aright? When we think of Scott at the North Pole we think of the finest attributes which man can claim; but the Scott Monument is crowned by a splendid figure of Scott himself, and not by a symbol of that inside the man which lifted his doing far above his mere exterior expression. We are quite aware that the critic may turn round and say that the figure of a man may symbolise great things, just as a lion is taken to symbolise strength or a cat cunning. But man, even if he has created gods of very man-like qualities and looks, is only deeply stirred when he visualises things greater than himself. For him the sun symbolises Life, the stars Hope, the sea Mystery, and lightning the action of a God. No great and abiding impression can be created by the representation of the commonplace. No art, we know, is so difficult as that of the memorial; we have done the literary part very well, but have we not missed the greater inspiration?

The collection, which will remain on view till December 11, represents over one thousand memorials.

NOTES.

Waterloo Bridge.

It was only to be expected that the report of Sir Edwin Lutyens should point out the jeopardy of Waterloo Bridge which has been jeopardised by over-sailing parapets, and we have frequently pointed out, or by the fact of the bridge being the artistic values of Waterloo Bridge, and at the same time fairly deal with the increased amenities of traffic which are asked for. Our interpretation of the report is that the real solution lies in preserving the bridge intact, and to go on with a Charing Cross bridge, and perhaps a bridge from the eastern arm of the river. We have expert opinion that Waterloo Bridge can be preserved intact and remain useful, and we cannot therefore contemplate the rebuilding or widening of the bridge.

Opinions on Waterloo Bridge.

We are glad to see Sir Reginald Blomfield's manful letter to the *Times*. He protests against some of the suggestions in Sir Edwin's report, and goes on to say, "The feeling that Waterloo Bridge should be preserved, as it is, is deeper and far more widely spread than seems to be realised by those who talk airily of its possible destruction. Waterloo Bridge is something more than a mere means of transit from one side of the river to the other. It is a noble national monument, and it carries with it memories and associations of a period of tremendous stress, far too profound to be tampered with by anybody." Sir Reginald also points out that all those whose opinions should carry great weight in the matter have protested against the proposed destruction, and have urged the preservation of the bridge.

THE subject of architectural education has just recently been a theme on which the Presidents of the R.I.B.A. and the Architectural Association have made some interesting remarks in their Presidential addresses, and now we have before us (see p. 707) details of the reconstitution of the Board of Architectural Education. What appears to be an important part of the work of the Board is the periodical visits to the various schools which are made in order "to keep the Schools Committee in touch with all the schools recognised by the R.I.B.A. and ensure that a uniform standard is maintained. The inclusion of R.I.B.A. members, not specially concerned with education, both on the Board and on the Committee will make for breadth of view in the Board and for a wider knowledge of the Board's work in the Institute at large. By all of these means co-ordination is to be expected and the advice and assistance of the State and other educational authorities will be of great value and will enable the Board to discharge its duties with greater weight and efficiency."

Wet Time Pay.

PROGRESS appears to have been made with the proposals to pay for time lost by workmen in the building industry caused by wet or inclement weather, and we are glad to note that hopes are entertained that a scheme which has been put forward will be adopted at a joint meeting next Wednesday of the Master Builders' Federation and the Operatives' Federation. The

original proposals, it is understood, been somewhat modified, but it is to be hoped that some satisfactory scheme can be devised which will not add to the cost of building work, though if necessary there are few building owners who will be found to object to a slight increase in cost if only to remove an anomalous cause of much discontent in the building trade labour.

Advertising in Public Places.

IN referring to the letter of the President of the Royal Institute of Architects, which we in our last issue, Mr. Arthur Welford, a letter which we give elsewhere, out that if Sir Reginald Blomfield's suggestion that those responsible for vulgar street advertisements should be made to pay for them by way of a tax on a poster would be immediately on to the consumer of the advertised goods. We agree with him; but on another point still, *i.e.*, that nothing more than a tax on street advertisements do little or nothing to remedy the frequent offences against public decency, would, on the contrary, appear to be an easy means of legalising an abuse which is wanted is the control of such advertising, which is what the public is beginning to demand.

WE give in this issue charming examples of brickwork, many which could be of characteristic brick in all parts of the country, and glad to note that more attention is being given to brickwork as a house building material. Not only have we the able book on "English Brickwork" which these examples are taken from (noticed elsewhere), but we have the address of Sir Charles Ruthven, Director of Housing, in his presidential address to the Institution of Structural Engineers, an abstract of which is on p. 710. The popular brick, which had stood the test of time, as a handy unit, it is the best known and the best liked building material in existence for house building purposes, given a plentiful supply at a reasonable price, and the skilled labour necessary for its use, work executed by its aid, and cheap, lasting and artistic."

Decorative Work in Winter.

THE sensible suggestion made in our correspondence columns last week for some relief to unemployment in the painting trade at this more decorative and painting should be put in hand. There is sound reason why much painting should not be done in the winter, and our correspondents gave some reasons why the habit of deferring work until the spring should be broken.



From "A History of English Brickwork." (See p. 699.)
"King's Head" Inn, Sissinghurst, Kent



Weather Vanes at the Oast House, Crockham Hill, Kent.

Designed and made by Mr. F. J. SEDGWICKE.

IN his Presidential address at the Institution of Structural Engineers last week, Sir Charles Ruthen reviewed the methods of building which have been put to the test of experience in the present year. As he remarked, the problem of new methods of construction remains one of extraordinary difficulty; he mentioned that over 1,000 different methods have been submitted to Government Committees during the past few years. It would, we think, be helpful if some of our readers would give the results of such experience as they may have had in the use of concrete with the aid of shuttering or in building with concrete blocks.

WE have received the Annual Report of the National Institute for the Blind (224-8, Great Portland-street, W.1) for the financial year ended March 31, and we are glad to call attention to the admirable work carried out by this most useful body. The work of the Institute includes the publication of Braille embossed books, magazines and newspapers, and of Moon embossed books and periodicals—Moon being easily learned by the aged and the preparation by hand of text books in Braille for blind students, and the maintenance of a Students' Library; the publication of embossed music, and the works of British blind composers; the provision of apparatus for the blind, such as writing machines, mathematical cards, games, Braille watches, models, and the maintenance of homes for the blind, a massage school in London, a

guest house or the aged blind at Chester, a blind women's hostel in London and a convalescent and holiday home at St. Leonards-on-Sea; the relief of the blind poor; training and after-care of the adult blind and of blind ex-service men who are ineligible for pensions, and their blind dependants; the visitation and training of the blind in their own homes; the support of home industries for the blind, including supply of materials at cost price, sale of goods, augmentation of wages, etc.; technical and research work which may tend to lessen the burden of blindness; the employment of the blind; and assistance to local institutions and societies for the blind throughout the country in the form of financial assignments and allocations. Surely no Society can be more deserving of support than this Institute!

We may call attention to the soirée of the R.I.B.A. to be held this Friday evening, as although it is

likely to be a crowded meeting, there may be some of our readers who need a reminder of the function. The soirée is ostensibly to celebrate the amalgamation of the S.A. with the R.I.B.A., and the meeting should be a great success.



Hawarden War Memorial.

SIR GILES GILBERT SCOTT, R.A., Architect.

GENERAL NEWS

Lambeth Bridge.

The L.C.C. has decided to reconstruct Lambeth Bridge and to widen Lambeth-road, Albert Embankment, and Lambeth Palace-road, at a total estimated cost of £668,000.

University Architectural Tuition.

A decree has been passed at Oxford University authorising the provision of a course of lectures on English and Spanish architecture. At Cambridge it is being urged that architectural studies should be added to the faculties specified.

Birmingham-Mersey Canal.

The scheme for the improvement of the canal system between Birmingham and the Mersey to allow of navigation by larger boats was the subject of a recent conference at the Ministry of Transport. The total length of the route dealt with in the Birmingham to the Mersey scheme is 82 miles: from Broad-street, Birmingham, to the estuary of the Mersey, passing through an important industrial area of the Black Country, including Wolverhampton, thence through the Potteries to the Weaver Navigation. The total estimated cost of the scheme is £6,593,627, and the estimated annual cost, subject to certain deductions, is placed at £433,816.

The Foundling Hospital.

The Governors of the Foundling Hospital have entered into a provisional contract for the purchase of a Surrey estate, the Royal St. Anne's Schools, at Redhill, which is to serve as accommodation for their work pending the time when a suitable country property can be acquired.

London Town Planning.

Officials of the London County Council are at work on proposals for the re-planning of London. It is contemplated that the L.C.C. plan will cover the whole of London, and will be the basis to which future development and redevelopment will conform. The object of the plan is to provide sites adequate to modern building schemes, to improve the roads, and to avoid undue interference with the existing buildings of a permanent, institutional, or historical character.

Proposed London Churches.

The Bishop of Southwark has issued an appeal for £100,000 to be used towards the erection of twenty-five new churches for the new districts of South London.

St. James's Chapel, Liverpool.

The Mortuary chapel attached to St. James's Cemetery, Liverpool, has been reopened, following the completion of restoration work.

Preserving St. Paul's.

A meeting of the committee responsible for carrying out the work for the preservation of St. Paul's Cathedral has been held at the Mansion House. The work of cementation has gone forward satisfactorily, and the drilling and first injection of the holes in the crypt portion of the south transept piers has been completed. The initial drilling in the crypt portion of the nave piers was very nearly complete, a total footage of about 1,500 ft. having been drilled. After careful investigation and tests it had been decided to use a non-corrosive steel for reinforcement, this to be inserted and cemented into the holes when grouting had been completed. The construction of the piers in the crypt, as was expected, had been found to be very compact. Levelling and other observations mentioned in the last report were completed, and afforded reassuring evidence that neither settlement nor other disruptive movements in the dome area were taking place.

"Old London."

We notice that a correspondent to the *Eastbourne Chronicle*, Mr. E. A. Smith, states that "the lecture on 'Old London,' by Mr. H. C. Cox, F.C.A., organised by the Eastbourne

branch of the Order of Crusaders, in conjunction with *The Builder*, realised over £25. This has been equally divided and handed to the 'Tiny Tim (Cripples) Guild' and the Leaf Homœopathic Cottage Hospital."

Housing at West Bromwich.

The Swan Village scheme provides for the demolition of 102 houses, with displacement of 625 people, and the erection of 62 houses on the site. The estimated cost is £60,550.

Incorporated Institute of British Decorators.

The following gentlemen have been elected Honorary Fellows of the Incorporated Institute of British Decorators: Mr. Frank Brangwyn, R.A.; Sir Banister F. Fletcher, F.R.I.B.A.; Professor A. P. Laurie, M.A.; Mr. Eric Morley; Mr. W. H. Meggs; Mr. A. J. Healey, F.R.I.B.A.; and Mr. T. P. Bennett, F.R.I.B.A.

Concrete Houses.

The Ministry of Health, in its latest housing returns, announces that definite arrangements have been made for the erection of 24,060 concrete houses under the subsidy scheme. Of these, 4,606 houses have been completed, and 8,407 are now in course of erection.

Another Severn Bridge.

Atcham Bridge, which spans the River Severn three miles east of Shrewsbury, is in a bad condition. The Salop County Council has rejected a proposal that it should be widened and strengthened, and has decided to erect a new concrete bridge alongside, at an estimated cost of £50,000. The old bridge will be preserved as an ancient monument.

Roman Statuette.

A relic of Roman occupation has been found buried in some masonry close under Exeter's old city wall. Workmen clearing a site for a motor parking station discovered part of a statuette consisting of the torso and one arm. It is of stone, from Beer Quarries, in East Devon, which were largely worked by the Romans.

London Association of Slate Merchants.

Mr. E. Parkinson, of Messrs. E. Parkinson (London), Ltd., roofing contractors, of Tottenham, has been elected President of the London Association of Slate Merchants, Master Slaters and Tilers for the ensuing year.

Braunstone Estate, Leicester.

The Leicester Housing and Town-Planning Committee has purchased Braunstone Estate, including the hall, park, and five farms, for £115,000.

Alexandra Palace.

At a recent meeting of Edmonton Board of Guardians on relief work, the proposal was made that all the local authorities in the Edmonton Union (Edmonton, Wood Green, Hornsey, Southgate, Enfield and Tottenham) should combine in a big scheme for renovating the Alexandra Palace, which was badly in need of repair.

Heating of L.C.C. School Staff Rooms.

The L.C.C. recommend that the standard planning of elementary schools be varied by the omission of open fireplaces from the construction of teachers' rooms in new and remodelled schools, and the substitution of ordinary radiators connected with the central heating apparatus.

St. Thomas's Hospital Memorial.

The foundation stone of the new college house extension and students' club, which is being erected as a memorial to eighty-one students and members of the staff of St. Thomas's Hospital who fell in the war, was laid recently. Situated opposite the main hospital building in Lambeth Palace-road, the new club, in addition to affording opportunities for sport and recreation, will provide seventy-two bedrooms for the resident staff and students. Mr. W. H. Currey, F.S.I., L.R.I.B.A., of 37, Norfolk-street, W.C.2, is the architect.

COMPETITION NEWS

Church, Clacton-on-Sea.

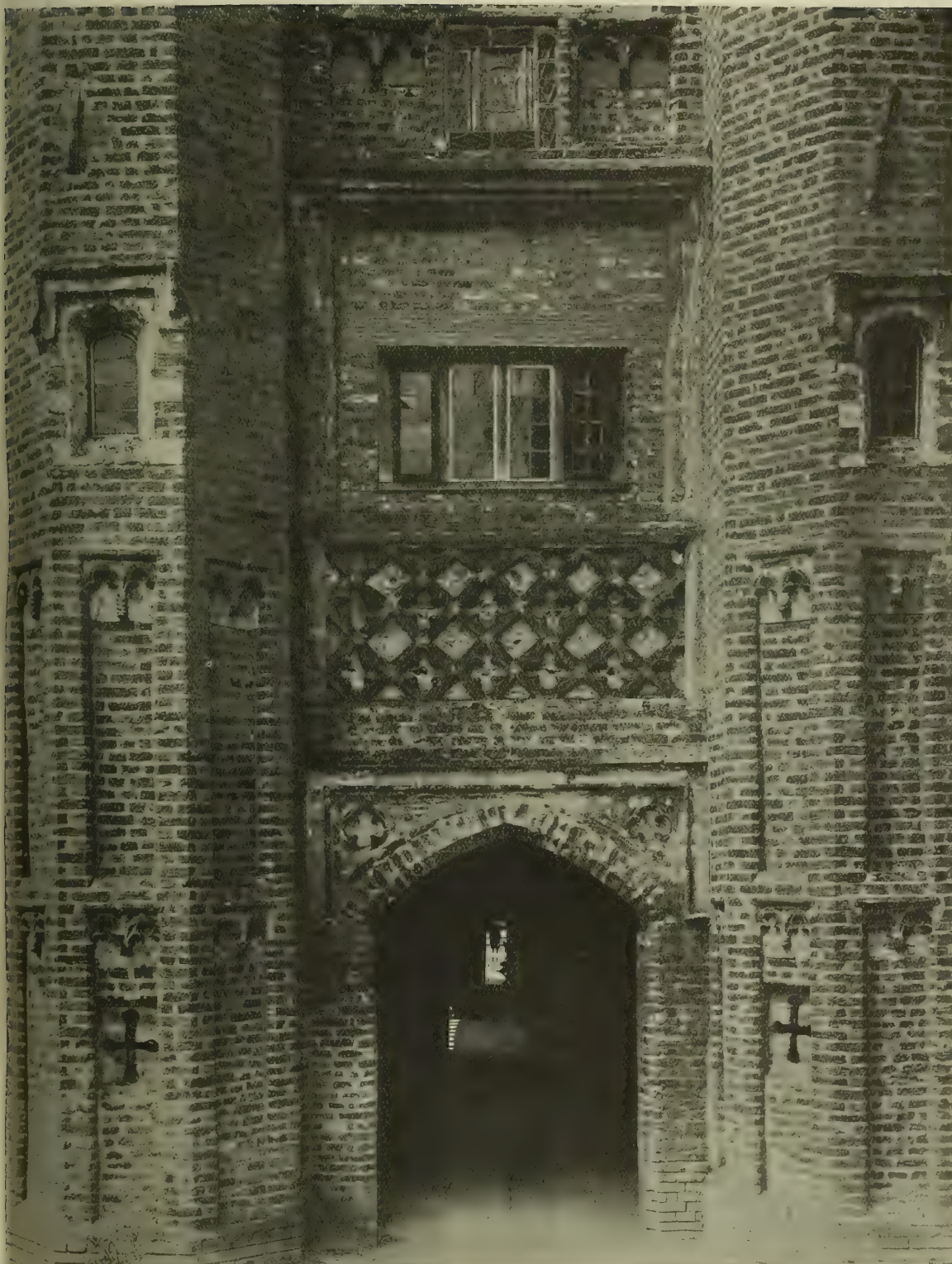
The parishioners of St. Paul's Church, Clacton-on-Sea, are considering the question of building a new church. Sir Charles Nicholson suggested that a church to seat 900 persons be built in three sections. A report advocating invitation of competitive designs from a large number of architects has been adopted.

Competitions Open.

	Particulars published in "Builder."	See
Model Dwellings, Russia	Sept. 4 ..	N
Town Hall, &c., Pretoria. Open to architects residing in South Africa or Registered under Architects' Act, of 1909, Transvaal. Assessor to be appointed by R.I.B.A. Premiums: £250, £150, £100....	.....	N
Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply parties, 35, Old Queen-street, S.W.1	April 24 ..	J
New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sereton Park-road, Liverpool	Aug. 7 ..	J
Houses for Smaller Middle-Classes and Intellectual Workers. Held under auspices of International Federation of Building and Public Works. Prizes: 1st, 500 dollars; 2nd, 300 dollars; 3rd, 200 dollars. Write to Director-General of the International Federation, 17, Avenue Carnot, Paris ..	Oct. 30. ..	J
Art Gallery and Museum, Birkenhead. Limited to competitors practising within 20 miles of Birkenhead since January 1, 1923. Premiums: £250, £175, £100. Sir Robert Lorimer, A.R.A., assessor. £225 deposit. Apply Curator, Central Public Library, Birkenhead	Oct. 16 ..	J
Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London	Aug. 14 ..	J
Royal National Eisteddfod of Wales, Swansea, Competitions: (1) National Parliament House of Wales (Prize, £100); (2) Street Facade to a Large Store (Prize, £25); (3) Set of Measured Drawings of Architecture (Prize, £25). Apply to General Secretary of Eisteddfod, W. Talog Williams, 24, Goat Street, Swansea, Mr. Arthur Keen, F.R.I.B.A., Assessor	Nov. 6. ..	M
Incorporated Architects in Scotland: (1) Rowand Anderson Medal and £100: City Art Gallery and Museum; (2) Rutland Prize (£50) for Study of Materials and Construction; (3) Prize (£10 to £15) for 3rd year Students in Scotland; (4) Maintenance Scholarship, £50 per annum for 3 years. Apply Secretary of the Incorporation, 15, Rutland-square, Edinburgh	Nov. 6. ..	J
Plan for construction of Conference Hall, for League of Nations, Geneva. International Competition, Sir John Burnet being British representative on Jury of Assessors. 100,000 Swiss francs to be divided among architects submitting best plans. Programmes with R.I.B.A., 9, Conduit-street, where intending competitors should apply. Single copies from Secretary-General, League of Nations, Geneva, on payment of 20 Swiss francs.	Jan. 2 ..	J
*Guisborough Proposed New Hospital .....	.....	J
*Competitions when "warned" or vetoed R.I.B.A. are starred.	.....	J

St. Peter's Hospital, Covent Garden

St. Peter's Hospital, Covent Garden appealing for £25,000 for extensions.



From "A History of English Brickwork." (See p. 699.)

Gatehouse, West Stow Hall, Suffolk (1520-33).

[All red brick of varying colours. Modern repointing has not yet toned down.]

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

Advertisements in Public Places.

SIR.—To those who do not wish to see, or to be influenced by them, advertisements in public places are an offence to the eye and usually an insult to the intelligence. Therefore, it is cheering to read the protests which were made by the President of the R.I.B.A. against the disfigurement of town and country, and by the proposer and seconder of the vote of thanks to him for his Presidential address. The remedies suggested by these gentlemen for the present state of things appear to be two: (1) to avoid buying offensively-advertised goods, and (2) to tax advertisements, presumably with the idea of "making the advertiser pay for it," and so discourage him in his practice of shrieking his wares.

As to (1): I now know that there are at least two people in the world who apply this as far as possible, but, unfortunately, the habit is not likely to become general. As to (2), Sir Reginald Blomfield is reported as saying: "Those responsible for these things inflict a great deal of annoyance on the community and should be made to pay for it." If "being made to pay for it" be meant in a punitive sense, perhaps some such punishment for those responsible for the advertisements, as being placed in the stocks in Piccadilly-circus or Leicester-square day and night for a month or so, might have good results. But if it be meant in a pecuniary sense then it has only to be pointed out that the cost to the advertiser of a stamp on a poster would be immediately passed on to the consumer of the advertised goods, effectually to dispose of this proposal as a deterrent to advertising. On the contrary, it would only add to the annoyance of the consumer to know that in buying goods he would pay not only for the advertisement of them, but also the tax on the advertisement.

To treat advertising in this way is rather like prescribing a poultice for a furred tongue caused by a liver attack, for advertising (in a general sense) is only a symptom of a disease and is not the disease itself. This disease—a sort of malnutrition—is caused by the ever-present shortage of community purchasing power to set off against goods created. Goods must be sold, but under our system of bank "loan"-fed industry there is never at any given time enough purchasing power in the country to buy the goods turned out, or those imported in exchange for those exported.

It is in the endeavour to get rid of the unsaleable surplus thus created that advertisers must try to create a desire in the minds of people to buy what they do not want with money which they either cannot afford or have not got. Poultices are useless; until the cause of the disease be removed the symptoms will always show themselves.

ARTHUR WELFORD.

St. Paul's Cathedral.

SIR,—I remember the time when St. Paul's was considered the embodiment of perfect construction, the only one in which all weights, stresses and strains had been mathematically worked out. (As a scientific construction St. Peter's was held up to scorn.) From a consideration of the drawings, from reports as to the condition of the building, and from speculation as to how it (particularly the dome) eventually embodied its present materials of construction, it is arguable that the building was far advanced before the construction of the dome was worked out. Were those surrounding buttresses designed to carry (along with the piers below) a much lighter dome? Not far away are there not huge, lightly-loaded piers? Did Wren, too late, regret not calling these to his aid vertically as well as laterally? Were not Wren's latter time yearly visits prompted by something more

serious than the agreeable contemplation of his masterpiece?

Wren was greater than those dealing with his work, for would he not have realised that the unequal spreading and sinking of an unequally loaded site (due to extraneous causes subsequent to his time) was the problem relatively to which all else was unimportant? Are not those vast sums now being spent in danger of being utterly lost?

There are two courses yet open: (1) To impound the site and conservatively but effectively repair the fabric. (2) Demolition and reconstruction elsewhere. Cost as well as sentiment must be considered. How would Wren decide?

We may be sure he would not spend money on an unstable site liable to be further disturbed by underground workings and unceasing vibration, continually increasing. Rather than incur the expense of impounding the site it is quite likely Wren would advise demolition.

Manchester.

A. HENTHORN STOTT.

Annual Cost of R.I.B.A. Diploma.

SIR,—In your leading article of August 28 last you have shown the difficulties experienced by the average architect in making any sort of livelihood, pointing out the improbability of his becoming even self-supporting at the age of thirty-five. It seems, therefore, doubly onerous that his hard-earned qualifying diploma should involve him in an annual charge considerably higher than that involved in the more remunerative professions. Having regard to the large increase in the revenue of the R.I.B.A., as from January 1 next, due to the absorption of the Society of Architects, it would seem an appropriate time for the Royal Institute to reduce the annual charge on members for the renewal of their diplomas to the pre-war rates.

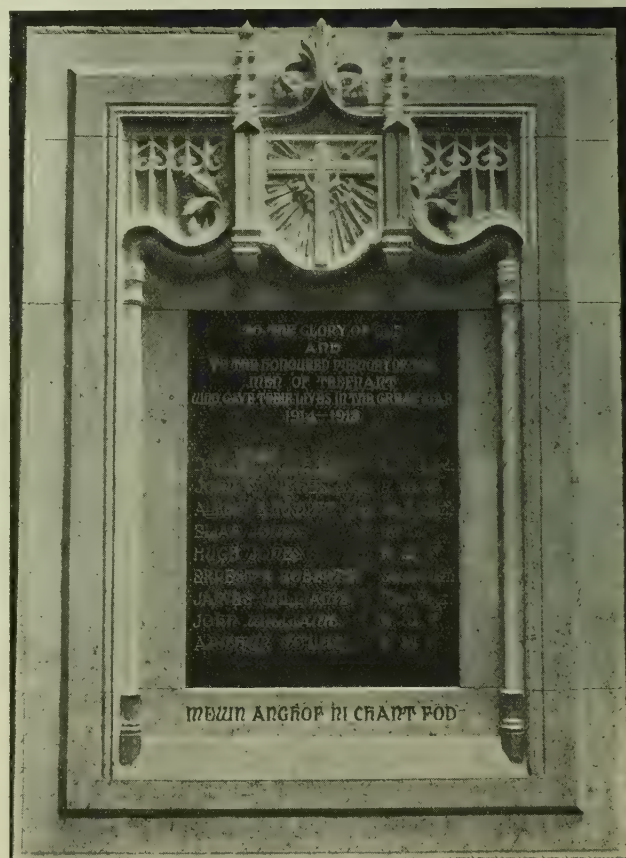
In the case of the architect and surveyor who, in his young days, was enthusiastic enough to earn also the diploma of the Surveyors' Institu-

tion, the considerable outlay of nearly every ten years is necessary to enable him retain the two certificates of his professional qualifications. The chartered account usually enjoying a very much larger professional income, gets off with £32 10s. for the period, and the doctor is at liberty to retain his diploma without any recurring charge whatever. Architects and surveyors in practice are, as a whole, considerably worse off financially than in pre-war days, and no doubt the majority of members would concur that both the R.I.B.A. and the Surveyors' Institution could to advantage consider the possibility of reducing their subscriptions to something nearer the professional standard.

ZONAM PERDI

Tablets in Cathedrals.

SIR,—The Chairman of the Society for the Protection of Ancient Buildings, writing in the *Times*, proposing that no more wall tablets should be placed in our Cathedrals, forgets that if they are not to become mere lemons only, the life of our own time, a witness, should also be seen in them. In pointing to the necessity of wiser choice of what is included this appears to be the taken view of a purely negative attitude. Age is as able as another to give good advice if we go to the right source for them. The chairman of the S.P.A.B. would not appear to be acquainted with the good work done for if he were so there would be no ground for his objection. Or does he wish to see that good work is not to be obtained? This is a rather arrogant opinion to express. I rather incline to the belief that his experience lacks the knowledge to justify any such objection. There can be no objection, but every advantage to the life of the Church, to including our contribution of beauty to the Cathedral of this country, thus perpetuating their life is hereditary and continuous, and not



Memorial Tablet at Trefnant Church, North Wales.

SIR GILES GILBERT SCOTT, R.A., Architect.

THE ARCHITECTURE CLUB DINNER

J. C. SQUIRE (President) occupied the ninth dinner of the Architecture Club at the Savoy Hotel on Thursday of last week. Among those present were Messrs. Blow, Darcy Braddell, H. P. Cart-de-Blanc, E. Guy Dawber, Arthur J. Davis, W. Denning, Rudolf Dircks, J. H. Elderfield (Secretary), H. S. Goodhart-Rendel, E. Stanley Hamp, E. Vincent, P. D. Hepworth, Ralph Knott, Niel Lloyd, Ian MacAlister, Edward Oswald P. Milne, W. G. Newton, Plume, Howard Robertson, Herbert Rose, A. Dunbar Smith, Philip Tilden, Gerald Wellesley, H. C. D. Whinney, Wilson, and Professor J. Hubert Kingston.

Outlining the Club's activities, the President referred to the exhibition at the R.I.B.A. in Conduit-street, and expressed the hope that the premier architectural body should be housed in a more imposing building. Proposing the toast of "Architecture," Mr. SQUIRE said the ancients placed the arts in the order of architecture, sculpture, painting, music, and the drama. If we were to express our views of the fine arts we should include literature, oratory, dancing, and perhaps organisation. Of the fine arts, it seemed to him that architecture was the most beautiful and comprehensive, because while others might have charm, others fragrance, architecture might have all of them, and also might be coupled with them utility; architecture had the privileges of permanence and endurance. The people who had the architecture of London in their hands had the privilege of building that which would last permanently, and they could give to buildings all the beauty they chose. One of the most extravagant things in the world was the continued occupation of valuable land for pieces of architecture; three-quarters of London ought to have been pulled down years ago. It was too much the custom to allow a building to continue to occupy space as it would stand up, without reference to efficiency in occupying that space. Commerce had been the most backward in development. Public buildings were superb, and elsewhere; domestic architecture, particularly inland, was delightful; but commercial architecture had not been employed to the advantage of which it was capable. But more effort was being made in that direction. Through the Royal Institute the architects of the country felt the privilege of inspiring the public with the desire to do things in a better and still better way. Through the Royal Institute the architects of this country could make a stronger case for themselves. In America the architectural societies were recognised by the authorities, and no public work was undertaken without their consent, because the architects made themselves sufficiently strong to win recognition of their knowledge. It was a great pity that the streets they had recently seen in London had not been taken in hand by the Royal Institute and a plan conceived which would have made Regent-street one of the most beautiful things in the world. Regent-street was a very unfortunate instance: it should have been made as beautiful as the sixteenth-century architects could design, as it had been made as beautiful as the nineteenth-century architects could design. If they could teach the public the elements of architecture they would find fewer demands for buildings opposed to the first principles of architecture. Because he knew no better, he insisted on a building which might help him to sell a few more and sacrificed a satisfactory structure to his personal wish born of unintelligence. He would like to see the whole world come to London for the last thing in architecture.

E. GUY DAWBER, in seconding, said at the exhibition at the Galleries of the Royal Institute should convince anyone that

there was no fear as to the future of architecture in England. With regard to the premises in Conduit-street, the Royal Institute had been there for many years, and had long felt they had outgrown them, especially as during the past ten years they had come to an amalgamation of all the architectural bodies throughout Great Britain. The Council were negotiating for premises which would house the Royal Institute in a worthy manner. In London people only noticed architecture at all when certain buildings were referred to in the press. In the rural districts they were rapidly losing all the characteristics which made English country towns and districts so lovable and so beautiful, simply through indifference of the public. The care of villages and towns was almost always in the wrong hands. Whilst architects were doing their utmost to educate themselves up to the highest possible standard, the public should also do their share. Public schools and secondary schools should educate their students in the elements of seemliness, decency and proportion in building. If some teaching of that kind had been given during the past forty years we should not have

seen the degradation and spoliation of the countryside which had gone on. Small houses were being scattered all over the most beautiful parts of the country without the least regard for the districts in which they were situated, and an energetic effort to stop it should be made before it was too late. Local authorities paid not the least attention to the architecture and suitability of such buildings. Everyone tried to get away from London, but if the country were spoiled they would not be much better off there than in town. In considering Regent-street, it should be remembered that competitive designs were obtained for Kingsway, and some extraordinarily fine designs were produced. The London County Council were most anxious to have these designs carried out, but the shopkeepers wanted their own individual buildings, and would not put up with only a portion of the façade. Kingsway even now was one of the finest streets in London, probably owing to the fact that the bulk of the buildings had been designed by one firm of architects; but in Regent-street there had been a number of different architects, who had produced such an unfortunate result.

"Our Literary Side" was proposed by SIR CHARTRES BIRON, and responded to by MR. C. A. WILKINSON.



Oswestry War Memorial Tablet, in the Parish Church.
SIR GILES GILBERT SCOTT, R.A., Architect.

SIR EDWIN LUTYENS'S REPORT ON WATERLOO BRIDGE

IN response to the invitation of the L.C.C. to investigate the possibility of widening Waterloo Bridge, Sir Edwin Lutyens has now reported as follows:—

I have explored every avenue of approach to this problem with due regard to the data and drawings so generously supplied to me by Mr. Humphreys, yet I have, I fear, been unable to arrive at any satisfactory design whereby the bridge could be widened by corbelling out the parapets or any similar method of addition. Architectural detail might amend the schemes already put forward by the council's engineering office, and by others, that I have seen; or, again, those published at various times in the Press, for corbelling in this matter; but any such amendment would not affect the principle I am anxious to maintain, and I have come to the considered conclusion that there is no way of widening Waterloo Bridge by any such method without detrimental effect to its appearance.

To overhang footways would altogether destroy the architectural character of Rennie's bridge, which relies entirely upon its spontaneous and direct motif of arch and pillared buttresses. The narrowness of the bridge emphasises its robust character, and to link the buttresses with any horizontal line that would throw into shade the crown of the arches would completely mutilate the character of the original design, and would create, in fact, not only a new bridge but an ugly one. I have avoided conferences of any sort, so that I remain unprejudiced by divergent views on questions of repair or reconstruction. Good engineering, as good design, always follows the most direct method; and I cannot but believe that, no matter what the council's decision may be, the bridge, to be maintained, must eventually be rebuilt.

The scheme prepared to show how the bridge could be tunnelled with sub-footways is ingenious; yet I believe that Mr. Humphreys agrees with me that such a solution is one not altogether possible to recommend. The best way, if new footways are decided upon, would be to build them in suspension, as independent structures. They would, of necessity, mask the existing bridge, but whensoever, if ever, a Charing Cross or an Aldwych Bridge is built, and when built proves its prophesied relief to present traffic congestion, these independent footways could be removed, and the present bridge, having in the interval been kept intact awaiting this happier time, could then reveal her beauty once more. Admitting the possibility of a new and independent structure supplementing the existing bridge, it would be possible to build a new bridge of one span—over and above the existing bridge—either for foot passengers or for vehicular traffic. It would entail some 30 or 35 steps up from the level of Wellington-street to the upper bridge—an additional burden truly on those pedestrians who wish to cross the river from the Embankment, but one which might be appreciated as a small tax on the public, who have demonstrated their anxiety to save the bridge they so rightly admire. However, I think that only a small percentage of people wish to cross the bridge from the Embankment, as compared with those who cross it from the Strand level.

If a vehicular overhead bridge were contemplated, it would entail a road, starting from York- and Stamford-streets, with a gradient of 1 in 43 to give head room over the old bridge, which, on the Middlesex side, could be carried across the Strand to arrive at Aldwych in very much the same position as is proposed in Mr. Humphreys's under-road scheme. A bridge suspended above the old bridge would not destroy the effect of the yet existing bridge—though it might interfere with various buildings or Somerset House—facing

Wellington-street—and much could be said against such interference; but wherever one turns, or whatever solution is attempted, questions of this nature are bound to arise. London suffers, and will for ever suffer, from problems of this kind until such time as some definite plan and policy are adopted which will ensure, over a period of many years, the growth of a new and predestined London.

A suspended bridge in one span (an exciting problem for your engineers) would create the least disturbance to the lines of the still barely existing bridge; or, similarly, a series of spans, built in suspension to contradict the lines of the present arches. The bridge of one span would be the least disturbing to the views across the bridge of St. Paul's, or to the lines and design of Waterloo Bridge itself. Again, by heightening the bridge, I believe it is possible to widen it by 12 ft. 6 in., thus giving a 40-ft. carriage-way and two 7 ft. 6 in. footways, and this in the end may prove to be the simplest solution, if, when rebuilding, the piers are raised a minimum of 5 ft. and a maximum of 8 ft. 3 in. Rennie may not have foreseen the Embankment, and, for this or other reasons, that the bases of his columns would be awash at high tide. By raising the piers these bases could never be flooded, and the raising of the arches would increase the waterway between the piers and their abutments by a practical width of 3 ft. 6 in., and, incidentally, greatly improve the Victoria Embankment thoroughfare.

This would again improve the appearance of the bridge at high water. The parapets would remain level, and the traffic gradients required to reach the new level would be within the parapets above the first span on either bank. Widening the bridge will increase the relation between the pier lengths and their pillared buttresses, which are now, in my opinion, great in their æsthetic quality, a point which, I believe and deplore, few realise or appreciate; and for this reason it may not be considered a matter as great in importance as any scheme merely affecting the elevation.

I deeply regret that I have failed to find a sure way of widening Waterloo Bridge by any method which does not, in some way, mar its brave appearance. Yet I have only mentioned a few of the many ways in which I have endeavoured to discover an adequate solution of what I believe to be a nearly impossible problem—so to add to the amenities of Waterloo Bridge without affecting its æsthetic possession.

SOME OPINIONS ON THE REPORT.

Commenting in a letter to the *Times* on Sir Edwin's report, Sir Reginald Blomfield writes: "Imagine this gigantic arch in a single span above the existing bridge. As seen from either above or below the bridge, the effect would be that of some hideous nightmare, but apart from the portentous effect of such a bridge, it seems to be obviously impracticable. Sir Edwin says, 'A vehicular overhead bridge would entail a road starting from York- and Stamford-streets, with a gradient of 1 in 43 to give head room over the old bridge.' But the existing gradient of the approach from York-road to the south end of the bridge is about 1 in 36. Therefore the approach to the overhead bridge would not rise above the existing approach, but would burrow into it. What would happen on the north side goodness only knows, and apparently the poor old bridge would lie derelict and partly buried under this fantastic superstructure."

"As to the proposal to heighten the bridge in order to widen it, Sir Edwin suggests that this would improve its effect, although he himself had already pointed out that 'the narrowness of the bridge emphasises its robust character,' and that to widen it would spoil it, and

he further suggests that Rennie might not have foreseen that the bases of his columns be under water at high tide. Sir Edwin rest assured that Rennie knew very well what he was about, and that he realised that the Thames is a tidal river. As the water is always moving up or down, the water level, though it may appear constant for a short time, is never actually the same, and which might look well at the top of the bridge, personally I think they would be spoiled by heightening—might look intolerably when the tide was down. . . . In default of ignorance of the views of his colleague Sir Edwin) gives it as his opinion that the matter what the Council's decision may be, the bridge, to be maintained, must eventually be rebuilt.' Why 'must'? The question is rebuilding versus underpinning is a matter for engineers rather than for architects. It is well known that the almost unanimous opinion of architects, supported by very eminent engineers, is that the bridge can be underpinned, that repair, not reconstruction, is all that is necessary, and that on no account should the design of the bridge be altered in any way. . . ."

Mr. Arthur Keen, in an interview, said that it must not be forgotten that Waterloo Bridge should be regarded as a small bridge, and that the traffic should be dealt with elsewhere. Anyone who looked at the map of the city could see that the great body of street traffic flows from Regent-street for its centre and with Euston Road on the west and Tottenham Court-road on the east, constituted a triangle, the apex of which was Charing Cross, so that that was the one to deal with traffic, and not Waterloo Bridge.

Mr. Dalrymple-Hay said the strengthening of the foundations of the piers (of the bridge) was a simple and ordinary engineering proposition. It was the cheapest method that could be done to make it permanent. The foundations could be taken down to the London blue clay and spread out to give ample bearing resistance. If that were done the work could be carried out in a less manner than by any other proposal that has yet been made.

Sir Wilfrid Stokes (Past President of the British Engineers' Association, and chairman of a conference of engineers that agreed that a bridge could be made safe) said he agreed with the report, and nothing more fantastic than the idea of having a new span bridge across the existing structure. Engineering difficulties would be stupendous, the cost prohibitive, and the result hideous. He thought it practically impossible to have abutments that would carry the bridge. With regard to the suggestion that the bridge must be rebuilt, it should be remembered that only two of the arches were to be formed: the other parts of the bridge would be left perfectly sound. The only question was regard to the foundations, and for a comparatively small sum they could be put in order.

Mr. Ewart G. Culpin said he believed underpinning was an adequate remedy, that there was no excuse for rebuilding the bridge were taken down it would be rebuilt, and even if it were it would be Rennie's masterpiece. The bulk of the opinion was against Sir Edwin's contention that the bridge must come

White Lines on Highways.

The Minister of Transport has issued a statement dealing with the white lines on highways to reduce traffic risks; but it exists considerable diversity of opinion as to the different areas, steps are being taken to collate the views of local authorities. These have been considered, the Minister proposes to issue a circular letter to all authorities concerned with a view to standardising of white lines throughout the country as a whole.

HISTORY OF ENGLISH BRICKWORK

RE are encouraging signs that more is being taken in the traditional arts of building, as well as in the old crafts and towns in which so many beautiful examples of these crafts can be found. The use of timber, stone, brick, plaster and iron-work which can be seen in so many parts of the country is becoming more and more popular by means of photography and the illustrated press, while the great increase in travelling facilities affords opportunities denied former generations of visiting beautiful places. Perhaps to photography the press more than any other agency we must in bringing before the public these things and giving them some idea of the many examples of beautiful buildings to be found in the arts which go to their creation. Be it as it may, photography and the press have been employed in the production of an exceptionally fine book on English brickwork*, which contains a wealth of beautiful illustrations of some of the finest brickwork existing.

This is a book," says Sir Edwin Lutyens in his introduction, "that all who appreciate the art of brick building, and all architectural students, both young and old, who yet have ambitions to improve, should possess, read and re-read," and we believe this will be the verdict of those who read the authors' work. The arrangement of the contents is to be commended, for while a general historical note on the history of English brickwork is given, the subject is more particularly treated in short chapters such as: Brick sizes; prices, wages and output; brick-making; terra-cotta; tiles, Proclamations and Orders; tax on bricks; characteristics of brick; factors (form, colour and colour); association with other materials; manipulation of brick; table of measurements, &c. The author writes

well and, thanks to this, the interest of the subject and the good type, the "History" is a pleasure to read, and should be the means of extending the knowledge of the general public as well as that of architects, craftsmen and others more particularly interested in the possibilities of brick architecture. Most architects know what these possibilities are, and if this book adds to the knowledge of the general public—with whom, as the author says, rests the decision what domestic buildings shall be built and of what materials—the author will have deserved well of the community, and especially those who desire to see the fine brick traditions of the country carried on.

What this tradition is can be seen by those who may not know from the very fine collection of brick structures illustrated, two or three of which we reproduce this week. Brick is a material which was highly esteemed by Wren and some of our best architects, and examples of brick structures include some of the most picturesque to be found in any material and as durable. While a few of the examples shown are well known, they have been included because of their importance, but the majority, we are informed, have not previously appeared in any book, and almost all the photographs have been taken specially for this volume. Much could be said about the quality and charm of these illustrations—the careful selection of picturesque and serviceable types, which cannot fail to create or stimulate an appreciation of the many brick buildings of our towns and villages—and though many good brick buildings have not, of course, been included in the work, "it is believed that every important type is represented by at least one example," while a good many measured drawings have been included, adding to the usefulness of the work. We agree with Sir Edwin Lutyens that "Mr. Lloyd has done real service to a great English tradition," and with him we may "earnestly hope that English architects and builders will take heed and benefit so that our England will become yet more beautiful and the prevailing methods that so mar our country will cease; and that the

influence of this book will once more help to produce those beauties that were ours in times, alas! gone by." A fitting commentary on this is afforded by Mr. Lloyd in his short chapter on "Characteristics of Brick":—

"Provided fashion does not oust brick in favour of modern substitutes (fashion often succeeds in substituting the worse for the better) brick seems likely to hold its own for all ordinary building works. The buildings illustrated in this volume are proofs of the durability of brick, and the many admirable qualities they possess are so largely due to this material as to merit the closest study. Success in handling building material has ever depended upon intimate knowledge of its capabilities and limitations. Of no material is this truer than of brick, and the masterpieces of brickwork owe as much to the craftsman as to the designer. The failure of the late nineteenth-century brickwork revival was owing to the designer's failure to understand the material and to the extinction of intelligent craftsmen whose achievements in earlier work were the fruit of long and intimate experience."

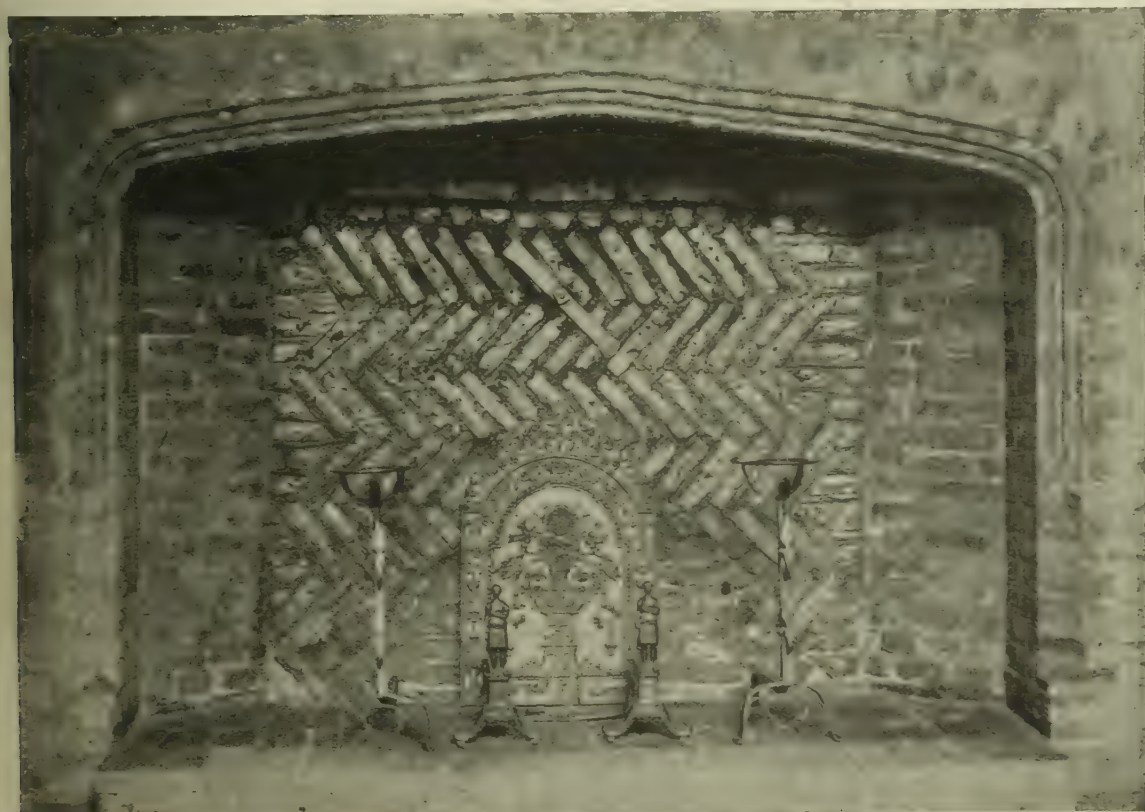
The author must have devoted much time and research in the preparation of a delightful book, upon the production of which both he and the publisher can be heartily congratulated.

Restoration of the Jewel Tower.

The restoration of the Jewel Tower of Westminster, the only remaining portion of the Royal Palace in 1377, is now complete.

Swansea University College.

We understand that Lord Eustace Percy recently opened the new buildings at the Swansea University College for the faculty of arts and also those for the department of engineering. The block erected for the faculty of arts provides classrooms convertible into an assembly room and full specific library. The new engineering laboratories provide a floor space of 16,000 square feet, and when fully equipped the capital expenditure will amount to £50,000.



From "A History of English Brickwork."

Brick Fireplace in King's Chamber, Oxburgh Hall, Norfolk.

LEADING CONTENTS. PAGE

WAR MEMORIALS AND SYMBOLISM	691
NOTES	692
GENERAL NEWS	694
COMPETITION NEWS	694
CORRESPONDENCE	696
THE ARCHITECTURE CLUB DINNER	697
SIR EDWIN LUTYENS'S REPORT ON WATERLOO BRIDGE	698
HISTORY OF ENGLISH BRICKWORK	699
ARCHITECTURAL SOCIETIES	707
HOUSING AFTER SLUM CLEARANCE	708
THE SURVEYORS' INSTITUTE	709
NEW MATERIALS FOR HOUSING	710
ARCHITECTS' AND BUILDERS' INQUIRY BUREAU	711
THE BUILDING TRADE	712
ATHOLL STEEL HOUSES	715
NEW BUILDINGS IN LONDON	716
RATING AND VALUATION BILL	717
CONTRACTS, COMPETITIONS, &C.	718
PROPOSED NEW BUILDINGS AND OTHER WORKS	720
THE SCOTTISH BUILDER	723
TENDERS	725

ILLUSTRATIONS

R.I.B.A. Archibald Dawnay Scholarships.

The R.I.B.A. Archibald Dawnay Scholarships are offered annually by the Royal Institute for competition between students of recognised schools, and are intended to foster the advanced study of all forms of construction, the economic and practical use of materials, and the logical expression in architectural design of structural elements. This year all the scholarships available have been awarded to the students of the Architectural Association, which is a testimony to the high standard which is being attained in the school in the study and delineation of construction and practical detail. The successful students are as follows:—R.I.B.A. Archibald Dawnay Scholarship of £75 for one year, Mr. J. Breakwell; R.I.B.A. Archibald Dawnay Scholarship of £50 for one year, Mr. W. R. Brinton; special additional R.I.B.A. Archibald Dawnay Scholarship of £50 for one year, Mr. R. P. Cummings.

Our illustrations show examples of the work of Mr. J. Breakwell, the subjects being working drawings which form part of the general school course.

A New Building in Leadenhall-street.

This additional corner building has been erected so as to form in every way, internally and externally, a continuation and completion of the London & Lancashire Insurance Co.'s existing premises, Nos. 149 to 155, Leadenhall-street. The Leadenhall-street elevation is designed so as to bring the main entrance to the Company's own offices in the centre of the building. At the angle of Leadenhall-street and Bishopsgate, a tower has been built containing an electric illuminated clock which can be readily seen, not only from the Mansion House, but also from the London Bridge end of Gracechurch-street. The new building contains ten stories, with a superficial area of approximately 24,000 ft. The complete premises now provide nearly two acres of floor space. The ground floor hall is lined with veined statuary marble, and Sicilian white marble is utilised on the lower ground floor and throughout the staircase. The exterior is in Portland stone, with granite base, and a bronze doorway gives access from Leadenhall-street to the ground floor premises. The upper floors are entered from Bishopsgate. Every part of the new building has excellent natural light. Carefully-considered schemes have been installed for electric lighting, central and domestic heating, mechanical ventilation, air washing and ozonising. An electric elevator is installed and posting chutes are placed on every landing.

The general contractors were Messrs. Ashby & Horner, and the following were sub-contractors: Mr. G. Hawkings, stone carving;

Davis, Bennett & Co., drainage and sanitary work, also boilers and heating and warming systems; Pinching & Walton, electric lighting and ozone machinery; Moreland, Hayne & Co., steel construction; The Kleine Patent Fire Resisting Flooring Syndicate, Ltd., reinforced floors; Crittall Manufacturing Co., bronze and steel windows; Fenning & Co., marble work; W. B. Simpson & Co., tiling and granolithic; P. Turpin, ornamental plaster ceilings, board room and luncheon room panelling; Express Lift Co., electric lift; Birmingham Guild, Ltd., ornamental lift enclosure and rails to staircase and bronze door and ornamental metal work; J. Kaye & Sons, locks and door furniture; A. Williams & Co., well sinking and pumps; Chatwood Safe Co., strong-room doors; The Standard Time Co., clocks and dials; Art Pavements & Decorations, Ltd., biancola partitions; The Luxfer Co., Ltd., glazing; Waygood-Otis, Ltd., letter chutes; The Gas Light & Coke Co., gas services and kitchen fittings; J. A. King & Co., Ltd., pavement lights, etc.; Val de Travers Asphalt Paving Co., Ltd., asphalt; Messrs. W. T. Allen & Co., railings to street and radiator grilles. Messrs. M. E. & O. H. Collins were the architects.

New Theatres Block, Cancer Hospital, S.W.

This extension to the Cancer Hospital replaces an old theatre that had been in use for fifty years. It has been erected as a memorial to the late Sir Charles Ryall, C.B.E., F.R.C.S., senior surgeon to the hospital for twenty-eight years. The scheme provides for a double operating unit with a complete group of auxiliary rooms. The extension occupies the site of the old maids' quarters on the third floor of the main buildings, formerly a high-pitched roof with dormer windows, and to prepare the lower structure for the new story a very considerable amount of work in the way of thickening walls, underpinning, steelwork, etc., was necessary. The planning of the extension was dominated by the outline of the old building, the position of the lift, the main stairs and the chimney shafts from the lower four floors, and the work was successfully carried out without interfering with the work of the hospital, beyond closing the wards on the second floor of the main building for about six months. The plan of the new story provides two operating theatres, with visitors' gallery to each (both galleries being connected and approached without entering the theatres), two anaesthetic rooms, two sterilising rooms and one main sterilising room, two wash-up rooms, sister's room, nurses' room, male and female visitors' rooms with lavatories attached, surgeon's room with bath and lavatory, and linen and instrument room. An X-ray room is provided, with dark room attached and a small pathological laboratory. The theatres, anaesthetic rooms, laboratory, etc., are planned facing north; the other rooms face south, the portions being divided by a wide corridor running due east and west. A wide easy stair is provided from the second floor, and an automatic push button bed-lift communicates with all floors from the basement upward. Wide iron escape stairs are arranged at either end of the main corridor.

The main façade is in red brick and Portland stone to harmonise with the existing building, and the roofs are covered with best Bangor slates with asphalt flats. A machinery and a tank room are provided on the roof at the back approached by a small stairs from the third floor. The internal finishings of walls are in Keene's cement painted and enamelled, the sterilising and wash-up rooms being tiled and the main corridor lined with marble and tiles inlaid for a height of 6 ft. The heating and hot-water supply is by radiators, all supplied through Royle's calorifiers, steam being supplied by a pair of Cochran vertical steam boilers in the boiler house in the basement. The floors of the theatres, etc., are in terrazzo, the X-ray room in rubber, the corridors in rubber with terrazzo margins, and the other rooms pitch pine wood block.

A very complete electrical installation is provided, including power points throughout

for various X-ray and surgical apparatus light used over the operating tables consists of a single crystal lamp inside a large reflector the lamp being capable of being moved in any directions and adjustable to any angle. Particular care has been taken with the internal finishings, doors, windows, etc. Projections and angles being eliminated as far as possible and every angle made convex or concave.

The general contractors were Messrs. Ashby & Hill (who also carried out the existing system of electric light, power, and fittings) and the following were sub-contractors: Redpath Brown, steelwork; Thos. Potter, heating and hot water supply; Carter & Co., tiling and terrazzo; Henry Hope & Sons, windows; Pinchin Johnson, satinette and John Bolding, sanitary fittings, including specially designed basins for the theatres; W. Alliot, sterilising apparatus; W. Otis, Ltd., lift; Western Electric Co., phones. Mr. Thomas A. Pole, A.R.C.S., was the architect.

A Sixteenth-Century Staircase.

This staircase is still to be seen in preservation in the Bate Hall Hotel, Cheshire, Macclesfield, in the ownership of Messrs. W. A. Smith & Sons, Ltd., Crown Buildings, Macclesfield. The building disguises its antiquity with a modern front, but writing of 1818, Ormrod, the Cheshire historian, described it as then "having long been used as a house," but that formerly it was the residence of the Stopfords, ancestors of the Earl of Courtown. In Ormrod's time it had a front "in the style of timber edifices for the Rows of Chester," and a very handsome lantern window over the archway. The aspect is still preserved at the rear, an archway with massive beams still leads to a cobbled courtyard; but the pride of it is the Tudor staircase with its massive posts and pendants of solid oak, and the balusters running up from the ground to the top landing.

We are indebted to Mr. Edgar Shuttleworth for the above note and the illustrations of the case.

MEETINGS

FRIDAY, November 13.

Royal Academy of Arts.—Professor Laurie, on "Painting Media: Oils, water-colours, and tempera." At Burlington House, 4 p.m.

Royal Institute of British Architects.—At 9, Conduit-street, W.1. 8.30 p.m.

London Society.—Sir F. Baines on "History and Preservation of Westminster Abbey." At 18, John-street, Adelphi, W.C.2. 5 p.m.

Town Planning Institute.—President's address by Professor P. Abercrombie. At Victoria-street, S.W.1. 6 p.m.

SATURDAY, November 14.

Institution of Structural Engineers.—Industrial Research Laboratories and Materials Testing Department of the City of Birmingham. 3 p.m.

MONDAY, November 16.

R.I.B.A.—Mr. Raymond Unwin, F.R.C.S., on "The Architect and His City." At Conduit-street. 8 p.m.

Royal Academy of Arts.—Professor Laurie on "Modern Pigments: Their Selection and Use." At Burlington House, 4 p.m.

TUESDAY, November 17.

College of Estate Management.—Mr. F. Unwin, F.R.I.B.A., on "Town Planning." 35, Lincoln's Inn Fields, W.C.2. 5.30 p.m.

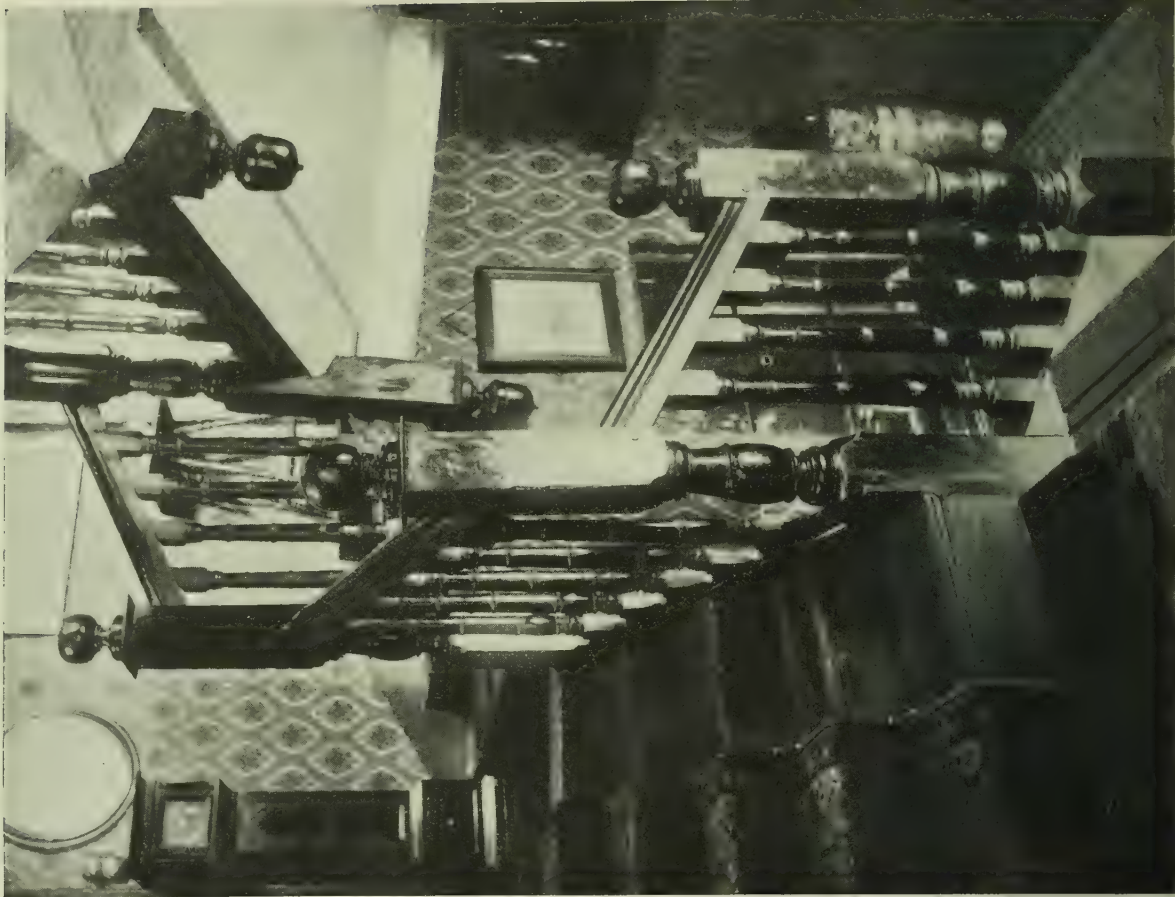
Royal Academy of Arts.—Professor Laurie on "Methods of Wall Painting." At Burlington House, W.1. 4 p.m.

WEDNESDAY, November 18.

Royal Society of Arts.—Mr. I. C. Goode on "The Furniture of Hampton Court." John-street, Adelphi, W.C.2. 8 p.m.

Royal Academy of Arts.—Professor Laurie on "The Selection of Stone for Building." At Burlington House, W.1. 4 p.m.



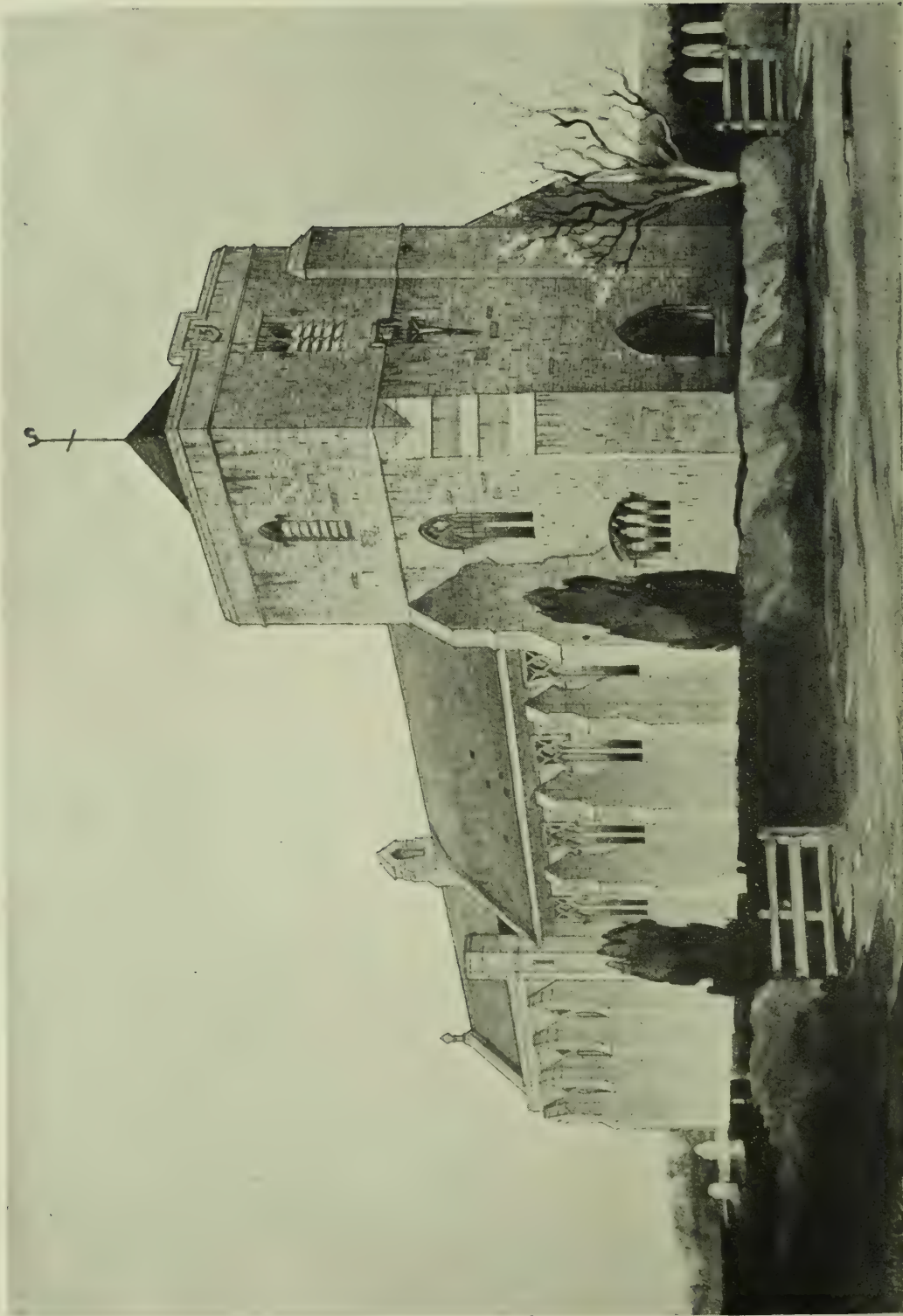


BOTTOM FLIGHT.



TOP FLIGHT.





ROYAL ACADEMY EXHIBITION, 1925

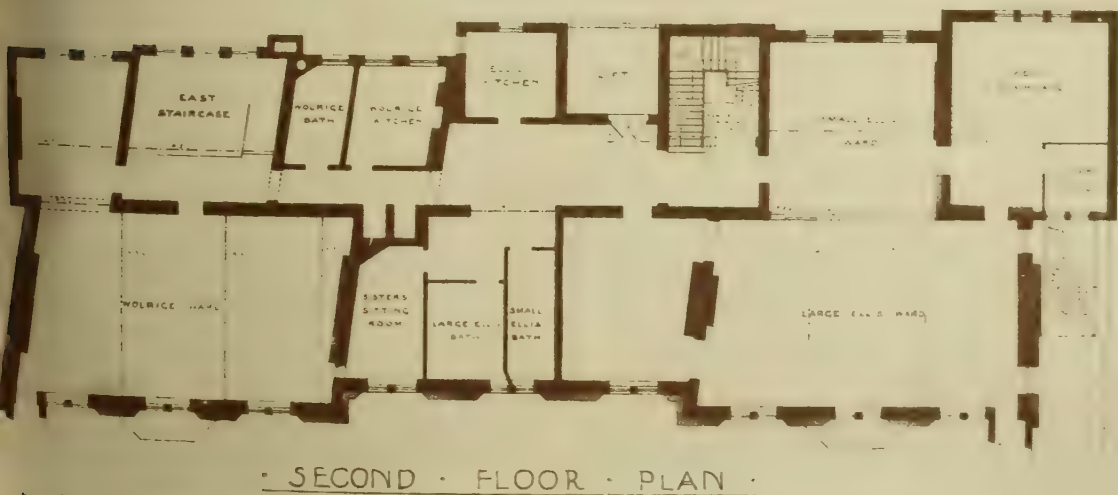
Little Coates Church, Lincolnshire. Mr. Walter Tapper, F.R.I.B.A., Architect.

This is an enlargement of the existing church, which consists of a nave and south aisle, the latter about 6 ft. wide. To the north was added a new chancel and tower. The walls are faced with Weldon stone and coursed rubble with dressings of the same.



NEW PREMISES, LONDON & LANCASHIRE INSURANCE CO., LTD., LEADENHALL STREET, E.C.

MESSRS. M. E. & O. H. COLLINS, ARCHITECTS.

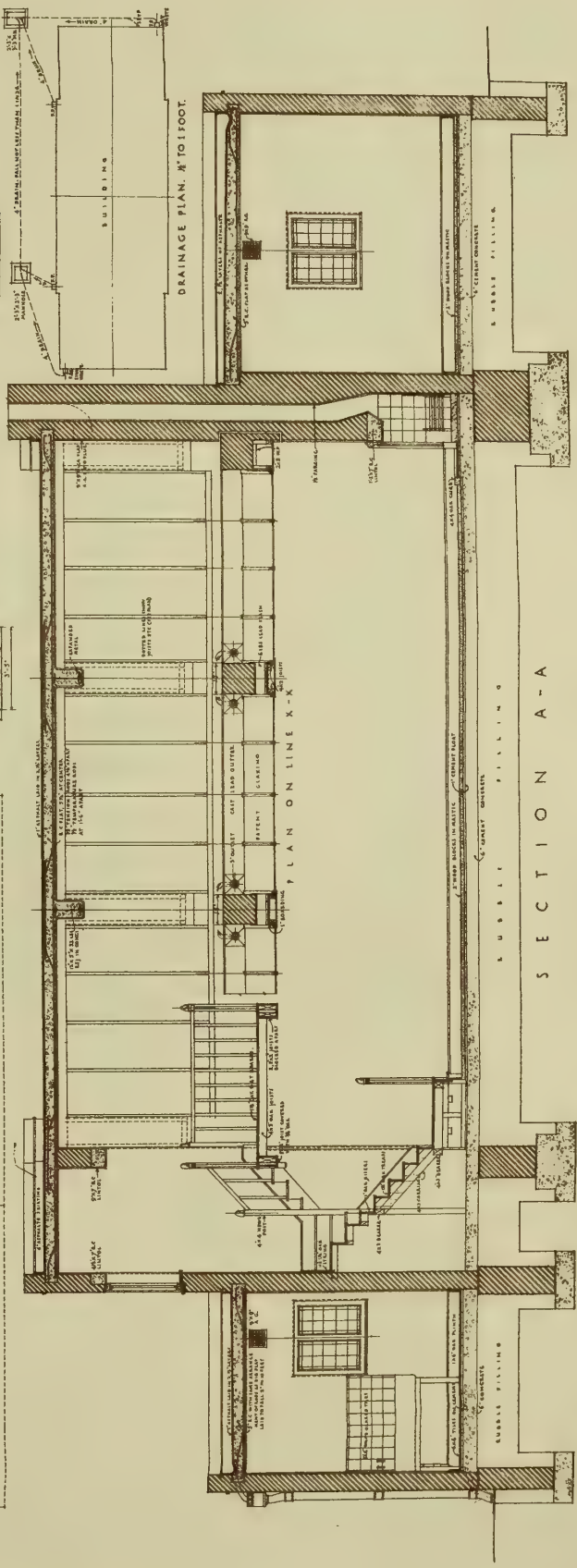
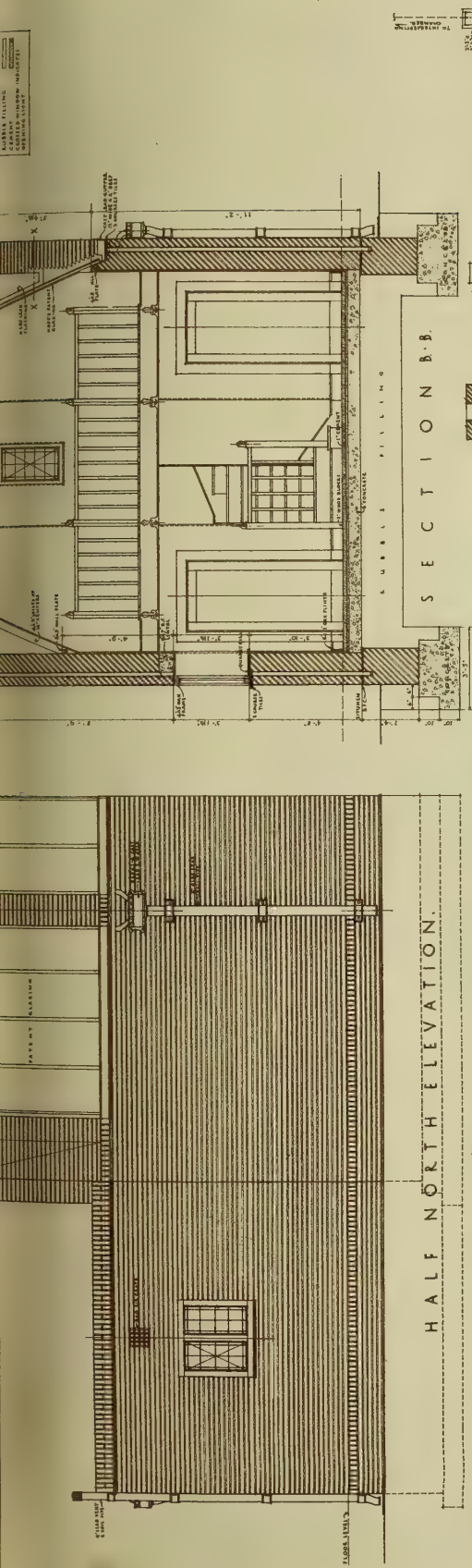


SCALE: EIGHT FEET TO AN INCH

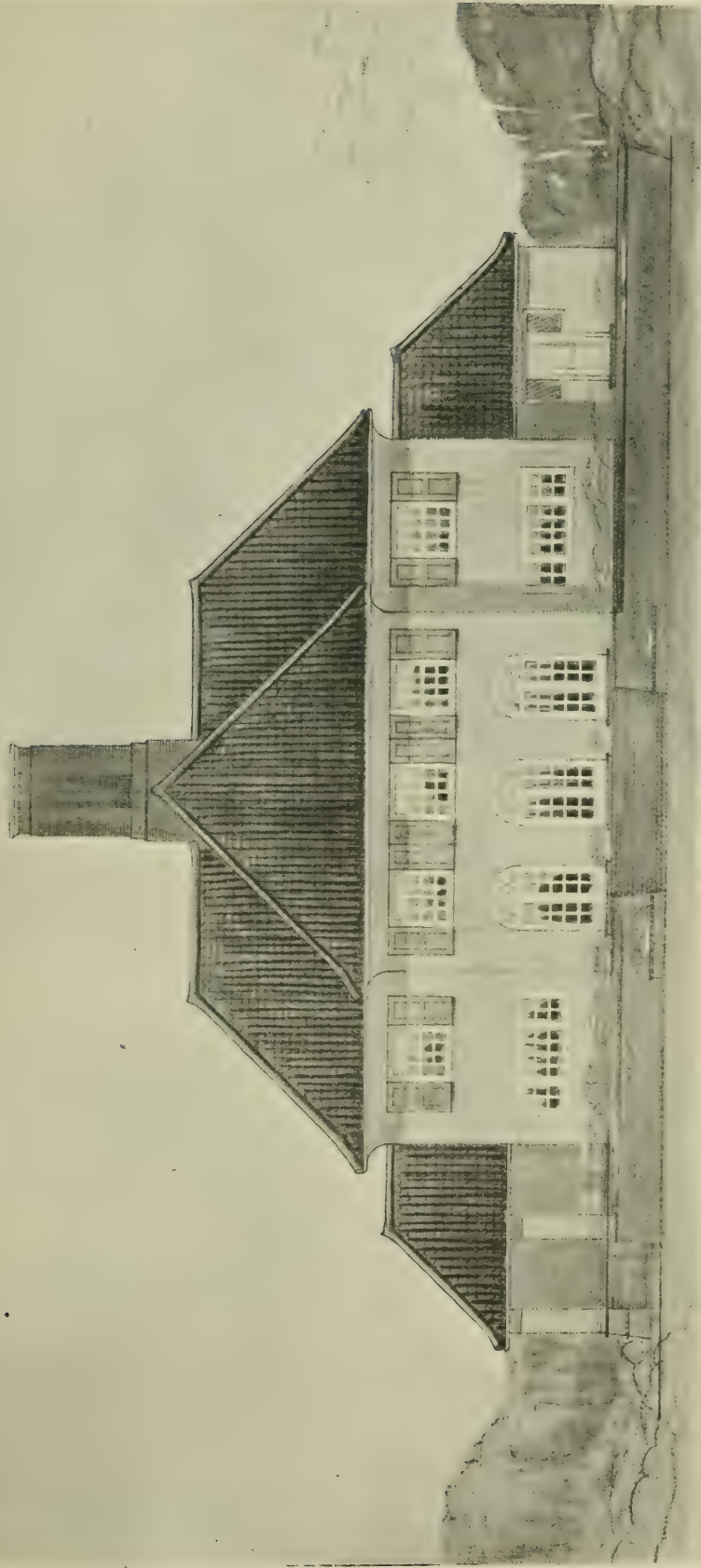
THE CANCER HOSPITAL, S.W.: NEW THEATRE BLOCK (RYALL MEMORIAL).

MR. THOMAS A. POLE, A.R.I.B.A., ARCHITECT.



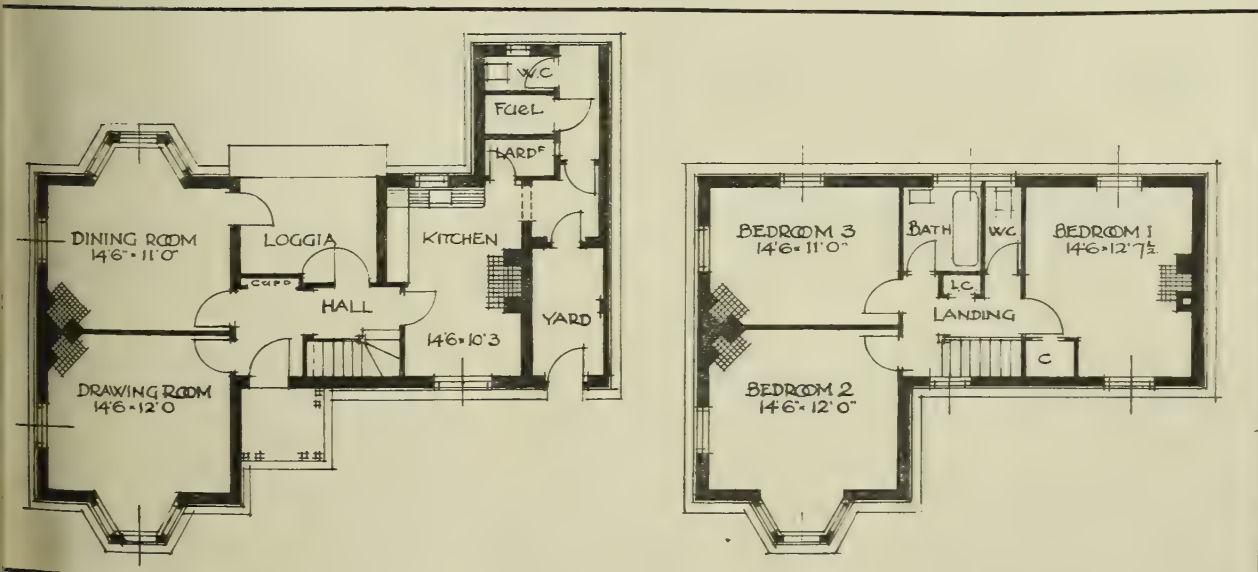


THE R.I.B.A. ARCHIBALD DAWNAY SCHOLARSHIPS:
DESIGN BY MR. J. BREAKWELL (ARCHITECTURAL ASSOCIATION), AWARDED £75.



ROYAL ACADEMY EXHIBITION, 1925.

A House at Aldeburgh. Mr. OLIVER HILL, F.R.I.B.A., Architect.



House in High Oaks-road, Welwyn Garden City.

MESSRS. LOUIS DE SOISSONS and ARTHUR W. KENYON, F.F.R.I.B.A., Architects.

This house is of brick, with a tiled roof. Bay windows are a feature of both front and back elevations. The house was erected by Mc-srs. Welwyn, Builders, Ltd.

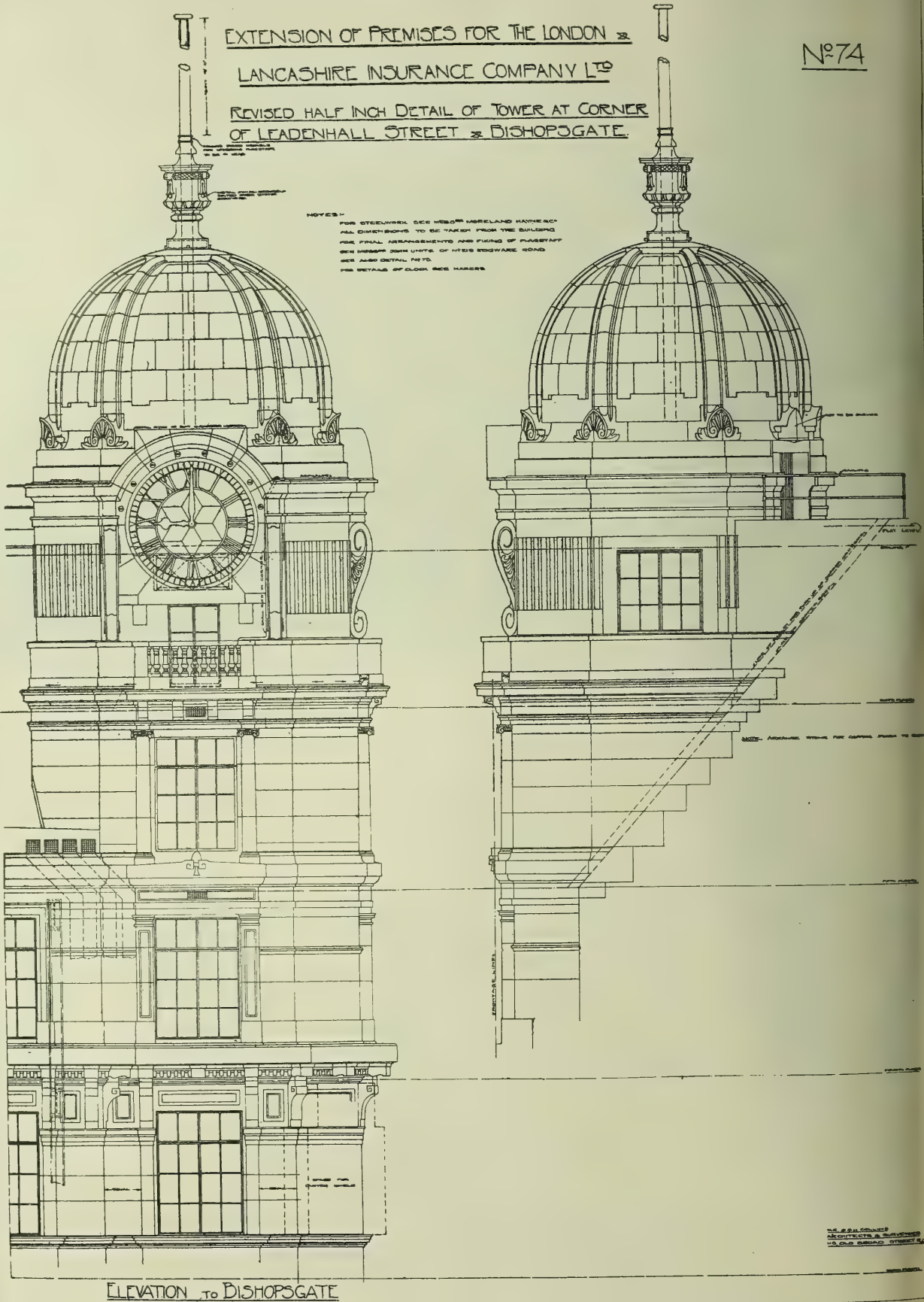
Nº 74

EXTENSION OF PREMISES FOR THE LONDON &
LANCASHIRE INSURANCE COMPANY LTD

REVISED HALF INCH DETAIL OF TOWER AT CORNER
OF LEADENHALL STREET & DISHOPGATE

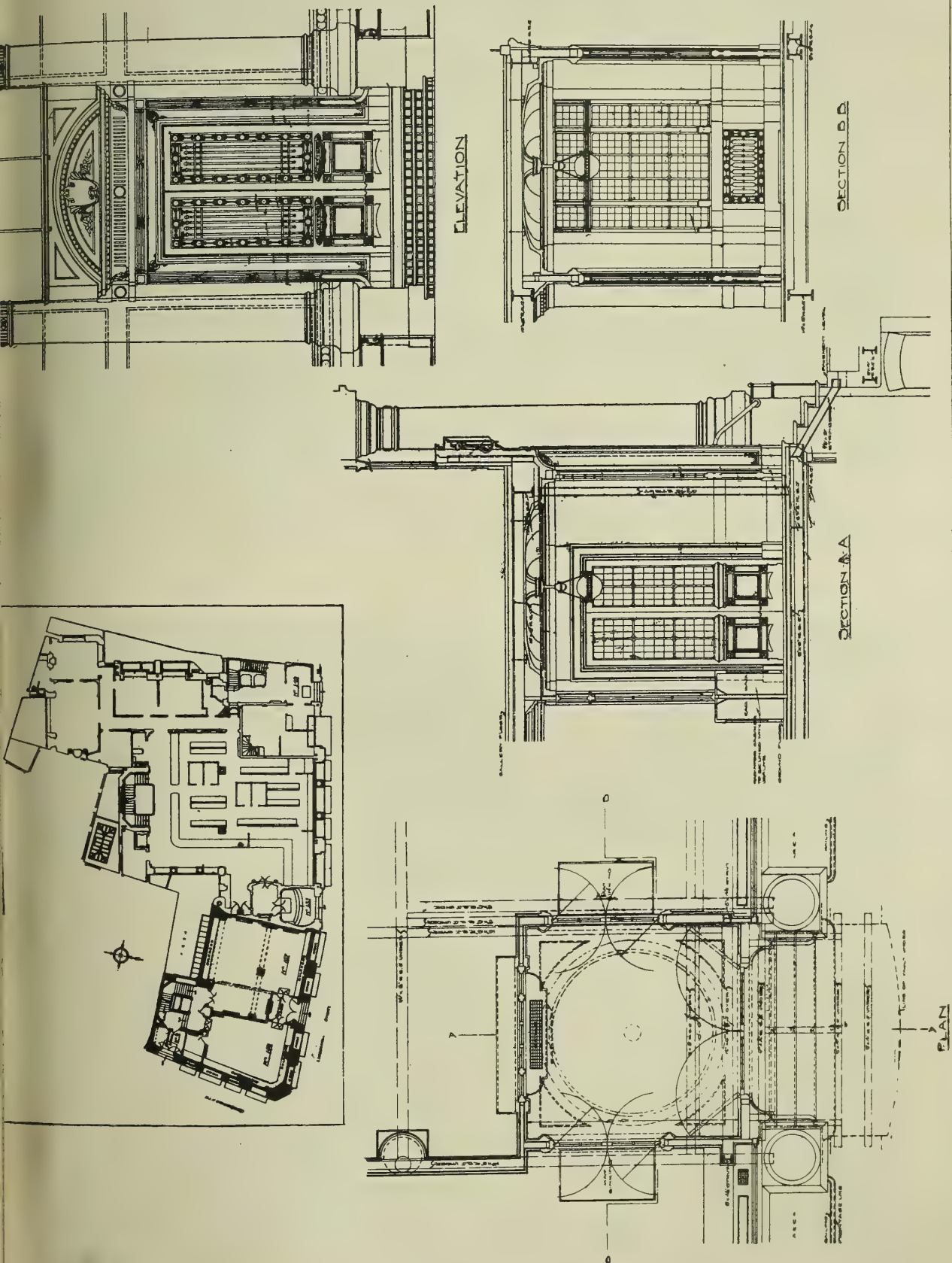
NOTES:-

FOR STEELWORK SEE MESSRS HARELAND HARRIS & CO
ALL DIMENSIONS TO BE TAKEN FROM THE BUILDING
FOR FINAL ARRANGEMENTS AND PLACING OF PLASTER
SEE MESSRS JOHN UPTON OF 115 & 117 EDWARDS ROAD
SEE ALSO DETAIL PAGE
FOR DETAILS OF CLOCK SEE HARRIS



Extension of Premises for the London & Lancashire Insurance Co., Ltd., Leadenhall-street, London :
Details of Corner Tower.

MESSRS. M. E. & O. H. COLLINS, Architects.



Extension of Premises for the London & Lancashire Insurance Co., Ltd., Leadenhall-street, London : Details,
Messrs. M. E. & O. H. COLLINS, Architects.



OPERATING THEATRE.



A CORRIDOR.

The Cancer Hospital, London, S.W.
MR. THOMAS A. POLE, A.R.I.B.A., Architect.



ARCHITECTURAL SOCIETIES

ROYAL INSTITUTE OF BRITISH ARCHITECTS.

Constitution of the Board of Architectural Education.

At the year 1920, the Council of the R.I.B.A. decided on the reconstitution of the Board of Architectural Education as soon as the necessary powers had been granted by the Privy Council. A new charter having come into operation this year, the matter was at once taken into consideration and the new constitution of the Board has now been approved by the Council. It has been decided to make the Board fully representative and bring it into touch with other bodies having interests allied or bound up with those of architectural education, to enlarge its scope, and to enable it to discharge its proper functions as the central authority, under the Council of the R.I.B.A., advising on architectural education throughout the Kingdom and in the Colonies.

With this object in view, the Board is to be reconstituted and is to have under it three committees with executive powers in all line matters, viz., Schools, Examinations, Prizes and Scholarships Committees, the Board itself, subject to confirmation by the Council, dealing with matters of general principle and policy. The Committees, being composed of representatives with great experience in the matters with which they will have to deal, and having power to act, greater efficiency and expedition is to be expected. Besides the committees there will be a small Board of Moderators, who will deal with the standard of examinations and testimonies of study and setting and marking of the actual examination papers. A small Visiting Board will perform similar functions in connection with the Schools and by periodical visits will be able to keep the Schools Committee in touch with the Schools recognised by the R.I.B.A. to ensure that a uniform standard is maintained. The inclusion of R.I.B.A. members, specially concerned with education, both on the Board and on the Committees, will make the Board of view in the Board and for a wider knowledge of the Board's work in the Institute. By all of those means co-ordination is to be expected and the advice and assistance of the State and other educational authorities will be of great value and will enable the Board to discharge its duties with greater skill and efficiency as will be seen from the proposed constitution which follows, the lists of subject, of course, to acceptance from the bodies concerned. The Chairman of the Board is Mr. Maurice E. Webb; Mr. Walter E. and Mr. Henry M. Fletcher, M.A., are Vice-Chairmen; and Mr. L. Sylvester Sullivan is Secretary.

Constitution of the Board of Architectural Education:—

One representative from each School of Architecture recognised for exemption from the Final Examination (at present seven, omitting McGill University and Sydney University).

One representative of the Governing Bodies of the Universities, including Oxford, Cambridge and London, and three others to be nominated by the Standing Committee of Vice-Chancellors and Principals of the Universities of Great Britain and Ireland.

The Director of Education, School of Architecture, the Architectural Association.

Schools of Architecture recognised for exemption only from the Intermediate Examination—

One representative for every two schools by ballot (at present eight, including the Northern Polytechnic and the R.W.A. School of Architecture, Bristol, but excluding the Bombay School of Art and the University of Toronto).

Polytechnics teaching architecture, Technical Schools teaching architecture, and Art Schools teaching architecture, to be nominated by the Society of Art Masters.

H.M. Board of Education.

The Director of Education, the London County Council.

The Headmasters' Conference.

The Association of Architects, Surveyors and Technical Assistants.

The Institute of Builders.

The Master of the Art Workers' Guild.

The Royal Society of Arts.

The Incorporation of Architects in Scotland.

The Royal Institute of the Architects of Ireland.

The British School of Rome, Faculty of Architecture.

The Royal Academy School of Architecture.

The President of the Town-planning Institute.

The President, R.I.B.A.

The Hon. Secretary, R.I.B.A.

The Chairman of the Allied Societies' Conference.

The President of the Architectural Association.

Thirteen R.I.B.A. members, excluding the officers of the Board, to be appointed by the Council on the recommendation of the Board of Architectural Education (one-third, excluding the officers of the Board, to retire every year).

2. Schools Committee.—

One representative from each School of Architecture recognised for exemption from the Final Examination (at present seven, omitting McGill University and Sydney University).

One representative from each School of Architecture recognised for exemption only from the Intermediate Examination (at present eight, including the Northern Polytechnic and the R.W.A. School of Architecture, Bristol, but excluding the Bombay School of Art and the University of Toronto).

R.I.B.A. Members.

H.M. Board of Education Inspector.

The Director of Education, the London County Council.

Polytechnics, Technical School and Art Schools teaching architecture.

R.I.B.A. Visiting Board.

3. Prizes and Scholarships Committee.—

A Vice-Chairman of the Board (Chairman).

R.I.B.A. Members.

Schools of Architecture.

R.I.B.A. and other Prizewinners.

The Director of Education, the London County Council.

H.M. Board of Education.

British School at Rome, Faculty of Architecture.

4. Examinations Committee.—

A Vice-Chairman of the Board (Chairman).

The Board of Moderators.

R.I.B.A. Examiners (Intermediate Examination and Final Examination).

The Registration Committee.

R.I.B.A. Statutory Examiners.

R.I.B.A. Town-planning Examiners.

R.I.B.A. External Examiners.

R.I.B.A. Members.

The Association of Architects, Surveyors and Technical Assistants.

5. Board of Moderators.—

R.I.B.A. Members (Ex-Examiners).

6. R.I.B.A. Visiting Board.—

The Chairman of the Board, Chairman of the Visiting Board.

A Vice-Chairman of the Board.

The Hon. Secretary of the Board.

A Teaching Member.

7. Problems in Design and Testimonies of Study.—

A panel of twelve examiners will be set up to deal with problems in Design and Testimonies of Study.

Town Planning and Students of Architecture.

On Monday, November 16, at 8 p.m., Dr. Raymond Unwin will deliver a lecture at the R.I.B.A. entitled "The Architect and his

City." The main purpose of the lecture is to interest students of architecture in the subjects of town planning and housing, and it is the special hope of the Council that there will be a large gathering of students from the schools of architecture in the London area. Admission to the meeting will be free, and it is only necessary for those attending to sign their names in the book on arrival.

THE ARCHITECTURAL ASSOCIATION OF IRELAND.

In the course of his inaugural address to the Architectural Association of Ireland, given on November 3, the President, Mr. W. A. Dixon, M.R.I.A.I., referring to the question of architectural education, said that in future their students would have the use of the studio at University College, and the help and guidance of the studio master, together with other advantages in the form of lectures, etc. An atmosphere would be created wherein a student would feel the friendly rivalry of his fellows, thus stirring up within him the desire to put his best into his work. Exchange of ideas was also more possible in the studio, and the desire to help one another would be fostered. In the studio the students would be guided in their work by a studio master, whose duty it would be gradually to lead them on from one stage to another, applying an occasional test in order to ascertain if the students were keeping the pace; to help them out of difficulties, and to assist and encourage them to express what was within them, and then to show them how to mould the rough thoughts which they jotted down into workable form.

Fundamental principles would be explained, and the student shown that these existed in some form in every known example of their art which was accepted as being worthy of study. In this way, the student was brought into contact with history in a pleasant form, and he would not regard this subject as a thing which involved a concise knowledge of dates, but as a sort of story book which explained how our system of styles came into existence. He would realise that where the principles which he was endeavouring to grasp had been violated the result had been more or less chaos.

Having acquired a knowledge of these basic matters, the student would be permitted to put some of them into practice, by the preparation of designs of an elementary character. In this way, a sound basis would be laid for more advanced design and building construction. The nature and uses of building materials would, of course, find places in the programme, and in addition freehand drawing and draughtsmanship generally.

Northern Ancient Monuments Scheduled.

Section 14 of the Ancient Monuments Act of 1913 is now applicable to an additional list of structures, including the following: Lancashire: Cartmel Priory, Gatehouse; Wraysholme Tower, Ulverston; Knapperthaw stone circle, Lowick; Urswick British settlement; Gleaston Castle; Castle Hill, Pennington; camp near Holme Bank Plantation, Urswick. Westmorland: Gunnerkeld stone circle, Shap; Castlesteads British settlement, the Helm, near Kendal; Scalford British settlement, near Kirkby Lonsdale; Millrigg British settlement, Kentmere; Hugill British settlement, near High Borran; Ewaclose British settlement, Crosby Ravensworth; "Druids' Circle" on Knipe Scar, Bampton.

Middlesex Hospital.

As a first step towards the Middlesex Hospital rebuilding scheme, the west wing will be closed in January. Ten wards, some of which were used for French Revolution emigrants, will disappear, and the 200 patients affected will be accommodated in an old infirmary in Cleveland-street, which will be fitted up as a complete hospital during the reconstruction of the old building. £210,000 has been subscribed towards the £500,000 required.

HOUSING AFTER SLUM CLEARANCE

In the course of a lecture on this subject given at Norwich for the Chadwick Trust on November 5, Professor S. D. Adshead said that the worn-out, unhealthy slum areas in Norwich were very old. Rebuilt several times, they dated not from the eighteenth and the first half of the nineteenth century, but from mediæval times. Broadly speaking, there were two classes of slum areas in English towns—the one, commonly found in our old market towns, was picturesque; and the other, found in our towns that prospered at the commencement of the nineteenth century, had a skin deep interest in its architectural traditions. Most towns that had developed abnormally since 1875 had their terraces of monotonous houses—they were the horrible expression of a super-industrial age, vulgar in appearance and machine-like in their arrangement, but with rare exceptions they could not be described as unhealthy, nor could they be classed as slums.

The greatest difficulty in connection with a clearance scheme was that of removing the people. The difficulties were: (1) You had nowhere to send them to when you drove them out. (2) If you had provided alternative accommodation it would be unsuitable in position for a large proportion of your dispossessed. (3) You could not to-day evict large numbers of people whatever your legal powers. We were not living in last century when the supply of the speculative builder was ahead of the demand. This question of reconstructing unhealthy areas and rehousing the dispossessed, to be dealt with in a statesmanlike way, meant adopting measures and methods that extended far beyond the confines of the area affected. This was the way of the physician; the other was the way of the surgeon. Surgical operations were necessary, and a very great deal of thought would have to be given to the methods of the surgeon, perhaps more thought than to the prescriptions of the physician; but at the same time we must not forget that, in the end, the solution of the problem of clearing out and rebuilding unhealthy areas lay in the slow but steady growth of a well-thought-out development plan for the town. The problem, however, was too urgent and too intimate to depend for the solution entirely upon such comprehensive methods. We must, perforce, resort to the surgical operation.

Where we had a congested population in the worn-out area of a town, to depend on anything short of attracting the population to vacant houses that were hard-by was too remote. It was not sufficient even to provide suitable accommodation in outlying areas of the town, much less to depend upon migration to new satellite towns. The extension of the suburbs coupled with improved facilities for transport would help, as also would the founding of new towns, but the process of spreading the population in this way, though sane, was too slow of realisation. The new place would be occupied by the more enterprising of the people, and by the people who were not necessarily down at heel. The problem of slum clearance could be greatly assisted by migration, but could never be entirely solved in that way. It must always depend upon repairing and rebuilding, if not on the site affected, at any rate in the most easily accessible one that could be found.

With such financial assistance, and with such untried and complicated powers as were provided by the four Housing Acts, occasion was offered in the carrying out of a scheme for the exercise of considerable technical skill. Within the scope of the law, it would appear to be quite easy for a local authority to burden itself with a great deal of unnecessary pulling down, perhaps owing to a very indifferent plan having been prepared; perhaps owing to houses being included that could be better dealt with under Section 17 of the Act of 1909 (now clause 11, subsection 1, Act 1925); perhaps owing to difficulties arising due to inadequate

arrangements having been made for the rehousing of the dispossessed; and lastly, perhaps owing to unnecessary litigation being entered into owing to inclusion in the area of buildings which were not houses and which need not have been included had a really clever plan been prepared.

It was of the greatest importance to prepare a really clever plan. It would have to be a rather cunning plan—a plan that had been prepared with a very clear recognition of the obligation of owners, as well as of the local authority; a plan which dovetailed its radical improvements into an area of houses and buildings of varying interests, and over which varying powers could be exercised in such a way as to appear when the work was completed that the whole area had been dealt with as though it were a scheme under Part I. He ventured to suggest that from the financial point of view, as well as the social and administrative, the success of a scheme would depend more upon the making of a really good plan than upon any of those other factors, such as the valuing and acquiring of sites, the borrowing of money, and the settling of disputes.

What an architect had first to decide after having examined an unhealthy area, was as to what could be put into a reasonably fit condition and what must be pulled down—either because it was too congested or too worn out. If the buildings were reasonably sound—whitewash, the insertion of a damp course, improved sanitation, and perhaps a new roof covering would often be better and cheaper than pulling down. In the main, pulling down was necessary, not for the purpose of rebuilding, but for the purpose of providing light and air. Pulling down was also necessary where buildings were really worn out. Old and worn-out houses are like worn-out machinery. If funds would run to it, it was nearly always a better proposition to pull down entirely and rebuild. There would be a big loss at the outset, but a much bigger return in the long run.

It had always been an open question, the extent that the tenants of worn-out property could be re-housed in the new buildings that would be erected on their site. Liverpool claimed to have practically rehoused the whole of the dispossessed in certain areas. The County Council, he understood, under Mr. Riley's superintendence, managed to house a certain proportion, but by no means all. His own experience in the work at Kennington led him to assume that unless some very special arrangements were made with the old tenants, there was very little likelihood of rehousing on the area more than a very small proportion, and these only amongst the very poorest class.

In an area with which he was interested there appeared to be no solution of this difficulty except by erecting temporary huts in a big open square and utilising them as the passing abode of tenants temporarily dis-housed. Another solution which seemed to be recommending itself to certain local authorities of smaller industrial towns with which he was acquainted was to erect groups of houses on the nearest possible vacant land to the slum, with the hope that the whole of the dispossessed could be attracted to these new houses. He did not think it could be said that as yet there had been any real experience of such a scheme of rehousing, and it remained to be seen to what extent there was a possibility of such a solution, but his own view was that the class of tenant who occupied these very old houses was not a class which could be readily removed to any distance from one district to another, and it would always be found necessary to erect some type of block building on the area of the dispossessed, at any rate, to accommodate the older and more deeply rooted occupants of the slums.

At the present moment we were at the parting of ways. On the one hand we had Mr.

Topham Forrest proposing the erection of a nine-story building for St. Pancras with a view to rehousing the whole of the inhabitants of a crowded area by vertical replanning. Topham Forrest's suggestion was that such a building should be of steel construction, proof, constructed with a brick outer skin and an inner concrete lining and concrete partitions, one fireplace to each tenement, central heating, the staircases to be centrally disposed.

The argument for tall buildings—such as now appeared to be the policy of the London County Council to erect—was that in such buildings a much larger number of people could be accommodated on the same area. There was also the point that a high building helped to pay ground rent. Personally he thought this latter argument was entirely delusion, as unless the land was frightfully expensive, which it need not be if purchased under the recent Housing Acts, the cost of extra thick walls and fireproof staircases in meeting all the requirements of the Building Acts connected with the building of tall houses became so great as completely to extinguish any saving that might appear effected in ground rent.

Personally he had greater faith in the slow and the spread of cities than most people. He thought as a general policy it was a mistake nowadays to erect without lifts buildings for the working classes of a greater height than three stories. It was entirely a different matter when it came to the middle-class with lifts. We had yet to be convinced that provided there was adequate space between buildings, any greater number of people could be housed on an area in tall buildings, say five stories, than in buildings three or four stories high only. On the Duchy of Cornwall estate at Kennington, so far it had always been the policy to confine the heights of buildings to three stories, and no one had regretted it.

There were a great number of new type buildings, apart from ways of dealing with old ones, all suited to the accommodation of the working classes in towns, but the question from his experience, which appeared to be a very great majority of people that occupied these areas, was the two-story flat. He believed the London County Council was fitting two-story tenements into six-story buildings, one on top of another, and that was a good deal to be said for this. It was always likely to be a better circulation of air in a two-story building than in a six-story flat.

Then there was a very interesting kind of building, of which there were a few examples in London—dwellings with their fronts turned towards an inner court instead of to the street. A building of this type was erected on the Prince of Wales' estate at Kennington for 52 tenants. The streets outside were wide and all interest was centred on an inner garden.

He did not know if a record was available as to the number of acres of unhealthy areas in England, but it must be very large. He regarded the clearance of the unhealthy areas as one of the biggest problems we had to tackle. All interest seemed to be centred on the little house in the garden city or in the suburb, and practically not the slightest attention had been paid since the war to the dwellings in the slum. He was quite inarticulate as to his votes did not appear to count, but it was these areas that the more poisonous elements of society were nourished.

Yarmouth Church Restoration.

The work of restoration of the parish church of Yarmouth has been completed at a cost of £75,000 during the eighty years since it was taken, Messrs. Bodley & Hare being the recent architects concerned. The church was founded in 1105, and is now the largest church in England.

THE SURVEYORS' INSTITUTION

PRESIDENTIAL ADDRESS.

the course of his opening address to the Surveyors' Institution on November 9, Mr. D. Wallis, President, referred to many of the current interest, including the Rating and Valuation Bill, and the proposed registration. Referring to the Rating and Valuation Bill, he said he thought that had cured some of the abuses which had been set up under the Lands Clauses Acts, and particularly was the improvement to be found in the reduction of the cost of arbitrations and the expedition with which they were now decided. It was no longer necessary for a party in a dispute as to compensation to consider whether they had not better make a compromise, or perhaps an unreasonable concession, rather than incur the heavy expense and uncertainty of an arbitration. Costs were now kept within reasonable limits, and the procedure was greatly simplified. Turning to one or two problems which presented the surveyor who is dealing with the compulsory acquisition or use of land for the purpose of providing houses for the working classes, the President gave first place, on account of its pressing importance, to a plea for an early amendment of Section 9 of the Rating and Town-planning Act, 1919, now enacted in Section 46 of the Housing Act, 1920, but which, for the sake of clearness, he referred to as Section 9.

This section provided that where property compulsorily acquired for the improvement or construction of an unhealthy area, the compensation for the land and buildings in the healthy area was to be the value of the property, as if cleared of buildings, subject to deduction in the compensation for the site value made in the improvement for the rehousing of persons of the working classes on the site when cleared. It was argued, and with some force, that the guiding principle of the section was sound. Dwelling-houses occupied by persons of the working classes were insanitary, and in such a condition that they were unfit for human habitation, they might be condemned and a compulsory order enforced. It would be unreasonable in such circumstances to suggest that compensation should be paid for the condemned buildings on the site merely because they were acquired compulsorily for the purpose of clearing an insanitary area. The difficulty and injustice arose not so much from any faulty application as from the fact that cases of extreme hardship were bound to arise when the section which might be quite justifiable in individual cases, was applied in a wholesale manner to a considerable number of dwelling-houses in varying stages of dilapidation. Many of these houses might be on the border line, some of them might not be insanitary. Some were included because of their unsavoury surroundings. Indeed, it was not uncommonly found that premises which were not insanitary were included in the insanitary area because of their environment.

He had the opportunity as an official speaker of hearing a number of these cases in different towns. In some instances he had met with any real hardship, but in other cases he had found that business and commercial premises had been included in the insanitary area and that persons earning their livelihood from their own premises had been deprived of their right to compensation for buildings, plant, fixtures, loss of business or removal, although the premises were not in themselves insanitary and were not used mainly as dwelling-houses. In such cases he had given his opinion with considerable reluctance and with a feeling that an amendment of the Act was very much required.

Matters of considerable importance, upon which it was to be regretted that no decision had been reached, had yet been obtained, was the question, made, he believed, by the Rating and Valuation Bill, that in all the arbitrations which had

been held under Section 9, that the wording of the section prevented payment of compensation for machinery, plant, loss of business, or removal. The wording of the section was that "the compensation to be paid for the land, including any buildings thereon, shall be the value at the time the valuation is made of the land as a site cleared of buildings." Did the words specifying that the compensation was to be the value of "the land as a site cleared of buildings" mean that the owner was to receive no compensation for removal or for loss of business? How the High Court would decide this question he could not say, but he hoped that such an amendment of the Act might be made by Parliament that it might not be necessary to trouble the High Court. As a matter of simple justice it should be provided that fair compensation should be paid for destruction of business or trade.

In connection with the clearance of slums he said a word in favour of the extension of town planning to land already built upon in our large manufacturing towns. The present system, or want of system, seemed to be that the more pressing needs of street widenings, to provide for the growing stream of electric tramways and heavy road traffic, were frequently attended to in a casual manner. It was seldom that sufficient regard was paid to the ultimate development of the centre of the city as a whole. When so much was being done to secure by town planning the proper layout of roads and the allocation of particular areas for industrial and for residential purposes in the outskirts of the towns, and by the schemes for garden cities in the more distant suburbs, it seemed a pity that more thought could not be given to the question of the re-modelling of the centres. It was true that the prohibitive cost would prevent any immediate reconstruction, but the future improvement of the built-on lands was a matter which should be considered and planned well ahead, so that opportunities might be taken as they occurred. Piecemeal improvements should eventually fit in with a complete scheme designed to give some character and dignity to the towns. It was possible that in some towns some means of collaboration between property-owners and the local authorities might be found. Such a method might enable earlier improvements to be made without the expense and irritation of compulsory procedure.

Turning to another point, the speaker said that if the building of new factories was encouraged upon sites newly denuded of dwelling-houses, these new factories would require more labour, and the congestion of the slums remaining would tend to increase. The result of providing new houses at a distance was that only a small proportion of those displaced in the unhealthy area removed to the new houses. The others remained near their former district, and helped to aggravate the overcrowding. It might be true that the new suburban houses, if not occupied by those displaced, were at any rate occupied by others who, vacating houses in the towns, provided room for those less fortunate than themselves. This process, however, was the process which created the slums, the process by which better-class houses, deteriorating in character, gradually passed from the well-being of residences to the level of tenement or lodging-houses.

It was early to say whether general approval could be given to schemes for the erection of tenements of nine or ten stories, but the attempt, if made, should be watched with sympathetic interest. The city of Liverpool had long been in the vanguard of progress in housing matters. Their present proposals, so far as publicity had been given to them, indicated the erection of ten-storied tenements, with electric lifts, and all modern conveniences, with broad streets giving ample light and air. Tenements of this character appeared to solve one of the problems of the slums, that was, to provide living accommodation for all the persons displaced, and to provide that accom-

modation in the same area. In other words, to rehouse all those living in a crowded slum on the same site, in a clean healthy building with plenty of air space. In localities where space was strictly limited, and where it was necessary to house a large population in close proximity to their work, this proposal for lofty tenements seemed to offer the only practical means of solving the problem. It did not, however, seem to him that tenements of nine or ten stories would be desirable or suitable as a general means of solving the problem of the slums. Some progressive towns had already provided three- or four-storied tenement flats, and he hoped to see a greater extension in that direction. Modern well-equipped tenements of three or four stories should include varying types of accommodation from two rooms up to flats of six rooms, and with open spaces or playing fields easily accessible. Such tenements might be profitably erected in the existing slum areas after clearances, particularly if new methods of construction could be devised.

Referring to the Rating and Valuation Bill, the speaker said that under its provisions the overseers, after an existence of 300 years, would disappear, and the rating authorities would be the borough councils, urban district councils, and rural district councils. It was claimed that by this transfer of duties the number of rating authorities would be reduced from 12,882 to 648. The rates in respect of various services would be consolidated into a single general rate. Special rates would continue only in parishes in rural areas where special services had still to be provided. The parish would drop out as a rating unit, and the precepts for county rates would apply to one uniform poundage to the whole of an assessment area. These areas would be county boroughs and areas constituted under schemes prepared by county councils after consultation with rating authorities and other public bodies, and approved by the Minister. Greater uniformity in the distribution of the burden upon ratepayers would, it was contended, be obtained by these means.

Registration.

With regard to registration it would seem at first sight a comparatively simple matter to obtain statutory provision to prevent unqualified persons from practising as surveyors. The profession of a surveyor was one of a highly expert and specialised nature. He was called upon to perform duties which required skilled training and technical education. The welfare and the protection of the general public depended upon the efficient carrying out of those duties. The surveyor had to deal with matters of great public importance, including all the intricate problems attaching to land and property. The management of land and buildings, the public acquisition of land, the rating and assessment of all classes of property, agricultural problems, urban problems, many other questions relating to land acquired for houses, factories, canals, railways, roads, and public works, were all in the hands of surveyors.

They (the Surveyors' Institution) attacked the problem of registration in conjunction with the Auctioneers' and Estate Agents' Institute and the Land Agents' Society. A joint Bill was promoted in Parliament and had met with considerable opposition. The result of the efforts made in Parliament so far were that the Bill was for the time being held up. Members must not suppose that the Institution proposed to drop the question of registration. On the contrary, it was intended to proceed with it, but he would be a rash man who would predict a successful issue within a reasonably short period. He was strongly of opinion that all the members of the Surveyors' Institution should adopt the term "Chartered Surveyor." If that term became generally known and recognised they would go a long way towards attaining the object aimed at in the Registration Bill. They had the right to use the term "Chartered Surveyor" for some thirty years, but had not availed themselves of that right.

NEW MATERIALS FOR HOUSING

IN the course of his Presidential Address to the Institution of Structural Engineers, on November 5, Sir Charles Ruthen referred at some length to the housing problem, which he said still remained one of extraordinary difficulty, for the popular brick had stood the test of time. It was a handy unit, it was the best known and the best liked building material in existence for house building purposes, and given a plentiful supply at a reasonable price, and the skilled labour necessary for its use, work executed by its aid was rapid and cheap, lasting and artistic. Those who laboured in the search of new building methods should begin their investigations and experiments where others left off, and not where others began. Information published by the Ministry of Health upon the subject of the manufacture of concrete blocks and slabs and upon concrete *in situ*; the reports published by the Standardisation Committee 1920 to 1921; the reports issued by the committees upon Special Methods of Building; the various reports issued by the Building Research Department, and the various notes upon special methods which had appeared in the Press, were all of exceeding value and assistance in preventing the same ground of study being covered many times.

Well over a thousand different methods and systems had been submitted for consideration to the various committees appointed by successive Governments during the past few years. They fell within, roughly, 11 distinct categories, as follows:

	No. of Systems.
1. Patent bricks	20
2. Clay lump	11
3. <i>Pise de terre</i> , with various mixtures of gravel, clay, ashes, lime and sand..	15
4. Chalk concrete	4
5. Cob walling	10
6. Timber framing, covered with wood pulp, ply-board, steel, cast iron, asbestos, weather-boarding, bricks, concrete blocks, gunned-concrete, slating, tiling, shingles, gypsum slabs, and various other materials..	41
7. Steel framing, covered with the various materials set out above ..	39
8. Concrete.	
A. Concrete blocks and slabs, made up of cement concrete, cement and sawdust, aerated concrete, &c.	
(a) Hollow or solid blocks the full thickness of the wall	70
(b) Cavity wall with two slabs ..	52
(c) Blocks at intervals the full thickness of the wall to form piers, with panels of two slabs forming cavity	36
(d) Two slabs laid dry with concrete <i>in situ</i> piers or grouted joints..	14
B. Concrete <i>in situ</i> , with or without cavity and with or without reinforcement, erected with the aid of	
(a) Travelling shuttering	6
(b) Permanent shuttering:	
1. Concrete or brick	29
2. Asbestos-cement	16
3. Steel	8
(c) Temporary shuttering with permanent supports of	
1. Brick or pre-cast concrete ..	21
2. Steel or cast iron.. .. .	15
3. Timber, asbestos, &c.	12
(d) Climbing, shuttering of steel, timber, asbestos, &c., secured to temporary steel or iron supports..	32
(e) Similar to (d), but secured to temporary timber supports.. .. .	55
(f) Self-supporting shuttering of steel, iron or other metal with or without bars or uprights to give alignment	49
(g) Self-supporting temporary shuttering otherwise similar to (f)..	88

(h) Large sections of ordinary shuttering, but temporary supports ..	33
(i) Miscellaneous	42
C. Pre-cast reinforced concrete consisting of	
(a) Short columns and slab panels..	7
(b) Skeleton framing and slab panels	33
(c) Large slabs erected by cranes..	34
(d) Various	7
D. Framing used either to carry floors and roofs or merely to give alignment.	
(a) Temporary framing	37
(b) Steel framing	40
(c) Spun or cast concrete framing..	23
(d) Chalk bricks	1
E. Miscellaneous suggestions	44
9. Material, appliances and machines..	32
10. Plaster substitutes	
(a) Wood wool slabs.. .. .	11
(b) Spun concrete slabs	7
(c) Aerated concrete.. .. .	11
(d) Sawdust and cement and various chemicals	30
11. Roof coverings of protected iron in sheets, bitumen and asbestos sheets, concrete tiles, &c.	25

This rather extensive list did not include hundreds of suggestions which did not take any intelligible form.

Whatever might be the system adopted the most economical type of labour was skilled labour. The employment of entirely unskilled labour upon house building work, even if such, for a moment, could be considered a practical proposition, or, indeed, the employment of entirely unskilled labour upon any part of house construction work, had been found, and would continue to be found, unremunerative in the highest degree. Labour must be skilled if economical work was to be produced, and the speed and cheapness of the work produced—to say nothing upon the question of the quality—was measured exactly according to the degree of skill possessed by the labour employed. It was unreasonable to suggest that the strength lacking in these essential skilled ranks could be made up by a wholesale recruitment from the ranks of the entirely unskilled unemployed. Semi-skilled labour, under the direction of highly skilled men, could be used to the greatest advantage in the execution of some of the most approved methods of modern building. It was strange but true that the most inferior class of skilled workers in the building industry, by the introduction of the various forms of concrete construction, had become, in actuality, among the most important workers in this industry. They were now largely responsible for the ultimate strength of the structure, and their highly skilled brother workers were engaged more upon the covering of the essential framework. The one great hindrance to the adoption of concrete, in any form, in construction, was that carelessness, or lack of proper skill in any essential direction, was of serious consequence.

Any new method of house construction which, in its execution, made an excessive demand upon the labour of the bricklaying or plastering arms of the industry, or which in its execution misapplied the labour of these essential craftsmen, was doomed to absolute failure, unless the method proposed enabled the superficial or cubical output of the work of these craftsmen to be considerably increased. The real and urgent need was not to find new methods of cottage building which would supplant the existing well-tried methods, but new methods which, whilst not making a demand upon the already fully-engaged essential skilled arms of the industry, would add to the total number of houses already being produced by normal methods. Or alternatively, new methods which would enable the output of the essential arms of the industry to be augmented.

In the normal brick house the total labour employed, from the first operation to the com-

pletion of the house fit for occupation, was to skilled labour 58 per cent. and as to unskilled labour 42 per cent. In the erection of a concrete house, under the most approved method the labour employed was as to skilled, 42 per cent. and as to unskilled, 58 per cent. term unskilled labour was used in its general accepted sense. In order to realise the application of a satisfactory alternative method of producing the "shell" of a house did not necessarily add to the total number of completed ready for occupation, it should be mentioned that in normal house construction the labour upon the "shell" represented 16.9 per cent. and the materials 29.4 per cent. (exclusive of plastering), or 46.3 per cent. the completed house. The labour and materials in the production of the "shell" was shown in detail in the following statement:—

LABOUR.	per cent.	MATERIALS.	per cent.
Bricklayer ..	6.7	Bricks ..	16.9
Carpenter and joiner ..	2.9	Cement and lime ..	16.9
Slater and tiler ..	.8	Timber in casing ..	16.9
General labourer ..	6.5	Slates and tiles ..	16.9
		Lead ..	16.9
		Light castings ..	16.9
Total ..	46.3		

The average percentage cost of labour and materials in working-class cottages of no construction was set out in the following table:—

LABOUR.	per cent.	MATERIALS.	per cent.
Bricklayer ..	8.9	Bricks ..	39.6
Plasterer ..	3.1	Cement and lime ..	39.6
Carpenter and joiner ..	8.7	Timber in casing ..	39.6
Slater and tiler ..	.8	Timber in joinery ..	39.6
Plumber ..	1.6	Slates and tiles ..	39.6
Painter ..	2.9	Lead ..	39.6
General labourer ..	13.6	Light castings ..	39.6
		Miscellaneous ..	39.6
Total—			39.6
Labour ..	39.6		
Materials ..	60.4		
			100.0

During the past twelve months or so, no a number than 20,000 houses, of various and alternative methods of construction, been erected in various parts of the country and the experience gained as a result had been exceedingly valuable. The question of condensation or "sweating" was one of the difficult to be satisfactorily overcome, and the main, condensation depended more upon the surface of the wall than upon its position. A polished surface was slow to absorb heat from the air, and remained, and consequently was liable to cause condensation. If, in addition, surfaces were painted with cement, so that they could absorb moisture, then the condensation was more noticeable. Rough unpolished masonry might become fairly warm and was absorptive but if polished, the surface remained cold and was less absorbent. Hard plasters were suitable for concrete work, and the coating the interior walls of a house with plain cement-wash was unwise. Theoretically an absorbent surface of a wall did not prevent condensation, but by the absorption of moisture prevented condensation from showing. The external surfaces of concrete wall course, should be non-porous.

Generally speaking, reinforcement was necessary in cottage building, except for the purpose of strengthening certain pre-cast work, or for giving alignment when blocks. If the strength of the structure depended upon the reinforcement, this must be properly protected. In slabs of less than 1½ in. thick, it was difficult to lay reinforced

it was properly protected. Combed, in the use of concrete blocks, and these often led to unequal and all the evils that result therefrom. narrow width blocks complicated joints were than useless; bedding was difficult and more so.

Concrete block work the simpler the block, the nearer to the brick in simplicity—the more satisfactory from all points of view. Concrete block was of such size and shape that it could be bonded with the ordinary mortar was advisable, for there were so many of cottage building where brickwork was satisfactory. The size of the block should be such that the bricklayer or mason could lay it with the left hand, without laying his trowel. The more general use of concrete below the ground level in nearly all cases, large and small, would effect a great saving in the highest skilled labour, and in the valuable cottage building material. There is no doubt that concrete properly used was a reliable substitute for bricks.

ARCHITECTURAL DEVELOPMENTS IN OXFORD

Recent architectural developments in Oxford have evoked both praise and blame. It may be interesting to give some particulars of recent buildings that have been built or completed in Oxford since members of the R.I.B.A. were there a year ago. There have been several new buildings in St. Giles. Pusey House, the headquarters of the Anglo-Catholics in Oxford, has been largely rebuilt, and next door there is a new building that harmonises admirably with its neighbour, erected for the Dominicans. A happy use of old Cotswold tiles for the re-roofing of the new building in the area has helped to preserve the character of this part of Oxford.

There has already been published regarding the buildings of Hertford College. According to some notes made by Mr. E. H. New, M.A., from whom we are indebted for the main facts here, the original of the old structure of Hertford House has been followed, and this is regarded as a good example of an attempt at a thorough "restoration."

Several additions to colleges have been completed. A bay window in Lincoln College has just been renewed under the direction of Herbert Read. The kitchen buildings of Balliol College have been re-faced. The Research Institute of Agricultural Sciences is a modest and pleasing piece of architecture. Magdalen College, however, has just completed a squash racquets court in the new building, the red-tiled roof of which now projects over the "Long Wall."

Recent editorial complained of some of the commercial buildings that have lately been erected in Oxford. These prove that the planning scheme adopted last September is not generally needed if the authorities are to be able to carry out their trust. Before long the Ministry of Health will hold a public inquiry into the scheme. This will present the opportunity to those who welcome such skilful changes to be carried out in St. Giles and in the street, and who regret the lamentable condition of some industrial buildings, to express their point of view in order that the old-world character of the University may not suffer from the new and unsightly improvements.

Nile Contract for British Firm.

A new steel railway bridge across the River Nile is to be built at Dessouk, in the Nile delta, about twenty miles from Alexandria. The bridge is to be a through railway bridge, with cantilever roadway and footways on each side, having a total length of two thousand feet. It is to be built for the Egyptian State Railways by Messrs. Dorman, Long & Co., Ltd., at a cost of £142,000.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting?—ED.

Internal Finish for Exposed Walls.

[REPLY TO "SUBSCRIBER," OCTOBER 30.]

SIR,—Walls finished in a hard cement surface and painted are very liable to suffer from condensation, except in buildings of sufficient importance to have a reliable heating system to ensure an equable temperature inside the building. If there is a fear of weather penetrating to the inside surface, it is far better to treat the external surface of the wall. There are a number of petrifying liquids on the market that can be relied upon for this purpose. No cement or plaster can be expected to have a long life that is allowed to become more or less permanently damp.

"WATERPROOF."

Height of Adjoining Chimneys.

SIR,—When building on a plot between two existing buildings and to a height greater than that of such buildings, is it obligatory to carry up the adjoining chimneys to a sufficient height above the new roof level? We shall be glad if some correspondent can tell us the legal position in this matter.

W. & D.

Preparation for Coating Plinth of House.

SIR,—Can any of your readers inform me as to the best mixture of tar and pitch, or other ingredients, for coating the brickwork around the base or plinth of a house?

L. H.

X-Ray Proof Material.

SIR,—I am adapting a second-floor room for "X-Ray" work. In order to guard against the penetration of the rays to adjoining rooms on the same floor and on the floors below, I am considering the insertion of a layer of 7 lbs. lead in floor and dividing walls, which, I understand, will be effective. This seems rather a clumsy and costly method, and I should be glad to hear if there is any alternative substance which would have the same effect. What is barium plaster?

"RADIOGRAPHER."

By-law Questions.

[REPLY TO "DURBAN," NOVEMBER 6.]

SIR,—(1) Corrugated iron is a suitable material for the buildings mentioned. (2) Such partitions as described are party walls and should be of brick, stone or concrete. (3) A wall of the height given should be one and a half bricks thick. (4) A small garage cannot be a warehouse; it is a domestic building. (5) You need not put fireproof floors over a small garage.

HENRY LOVEGROVE.

Subsidy Houses.

[REPLY TO "J. L. I.," NOVEMBER 6.]

SIR,—Much depends on the conditions first arranged, as cement flashing is more used than lead flashing in speculative houses. Why did nobody interfere at an earlier stage? It would be difficult to raise the question now.

HENRY LOVEGROVE.

SIR,—Judgment upon the matter referred to lacks precedent, but I should say that the local authority had gone beyond its right in refusing subsidy after having issued a certificate of completion. The usual procedure is the issue of a certificate upon approved plans, subject to adherence to the plans and approved construction; then the issue of a certificate of completion when the building has been approved by the surveyor; and finally the payment on the certificate when the building has been duly occupied. It appears from your correspondent's letter that the first two stages have been completed, and I am of the opinion that, in that case, the local authority has acted *ultra vires*. If, on the contrary, only the preliminary certificate has been issued, the authority is within

its rights in refusing to pass construction that is ruled to be unsound. Your correspondent may be interested to know that in certain L.C.C. houses of recent date there are no lead flashings round chimneys.

"JUSTICE."

Concrete Bricks.

[NOTE ON MR. STEDMAN'S LETTER, NOVEMBER 6.]

SIR,—One or two points in Mr. Stedman's letter may be misleading. Hand tamping depends so much upon the "tamper" that, however fortunate may have been the experience of your correspondent, the more usually successful results will follow the use of a good block-making machine, where uniformity is ensured in the output. That this uniformity is one of excellence depends entirely upon the composition of the concrete, and I have found from personal experience that the inclusion of a proportion of breeze or ashes in the aggregate, say, two of breeze, four of ballast, and one of cement, makes for just that degree of absorption that gives brickwork the right consistency to resist weather from without, and condensation from within.

"USER."

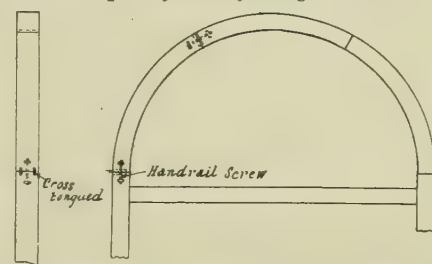
Size of Radiators.

[REPLY TO "A COMFORT," NOVEMBER 6.]

SIR,—Your correspondent must give further particulars before reliable advice can be given. It is necessary to know the window area through which the main loss of heat will take place, the position and level of the boiler, and the size of gas fire proposed to be installed.

Circular-headed Door Frames.

SIR,—The accompanying illustration shows a method adopted by me for jointing wood circular-



headed solid door frames. Is this the recognised practice? If not, perhaps your readers would advise me.

"QUERIST."

Responsibility for Drainage Work.

SIR,—A client of mine is living in a house which has had a cess-pit. The estate has just completed the sewer at the back of his premises and he has had notice to connect up to same. I had the contract, but found after opening up from inspection chamber to sewer I could not get sufficient fall. I also found that all the refuse had been running to a surface-water drain in front of house and not to his cess-pit. This service water drain has since been connected to main sewer. The sanitary authorities now want my client to open up in front, find drain pipes, and build two inspection chambers, which he refuses to do unless they pay for the expense already incurred at the back. The sanitary inspector says I should be the loser because I should have found out if there was sufficient fall to the sewer before going too far, which in any case would have necessitated my opening up over the sewer to get at the sewer culvert to take levels. I maintain they should have been satisfied that there was sufficient fall before giving my client notice to connect. Am I right?

"DRAINS."

Inquiries on the following subjects have been answered direct:—Metal Letters for Signs; Geyser and Boiler; Building Blocks; Illustrations of Houses of rental value of £80; Pantiles; Legal, Yorks.

Information Wanted.—We should be obliged if any reader could give us information with regard to the following:—(1) Doric Concrete Curb; (2) Hydrome Water Paint; (3) Lapsoidal, a store material.

THE BUILDING TRADE.

THE NEW PUBLIC HEALTH ACT, 1925—II

PART II.—STREETS AND BUILDINGS.

THIS part of the Act is adoptive, but where powers are conferred upon a county council by any section in this Part, those powers may be exercised by the council without an adoption by them of the provisions of that section. (See section 2, subsection (2), and our note thereon supra.)

It is not necessary for us to refer to section 13 (Street bins), section 14 (Drinking fountains, seats, &c., in streets), section 15 (Fire alarms), section 16 (which defines certain areas in which the foregoing powers may not be exercised without the consent of the county council or certain statutory undertakers), and sections 17-19 inclusive (which relate to the naming of streets).

Drainage of Courts, &c.

Section 20, subsection (1), after citing section 25 of the Public Health Act (Amendment) Act, 1907, which provides for the execution of works for the effectual drainage of the subsoil or surface of a yard in connection with and exclusively belonging to a dwelling house, provides that it shall extend to "any court, yard, or passage (not being a highway repairable by the inhabitants at large), which is used in common by the occupiers of two or more dwelling houses, whether such dwelling houses belong to the same or different owners."

Subsection (2) provides that where "under the said section, as extended by this section, the local authority have executed works as above on default of the owners of dwelling houses, and the dwelling houses belong to different owners, the expenses incurred by the local authority in the execution of the works shall be apportioned between the owners in such shares as may be determined by the surveyor or (in case of dispute) by a court of summary jurisdiction, and in default of payment, any share so apportioned may be recovered summarily as a civil debt from the owner on whom it is apportioned."

Subsection (3) provides "upon the commencement of this section" (that is, when the adoption comes into force, see ante section 1 subsection (4), any by-laws made by the local authority under section 23 of the Public Health Acts (Amendment) Act, 1890, with respect to the paving of yards and open spaces, in connection with dwelling houses, shall cease to have effect in any area where this section comes into force. The memorandum of the Ministry has an important note on this section. It points out that the section contemplates that section 25 of the Act of 1907 will be in force in an area before the new section is adopted; therefore if the local authority proposes to adopt the new section an application should be made for an order of the Minister putting section 25 of the Act of 1907 in force.

Section 21 relates to the "Prevention of water flowing on foot paths," and enables the urban authority to call upon the owner of any premises abutting on a street in an urban area to "execute and thereafter maintain such down-pipes, channels, or gutters, as may be necessary to prevent, so far as is reasonably practicable, surface water from the premises flowing on to or over the footpath of the street under penalty, and the provisions of this section are in addition to the provisions of section 74 of the Towns Improvement Clauses Act, 1847."

It will be remembered that this section can only be adopted by urban authorities without the consent of the Minister where the population exceeds 20,000, and it cannot be adopted by rural district councils, and the same observation applies to the following section, 22, which enables the urban authority to give notice to the owner or occupier of any lands abutting upon any street within their district which is repairable by the inhabitants at large to take

steps (under penalty) to prevent soil or refuse falling upon or washing into the street or any sewer or gully therein in such quantities as will obstruct the highway or choke up the sewer or gully.

Obstruction to Persons Using Streets.

Sections 23 to 26 inclusive are grouped under the above heading. Section 23 provides that where any tree, hedge, or shrub, overhangs any street or footpath, "so as to obstruct or interfere with the light from any public lamp or to endanger or obstruct the passage of vehicles or foot passengers or to obstruct the view of drivers of vehicles," the owner of the tree, hedge or shrub or the occupier of the premises may be served with notice to lop or cut and in default the local authority may do so and may recover the cost summarily from the owner or occupier. In the case of main roads maintained by a County Council the powers conferred by this section are to be exercised by the County Council (subsection (2)).

There is an appeal against an order made under this section to a court of petty sessions, and the procedure on appeal is laid down in Section 8 of the Act. The Memorandum of the Minister draws attention to the various Acts dealing with this question. Under Section 65 of the Highway Act, 1835, highway authorities are empowered to apply to the justices for an order for the removal, pruning, &c., of hedges and trees which obstruct traffic or prejudice the roadway by their shade. There is a penalty attached to this section and in default the expenses of doing the necessary operations can be recovered as against the owner by distress.

Section 4 of the Roads Improvement Act, 1925, which came into force August 7 last, enables the highway authority to deal with trees, hedges and obstructions at or near any corner or bend which interfere with the view of persons using the highway whether the trees overhang or not, but the highway authority have to bear the expenses and compensate the owner. Under Section 23 of the Public Health Act, 1925, no application to justices is necessary, but the trees, shrubs, &c., must overhang the street or footpath.

Projections over Streets.

Section 24 cannot be adopted by a rural district Council; it provides that "any projection erected or placed against or in front of any house or building which by reason of being insecurely fixed or of defective construction or otherwise is a source of danger to persons lawfully using a street shall under Sections 69 and 70 of the Towns Improvement Clauses Act, 1847, as incorporated with the Public Health Act, 1875, be deemed to be an obstruction and those sections including the penal provisions shall apply."

Section 69 of the Towns Improvement Clauses Act, 1847, as amended by Section 160 of the Public Health Act, 1875, particularised a great many things which were to be deemed obstructions, porches, sheds, windows, &c., &c., these particularised obstructions were followed by the general words "or any other obstruction or projection." We gather from the Memorandum that owing to this particularity there was reason to think that the general words might have no effect, according to the rule of construction that general words must be applied as only embracing things *ejusdem generis* with those specified, and this section is therefore drawn in general terms "any projection;" but there is a further distinction between the two sections, for Section 69 implies that the projection must be "an obstruction to the safe and convenient passage along any street," whereas this new section also provides against the projection

being "a source of danger by reason of being insecurely fixed or faulty in construction."

Section 25 renders it unlawful "under authority to fix or place any overhead beam, pipe, cable, wire or other similar apparatus, over, along or across any street, but this does not apply to statutory undertakers defined in Section 7, subsection (3). Upon commencement of this section Part II of the Public Health Acts (Amendment) Act, shall cease to have effect in any area in which this section is put in force but any by-laws by the local authority under that part of the Act shall nevertheless remain in force revoked by resolution of the local authority."

In some districts we could name where it is the local authorities themselves who are the chief offenders in placing a network of head wires over the streets in connection with their electric lighting undertakings.

Section 26 enables the local authority to make by-laws for the prevention of danger or obstruction to persons using any street or place, which latter expression includes any public park or garden, or any place to which the public have or are permitted access, apparatus such as posts, wires, &c., used for wireless telegraphy or telephony stretched placed over any premises and liable to fall on any street or public place. This section does not apply to statutory undertakers.

It is unnecessary for us to notice Section 27 which requires a licence to be granted, without payment except legal or other expenses, for carrying bridges over streets, and Section 28 which relates to bridges designed to carry streetcars, and we pass to the sections relating to

New Streets.

Section 29 merely enacts that a street which has been deemed a new street for the purpose of the application of any by-laws of the local authority with respect to new streets, or of any provision of a local Act with respect to the width of streets notwithstanding that it is a continuation of an existing street, but Section 30 is more drastic and appears to raise considerable difficulties.

Section 30 subsection (1) is as follows: "Where it appears to the local authority that the whole or any portion of an existing highway will be converted into a new street as a consequence of building operations which have been or are likely to be, undertaken in the vicinity of the local authority may by order declare that highway or such portion thereof as may be specified in the order, a new street for the purposes of the application thereto of their by-laws with respect to new streets or of any provision of a local Act with respect to the width of streets." Subsection (2) provides for a notice being posted in the street or part of the street affected not less than one month before making an order.

Subsection (3) provides that such an order shall state that an appeal to quarter sessions will lie under this Act against the order by any person aggrieved. (As to the appeal, see Section 7 of the Public Health Acts (Amendment) Act, 1907, as applied by Section 70 of the Act.)

Subsection 4 enacts that upon an order made under this section coming into force any person shall commence to erect a new building abutting on or adjoining the highway, or portion of a highway, by the order declared to be a new street shall in relation to that land be deemed to be laying out a new street within the meaning of the by-laws of the local authority with respect to new streets or of any provision in a local Act with respect to the width of streets. Subsection (5) excepts buildings (other than dwelling houses) erected by railway companies or by the owners of docks, canals, &c.

The Memorandum of the Ministry states that this section is aimed at a difficulty illustrated by the cases of Devon Port Corporation v. The

3, 1 Ch. 759) and Attorney General v. Dorin 2, 1 Ch. 369; *The Builder*, December 8, 1925.

With reference to these cases and this section, certain questions, however, arise, and we venture the following observations:

New streets may be created in two ways, a new street may have been laid out on private land, thus becoming a "new street" in the primary sense of the words (Attorney General v. Barton, 1909, 2 Ch. 265; *The Builder*, September 1909), or an existing highway which had long been a "street" within the interpretation of section (4) of the Public Health Act, 1875, may, by the erection of houses abutting upon it, become a street in the popular sense of the term (Attorney General v. Barton, Eccles Local Board, 3, 8 App. Case 798).

In the two cases cited in the Memorandum referred to the latter of the two classes of private streets, and the Court had to consider the question of fact whether the building operations constituted a laying-out of a new street within the meaning of the by-laws made under section 157 of the Public Health Act, 1875. It was held in those cases that there must be something in the nature of a physical laying-out as distinguished from a mere metaphorical laying out.

In *Devonport Corporation v. Tozer*, the defendants, owners of a triangular site abutting on two sides on public highways, were erecting buildings upon this site fronting the highways, and the Corporation contended that they were laying out a new street which did not comply with their by-laws as to the width of the streets. The Court held that the facts were not sufficient to justify the inference that the defendants were laying out the highways as new streets.

In *Attorney General v. Dorin*, the defendant was the owner of land abutting upon a highway in an urban district and separated from the highway by an ancient hedge, and he erected tenements with their backs to the road and a strip of land, 16 ft. in width, between the backs of the houses and the hedge. He inserted gates in the hedge giving access to the backs of the houses from the road, and he drained the houses by a sewer which he had constructed in the strip, but it was held that he had done did not constitute a physical laying-out of the road as a new street.

It seems clear that when once an order has been made, declaring a highway or part of a highway to be a new street under section 1, subsection (1), then subsection (4) would prevent objections such as those raised in the above cases from being raised, as the position would be very much the same as it is where a new street has been made for the first time. But by subsection (3) an appeal is given apparently against the making of the order, although the section is not very clearly worded as regards this point. The words of the subsection are: "Where such notice" (that is, the notice to be posted in the street affected by the intended order) "shall contain a statement that the intended order may be made by the local authority on or at any time after the date named in the notice, and that an appeal to quarter sessions will lie under this Act against the order in the instance of any person aggrieved." Presumably, therefore, on an appeal to quarter sessions against the order, the same questions arise as in the above cases as to whether building operations will convert the highway into a new street.

This is largely a question of fact, and therefore the appellate courts only considered whether there was evidence to support the finding, but the question of fact under this section may be complicated, for the court will have to consider not only whether building operations have commenced or immediately contemplated will convert the highway into a new street, but the effect of building operations may be undertaken; or it may possibly be that the only question which can be asked will be whether there was evidence to show the local authority in considering that the operations undertaken or likely to be undertaken would convert the highway into a new street. This section is sure to be the cause of litigation. When once the order is in force,

it would appear the only question which could be raised under subsection (4) would be whether the building was upon land "abutting on or adjoining the highway."

Section 31 enacts "Whenever application shall be made to the local authority to approve the plans of a new street, in pursuance of any by-law or enactment requiring a plan to be submitted to the local authority, and such new street in the opinion of the authority will form (a) a main thoroughfare or a continuance of a main thoroughfare, or means of communication between main thoroughfares in their district; or (b) a continuation of a main approach or means of communication between main approaches to their district, the local authority may, as a condition of their approval, require that the new street shall be formed of such width as they may determine, "Provided that if such width exceeds by more than 20 ft. the maximum width prescribed for a new street by any by-law or enactment with respect to the width of new streets which may be in force in the area, the local authority shall make compensation for any loss or damage which may be sustained by reason of the street being required to be a width greater than 20 ft. in excess of such maximum width."

By subsection (2) the amount of such compensation shall, in default of agreement be determined by arbitration under the Acquisition of Land (Assessment Compensation) Act, but the subsection contains a "betterment clause," any benefit accruing to the claimant from the street widening is to be taken into consideration in estimating the compensation.

The "loss or damage" here mentioned is distinct from extra expense incurred by reason of the additional width required, for subsection (3) enacts that nothing in this section shall empower the local authority to require any person "to defray any greater expense in the execution of any street works than would have been payable if the street had been of no greater width than the maximum prescribed by any by-law or enactment."

The additional expense incurred in the execution of street works by reason of the greater width shall be certified by the surveyor, or, in case of dispute, be determined by a petty sessionsal court.

It will be observed that "loss or damage" can only be claimed where the width prescribed exceeds the maximum by 20 ft.; but the extra cost can be claimed on any excess over the maximum width as prescribed by by-law or enactment. By subsection (4) the local authority shall determine the proportion of the width to be laid out as carriageway or footways.

Section 32 contains what the Memorandum terms "a concession to building owners." Subsection (1) provides that where an owner proposes to lay out a new street upon land which adjoins or abuts on an existing highway and buildings, have been or are about to be erected on one side only of that highway, the local authority in any case in which they are empowered to require such owner or widen the existing highway to the width prescribed for a new street by any by-law or enactment, which in this section is called "the prescribed width," may by order permit such owner to widen the highway to such less width as may be prescribed in the order, so, however, that the distance between the centre line of the existing highway and the boundary (as extended) on the side adjoining the land of such owner shall not be less than one-half of the prescribed width.

By subsection (2) an appeal shall not lie to quarter sessions against the withholding or refusal by the local authority of such an order.

By subsection (3) not less than twenty-one days before the making of such an order, notice of the proposed order shall be sent both to the owner of the land to which the order will relate and to the owner of land which adjoins or abuts on the other side of the highway opposite the land to which the order will relate.

By subsection (4), when the owner on the opposite side commences to build, he shall under penalty complete the widening of the existing highway, but this subsection shall not impose

on any such owner an obligation to put down any building erected before the date of the order made under this section. It seems not clear whether this section can be applied where, under section 30, the local authority has, by order, declared a highway or any portion of it to be a new street. It is to be observed that under section 30, subsection (4), when such an order has come into operation, any person who shall commence to build or erect a new building upon land abutting on or adjoining the highway, "shall in relation to that land be deemed to be laying out a new street within the meaning of the by-laws," &c. The question is—Do the words at the commencement of section 32, "Where an owner proposes to lay out a new street . . ." apply to section 30, subsection (4)? It would seem a case of hardship if a person erecting a single house on a highway, which, under section 30 had by order been declared a new street, were liable to give the land for the new street for the full width and not merely set back his building, and presumably the two sections may be read together. But, in any case, the order under section 32 is discretionary in the local authority, and its withholding is not the subject of appeal, so section 30 may hardly operate. This is shown by the Memorandum which, in reference to section 32 states, "Where a building owner is developing land on one side only of an existing road or footpath, in such a way that he can be held to be laying out a new street, the by-laws of the local authority would usually require him to surrender the land necessary to widen the existing road or footpath to the full by-law width. Section 32 enables the local authority to grant a concession to building owners in such cases if the road or footpath is an existing highway." It is to be noted that section 30 applies only in cases where there is an existing highway, so to this extent the Memorandum supports the view we have expressed that the provisions of section 32 can be applied to section 30.

It would certainly appear desirable that in every case where an existing road is declared to be a new street the land added to the highway should be taken where possible from both sides, not only in the interests of the owners of the land abutting upon it, but also to maintain the line of the street. It sometimes appears to us that the Legislature when it is intent upon one scheme, such as street and road improvements, forgets the effect it may have on other schemes. Thus some of the sections we have been noticing impose a burden on a building owner "laying out a new street," but the technical meaning given to those words does not apply them to a building owner constructing a street as part of his building scheme, but to anyone building a house abutting upon an existing road. It is clear that if such a building owner has to give the land required for widening an existing roadway to its whole width, that is not an encouragement to building, but a distinct deterrent, and in any case it must add to the cost of the building, and where it is intended to erect buildings which may be let to persons of small means add to the rents.

Street Improvements.

Section 33 introduces the power to prescribe what is called an "Improvement Line," which is to be distinguished from the "building line" prescribed in section 3 of the Roads Improvement Act, 1925, which came into force August 7. The section is a very long one, and we can only outline its provisions.

Subsection (1) provides, "Where in the opinion of the local authority (a) any street reparable by the inhabitants at large is narrow or inconvenient or without any sufficiently regular boundary line, or (b) it is necessary or desirable that such street shall be widened, the local authority may prescribe in relation to either side of the street, or at or within a distance of fifteen yards from any street corner the line to which the street shall be widened."

By subsection (2), this line shall be shown on "an improvement plan" to be deposited at the offices of the local authority and open to inspection free of charge for one month. By

subsection (3) notice in writing is to be given to every owner and occupier interested.

By subsection (4) the local authority shall consider any objection made to the proposed improvement line (but apparently no right of appeal is given), and not less than six weeks after the date on which notice was given to the owners and occupiers the authorities may by resolution prescribe the improvement line.

By subsection (5) when the improvement line has been prescribed no new building, erection or excavation shall be placed nearer to the centre line of the street than the improvement line without consent of the local authority, but the foregoing prohibition does not apply to statutory undertakers in connection with their pipes and apparatus.

By subsection (6) any person whose property is injuriously affected shall be entitled to compensation from the local authority, but no compensation can be claimed in respect of a building erected or contract made after "the date of the deposit of the improvement plan."

By subsection 7 the compensation shall be assessed under the Acquisition of Land (Assessment of Compensation) Act, 1919, but the arbitrator may take into account and embody in his award any undertaking in relation to the property affected offered by the local authority, and it is to be noticed that under subsection 10 "betterment" is to be taken into consideration.

By subsection (8) the local authority may purchase any land not occupied by buildings between the improvement line and the boundary and the provisions of the Land Clauses Acts, including the provisions with respect to the purchase and taking of lands otherwise than by agreement except sections 92 and 123 of the Act of 1945, shall apply. Here, again, the betterment provision contained in subsection (10) applies.

Subsection (9) provides that until the land so purchased has been added to the street the occupier of the land from which it is severed and other persons with his permission shall be entitled to reasonable access across the land to the street, and shall have the same rights in regard to laying, altering, repairing, drains, mains, pipes and electric lines in such land as if it were part of the street.

Subsection (12) imposes penalties where, after the improvement line has been prescribed, any person offends against the provisions of the section.

Subsection (13) saves the rights of certain undertakers such as railway companies, docks, &c.

Section 34 must be read with the above section, for as regards main roads maintained by county councils the above powers are vested in the county council, but after consultation with the district council.

Private Street Works.

Section 35 is merely directed to altering the effect of the decision in the case *Robertson v. Bristol Corporation* (1900, 2 Q.B. 198). In that case it was held that a local authority exercising powers under section 150 of the Public Health Act, 1875, as regards paving and making-up streets had no power to alter the respective widths of the carriageway and footpaths. Section 35, which is one of the sections which cannot be adopted by rural councils removes this disability from urban councils both under the Public Health Act and the Private Street Works Act, 1892, but by a proviso to this section it is enacted that no greater charge shall be imposed on a frontager by reason of such variation "than could have been imposed in respect of a carriageway or footway of the width prescribed for a new street of the same class by any by-law or enactment with respect to the width of new streets which applied to the street when it was laid out, and any sum in excess shall be borne by the urban authority."

This section is the last in Part II, but it seems convenient here to mention the following sections which appear in Part VIII as they bear on this question of making up streets.

Section 81 is directed to bringing section 150 of the Public Health Act, 1875, and any local

Act which contains provisions relating to street works into line with section 15 of the Private Street Works Act, 1892. This latter is an adoptive Act, but it contains powers which enable the local authority to contribute the whole or any portion of the expenses of works. This power is, therefore, now exercisable under section 150 of the Public Health Act, or a local Act. Section 82 similarly imports into section 150 of the Public Health Act, 1875, a provision found in section 20 of the Private Street Works Act, 1892, that where notices have been given by the urban authority as to paving and making-up of a private street and such work has been done to the satisfaction of the urban authority, then on application of the greater part in rateable value of the owners of land or houses in such street the authority shall declare the same to be a highway reparable by the inhabitants at large. This section applies only to urban districts.

The Memorandum of the Ministry explains in reference to section 81 that local authorities in some districts act neither under the Public Health Act nor the Private Street Works Act, but under local Acts in executing street works, and that the object of that section is to confer the powers of deciding the respective width of the roadway and footpaths under any of the above statutes. That being the case, we cannot see why the provisions of section 82 were not also extended to local Acts, as when the street has been made-up at the frontagers' expense those frontagers should have the same right of demanding that the street shall be declared a highway reparable by the inhabitants at large, whether the works were done under the above public Acts or under a local Act.

THE PENALTY OF AGE

SIR,—Your correspondent's query, "Why?" is echoed by other middle-aged, healthy, active surveyors' and builders' assistants. Employers who interview applicants do not consider themselves "too old at 40," 50, 60, or even older, to "carry on." Why? Many assistants served in the war, have been hard hit by loss of employment, loss of savings put by for old age, and now, it seems, are not given a fair chance. Why?

Another handicap is that an applicant is required in some positions to have P.A.S.I. or other degree to his name. Why? This was not made a condition in the past. Many capable men, for various reasons, did not sit for exams. in their younger days.

Advertisers require applicants to state age and salary required. Why? If age is mentioned, it is hopeless to expect a reply. Salary required may be considered too much; or, on the other hand, if a moderate one is asked, the applicant may not be considered suitable. Why should not a statement of qualifications be sufficient for the advertisers to select applicants for interview, and thus provide an opportunity for mutually arranging salary according to circumstances? Is it possible, through the medium of your journal, to have the views of employers on the oft-repeated question

"Why?"

BUILDING AND ENGINEERING CONTRACTS.

Arbitration in Building Disputes.

A course of ten lectures on these subjects is being given at the Westminster Technical Institute by Captain W. T. Creswell, Barrister-at-Law, on Tuesday evenings from 7 to 9 p.m. Special attention will be devoted to questions involved in housing work. The course will be based on the following syllabus: The nature of contracts generally; forms in which a contract may originate; the tender; the acceptance of the tender; the consideration; the contract; mistakes; fraud; misrepresentation; supervision of work; time of completion; omissions and variations; defects; certificates and retention money; penalties and liquidated damages; discharge of contracts by performance and otherwise; breach of contract; damage to persons, property or things; and arbitration in building disputes.

BOOK REVIEWS

Modern Building Practice. By WILL HARVEY. (London: 9, Queen Anne Gate, Westminster, S.W.1.) 1925. Pp. 5s.

This is a handy little volume which deals with those matters of building practice which every architect ought to know—generally small matters, but if carried out would add considerably to the satisfaction of clients and lessen that tendency to criticism which we are afraid is too often justified, more particularly in the case of small houses. The book is well illustrated, and a perusal of it will probably be a useful reminder of those small matters that to make a perfect whole.

Cellulose Ester Varnishes. By F. SPROXTON. B.Sc., F.I.C.

Blacks and Pitches. By H. M. LANGTON, M.B.Sc., A.I.C.

We have received a copy of these books, which are two of a series of monographs on important branches of the oil and colour industries. They are written by specialists who possess fact, experience and adequate chemical knowledge. A critical digest of the published literature, a feature of the series, and descriptions of typical manufacturing processes are included. Special reference is made to allied industries. The books are well illustrated with photographs, diagrams of plant, photomicrographs, and other pictorial expressions calculated to enable a reader the better to understand the

A Short History of the Building Crafts. By MARTIN SHAW BRIGGS, F.R.I.B.A. (London: Clarendon Press.)

The author of this work, which is based on a series of lectures to architectural students at the University College, which subsequently appeared in our pages, has approached his subject with erudition. His treatise is written with old-time methods of construction in their relation to the buildings of the past. There is an introductory chapter dealing with the architect and the craftsman, followed by ten chapters describing the various trades and handicrafts. The author writes from a disinterested point of view, his aim being to make known the honesty of purpose which was the stimulus to the workers of old days, and the book is wide in its range, touching on building construction of nearly every civilisation.

A good deal of the theory described by the author has been revived by architects during recent years, particularly in the realm of domestic building, but there is much so stated in the arguments put forth, and 250 illustrations by the author will be of service to students. We would wish, however, that the author had connected his chapters more closely to the story of English building, particularly the way in which certain treatments of stone, brick, and timber resulted from the development of the plan in a vertical direction. The book is well written, and shows careful research, not only in libraries but among old buildings which are recognised as examples of sound building. The publication of the work is a step in the right direction, and its lessons will doubtless be incorporated in the teaching systems of the schools.

Books Received.

ENGLISH ROOMS AND THEIR DECORATION. By GLANCE. By Charles H. Hayward. (London: 9, Queen Anne Gate, W.1.) Price 5s. net.

ELEMENTARY GUIDE TO REINFORCED CONCRETE. By Albert Lakeman. (London: Concrete Publications, Ltd.) Price 2s.

PRACTICAL STEAM, HOT WATER AND VAPE HEATING AND VENTILATION. By Alfred King. (London: Crosby Lockwood & Son.) Price 25s. net.

OXFORD REOWNED. By L. Rice-Oxley. (London: Methuen & Co., Ltd.) Price 18s.

COURSE IN STRENGTH AND ELASTICITY OF MATERIALS. Vols. I and II. By Edward L. Coston. (London: Scott, Greenwood & Co.) Price 10s. 6d. net each.

ATHOLL STEEL HOUSES

The Minister of Health has authorised 25 pairs of demonstration Atholl houses to be built in many parts of England. A pair of these houses have just been completed on the L.C.C. housing estate at Downham, and were opened recently by the Duke of Atholl, who designed them. In external appearance they are neat and well-proportioned, the steel stanchions painted black and the enclosed plates white. The roof tiles are red. The lay-out of the plan is economical, every square-inch being advantageously used. These two houses contain three rooms each and, on the ground floor, a living-room, kitchen, bathroom, larder, coal-cellar, &c., but this accommodation and the arrangements can be varied in a number of ways by using the standard units all the time.

The speed with which these houses can be built, however, is their greatest asset, the time taken from two to four weeks, although the plates of the walls in a pair can be assembled within four days if necessary. One of our illustrations shows three days' work.

The outer walls are constructed of 3-16 in. plates flanged and curved at the top edge, thus providing a waterproof joint, adding to the structural strength and serving to carry the supports which the lining of the wall is fixed. These plates are coated with granulated cork on the outside face to absorb condensation. The inner lining is composed of asbestos sheeting backed with wood for strength and warmth. The 3 in. space between the steel and this inner lining serves to insulate the wall.

The cost is £450, but this will be reduced by mass production. Arrangements have been made at the Poplar works for the fabrication of the steelwork at the rate of 2,500 houses per year, although the firm, the Housing Corporation of Great Britain, Ltd., expect to build at least 10,000 houses next year. We understand that the L.C.C. has placed a substantial order for these houses, and that the relations with Labour are entirely friendly. Under union conditions are observed, and as the scheme does not unduly draw upon the trades in which a shortage of labour exists (bricklaying and plastering are eliminated) no difficulties are anticipated.

Excavations at Athens.

The excavations round the Acropolis are expected to begin next March. The American Committee has accepted the plan prepared by Ephor of Antiquities of Attica, in collaboration with the Director of the American School at Athens. The excavations are to be at the spot where the electric railway crosses the archaeological site in front of the section bridge, and will extend towards the Propaganda and the Acropolis.

TRADE NEWS

We have received a booklet from Sir William Arrol & Co. (Swansea), Ltd., describing their new structural works at King's Dock, Swansea.

Cements and their Properties.

We have received a booklet dealing with certain cements and their properties—"a critical consideration"—by Mr. J. F. Goddard, and published by Super Cement, Ltd., of 10, Upper Woburn-place, W.C.1. This abstract commences with a brief summary of the invention, the first use and the progress of cement; every aspect of the preparation is fully dealt with. Super cement is made from Portland cement clinker, and is improved by adding to this a material known as Catacoll during the grinding operation. This is a chemically treated gypsum and is substituted for an approximately equal amount of the raw gypsum ordinarily added to the clinker at the same stage in the manufacturing process of Portland cement. The essential ingredient of Catacoll is tannic acid, and its function is to facilitate the reactions which occur between the mixing water and the constituents of the clinker, and ensure that they will be complete; this makes it thoroughly waterproof. Those interested can obtain this booklet on application to the above address.

Structural Steelwork.

The surest testimonial to the quality of any goods is the length of time for which the firm has produced them. Messrs. Fredk. Braby & Co., Ltd., Petershill-road, Glasgow, have been manufacturing structural steelwork for half a century. In giving a general description of their work they believe that actual photographs serve as a better medium than letter-press, and have collected in their latest brochure a variety of illustrations of recent work, indicating the character of the work they do. They state that they have a large and experienced staff of designers, engineers, and craftsmen, and great care is taken with export work, to ensure proper marking so that the structures can be put together with unskilled labour. An innovation upon which Messrs. Braby & Co. are to be congratulated is their scheme of "Standard-unit" construction: structural steelwork, ready-made in interchangeable standard parts, which are assembled in various ways to suit various requirements, chief among which is that of roof framework. The advantages of this system are summed up in a phrase: "Steelwork from stock." This means immediate design and immediate supply; interchangeability; standardisation and simplicity; adaptability to varying circumstances; readiness in all cases for immediate erection, extension, duplication or alteration; and for re-erection without loss.

Sash Chains.

We have received a leaflet from Messrs. Rhodes' Chains, Ltd., of 26, Charing Cross-road, W.C.2, dealing with the Improved Nos. 44 and 33s Chains. Though these are light in weight, increased efficiency in manufacture, combined with the selection of only the best materials, has enabled the firm to produce strong and serviceable chains at low cost; while their usefulness has been greatly increased by the fact that no elaborate fittings are required for fitting them to sashes and weights. They are claimed to be silent and easy running, and never to require attention, thus obviating any interference with the decoration. The inconvenience and cost of repairing broken sash lines is eliminated and all damage to person and property avoided.

NEW COMPANIES

The particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 and 118, Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

BURTON HOLT (CHELSEA), LTD. (209,066), Registered October 17. 1-3A, Church-street, Chelsea, S.W.3. Manufacturers of pre-cast concrete units and concrete "in situ," repairers of alabaster, &c. Nominal capital, £500.

SOUTREND MASTER BUILDERS' HOUSING CO., LTD. (209,071). Registered builders and contractors, &c. Nominal capital, £4,000.

CILCEN LIME SPAR CO., LTD. (209,037). Registered October 10. Quarry owners, quarry-masters, &c. Nominal capital, £3,000.

R. L. DILWORTH, LTD. (209,045). Registered October 16. Builders and contractors. Nominal capital, £5,000.

J. B. BROOKE & SONS, LTD. (209,081). Registered October 17. Joiners, builders, &c. Nominal capital, £3,000.

AERATED CONCRETE CO., LTD. (208,597). Registered September 21. 97-8, Abbey House, Victoria-street, Westminster, S.W.1. Manufacturers of and dealers in cement, lime, plasters, whiting, clay, &c. Nominal capital, £500.

G. & T. EARLE (1925), LTD. (208,738). Registered October 1. Wilmington, Hull. Manufacturers of and dealers in cement, lime, plasters, artificial stone, &c. Nominal capital, £10,000.

FRANCIS A. TINKER & SONS, LTD. (208,737). Registered October 1. Painting contractors and decorators. Nominal capital, £5,000.

ALDERSHOT BUILDING CO., LTD. (209,407). Registered November 3. "Ashleworth," North-lane, Aldershot. Builders and general contractors, &c. Nominal capital, £1,000.

C. PHIPPS & CO., LTD. (209,331). Registered October 30. Builders and decorators, &c. Nominal capital, £750.

THORNE & THORNE, LTD. (209,345). Registered October 30. 37, Westwell-road, Streatham, S.W.16. Builders and contractors, &c. Nominal capital, £5,000.



An Atholl Steel House as erected on the L.C.C. Housing Estate at Downham.



NEW BUILDINGS IN LONDON.

Aldersgate-street.—Plans have been prepared by Mr. F. Selby, architect, 44, Chancery-lane, W.C.2, for a block of office premises.

Artillery-row.—Large additional showrooms and staff quarters are being erected fronting on to Artillery-row and Spencer-place, S.W.1, linking up with the main stores building of the Army and Navy Co-operative Stores, Ltd., in Victoria-street, S.W.1. Messrs. Dove Bros., Ltd., Cloudesley-place, Islington, contractors. Sir Aston Webb & Son, Queen Anne's Gate, S.W.1, architects.

Ashted.—New factory buildings are being erected and existing premises adapted for the manufacture of artificial silk for the Rayon Manufacturing Co., Ltd., 62, New Broad-street, E.C.2. Messrs. Frank Hayes, Ltd., Kingsway House, Kingsway, W.C., and Messrs. George E. Everitt & Sons, Ltd., Sydenham-road, North Croydon, contractors. Mr. H. L. Cabuche, O.B.E., F.R.I.B.A., is supervising the work.

Balderton-street.—Foundations have been constructed for the garage—holding 350 cars—repair works and petrol service station which are being erected by Messrs. Bovis, Ltd., 43, Upper Berkeley-street, W.1. Plans by Messrs. Edmund Wimperis, Simpson & Guthrie, F.F.R.I.B.A., 61, South Molton-street, W.1, acting on behalf of Messrs. Macy's, Ltd., garage proprietors.

Bermondsey.—The L.C.C. have under consideration in connection with the rebuilding of the slum area known as "Hickman's Folly," a proposal to pull down and re-erect the "George" public-house in Flockton-street. Mr. Kirby is architect to Messrs. Courage & Co., Ltd., the brewers, owners of the property.

Bond-street.—As soon as operations upon escalators, &c., at the Bond-street Underground Station are completed it is proposed to convert the ground floor of the superstructure into a shopping arcade, to plans prepared by Mr. Stanley A. Heaps, architect to the "Underground" Co., Electric Railway House, Broad-way, S.W.1.

Brentford.—Funds are being raised to build a new Cottage Hospital for the district. Plans by Messrs. Dodge & Reid, 120, High-street, Brentford.

Bromley.—The T.C. propose to build a new school on the Downham housing estate to accommodate 1,000 children. Plans by Mr. Herbert O. Ellis, F.R.I.B.A. (Messrs. H. O. Ellis & Clarke), 3, Old Queen-street, Westminster, S.W.1.

Church-street.—Messrs. N. A. Cooper & Co., builders, 47, Earl's Court-road, W.8, are to build a block of self-contained flats of six stories, on a site at Nos. 26-28, Church-street, W.8. Shops will occupy the ground floor frontage.

Croydon.—Plans for a new secondary school on a site in Shirley-road are to be prepared by Mr. H. Carter Pegg, F.R.I.B.A., 35, Parliament-street, Westminster, S.W., for the Croydon E.C.

Croydon.—Extensions are to be carried out to the electricity works in Factory-lane, for the Borough Council. Messrs. Peter Lind & Co., 2, Central Buildings, Westminster, S.W.1, contractors.

Croydon.—Messrs. Higgs & Hill, Ltd., Crown Works, South Lambeth-road, S.W., have secured the contract for the first section of the extensions to be carried out at the Croydon General Hospital in London-road, at a cost of £58,000. New out-patients' and ward departments have been designed by Messrs. H. Berney & Son, 35, High-street, Croydon.

Edgware.—Hendon Board of Guardians propose to build a new institution and hospital for 500 beds. The first section includes five wards accommodating 175 beds, nurses' home, laundry, power-house, &c. Messrs. Payne & Hobday, architects, 45, Bedford-row, W.C.; Messrs. Dolby & Williamson, consulting engineers, 8,

Princes-street, Westminster, S.W.1; Messrs. John Leaning & Sons, quantity surveyors, 28, John-street, Bedford-row, W.C.

Fleet-street.—A new branch of the National Provincial Bank, Ltd., is to be opened in a new building in Fleet-street, E.C.4, designed by Messrs. Campbell, Jones, Son & Smithers, 9, Dowgate-hill, Cannon-street, E.C.4. Mr. F. C. R. Palmer, F.R.I.B.A., Bank's architect, 15, Bishopsgate, E.C.3. Messrs. F. D. Huntington, Ltd., contractors, Broadway Chambers, Hammersmith, W.

Great Ormond-street.—The Governors of the Great Ormond-street Hospital for Sick Children, W.C.1, have under consideration rebuilding and extension at a cost of approximately £40,000, Mr. Charles E. Barry, A.R.I.B.A., architect, Parliament Mansions, Victoria-street, S.W.1.

Hammersmith.—Messrs. Stansell & Gregory, Ltd., paper container manufacturers, propose to build a new factory in Askew-road, W.12, four stories high, to the design of Messrs. Wallis, Gilbert & Partners, factory architects, 29, Roland-gardens, S.W.7.

Hampstead.—Alterations are being made to the shop premises at 8-9, Upper Belsize-terrace, for Messrs. Pitts Stores, Ltd., Messrs. Snewin Bros. & Co., contractors, 64A, Upper Clapton-road, E.15. Mr. William Gilbert, Lic.R.I.B.A., architect, 74, Broad-street-avenue, E.C.2.

Hornsey.—Building operations at Coldfall projected by the B.C. include a new school, designed by Mr. H. Carter Pegg, F.R.I.B.A., 35, Parliament-street, S.W.1. It is also proposed to reconstruct the Crouch End school.

Kensington.—Messrs. Hill & Gurr, Bromley, Kent, are erecting a block of 30 flats and five cottages for the Kensington Borough Council. Plans by Messrs. A. & J. Soutar, 8, King William-street, Strand, W.C. Quantities by Mr. E. J. Fairchild, 10, Adam-street, Adelphi, W.C.

Lewisham.—A nurses' home is to be built at the Lewisham Infirmary, S.E., to accommodate about 200 nurses. Messrs. Leslie & Co., Ltd., Kensington-square, W.8, contractors, tender amounting to £159,892. Messrs. J. Douglas Matthews, Son & Ridley, 3, Paul's Bakehouse-court, E.C.4, architects. Mr. Louis Jacob, F.S.I., quantity surveyor, 39, Bloomsbury-square, W.C.1. Mr. G. W. Martin, M.I.Mech.E., consulting engineer, 33, Arran-road, S.E.6.

Lombard-street.—Excavations and foundations are being made for the extension of the premises of Messrs. Barclay's Bank, Ltd., to occupy the corner of Lombard-street and Gracechurch-street, E.C.3. Messrs. Ashly & Horner, Ltd., 8, Aldgate, E.1, builders. Messrs. J. Campbell Jones, Son & Smithers, architects, 9, Dowgate-hill, Cannon-street, E.C.4.

Long Acre.—Premises at Nos. 87-91, Long Acre, W.C., occupied by Messrs. Odhams Press, Ltd., are to be rebuilt to provide larger printing and storage facilities, to plan prepared by Messrs. Francis Chambers & Son, 11A, College Hill, Cannon-street, E.C.4.

Norfolk-street.—Work has now been put in hand upon the extension and improvement of the Howard Hotel. Messrs. Bovis, Ltd., 43, Upper Berkeley-street, W.1, are constructing 150 new bedrooms, 50 bathrooms, restaurant for 200 persons, grill room for 100 persons, &c. Messrs. W. & E. Hunt, F.F.R.I.B.A., architects, 30, Norfolk-street, W.C.2.

Putney.—A new school for secondary education is being erected in Sutherland-grove, S.W., by Messrs. Walter Jones & Son, Ltd., 64, Victoria-street, Westminster, S.W.1, at a cost of £56,000, for the London Education Committee. Mr. G. Topham Forrest, F.R.I.B.A., architect, County Hall, S.E.1.

Regent-street.—Messrs. Dorman, Long & Co., Ltd., Central Buildings, Westminster, S.W., are putting into position the main stanchions and girders for the new Regent Arcade in Regent-street, Argyll-street and Little Argyll-street, W.1, for which Messrs. Kirk & Randall, Ltd., 146, Grosvenor-road, S.W.1, are the main contractors. Mr. S. Gordon Jeeves, 16, Han-

over-square, W.1, architect. Mr. W. H. W., 23, Farnival-street, E.C.4, quantity surveyor.

Regent-street.—Messrs. Bovis, Ltd., 43, Upper Berkeley-street, W.1, have secured the contract for the new premises near Piccadilly-circus, for Messrs. Lillywhite's, Ltd., sports outfit Shopfronts, Messrs. Frederick Sage & Co., Gray's Inn-road, W.C.

Regent-street.—Extensive alterations and additions are to be carried out to Les Grands Restaurant in Heddon-street, W.1, under the supervision of Messrs. Nicholas & Dixon, F.F.R.I.B.A., architects, 19, Hanover-square, W.1. Messrs. James Smith & Sons, builders, South Norwood, S.E.25.

Richmond.—It is proposed to carry out considerable structural alterations and improvements to the Greyhound Hotel in George-street. The owners are Messrs. Shorts, Ltd., 310, Holborn, W.C.

St. Helens-place.—A large office building, six stories high, is to be erected on a site on the east side of St. Helens-place, E.C. The owner of the estate are the Leathersellers' Company. Messrs. Dove Bros., Ltd., contractors, Cloudesley-place, Islington, N.1. Mr. Henry H. F.R.I.B.A., architect, 10, Gray's Inn-square, W.C.

Southwark.—Plans have been approved for the new block of offices to be erected in Stamford-street and Paris-gardens, S.E.1, for Messrs. Amalgamated Liffie Press, Ltd. Mr. T. J. architect, Doric House, Museum-street, Messrs. G. E. Wallis & Son, Ltd., builders, Broadmead House, Panton-street, W.1.

Strand.—Possession of a site at the rear of Strand Palace Hotel, W.C.2, will enable the directors of the Strand Hotel, Ltd., to proceed with an extension scheme, doubling the capacity of the building, and providing 900 bedrooms. Mr. F. J. Wills, 62, Oxford-street, W.1, is the company's architect.

Tooting.—It is proposed to build a new church of St. Augustine on a site in Garfield-lane, S.W.17. Mr. H. Burke Down, F.R.I.B.A., architect, 12, Little College-lane, Westminster, S.W.1.

Tooting.—A new station and booking office are to be erected on the City and South London Underground Rly. extension, to plans prepared by Messrs. Adams, Holden & Pearson, F.F.R.I.B.A., 9, Knightsbridge, S.W.1.

Victoria.—The road-widening scheme at the junction of Vauxhall Bridge-road and Victoria-road, S.W.1, includes the rebuilding of the whole block of property embraced by the "Windsor Castle" public house and the adjacent restaurant. Mr. Malcolm T. Saunders, architect to Messrs. Watney, Combe, Reid & Co. Messrs. William Woodward & Son, Great James's-street, W.C.1, are acting for Messrs. Aerated Bread Co., Ltd., Carter's Town, N.W.

Warwick-street.—Steelwork for a new block of offices and shops at the corner of Warwick-street and Beak-street, W.1, is now being fabricated by Messrs. Dorman, Long & Co., Ltd., Central Buildings, Westminster, S.W.1. Messrs. Geo. Parker & Son, Summer-road, Farnham, S.E., contractors. Messrs. Diespeker & Co., Ltd., 60, Holborn-viaduct, W.C., five floors. Messrs. Express Lift Co., Ltd., Greatcoat-street Works, S.W.1, lifts. Messrs. C. A. Manufacturing Co., Ltd., 246, High Holborn, W.C., metal windows. Mr. F. Cubitt Nichol, F.R.I.B.A., architect, 37, Norfolk-street, Strand, W.C.

Westminster.—St. Clement Danes Vestry Hall, S.W.1, is shortly to be vacated by the Westminster City Council, and occupied by Messrs. St. Clements Press, Ltd., of Portugal-street, W.C.2, for additional printing offices and works. Plans by Messrs. Emden, Egan & Co., 7, Garlick-street, Covent Garden, W.C.

Wood Green.—Thirty houses are to be erected on the White Hart-lane estate, by Messrs. Rowley Bros., Ltd., builders, Tower Works, Dunloe-avenue, N.15.

RATES OF WAGES IN THE BUILDING TRADE

READING a paper on "The Rating and Valuation Bill (1925) in its Present Form," at the meeting of the Auctioneers' and Estate Agents' Institute, on November 5, Mr. Philip Noel Faraday referred to the amazing inequalities which the Bill proposed to perpetuate. Take, for instance, he said, a shop in Bond-street with an identical frontage as a shop, say, in Hoxton, or other comparatively remote district not in the centre of London. It is conceivable to imagine the same frontage, the same depth, the same number of floors, and, indeed, identical accommodation. The shop in Bond-street was let at £4,000 a year, the shop in Hoxton at £400 a year. Under the Valuation (Amendment) Act both rents are subject to the same deduction in order to get at the rateable value; so that while the shop in Bond-street was allowed £66 for the purpose of rating for fire insurances, &c., the shop in Bond-street was allowed a sum of no less than £660 for the same purpose. The "rateable value" was the datum upon which each rate was levied; and, therefore, it was possible that in order to maintain the value of property in a state to command the rent, the landlord might more frequently paint and repair the shop in Bond-street as compared with the shop in Hoxton, it was ridiculous that the tenant should have the great advantage of a large allowance in order to find the "rateable value" upon which he paid for the shop in Bond-street as compared with the less-favoured tenant of the shop in Hoxton.

the event of equalisation of rates, which obviously at the back of the mind of the Legislature in some form or other, the application of a fixed scale of deduction to obtain rateable value would lead to a far greater lack of uniformity than could now exist. The law of supply and demand, with which Parliament could never be able to deal, might enable a tenant to escape his fair share of the burden of the taxation, according to the district in which his property was situated; and the varying scales which had been adopted by the various counties throughout England and Wales to suit local conditions, and which had in some instances been found to be equitable and just, would be scrapped in favour of a hard and fast rule applying to the whole of England and Wales, which was not valuation and required no office-boy skill to apply.

the same meeting a paper was read on
its in an Arbitration," by Mr. Ernest F.

A recent meeting of the Institution of Heating and Ventilating Engineers, Mr. J. J. reading a paper on this subject, said it might take it for granted that where the installation of heating plant involves the use of a large amount of fuel, some kind of instrument should be available to enable the attendant to record the firing, preferably to record automatically the result of his firing. When considering the performance of any heating plant in detail, a proper thermal balance sheet must be compiled in order to ascertain the details of the efficiency of the plant. The economic aspect of carbon recording was one of interest, but he did not suggest that it was a practical proposition to install a recorder where one had only a small hot water installation. A good deal of criticism against such recorders arose from the fact that the first instruments suffered from mechanical defects, and were therefore liable to go out of order. They were constructed too much by chemists who had not the proper conception of the rough and tumble working conditions in the average stockholder's plant. With modern plants far greater care and attention had been paid to the mechanical details, so that they now had an instrument which would stand years of hard work.

	Masons.	Bricklayers.	Carp'rs. Joiners.	Plas- ters.	Slaters.	Plum- bers.	Painters.	Lab'rs.
Aberdare	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Accrington	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Altrincham	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Ashton-under-Lyne	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Barnsley	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Barrow-in-Furness	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Barry	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Bath	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Bedford	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Birkenhead	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Birmingham	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Bishop Auckland	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Blackburn	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Blackpool	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Bolton	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Bournemouth	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Braford	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Brentwood	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Bridgewater	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Brighton	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Bristol	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Burnley	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Burton-on-Trent	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Bury	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Cambridge	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Cardiff	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Chatham	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Chelmsford	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Cheltenham	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Chorley	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Chesterfield	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Colchester	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Coventry	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Crewe	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Darlington	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Derby	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Doncaster	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Dudley	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Durham	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
E. Glam. Mon. Vall.	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Eastbourne	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Exeter	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Folkestone	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Gloucester	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Glantham	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Grays	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Grimsby	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Great Yarmouth	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Guildford	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Halifax	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Harrowgate	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Hartlepool	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Hastings	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Hereford	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Huddersfield	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Hull	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Ipswich	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Lancaster	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Leamington Spa	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Leeds	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Leicester	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Lichfield	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Lincoln	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Liverpool	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Llanelli	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
London (12 m. radius	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
12-15 m. radius	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Loughborough	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Luton	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Maidstone	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Manchester	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Mansfield	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Merthyr Tydfil	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Middlesbrough	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Newcastle-on-Tyne	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Newport, Mon.	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Northampton	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Norwich	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Nottingham	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Oakham	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Oldham	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Oxford	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Plymouth	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Pontypridd	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Portsmouth	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Preston	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Reading	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Rochdale	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Rochester	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Rugby	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
St. Albans	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
St. Helens	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Scarborough	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Sheffield	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Shrewsbury	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Southampton	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Southend-on-Sea	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Southport	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
South Shields	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Stockport	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Stockton-on-Tees	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Stoke-on-Trent	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Stroud	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Sunderland	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Swansea	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Swindon	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Taunton	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Torquay	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Tunbridge Wells	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Wakefield	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Walsall	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Warrington	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
West Bromwich	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Wigan	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Windsor	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Wolverhampton	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
Worcester	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s
York	1 s	1 s	1 s	1 s	1 s	1 s	1 s	1 s

(For rates of wages in the Building Trade in Scotland, see page 723.)

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc

NOVEMBER 16.—**Bristol**.—CONVENIENCE.—Public convenience at Cheltenham-road, for the T.C. L. S. McKenzie, City Engineer and Surveyor, City Engineer's Office, 63, Queen-square. Deposit £2 2s.

NOVEMBER 16.—**Bristol**.—CONVERSION.—Of the old married quarters into assistant Medical Officers' quarters and sewing room, also the conversion of the receiving block into nurses' cubicles, &c., at Southmead Hospital, for the T.C. Thos. S. Lamb, Clerk to the Guardians, St. Peter's Hospital.

NOVEMBER 16.—**Chipping Sodbury**.—HOUSES.—For (1) eight at Stoke Gifford; (2) two at Pucklechurch; (3) six at Shortwood; (4) four at Watley's End, Winterbourne; (5) four at Marshfield, for the R.D.C. Housing Inspector. Deposit £1 1s.

NOVEMBER 16.—**Edinburgh**.—RECONSTRUCTIONS.—Demolition of old properties and certain minor reconstructions at 94, Grassmarket, for the T.C. Morham & Brochie, ordained surveyors, 29, Hanover-street.

NOVEMBER 16.—**Galashiels**.—ALTERATIONS.—At Hillside Mills, Edinburgh-road, for the United Co-operative Society, Ltd. Manager.

NOVEMBER 16.—**Glamorgan**.—IMPROVEMENTS.—For (1) Olyne Council school, improvements to playground; (2) Ystalyfera Intermediate school, extension of dining rooms; (3) Wern (Ystalyfera) Council school, improvements to playground; and (4) Maesteg Secondary school, additional classrooms, for the C.C. T. Mansel Franklen, Secretary of E.C., Glamorgan County Hall, Cardiff.

NOVEMBER 16.—**Liverpool**.—ADDITIONS.—Alterations and additions to the Hightown school, for the T.C. Land Steward and Surveyor.

NOVEMBER 16.—**London**.—DWELLINGS.—Extension of a block of dwellings and the erection of a further block on the Whitmore Estate (Ware-street area), Shoreditch, for the L.C.C. Architect to the Council, The County Hall (Room No. 3), Westminster Bridge, S.E.1. Deposit £2.

NOVEMBER 16.—**Markham**.—SCHOOL.—Public elementary Council school, to provide accommodation for 500 children at Markham Village, for the Monmouthshire E.C. J. Bain, F.R.I.B.A., County Hall, Newport. Deposit £2 2s.

NOVEMBER 16.—**Rotherham**.—HOUSES.—Twenty-six houses on Doncaster-road, East Dene housing estate, for the C.B. Chas. A. Broadhead, architect, Devonshire House, Moorgate. Deposit £2 2s.

NOVEMBER 16.—**Sheffield**.—HOUSES.—Fifty-four houses on the Wybourn estate, Cricket Inn-road, Park, for the T.C. F. E. P. Edwards, F.R.I.B.A., City Architect. Deposit £2.

NOVEMBER 16.—**Walsall**.—HOUSES.—For (a) four parlour type houses; (b) two non-parlour type houses on the Chucky site, for the C.B. J. Taylor, Borough Engineer and Surveyor. Deposit £1.

NOVEMBER 16.—**Wombwell**.—HOUSES.—Erection of 56 type "A" and 20 type "B" houses on a site near King's-road, for the U.D.C. D. H. Roberts, L.R.I.B.A., Park-street, Wombwell. Deposit £2.

NOVEMBER 17.—**Barnesley**.—HOUSE.—Building of a pump house and attendant's bungalow, &c., at Soughley-lane, near Wortley, for the C.B. Waterworks Engineer, Doncaster-road. Deposit £3.

NOVEMBER 17.—**Birkenhead**.—LIGHTING.—Installation of electric lighting in 22 houses on the Council's housing site in Old-lane, for the U.D.C. N. Dufton, Clerk to the Council.

NOVEMBER 17.—**East Barnet**.—CENTRE.—Practical instruction centre at Victoria-road C.C. Girls' School, for the Herts C.C. Lt.-Col. A. Ernest Prescott, County Surveyor and Architect, County Surveyor's Office, Hatfield. Deposit £1 1s.

NOVEMBER 17.—**Newcastle-on-Tyne**.—PLUMBING.—Plumbers' and smiths' work in the Newcastle-on-Tyne district, for H.M.O.W. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit 10s. 6d.

NOVEMBER 17.—**Plymouth**.—EXTENSION.—Of Central Police Offices, for the C.B. J. Wibberley, Borough Engineer and Surveyor. Deposit £2 2s.

NOVEMBER 17.—**Portrush**.—ALTERATIONS.—Painting works, repairs and alterations at Portrush Coastguard Station, for the Government of Northern Ireland. Secretary, Ministry of Finance, 15, Donegall-square West, Belfast.

NOVEMBER 17.—**Rochdale**.—CONVENIENCE.—Convenience on the Springfield estate, for the C.B. Borough Surveyor.

NOVEMBER 17.—**Thurso**.—HEATING.—Heating apparatus at Thurso new school, for the West Riding E.C. Education Department, County Hall, Wakefield.

NOVEMBER 17.—**Wootton Bassett**.—HOUSES.—Forty-five houses on the Seaton Burn housing scheme, for the U.D.C. G. Beatty, Surveyor, Council Chambers, Dudley, Northumberland.

NOVEMBER 18.—**Crewes**.—HOUSES.—Twenty-eight houses on the Alton-street site, for the T.C. E. G. Timbrell, architect. Deposit £2 2s.

NOVEMBER 18.—**Hemsworth**.—RENOVATING.—Interior of the Children's Home, Barnsley-road, for the B.G. W. T. Lynam, Guardians' Offices, Hemsworth, near Pontefract.

NOVEMBER 18.—**Leigh**.—HOUSES.—113 non-parloured houses, for the T.C. T. A. Clare, Borough Engineer and Surveyor. Deposit £2 2s.

NOVEMBER 18.—**Leigh-on-Sea**.—Erection of a Post Office and Telephone Exchange. The Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s., payable to the Commissioners.

NOVEMBER 18.—**Liverpool**.—DEMOLITION.—Of the nurses' home at the Parkhill estate, for the T.C. Land Steward and Surveyor's Department.

NOVEMBER 18.—**London**.—HEATING.—Re-arrangement of the central heating and hot-water services at the St. Andrew's Hospital, Devons-road, Bow, for the Poplar B.G. Consulting Engineer. Deposit £2.

NOVEMBER 18.—**Manchester**.—SCHOOL.—Works required in the erection of the Newton Heath Technical School, for the E.C. P. M. Heath, Town Clerk. Deposit £2 2s.

NOVEMBER 18.—**Rochdale**.—HOUSES.—Fifty-four houses on the Clarke's-lane estate, for the C.B. S. H. Morgan, Borough Surveyor. Deposit £2 2s.

NOVEMBER 18.—**Rochdale**.—SEWER.—Tramways shelter in The Butts, for the C.B. Borough Engineer.

NOVEMBER 18.—**Seabury**.—HOUSES.—Eight houses, for the U.D.C. J. A. Iveson, surveyor, 14, Dean-road, Scarborough.

NOVEMBER 18.—**Tipperary**.—REPAIRS.—To cottages in Tipperary Rural District (Scheme No. 24), in accordance with the plans and specifications prepared by the Engineer, Irish Sailors' and Soldiers' Land Trust, 30, Lower Fitzwilliam-street, Dublin. Deposit £1 1s.

NOVEMBER 19.—**Middlesbrough**.—EXTENSION.—Of the Head Post Office, for the Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s., payable to the Commissioners.

NOVEMBER 19.—**Paisley**.—GATES.—Painter work of the special classes school annexe and for the erection of wrought-iron gates and railings in the playgrounds, for the Renfrewshire E.C. J. Hamilton Pullar, Executive Officer, County Education Offices, 16, Glasgow-road. Deposit £1.

NOVEMBER 20.—**Birmingham**.—HEATING.—Installing a domestic hot water supply at the nursery block at the Western-road Institution. H. Lea & Son, consulting engineers, Edmund-street. Deposit £1 1s.

NOVEMBER 20.—**Bromley**.—KENT.—DWELLING ACCOMMODATION.—Construction of dwelling accommodation over the Central Fire Station, Chislehurst-road, Orpington, for the R.D.C. Council's Surveyor, Park House, Bromley. Deposit £1 1s.

NOVEMBER 20.—**Cardiff**.—EXTENSIONS.—Extensions and alterations at the Clare-road electric tram depot, for the T.C. T. Peirson Frank, City Architect. Deposit £2 2s.

NOVEMBER 20.—**Chippenham**.—EXTENSION.—Of the boys' office accommodation at the district school, for the Governors. P. R. Jones, Clerk to the Governors.

NOVEMBER 20.—**Holywood**.—RESTORATION.—Of Hollywood ex-R.I.C. barracks, Co. Wicklow, for the Commissioners of Public Works. J. J. Healy, Secretary, O'ing O'breach Public (Office of Public Works), Baile Atha Cliath. Deposit £1.

NOVEMBER 20.—**Ipswich**.—NURSES' HOME.—Erection of a Nurses' Home for 57 nurses at St. Andrew's Hospital, Melton, for the Visiting Committee of the East Suffolk County Council. Brown & Burgess, architects, 9, Arcade-street, Ipswich. Deposit £2 2s.

NOVEMBER 20.—**Lodsworth**.—HALL.—Village hall, for the Committee. H. R. Moseley, Hon. Secretary.

NOVEMBER 21.—**Bexhill**.—HOUSES.—Erection of 24 houses in London-road, for the Corporation. Geo. Ball, A.M.Inst.C.E., Town Hall. Deposit £1 1s.

NOVEMBER 21.—**Farnworth**.—HOUSES.—Seventy houses at Harper Green, for the U.D.C. F. Ashton, surveyor. Deposit £2.

NOVEMBER 21.—**Harrogate**.—ROOM.—Parade room at the West Riding Police Station, for the C.C. P. O. Platts, A.R.I.B.A., County Architect, County Hall, Wakefield.

NOVEMBER 21.—**Hull**.—SHELTERS.—Four tramway shelters, for the T.C. E. S. Rayner, Engineer and General Manager.

NOVEMBER 21.—**Stainforth**.—STATION.—Police station at Stainforth, near Doncaster, for the West Riding C.C. P. O. Platts, A.R.I.B.A., County Architect, County Hall, Wakefield.

NOVEMBER 21.—**St. Mellons**.—HOUSES.—Twenty-two houses, and road and sewer work in connection with the lay-out, for the R.D.C. Thomas & Morgan & Partners, architects and engineers, 23, Gelliwastad-road, Pontypridd. Deposit £2 2s.

NOVEMBER 23.—**Belfast**.—PLUMBING.—Plumbing work and electric wiring of three additional villas and a gate lodge at Purdyburn Villa Colony, for the C.B. Tulloch & Fitzsimons, architects, 21, Castle-place. Deposit £2 2s.

NOVEMBER 23.—**Bristol**.—LIGHTING.—Electric lighting of the extension to the Bristol Docks Offices, Queen-square, for the Port Authority. W. S. Skinner & Sons, architects, Orchard-street; and H. T. Sully, consulting engineer, 28, Baldwin-street. Deposit £2 2s.

NOVEMBER 23.—**Clutton**.—HOUSES.—Ten houses at Farrington Gurney, for the R.D.C. Mr. Hawker, architect, Council Houses, Temple Cloud. Deposit £1 1s.

NOVEMBER 23.—**Clutton**.—HOUSES.—Twelve houses at Chew Magna, for the R.D.C. Mr. Hawker, architect, Council Houses, Temple Cloud. Deposit £1 1s.

NOVEMBER 23.—**Epping**.—COTTAGES.—Plans and specifications and approximate prices required for erection of (1) a terrace of six cottages, and (2) a semi-detached cottages, for the U.D.C. G. J. C. Solicitor, Epping.

NOVEMBER 23.—**Folkestone**.—HOSPITAL BUILDINGS.—Erection of new Out-patients' Department, Wards, Solarium, &c., for the Committee of Management of the Royal Victoria Hospital. J. L. Seidl, F.R.I.B.A., Radnor Chambers, Folkestone. Deposit £2 2s., by cheque.

NOVEMBER 23.—**Liverpool**.—SCHOOL.—New elementary school at Walton Hall-avenue, for the Land Steward and Surveyor (Architectural Department). Deposit £4 4s.

NOVEMBER 23.—**Lyme Regis**.—HALL.—Church for the Parish of St. Michael's, Church-street, 1, Regis. J. H. Blizard, F.R.I.B.A., Lansdowne House, Castle-lane, Southampton. Deposit £1 1s.

NOVEMBER 23.—**Manchester**.—DEPOT.—Transfer depot at Birchfields-road, Fallowfield, for the City Architect. Deposit £2 2s.

NOVEMBER 23.—**Preston**.—HOUSES.—100 parlour houses, for the C.B. Borough Surveyor. Deposit £2 2s.

NOVEMBER 23.—**St. Andrews**.—HOUSES.—Two four houses, East Langlands site, for the T.C. Watson, Burgh Surveyor. Deposit £1 1s.

NOVEMBER 23.—**Sunderland**.—SCHOOLS.—Second schools on the Barnes estate, Durham-road, for C.B. W. & T. R. Milburn, architects, 19, Fawcett-street. Deposit £5.

NOVEMBER 23.—**Tyldesley-with-Shakerley**.—HOUSES.—Thirty houses on the Sale-lane site, for the U.D.C. F. E. Jones, Engineer and Surveyor. Deposit £1 1s.

NOVEMBER 23.—**Wath-upon-Deane**.—CONVERSION.—Of privies into water closets, and the erection of new w.c.s. together with the necessary drainage, about 64 houses in West Melton and district, for U.D.C. F. J. Allott, Sanitary Inspector.

NOVEMBER 23.—**Windygates**.—HOUSES.—Forty houses, for the Kirkcaldy D.C. G. B. Deas, architect, Central Chambers, Kirkcaldy. Deposit £1.

NOVEMBER 24.—**Houghall**.—SHED.—Timber lecture shed, at the Horticultural Station, for Durham C.C. F. Willey, F.R.I.B.A., 34, Old Elbow-street, Durham.

NOVEMBER 24.—**Ilford**.—HOUSES AND MANNETTES.—Erection and completion of 98 houses and maisonnettes, together with their necessary housing, at the Horns-road estate, Barkingside, for the U.D.C. H. Shaw, M.Inst.C.E., Engineer and Surveyor, T. Hall. Deposit £5 5s.

NOVEMBER 24.—**Maldon**.—HOUSES.—Twenty workmen's dwellings, for the R.D.C. Wm. Allen, Engineer and Surveyor.

NOVEMBER 24.—**Stretford**.—SCHOOL.—C.O. school in Longford Park, for the E.C. P. O. Platts, A.R.I.B.A., 88, Mosley-street, Manchester. Deposit £1 1s.

NOVEMBER 25.—**Barnet, Herts**.—HOUSES.—Erection of 19 pairs of houses at Shenley-road, Barnet, and six pairs of houses at Hillside-road, Boreham Wood (a certain amount of work on these houses has already been done), for the R.D.C. C. A. Wilshire, Surveyor to the Council, Council Offices, Boreham Wood. Deposit £2 2s., by cheque.

NOVEMBER 25.—**Barnet, Herts**.—HOUSES.—Erection of eight pairs of houses and block of three houses, for the R.D.C. A. J. Wilshire, Surveyor to the Council Offices, Boreham Wood. Deposit £2 2s., by cheque.

NOVEMBER 26.—**Epping**.—HOUSES.—Erection of 46 houses, for the Epping R.D.C. Messrs. Toole Foster, F.R.I.B.A., architects, Buckhurst Hill, Essex.

NOVEMBER 26.—**Gateshead**.—ADAPTATIONS.—Works of adaptation at the Employment Exchange, Windmill Hill, for the Commissioners H.M.O. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commission).

NOVEMBER 27.—**Ashington**.—COURT.—Police station at Ashington, for the C.C. J. A. Bean, County Surveyor, Moot Hall, Newcastle-upon-Tyne. Deposit £1.

NOVEMBER 27.—**Lodsworth**.—HALL.—Village hall, for the Committee. H. R. Moseley, hon. secretary.

NOVEMBER 28.—**Bristol**.—FLATS.—Eight block two flats and one block of four flats, at the Bedmington housing site, for the T.C. L. S. McKenzie, Engineer and Surveyor, 51, Prince-street. Deposit £2 2s.

NOVEMBER 28.—**Sheffield**.—PAINTING.—Paint and repairs to interior and exterior of offices, Commercial-street, for the T.C. S. E. Fedden, General Manager and Engineer, Commercial-street. Deposit 10s. 6d.

NOVEMBER 28.—**Stamford**.—HOUSES.—Two four houses on the New Cross-road housing site, for T.C. Borough Engineer. Deposit £3 3s.

NOVEMBER 28.—**Wakefield**.—HOUSE.—Garage house, Cliff-lane, for the West Riding C.C. Architect, County Hall, Wakefield.

NOVEMBER 30.—**Wandsworth, S.W.4**.—SWIMMING BATH, &c.—Erection of a new swimming bath and appurtenant buildings in connection with, at Streatham High-road, S.W.15, for the Borough Council. Ernest J. Elford, Borough Surveyor, Balham High-road, S.W.17. Deposit £2 2s.

DECEMBER 2.—**Thedwastre**.—COTTAGES.—Six cottages at Walsham-le-Willows, for the R.D.C. H. Coates, architects, 51A, Abbeygate-street, Bury, Edmunds.

DECEMBER 4.—**Avonmouth**.—POST OFFICE, &c.—Erection of a Post Office and Telephone Exchange, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

DECEMBER 4.—**Hemel Hempstead**.—MATERNITY BLOCK.—Erection of a one-story Maternity Block for 10 beds, for the Governors of the West Herts Hospital. Robt. L. Butterfield, Clerk to the Hospital, West Herts Hospital.

DECEMBER 5.—**Staines**.—**HOUSES**.—Erection of houses of varying type upon their Worple-road estate, for the U.D.C. E. J. Barrett, M.Inst.C.E., Engineer and Surveyor, Town Hall, Deposit £2 2s.

DECEMBER 7.—**Brighton**.—**Re-building** Nos. 164 165, Western-road, for the County Borough of Htop. David Edwards, M.Inst.C.E., F.S.I., Borough Engineer and Surveyor, Town Hall, Brighton, Deposit £2 2s.

DECEMBER 9.—**Hammersmith**.—**W.6**—**WORK MATERIALS**.—Work and materials required in the top of a combined transformer sub-station and at al Shepherd's Bush Green, W. 12, for the Metropolitan Borough Council. R. Hampton Lucas, Borough Engineer and Surveyor, Town Hall, Deposit, £2 2s.

DECEMBER 11.—**Barking, Essex**.—**SCHOOL**.—Erection of a central school for 640 children in Wilmington, within the district, for the Education Committee. C. J. Dawson, F.R.I.B.A., Architect to the mittee, Clock House Chambers, Barking. Deposit

DECEMBER 11.—**Leyton**.—**SCHOOL**.—Erection of Knotts Green Special School, for the Leyton C. John H. Jacques, L.R.I.B.A., 61, West Ham, Stratford, E.15. Deposit £2.

NO DATE.—**Birmingham**.—**HOUSES**.—Erection of parlour and parlour houses on Richmond-road Flavells-lane, Yardley, for the Town-Planning mittee. Apply at once, Herbert H. Humphries, M.C.E., City Engineer and Surveyor, The Council se. Deposit £1 1s. for each contract.

NO DATE.—**Chartham**.—**HOUSES**.—Medical officer's e on a site situated in the Mental Hospital grounds hartham, near Canterbury, for the Kent Mental ital Committee. P. H. Arthur, Clerk and Steward, County Mental Hospital, Chartham, near Canter-

NO DATE.—**Kilmarnock**.—**PAINTING**.—In connec- with the 74 houses in course of erection, for the W. Dunbar, Market Bridge.

NO DATE.—**Kenfew**.—**HOUSES**.—For (a) 64 houses iderslie, (b) 48 houses at Thornliebank, and (c) 36 es at Busby, for the C.C. Jas. A. McCallum, rist Clerk, 15, West George-street, Glasgow.

MATERIALS, etc

DECEMBER 16.—**West Hartlepool**.—**MATERIALS**.—ath and road materials, sewer pipes, metal ngs, Portland cement, and disinfectants, for the Francis Durkin, Borough Engineer.

DECEMBER 17.—**London**.—**MATERIALS**.—For (1) bridges, comprising 74 spans of from 4 ft. to clear, weight 1,216 tons approximately, and 84 plates for girders, weight 7 tons approximately; eel material, M.S. angles, flats, rounds, squares, s, &c., 1,161 tons approximately, for the Madras Southern Mahratta Ry. Co. Directors, 25, ingham Palace-road, S.W.1. Charge £1 1s.

DECEMBER 17.—**Norfolk**.—**MATERIALS**.—Tar spray- and bituminous materials, tarred slag macadam, granite, for the C.C. S. H. Warren, County Sur- Queen-street Chambers, 9, Queen-street, ich.

DECEMBER 17.—**Sittingbourne**.—**PIPES**.—740 yds. of 3 in. diameter cast-iron water main, &c., for D.C. M. W. Lashmar, Surveyor.

DECEMBER 18.—**Manchester**.—**MATERIALS**.—Buff ootta, for the Newton Heath Technical School, re E.C. P. M. Heath, Town Clerk. Deposit

DECEMBER 21.—**Kesteven**.—**MATERIALS**.—Granite, al macadam, slag chippings and rejections, and, for the C.C. W. B. Purser, County Surveyor, y Surveyor's Office, 53A, High-street, Grantham.

DECEMBER 23.—**Horsham**.—**MATERIALS**.—For (1) 1,750 yds. run of concrete kerbing and 40 quad- (2) 1,900 tons tarred slag macadam, graded to 1 1/2 in.; (3) 650 tons fine tarred slag macadam, d in. to 1/2 in., for the U.D.C. C. G. Atkinson, eer and Surveyor.

DECEMBER 23.—**West Sussex**.—**MATERIALS**.—For oken granite, quartzite, or other approved stone chippings; also tarred macadam; (2) picked sur- bles and pit flints, and washed shingle or sand ble for surface tar treatment; also binding ma- for the C.C. H. W. Bowen, County Surveyor, y Surveyor's Office, Southgate House, Chichester.

DECEMBER 23.—**West Sussex**.—**TAR**.—200,000 gallons of, for the C.C. H. W. Bowen, County Surveyor, y Surveyor's Office, Southgate House, Chichester.

DECEMBER 27.—**Batley**.—**PIPES**.—8,800 tons of on pipes and special castings, 18 in. diameter, e T.C. G. H. Hill & Sons (Manchester), civil ers, 40, Kennedy-street, Manchester. Deposit

DECEMBER 27.—**Douglas (Isle of Man)**.—**PIPES**.—C tons of cast-iron pipes, from 15 in. to 3 in. ter, for the T.C. G. H. Hill & Sons (Manchester), e engineers, 40, Kennedy-street, Manchester. De- £1 1s.

DECEMBER 10.—**Dublin**.—**MATERIALS**.—Portland t, fire bricks, paints, steel plates, &c., for the Southern Railway (Ireland) Co. C. E. Riley, ary, Kingsbridge Terminus.

NO DATE.—**Bishworth**.—**MATERIALS**.—300 tons screened granite chippings, and 6,600 gallons of tar, for the U.D.C. Jos. Walshaw, Clerk, or, Halifax.

ENGINEERING, IRON AND STEEL.

DECEMBER 16.—**Doddworth**.—**SEWERAGE**.—New disposal works, comprising detritus pits, No. 2 and tanks, No. 2 percolating bacterial filter beds, n tanks, mud-drying beds, and other appurtenant for the U.D.C. W. H. Radford & Son, engi- Albion Chambers, King-street, Nottingham. £2 2s.

DECEMBER 16.—**Loughborough**.—**WIDENING**.—Re- uction and widening of the bridge over the Wood e Bridge-street, for the T.C. W. Granger, h Surveyor. Deposit £2 2s.

NOVEMBER 16.—**Worthing**.—**RESERVOIRS**.—Con- struction of two covered reinforced concrete reservoirs each of 500,000 gallons capacity, for the T.C. T. & C. Hawksley, civil engineers, 34, Old Queen-street, West- minster, S.W.1. Deposit £3 3s.

NOVEMBER 17.—**Manchester**.—**BRIDGE**.—Bridge, carrying road No. 49 over the L.M. & S. Ry., Didsbury, for the T.C. City Engineer. Deposit £3 3s.

NOVEMBER 18.—**Rochdale**.—**RECONSTRUCTION**.—Of Town Mill bridge to reinforced concrete, for the C.B. Borough Engineer.

NOVEMBER 19.—**Hammersmith**.—**IRON FENCING**.—Supply and erection of wrought-iron unclimbable fencing at Ravenscourt Park, Hammersmith, for the L.C.C. Chief Officer (Parks Dept.), The County Hall, Westminster Bridge, S.E.1.

NOVEMBER 19.—**Maesglas**.—**SHED**.—Carriage shed and other works at Ebby Junction, Maesglas, near Newport, Mon, for the G.W.R. Engineer, Paddington Station, London, W.2. Deposit £2 2s.

NOVEMBER 23.—**Edinburgh**.—**HOUSE**.—Construction of a filter house and also a small settling tank at Gourlaw, about half-a-mile south of Rosewell village, in the county of Midlothian, for the T.C. J. & A. Leslie & Reid, 29, Waterloo-place. Deposit £1.

NOVEMBER 23.—**Manchester**.—**STEELWORK**.—For (1) Supply and delivery of cast-iron work; (2) supply and delivery of steel work and the erection of steel-work and cast-iron work, at tramcar depot, Birch- fields-road, Fallowfield, for the T.C. City Architect. Deposit £1 1s.

NOVEMBER 25.—**Manchester**.—**STEELWORK**.—Con- structural steelwork for garage, Polygon Depot, Tower-street, Ardwick, for the T.C. H. C. Lamb, manager, Electricity Department. Deposit £1 1s.

NO DATE.—**Leeds**.—**STEELWORK**.—For the Public Library, Compton-road, Harehills, for the T.C. A. W. Kenyon, architect, 8A, George-street, Sheffield.

ROAD, SEWERAGE, AND WATER WORKS.

NOVEMBER 16.—**Brentford**.—**SEWERS**.—Laying of glazed stoneware pipe soil and surface water sewers, including construction of the necessary manholes, for the U.D.C. W. J. W. Westlake, Engineer.

NOVEMBER 16.—**Haslemere**.—**SEWERS**.—For (1) 320 lineal yards of 6 in. diameter salt glazed stoneware pipe sewer, together with inspection chambers and manholes, on the Grayswood-road, and from the rear of premises on the west side of Grayswood-road; and (2) 423 lineal yards of 6 in. diameter salt glazed stoneware pipe sewer, and 335 yards lineal of 4 in. diameter salt glazed stoneware pipe drain, together with inspection cham- bers, manholes, &c., on Courts Hill-road, for the U.D.C. C. A. Best, Surveyor. Deposit £1 1s.

NOVEMBER 16.—**London**.—**PAVING**.—New wood- block paving on reinforced concrete foundations, including certain repairs to footways in Canterbury road (part), from Hornshay-street to No. 125, for the Camberwell B.C. W. Bell, Borough Engineer and Surveyor, Town Hall, Peckham-road, Camberwell, S.E.5.

NOVEMBER 16.—**Whitley and Monkseatr**.—**MAKING-UP**.—For (1) Hotspur-avenue footway, and (2) Chest- nut-avenue, for the U.D.C. A. J. Roussel, Surveyor.

NOVEMBER 17.—**Lees**.—**MAKING-UP**.—Dixon-street, Smith-street, Back Dunham-street, between Smith- street and Dixon-street, Back Dunham-street behind Nos. 2-8, Dunham-street, Back Stamford-road behind Nos. 113-12, Stamford-road and Back Huddersfield- road behind Nos. 14-22, Huddersfield-road, all off Dunham-street, for the U.D.C. W. J. Lomax, engineer, 11, Fold-street, Bolton. Deposit £5.

NOVEMBER 17.—**London**.—**MAKING-UP**.—For (a) Hanbury-road, (b) Hollington-road, (c) Honeysett-road, (d) Roseberry-avenue, (e) Thackeray-avenue, for the Tottenham U.D.C. Engineer.

NOVEMBER 18.—**Birmingham**.—**SEWERS**.—Construc- tion of roads and sewers on part of "Fox Hollies Hall estate," Acoek's Green, for the T.C. H. H. Humphries, City Engineer and Surveyor. Deposit £2.

NOVEMBER 18.—**Birmingham**.—**SEWERS**.—730 yards of stoneware pipe sewers; 650 yards of concrete tube sewers; and 27 yards of brick and concrete sewers, in Bristol-road, Cock-lane, &c., for the T.C. H. H. Humphries, City Engineer and Surveyor. Deposit £2.

NOVEMBER 18.—**Rochdale**.—**SEWERS**.—Construction of roads and sewers on the Clarke's-lane estate, for the C.B. Borough Surveyor.

NOVEMBER 18.—**S uthwell**.—**FENCING**.—1,120 yds. of four mortice fencing at Kirklington, for the R.D.C. R. Morris, Highway Surveyor, Easthorpe, Southwell, Notts.

NOVEMBER 19.—**Carlisle**.—**PIPING**.—Low-pressure cast-iron piping for condensing water system, for the T.C. Chas. W. Salt, City Electrical Engineer. Deposit £1 1s.

NOVEMBER 19.—**East Westmorland**.—**PIPES**.—55 tons of 5 in., 4 in., 3 in. and 2 in. pipes, cast-iron spigot and socket pipes, together with all bends, junc- tions, tapers, and all other specials, for the R.D.C. Taylor & Wallin, engineers, Commercial Union Build- ings, 47, Pilgrim-street, Newcastle-on-Tyne. Deposit £5.

NOVEMBER 19.—**Heysham**.—**RECONSTRUCTION**.—Of Heysham-road with bituminous macadam, for the U.D.C. H. Miller, Surveyor.

NOVEMBER 19.—**Norham and Islandshires**.—**WIDEN- ING**.—Widening and re-making the roadway, formation of kerb and footway, and erecting concrete walls at Norham Castle Bank, and widening and strengthening the Mill Burn Bridge, for the R.D.C. J. Romans Lake, Surveyor. Deposit £3 3s.

NOVEMBER 20.—**B gnur**.—**ROAD**.—3,000 square yards of reinforced concrete carriageway, together with surface water sewer, gullies, &c., required in the recon- struction of Sudley-road, for the U.D.C. J. Draper, Surveyor. Deposit £1.

NOVEMBER 20.—**Roffey**.—**DRAINAGE**.—For (1) clearing site of proposed extension, levelling site, pro- viding drainage, pathways, and boundary fencing; (2) taking up existing drainage, providing for and laying new 6 in. drain, together with length of ditch to outfall, for the Burial Joint District Committee. A. J. Newbery, Clerk to the Committee, 1, Chennell- villas, Ruspier-road, Horsham.

NOVEMBER 20.—**Romford**.—**MAKING-UP**.—Making-up the private street between Mawneys-road and Mildmay-road (opposite the end of Willow-street), for the U.D.C. Engineer and Surveyor, 73, South- street. Deposit £1 1s.

NOVEMBER 21.—**Huntly**.—**SEWER**.—215 yards of an 18 in. sewer, for the T.C. Burgh Surveyor.

NOVEMBER 21.—**Scalby**.—**SEWERS**.—1,150 yards of 12 in. diameter and 1,900 yards of 9 in. diameter stone- work pipe sewers, together with manholes, lampholes, and other incidental works, for the U.D.C. J. A. Iveson, engineer, 14, Dean-road, Scarborough.

NOVEMBER 23.—**Birmingham**.—**REPAIRS**.—To road- ways at Monyhull Institution, for the B.G. H. H. Humphries, City Surveyor. Deposit £1.

NOVEMBER 23.—**Dartford**.—**RESURFACING**.—Re- surfacing with tar macadam approximately 71,940 super. yds. of carriageway of the Dartford-Longfield- road, for the R.D.C. E. J. Hobbs, Clerk of the Council. Deposit £2 2s.

NOVEMBER 24.—**Chesterfield**.—**WIDENING**.—Of Boy- thorpe-road, consisting of (*in ter alia*) the construction of a reinforced concrete closed culvert, two reinforced concrete bridges carrying single branch lines of the L.M.S. Railway, reinforced concrete open culvert, and other incidental works, for the T.C. V. Smith, Borough Engineer and Surveyor. Deposit £3 3s.

★NOVEMBER 24.—**Ilford**.—**ROADS AND SEWERS**.—Formation of roads and construction of sewers on the proposed extension of Horns-road estate, Barkingside, for the U.D.C. H. Shaw, M.Inst.C.E., Engineer and Surveyor, Town Hall. Deposit £2 2s.

NOVEMBER 24.—**S uthall-Norwood**.—**SEWERS**.—Extension of soil and surface water sewers at Norwood Green, for the U.D.C. J. B. Thomson, Chartered Civil Engineer, &c., Engineer and Surveyor.

NOVEMBER 26.—**Spennborough**.—**ROADWAY**.—Con- struction of approximately 1,500 yds. of roadway between Cleckheaton and Liversedge, for the U.D.C. Surveyor. Deposit £3 3s.

NOVEMBER 26.—**Widnes**.—**IMPROVEMENTS**.—To Sayce-street, Esther-street, passage rear of 1-15, inclusive, Robert-street, passage rear of 39-51, inclu- sive, Esther-street, Birchfield-avenue, passage rear of 64-70, inclusive, Birchfield-road, passage rear of 2-12, inclusive, Birchfield-avenue, and side of 2, Birchfield- avenue, Bradshaw-street, passage rear of 61, Birchfield- road, and 2-23, inclusive, Bradshaw-street, passage rear of 37-59, inclusive, Birchfield-road, passage rear of 1-19, inclusive, Bradshaw-street, passage side of 19, Bradshaw-street, and passage rear of 102-122, inclu- sive, Lugsdale-road, for the T.C. J. S. Sinclair, Borough Surveyor. Deposit £2 2s.

NOVEMBER 28.—**Torpoint**.—**MAKING-UP**.—Of a road at the rear of Hillsboro'-terrace, the Crescent, Montpelier-terrace, and Clarence-road, for the U.D.C. Surveyor. Deposit £2 2s.

★DECEMBER 1.—**Hemsworth**.—**SEWAGE WORK**.—Laying of 2,800 yds. of 12 in. and 425 yds. of 9 in. pipe sewer, &c., and the construction of a new sewage disposal works in the parishes of Upton and North Elmsall, in the Council's area, for the R.D.C. W. T. Lynam, engineer, Market-street, Cross-hill, Hems- worth. Deposit, £2 2s.

★DECEMBER 3.—**Lambeth, S.W.2**.—**FOOTPATHS AND ROADWAYS**.—Works in connection with forming new footpaths and roadways, &c., in making up Herne Hill- road, for the B.C. Osmond Catliff, M.Inst.C.E., Borough Engineer, Town Hall, Brixton-hill, S.W.2. Deposit £2 2s.

Competitions.

(See Competition News, page 694.)

Auction Sales, Tenders, etc.

NOVEMBER 16.—**Swaffham**.—W. S. Hall & Palmer will sell building materials dismantled from the Old Swaffham Workhouse. Auctioneers, Watton, Norfolk.

NOVEMBER 17.—**London, S.W.**.—Messrs. Vervard & Yates will sell, at 255, Clapham-road, excellent timber and building materials, &c. Auctioneers, 365, Norwood-road, S.E. 27.

NOVEMBER 17.—**Surrey**.—Messrs. Charles R. Davis & Co. will sell, under a deed of arrangement, by order of the trustee, at Merstham, stock-in-trade, plant, machinery, and rolling stock, &c., of a builder and contractor. Auctioneers, 285, Borough High-street, S.E. 1.

NOVEMBER 17 and 18.—**London, S.W.**.—F. H. Clark will sell, without reserve, at the Tooting House, Church- lane, Tooting, seasoned timber and building materials. Auctioneers, Railway Wharf, York-road, Wandsworth, S.W., or on the site.

NOVEMBER 18.—**Ramsgate**.—Messrs. Vervard & Yates will sell, at 1, Chatham-street, excellent timber and building materials. Auctioneers, 365, Norwood- road, S.E. 27.

★NOVEMBER 25.—**London, E.C.**.—St. Quinton, Son & Stanley will let by auction the corner building site known as 10 and 11, Crescent, Minorities, in the City of London (area about 2,540 sq. ft.), at Winchester House, Old Broad-street, E.C. Auctioneers, 34, Clement's- lane, Lombard-street, E.C. 4.

★NOVEMBER 26, 27 and 28.—**Sussex**.—Perry & Phillips, in conjunction with Douglas Killick & Co., will sell, on the premises, Maresfield Park (unless previously disposed of), interior and exterior fixtures and fittings, the fabric of the mansion will be sold for demolition (in two lots), lead, stonework, &c. Auctioneers, P. & P., 59, High-street, Bridgworth; D. K. & Co., High-street, Uckfield.

★NOVEMBER 30.—Hayes, Middlesex.—F. H. Clark will sell on site formerly occupied by National Filling Factory, Hayes, new and second-hand timber and miscellaneous building materials. Auctioneers, Railway Wharf, Wandsworth, S.W.18.

★DECEMBER 8.—Elstree, Herts.—Hampton & Sons will sell at St. James's Estate Rooms, 20, St. James's-square, S.W.1, freehold building estate at Deacon's Hill, Elstree, comprising 36 acres; vacant possession of whole. Auctioneers, as above.

Public Appointments.

NOVEMBER 16.—Kingston-on-Thames.—Fully-qualified Quantity Surveyor required to prepare Bills of Quantities in connection with erection of a Nurses' Home and other buildings at the Hospital, Kingston Hill, for the Guardians. W. Taylor, Clerk, Union Offices.

★NOVEMBER 16.—London, S.E.1.—District Surveyors for the districts of Hackney East and Hackney West required by the L.C.C. The Clerk, The County Hall, Westminster Bridge, S.E.1.

NOVEMBER 17.—Enfield.—Clerk of Works in connection with about 150 cottages required by the U.D.C. H. R. Crabb, M.Inst.C.E., Engineer and Surveyor, Public Offices, Enfield.

NOVEMBER 17.—Glamorgan.—(1) Temporary Assistant Quantity Surveyor, (2) Temporary Junior Assistant Quantity Surveyor required by the Education Committee. W. James Nash, F.R.I.B.A., County Architect, Midland Bank Chambers, Neath.

NOVEMBER 17.—Notts.—GENERAL MANAGER.—Required by the Mansfield Woodhouse U.D.C. to supervise the erection of houses by direct labour. A. Mayhall, Clerk, Council Offices, Station-street, Mansfield Woodhouse.

★NOVEMBER 18.—Battersea, S.W. 11.—GENERAL FOREMAN.—Required to act under the Borough Engineer, to supervise erection of an extension to generating station in Lombard-road, for the B.C. Edwin Austin, Town Clerk, Town Hall, Battersea, S.W. 11.

NOVEMBER 19.—Clacton.—Temporary Architectural Assistant required by the U.D.C. Geo. T. Lewis, Clerk, Council Offices, Clacton-on-Sea.

NOVEMBER 21.—Kingston-on-Thames.—QUANTITY SURVEYORS.—Required by the Surrey Education Committee, to work on commission. The Secretary, County Education Office, Kingston-on-Thames.

★NOVEMBER 21.—Sleaford.—Temporary Architectural Assistant required by the County Council. A. D. Piper, Clerk, Council Offices, Sleaford, Lincs.

★NOVEMBER 28.—Paddington, W.2.—Draughtsman required in the Borough Engineer's and Surveyor's Department by the Metropolitan Borough Council. W. F. Abbiss, Town Clerk, Town Hall (on receipt of a stamped and addressed foolscap envelope).

★NOVEMBER 30.—Greenford, Middlesex.—TOWN-PLANNING EXPERTS.—Required to quote an inclusive fee for preparing and carrying through a town-planning scheme for the parishes of Great Greenford and Perivale. A. Lloyd Jones, Clerk, New Broadway Chambers, Baling, W. 5.

★NOVEMBER 30.—Sheffield.—City Architect, not more than 50 years of age, required by the City Council. E. Hart, Town Clerk, Town Hall, Sheffield.

★DECEMBER 1.—West Ham, E.15.—Estimating and General Assistant in Works Department to assist the Works Manager, required by the Corporation. Borough Engineer, Town Hall, West Ham, E. (on receipt of a stamped addressed foolscap envelope).

★NO DATE.—Yorkshire.—Quantity Surveyors' Clerk for temporary employment required at the Royal Engineer Offices, Catterick Camp. Chief Engineer, Headquarters, Northern Command, York.

A.A.S.T.A. Smoking Concert.

The Committee of the Metropolitan Branch of the Association of Architects, Surveyors, and Technical Assistants are holding their annual Benevolent Fund smoking concert on November 26, in the "Dickens Society" Room, at Carr's Restaurant, Strand. The President (Mr. E. Fiander Etchells), will take the chair. A number of well-known West-End artists have been engaged. Coffee and sandwiches will be available during the evening, without charge. Tickets can be had of Mr. J. A. Gould (Chairman, Metropolitan Branch A.A.S.T.A.), 26, Buckingham-gate, Westminster, S.W. 1.

Wet Time Pay.

A joint meeting of the National Master Builders and the National Federation of Building Trade Operatives was held at Bedford-square on Tuesday, when negotiations for the ratification of a new agreement governing wages on conditions in the industry were continued. Progress has been made with the scheme of the joint sub-committee for payment for wet days. The original proposals, it is understood, have been somewhat modified, but the scheme will be on a joint contributory basis, and will create a fund to pay for the time lost through wet and inclement weather or other causes over which the workers have no control. A final decision will be reached next Wednesday, and hopes are entertained that the scheme will be adopted.

PROPOSED NEW BUILDINGS & OTHER WORK

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ABERYSTWYTH.—Plans have been submitted for the erection of a high-class café on the Waterloo Hotel site.

ABINGDON.—The T.C. are proposing to build twenty houses and twenty bungalows.

ABRAM.—The U.D.C. are to apply to the M.H. for permission to erect 50 subsidy houses on the Kingsdown road site.

ALTRINCHAM.—The Manchester and Salford Co-operative Society have a scheme in hand for the erection of 34 houses in Gladstone-road.

ASPATRIA.—A proposal of the Cumberlandshire E.C. to carry out alterations and extensions to the mixed department of the school, and to build a new infants' school at a total estimated cost of £11,500, has been approved.

AUDENSHAW.—A scheme is being prepared for the erection of a new secondary school for boys.

BANGOR.—The U.D.C. are considering the following works:—Hot sea baths, £22,500, and providing a public abattoir, £6,500.

BASFORD.—The cost of the Basford Boys' Secondary School, which is to be erected by the Notts. C.C., is estimated at £44,000.

BASINGSTOKE.—The Director of Education for Hampshire has recommended to the E.C. a site for a new school for Queen Mary's foundation, consisting of thirteen acres opposite St. Thomas's Home.

BATH.—The T.C. has asked the Health Committee to submit a comprehensive scheme for the provision of conveniences in the centre of the City. The City Engineer is to report upon suggested sites. The City Engineer has also been asked to report as to whether there is a site available for the erection of a convenience in the Brougham Hayes district. The City Engineer has been instructed to prepare a lay-out plan showing how the Newbridge-road and Brassmill-lane sites can be utilised for the erection of houses.

BECONTREE.—The L.C.C. recommend that, subject to the approval of the M.H., the freehold of two sites at Becontree be sold for £875 and £1,350, respectively, to the Essex C.C. for the erection of elementary schools.

BEESTON.—The B.E. have passed the plans of the Notts E.C. for alterations at the Beeston Nether-street boys' school.

BENTLEY.—Plans are being prepared for a bakery, together with three shops with houses attached, at Bentley, near Doncaster. Messrs. Hustler & Taylor, of Pontefract, are the architects.

BEXHILL.—The Housing Committee propose to build 24 more semi-detached houses on the portion of land adjoining the site in London-road. Plans are now being prepared.

BILSTHORPE.—The Notts E.C. has acquired a site for the erection of an elementary school for 744 children, estimated to cost £22,000, and for which plans are being prepared.

BINGLEY.—West Riding E.C. are seeking sanction for a loan of £924 for the erection of a house at the training college.

BIRMINGHAM.—The E.C. expect to invite tenders shortly for the erection of the new secondary school at Salfley, which will provide accommodation for 470 scholars. Plans have been prepared by Mr. W. H. Simister, F.R.I.B.A., Norwich Union Chambers, Congreve-street.

BISHOP ACKLAND.—The U.D.C. is seeking permission from the M.H. to utilise land at Blue Row for housing purposes.

BLACKPOOL.—The congregation of St. Kentigern's R.C. Church are raising funds for the erection of a new church on land adjoining present edifice.

BLACKROCK.—Funds are being raised for a new school.

BILDWORTH.—Notts E.C. has purchased a site from the Newstead Colliery Co. for the erection of an elementary school.

BOURNEMOUTH.—Pending the provision of a bathing pool on the sea-front when the west promenade is extended and further developed, the Corporation are considering the suggestion of enclosing a space by the use of piles.

BOVINGDON.—The Herts E.C. has purchased a site for the erection of an elementary school.

BRAINTREE.—The U.D.C. recommend that application be made to the M.H. for sanction to the erection of a further fifty houses on the Cressing-road site.

BRIGHTON.—The C.B. resolved that application be made to the M.H. for sanction of a further 50 houses. The M.H. has sanctioned the borrowing of £3,000 for the purchase of Hodshrove Meadow as a site for the proposed Moulsecomb school.

BRISTOL.—The Borough Engineer has submitted a sketch, together with an estimate of the cost of the proposal to construct a footpath, 15 ft. wide, on the south side of the sea wall, from the West Pier to the Hove boundary. The cost is estimated at £8,500. The Council has approved the lay-out and instructed the Borough Surveyor to prepare plans for the erection of 200 houses at an estimated cost of £25,000, including roads and sewers, on the Beershop Field estate. Plans passed: 24 houses, Reigate-road, for E. B. Hayward.

BRISTOL.—The Bristol Co-operative Society, Ltd., has purchased a large site in Castle-street where they propose to build a large central emporium and stores. Plans will be prepared by Mr. L. G. Ekins, F.R.I.B.A., architect to the Co-operative Wholesale Society, Ltd., 99, Leman-street, E.1.

BRISTOL.—The Bristol Co-operative Society, Ltd., has purchased a large site in Castle-street where they propose to build a large central emporium and stores. Plans will be prepared by Mr. L. G. Ekins, F.R.I.B.A., architect to the Co-operative Wholesale Society, Ltd., 99, Leman-street, E.1.

* See also our List of Contracts, Competitions, etc.

BURGESS HILL.—The U.D.C. has decided to erect a plot of land in Norman-road for the erection of 37 houses of a non-parlour type. Each house cost £450.

BURNLEY.—The E.C. propose to erect a new grammar school at the school children's playing field at an estimated cost of £600.

CARDIFF.—The Mission to Seamen, London, propose to extend the John Cory Sailors' Rest, and to an annexe providing accommodation for 150. Plans have been prepared by Mr. Gledinning Moore, F.R.I.B.A., 18, Castle-street, Swansea.

CHESTER.—The T.C. recommend that subject to the consent of the Cheshire L.E.C. the premises City and County School be extended in accordance with the plans prepared by the City Surveyor. Extension is to be made to the B.E. for appropriation is to be made to the M.H. for sanction to the sum of £2,500 for the purpose. Application to be made to the M.H. for sanction to borrow the sum of £7,350, for the erection of 16 houses on the Grove site.

CHIGWELL.—The Epping R.D.C. has decided to purchase a site for housing, subject to M.H. approval.

CHIPPING SODRURY.—The B.G. has decided to apply to the M.H. for sanction to borrow the sum of £600 for the purchase of the housing site at Ham. The M.H. has sanctioned the borrowing of £2 for the purchase of the Shortwood (Pucklechurch) housing site.

CHORLEY.—The R.D.C. has decided to make application to the M.H. for sanction to the building houses of the "A3" type.

CLACTON-ON-SEA.—The parishioners of St. Andrew have decided to try to acquire more land and a larger church.

CROYDON.—Mr. H. Carter Pegg, F.R.I.B.A., has been appointed architect for the Secondary school to be erected on the Shirley-road site, and Mr. A. S. Land, L.R.I.B.A., architect for the new infant department and alterations to existing buildings at North Park School. Plans passed: P. R. 13 houses, Ross-road, and three houses, L. Avenue: Scratchley Bros., 14 garages, Avondale, G. Poulton & Sons, 10 houses, Beauchamp-road, White, 13 houses, Stafford-road; F. H. 20 houses, Kenley Gardens, Thornton Heath, Shire, nine houses, Sunnybank, South. Paish, Tyler & Crump, 13 houses, Shirley-road, Rogers, 26 houses, Warminster-road.

DEWSBURY.—The E.C. has approved of a scheme for the erection of a new open-air school at the estate to accommodate 100 children, at an estimated cost of £3,750; and also the enlargement of the royd-lane Council School. The additional accommodation is to consist of two extra class-rooms in each boys' and girls' departments, each of which will accommodate forty children. The estimated cost scheme is £5,268.

DOUGLAS (I.O.M.).—Improvements at the Villa Marina, are to be carried out at a cost of £10,000.

DOVER.—The T.C. are to build more houses at Aston-avenue housing site.

DUKINFIELD.—The Corporation has agreed to erect 20 cottage houses on central sites in the town.

EAST GRINSTEAD.—The Surveyor has been instructed to prepare provisional estimate of the cost of a new school at Mount Noddy Cemetery, for the U.D.C.

EAST HAM.—The C.B. recommend that fresh be invited for the erection of conveniences at Wanstead Flats. The Council has also directed Borough Engineer to prepare and submit a scheme for additional dressing accommodation in connection with the vapour baths.

EASTHAM.—About 100 acres of the Carlet estate has been purchased by the Hamilton & Co., Ltd., of Birkenhead.

EDWINSTOWE.—Plans of the Notts E.C. elementary school for 744 scholars has been approved by the B.E.

ERSOM.—The U.D.C. has asked the consultant to prepare plans for a new reservoir.

FLINTHAM.—Repairs and improvements to Flintham and Soreyton elementary school at carried out by the Notts E.C.

FULBURN.—The Cambridgeshire C.C. has plans and estimates for the erection, enlargement and furnishing of buildings at the Asylum, at a total cost of £21,598.

FYLDE.—The R.D.C. has approved of plans for houses.

GODALMING.—The Corporation have purchased in Station-road, Farncombe, for a housing scheme.

GRAVESEND.—The Corporation has allocated on the King's Farm estate for the erection of elementary school.

GUILDFORD.—Plans for increasing the accommodation at Guildford Grammar School to 400, estimated to cost £17,725, have been approved by the Surrey E.C.

HARPENDEN.—Herts E.C. has acquired a site at Batford for the erection of an elementary school.

HASTINGS.—Application has been made to the Hastings Pier Co., Ltd., for permission to carrying out operations for extending the superstructure pier, adding some 9,000 sq. ft. Upon this a proposed to rearrange the existing buildings, at a cost of £30,000. The company's engineer is Mr. Botley, M.Inst. C.E.

ANT.—The U.D.C. has received the sanction of H. to a loan of £12,550, for the erection of two parlour type houses on the West-street estate.

RY.—The Cheshire C.C. are proposing the erection of a single story building for domestic subjects and a central centre, estimated to cost £2,500.

SWORTH.—The R.D.C. has agreed that the 500 to be erected as follows:—Ackworth 50, Brierley croft 30, Little Smeaton 20, Little Houghton hill 50, South Elmsall 50, South Hindley 50, Kirby 110, Shafton 40.—The E.C. has recommended a site at Fitzwilliam for the erection thereon elementary school.

KEY.—The B.C. has approved of the additions Hinckley Grammar School, to cost £10,681, for Leicestershire C.C.

EN.—Herts E.C. has asked the County Surveyor to prepare plans for a school for 520 scholars in Fishponds-lane, at a cost of about £17,000, for the improvement of school buildings in street, at an estimated cost of £2,000.

—The T.C. passed plans:—H. Johnson & Sons, four-type houses, Victoria-avenue; H. Sanderson, four-type houses, Westbourne-avenue.

—The U.D.C. passed plans: Lay-out plan of blocks 123-128, Bennett's Castle-lane, Becontree-lane, 1-29 and 2-36, Devonport-gardens, 2-36, Preston-gardens, 47-81 and 64-180, W. W. Gardner's, 146-194 and 255-327, The Drive, 135, Avenue-gardens, Eastern-avenue, and also 11 houses for P. Triplett, at Uphall-avenue, 11th-avenue; 40 houses at Lonsdale-gardens, 11th-avenue, Lynton-crescent and South View, for Suburban Developments (London), Ltd., houses at Staines-road and Elton-road, for Pintham.

TON.—The Borough Engineer is to obtain for the erection of 68 houses on the southern side also for the necessary roadmaking. The on Committee are considering the provision of school accommodation in the southern part of n and the provision of another domestic science

STER.—The U.D.C. has decided to build ten on the building site.

PORTS.—Middlesex E.C. has obtained consent of £8,223 for the enlargement of the county

ORTH.—The Leicestershire C.C. are negotiating purchase of the old brewery site for a new

AL.—The M.H. has sanctioned the borrowing T.C. of £4,374 for the erection of eight houses e-grove.—The Borough Surveyor is to submit estimates of a further 20 houses at Castle-Instructions have been given for plans for 0 houses.

—The C.C. propose to borrow £470 for the of a bridge over the Meenascarthyl River on from Meenascarthyl Strand to Duagh Cross.

IRING.—The U.D.C. has decided to erect afire by direct labour.

SHAM.—The Housing Committee of the R.D.C. ended the provision of six houses at Compton twelve at Whitechurch, twenty-four at Keyds-lam at Saltford.

AM.—Plans have been approved for the exten- steam laundry in Marsden-street.

NOTON SPA.—The Royal Baths are to be erected, at a total cost of £16,000. The M.H. (the Corporation permission to borrow £10,000 ovements at the Pump Rooms.

—The T.C. passed plans: 28 semi-detached Upland-grove, Harehills, and eight semi- houses, Upland-road, Harehills, for C. H. 16 semi-detached houses, East-row, Armley late, and eight semi-detached houses, Armley venue, Armley Grange estate, for A. Smith. PR.—The Coalville Working Men's Co- Society, Ltd., have decided to build a new a cost of about £15,000. Mr. Harry Swan- A, High-street, Coalville, has prepared the

D.—The U.D.C. have decided to make appli- the M.H. for sanction to build 50 houses.

S.—The City Council has decided to proceed rection of 32 houses by direct labour.

COL.—A scheme is under consideration for the an annexe to the Royal Southern Hospital, 20 additional beds and extra accommodation f.

(CITY).—The Corporation has requested the mmittee to consider the question of building Gallery.

(CLAPHAM).—Premises in King's-avenue are ted by the L.C.C. as a residential school at a out £9,000.

(HOLBORN).—The L.C.C. are to prepare a e the erection of a central school.

(KENSINGTON).—The L.C.C. has approved a handicraft centre to be erected, at a cost at Portobello-road.

(MARYLEBONE).—Extensions are to be at Queen Charlotte's Hospital, Marylebone-

(ST. PANCRAS).—The B.C. recommend that truction of the bridge carrying Kentish over the Regent's Canal be undertaken well, at the estimated cost of £8,000, on at the Regent's Canal & Dock Co. and the ute towards the cost of the work. Messrs. hell & Partners, Ltd., are the engineers, on with Borough Engineer. Application ade to the L.C.C. for sanction to borrow e scheme.

(SOUTHWARK).—A handicraft centre is to be ayer-street, Walworth, by the L.C.C., at 298.

ST. ANNES.—Plans have been prepared tion of baths at a cost of £30,000, for the

T.C. The plans have been prepared by the Borough Surveyor to the T.C.

MANCHESTER.—Messrs. Woolworth's, Ltd., have acquired premises known as the Exchange Arcade, where it is proposed to erect a large modern store.

MANSFIELD.—The Notts E.C. has passed plans for the proposed technical school. The estimated cost of the building is £39,350, towards which the Miners' Welfare Fund would contribute £10,300.—The trustees of the Brunt's Charity has now agreed to buy land for a dining hall and domestic subjects centre, to accommodate from 200 to 250, at a cost of £4,000.

MEAS-TAM.—The Leicestershire E.C. has estimated the cost of the renovations and improvements at Measham Church School at £1,000.

MELTON MOWBRAY.—The Leicestershire C.C. has agreed to build a new senior school for 400 boys at a cost of £10,000, and to adapt existing buildings for a girls' and junior school.

MR. LESBROUGH.—The T.C. is seeking sanction from the M.H. to borrow £2,400 for the conversion of the former Linthorpe Industrial School into a school for mentally defective children.

MOLESEY.—The U.D.C. has decided to build fifty-seven houses, at a cost of £27,924.

MOORT-ORPE (S. YORKS.).—A new fire station is to be erected adjoining the police station, at an estimated cost of £2,000.

MORTON.—The Parish Council are endeavouring to raise £400 to cover the estimated cost of cleaning and redecorating the Parish Church, and to cover the outlay on the installation of electric light.

NEWSTEAD.—Additional school accommodation is to be provided by the Notts E.C. for about 500 scholars.

NORTHAMPTONSHIRE.—Northants E.C. has under consideration a scheme for the provision of a special school for mentally deficient children.—Northants C.C. has agreed to co-operate with other authorities in the provision of an institution for mentally deficient.

NORT. OLT.—Sanction has been obtained by the Middlesex E.C. for a loan of £8,657 for the enlargement of the elementary school.

NORTON.—A M.H. inquiry has been held into an application by the Doncaster R.D.C. for sanction to borrow £825 for works of sewerage and sewage disposal.

NOTTS.—The C.C. are calling a conference of local authorities to formulate a scheme for a smallpox hospital.

OLDBURY.—The U.D.C. are to erect 20 new houses at a total estimated cost of £12,556 on the Tod-row site.—The Council also propose to build 50 houses by direct labour in Newbury-lane.

OLLOHAM.—Modified plans are to be prepared by the Borough Engineer for dwellings for displaced tenants on the Smethurst-street area.—The Medical Officer of Health is to inquire as to a site for the erection of a children's hospital.—Approval has been given to the new generating station scheme, to cost £207,000.—Quotations are to be obtained for the substitution of a new bridge for the cable bridge over the railway lines at Greenhill.—The Borough Engineer has been asked to prepare plans for a motor bus garage in Henshaw-street.

OLLERTON.—Plans for a school, to cost £22,000, have been prepared by the Notts E.C.

PLYMOUTH.—Two blocks of houses containing 24 flats at Pottery Quay are to be erected by the Borough Surveyor. Application be made to the M.H. for sanction to borrow the sum of £11,280 for the erection of the buildings.

PORTSMOUTH.—The E.C. has purchased a site from Winchester College, Trustees for the proposed northern secondary school. Land adjoining the secondary

school in Victoria-road North has been secured with a view to the provision of increased accommodation.

PRESTON.—Extensive improvements are to be carried out at the Ribble Power Station, at an estimated cost of £50,257.

QUEENSBURY.—The M.H. has approved the U.D.C.'s proposal to erect twelve houses on the housing site at Deanstones-lane.

RAINWORTH.—A site for a teachers' house at the school has been acquired by the Notts E.C.

RAYLEIGH.—Twenty houses are to be built by the Rochford R.D.C.

REALING.—The T.C. is to apply to the M.H. for sanction to the borrowing of £16,900 to defray the cost of fencing and laying out the new cemetery site at Caversham and for the erection of a superintendent's lodge and other buildings.—Application is also to be made to the M.H. for sanction to the borrowing of £40,000 for housing purposes.

REIGATE.—The M.H. has sanctioned a loan of £38,320 for a new school for girls at Reigate, for the Surrey E.C.

RETFOR.—The T.C. has decided to make application to the M.H. for the erection of 40 non-parlour type houses.

ROXTON.—Sanction is being sought by the Lancashire E.C. to borrow £23,700 for the erection of a central school.

ST. ALBANS.—Herts E.C. has obtained a site at Hatfield-road for the erection of a central school and a pupil teachers' centre.

SALTBAIRN.—The governors of Sir Titus Salt's Hospital have decided upon a scheme of extensions to the hospital.

SAWTON.—The Cambridgeshire C.C. has decided on a scheme to establish an experimental village college for the advancement of social life.

SEATON BURN.—The Westsude U.D.C. has obtained sanction from the M.H. to erect an additional 45 houses at Seaton Burn.

SHEFFIELD.—Arrangements have been made by the Jessop Hospital Board to acquire Norton Hall for the provision of a suburban hospital.

SMETHWICK.—The T.C. has decided to proceed with the erection of a further 24 houses by direct labour.

SOLIHULL.—The R.D.C. has provisionally accepted a tender for the erection of non-parlour type houses in Balsall-street, Balsall, at the rate of £487 per house. Tenders are to be invited for the erection of houses at Solihull, Earlswood, and Baddesley Clinton.

STALYBRIDGE.—The Corporation are seeking sanction to borrow £3,350 to facilitate the erection of houses on Corporation land in Grey-street, by T. C. Hayes.

STANLEY.—Plans have been approved for the erection of a Central R.C. Secondary school for 160 boys and girls.

STONE.—The architect to the R.D.C. has got out plans for twenty houses—six at Eccleshall, two at Scammell, two at Hilcote, six at Croxton, and four at Oulton. Tenders are to be invited.

STRAFFORD-ON-AVON.—The D.C. has received from the M.H. permission to build 72 houses.

SWANSEA.—The Catholic congregation are raising funds to erect new school premises.

TALLOW.—The co. Waterford Board of Public Assistance has decided to erect a new dispensary residence, at a cost of £1,000.

TORQUAY.—The T.C. passed plans: 36 houses at Barton, for Ball & Wilkinson; 28 houses at Barton, for G. E. Tozer; 17 houses at Pettitor-road, for A. W. Page; proposed lay-out for 43 houses at Barton, for G.E. Tozer.

TORQUAY.—The Borough Engineer reports that adequate repairs at the Pavilion will cost about £600, and he has been instructed to carry out urgent works.—Messrs. T. Vanstone & Sons have prepared a scheme for the erection of 200 houses on the Delson estate.

TRING.—Herts E.C. are negotiating for a site for the erection of a practical subjects centre.

TULLAMORE.—The U.D.C. has decided to acquire the site of the old barracks for building purposes.

TYRONE.—The C.C. has applied to the Northern Government for sanction to borrow 1,012, 623, 1950, £1,490, and £2,500 for the restoration of damaged bridges in the rural districts of Castleberg, Clogher, Cookstown, Dungannon, and Omagh respectively.

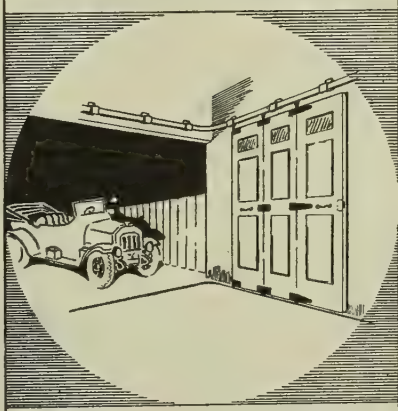
WARRINGTON.—The Corporation are arranging with the Leeds C.C. for the construction of a new bridge to replace the Bruch bridge at Poulton. The cost will be about £7,000.

WILLESDEN.—The Borough Engineer has visited Edinburgh and reported favourably on the Corollit-method of construction. The Company has tendered for flats or maisonnettes, which are of the two-bedroom type with large living room and flat roof, at £450, and also for houses based on the Council plans at £513 "A" type North aspect, £494 "A" South aspect, £555 "B" North aspect, and £543 13s. "B" South aspect. Tenders have also been received from The Constructors' Union for the erection of brick houses at £509 "A" North and South aspect, £552 "B" North aspect, £591 "B" South aspect, £429 flats with two bedrooms and large living room, and £573 flat, three bedrooms and living room. The Council recommend the erection of 240 houses and flats on the Brentfield estate. Application is to be made to the M.H. for sanction to borrow £125,000 for the scheme.—The L.M.S. Rly. are proposing to purchase 35 acres for the erection of factory premises. The Metropolitan Rly. are to build 46 more houses.—The Council is also proposing to erect flats in Stafford-road. The U.D.C. recommend that the clerk be instructed to apply to the M.H. for sanction to the raising of a loan of £3,500 for this purpose.—The M.H. has sanctioned a loan of £52,282 for the erection of 102 houses on the Brentfield estate.

YORK.—A new bacon factory is to be built at Sherburn-in-Elmet, at a cost of about £20,000. Plans have been prepared by T. H. Gjerstrup, 13, Ryssensensgade, Copenhagen, a Danish expert, whose British representative is Mr. J. Halley, 1110, Cannon-street, E.C.4. The promoters are the Yorkshire Farms Bacon Factory, Ltd., 44, Prudential Buildings, Park-row, Leeds.

THE "HENDERSON" SYSTEM SLIDING DOOR GEAR

FOR FACTORIES, GARAGES, SCHOOLS, ETC..



"TANGENT JUNIOR" FOR LIGHT DOORS.
"TANGENT SENIOR" FOR HEAVY DOORS.

WRITE FOR BOUND CATALOGUE B.24 TO—
P.C. HENDERSON, LIMITED.
BARKING, ESSEX. PHONE, EAST HAM 247.

PRICES CURRENT OF MATERIALS

Following to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.	£	s.	d.
Best Stocks	4	3	6
Second Hard Stocks	3	13	6
Per 1,000, Delivered at London Goods Stations.	£	s.	d.
Mettons, at	2	13	3
King's Cross	2	15	3
Do, grooved for plaster	3	8	3
Do, Bullnose	3	8	3
Best Stourbridge Fire brick—	8	11	0
2 1/2 in.	8	11	0
3 in.	10	3	0
GLAZED BRICKS—			
Best White	D'ble	30	0
Ivory, and	D'ble	27	0
Salt Glazed	One Side and		
Stretchers	Two Ends	31	0
Heads	Two Sides and	32	0
Quoins	One End	32	0
nose and 4 1/2 in.	Splays and		
Plats	Squints	29	10
Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.			

BREEZE CONCRETE SLABS.

Delivered London	s.	d.
4 in. per yd. super	2	11
2 1/2 in.	2	4
3 in. per yd. super	2	9
4 in.	3	6

Thames Ballast	10	6	per yd.
Pit Sand	13	9	
Thames Sand	14	6	
Best Washed Sand	14	6	
2 in. Shingle for Ferro-Concrete	12	9	
4 in.	14	0	
2 in. Broken Brick	11	6	
Pan Breeze	7	6	

Per ton delivered in London area in full van loads.			
Best Portland Cement. British Standard Specification. Test £2 18 0 to £3 3 6			
51s. alongside at Vauxhall in 80-ton lots.			
Ferrocrete per ton extra on above	0	10	0
Super Cement (Waterproof)	4	8	0
Roman Cement	8	15	0
Parian Cement	5	15	0
Keene's Cement, White	5	15	0
" Pink	5	10	0
Plaster, Coarse, Pink	3	0	0
" White	3	12	6
" Fine	5	12	0
Sirapite, Coarse	3	9	0
" Finish	3	17	0
Grey Stone Lime	2	11	9
Chalk Lime	2	11	9
Best Ground Blue Lias Lime	2	4	6
Hair	32	0	0
Granite Chippings	1	12	0
NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.			
Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dp			

STONE.

BATH STONE—delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube.	2	9 1/2
Do. do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube.	2	11 1/2
PORTLAND STONE—		
Brown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube.	4	4
Do. do. delivered on road wagons at above stations, per ft. cube.	4	5
White basebed, 3d. per ft. cube extra.		
NOTE.—1d. per ft. cube extra for every foot over 20 ft. average, and 1d. beyond 30 ft.		

HORTON-WOOD STONE—		
Delivered at any Goods Station, London.		
Small random blocks, up to 10 ft. cube. P. ft. cb.	7	0
Random blocks from 10 ft. and over	17	0
Sawn two sides	27	0
Sawn three or four sides	32	0
YORK STONE, BLUE—Robin Hood Quality.		
Delivered at any Goods Station, London.		
6 in. sawn two sides landings to sizes (under 30 ft. super.)	5	6
6 in. rubbed two sides, ditto	6	0
3 in. sawn two sides slabs (random sizes)	2	3 1/2
2 in. to 2 1/2 in. sawn one side slabs (random sizes)	1	6 1/2
1 1/2 in. to 2 in. ditto, ditto	1	4
HARD YORK—		
Delivered at any Goods Station, London.		
Scappled random blocks	6	3
6 in. sawn two sides landing to sizes (under 40 ft. super.)	5	1 1/2
6 in. rubbed two sides ditto	6	1 1/2
4 in. sawn two sides slabs (random sizes)	2	1 1/2
3 in. ditto ditto	2	1 1/2
2 in. self-faced random flags	9	0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d. Cills, 8s. 3d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 x 11	£32 0	3 x 6	£23 0
4 x 9	28 0	3 x 11	28 0
4 x 8	26 0	2 x 11	28 0
4 x 7	25 0	3 x 9	25 0
3 x 8	24 0	2 1/2 x 9	25 0
3 x 7	23 0	3 x 4 1/2	23 0
2 1/2 x 7	22 0	3 x 4	23 0
1 x 11	£32 0	1 x 9	£30 0

PLANED BOARDS.

1 x 11 £32 0 | 1 x 9 £30 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
1 1/2	21/-	1 1/2	32/6
1 1/4	23/-	1 1/4	37/6
1 1/2	25/-		
TONGUED AND GROOVED FLOORING.			
Inches.	per sq.	Inches.	per sq.
1 1/2	21/6	1 1/2	16/8
1 1/4	23/6	1 1/4	20/-
1 1/2	27/6	1 1/2	25/-
BATTENS.			
1 1/2 x 2		2 6	per 100 ft.
SAWN LATHS.			
Per bundle	1 1/2	AND UP THICK.	0 2 4

Dry Austrian Wainscoat, per ft. cube	0 16 0	to 0 13 0
Dry American and/or Japanese Figured Oak, ft. cube	0 15 4	—
Dry American and/or Japanese Plain Oak, ft. cube	0 11 0	to 0 13 0
Dry sq. edged Honduras Mahogany, ft. cube	0 16 0	to 0 13 0
Dry Log cut Honduras Mahogany, ft. cube	0 18 0	to 1 1 0
Dry Cuba Mahogany, ft. cube	1 4 0	to 1 10 0
Dry Teak, ft. cube	0 13 0	to 0 15 0
Dry American Whitewood, ft. cube	0 11 0	to 0 14 0
Best Scotch glue, per cwt.	4 10 0	to —
Liquid Glue, per cwt.	4 7 0	to 5 10 0

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

	£	s.	d.		£	s.	d.
24 by 12	37	12	6	18 by 10	21	2	6
22 by 12	34	0	0	18 by 9	18	12	6
22 by 11	31	5	0	16 by 10	17	12	6
20 by 12	29	15	0	16 by 8	13	15	0
20 by 10	25	12	6				

TILES.

	£	s.	d.	Per 1,000 f.o.r. London.
Best machine-made tiles from Brosley or Staffordshire district	5	12	6	
Ditto hand-made ditto	5	17	6	
Ornamental ditto	6	2	6	
Hip and valley tiles { Hand-made	0	9	6	
{ Machine-made	0	9	0	
(per dozen)				

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION PER TON—	£	s.	d.
R.S. Joists, cut and fitted	13	10	0
Plain Compound Girders	15	10	0
Stanchions	17	10	0
1/2" Roof Work	20	10	0

MILD STEEL ROUNDS.

Diameter.	£	s.	d.	Diameter.	£	s.	d.
1/2 in.	12	10	0	1 1/2 in.	11	5	0
3/4 in.	11	10	0	1 3/4 in.	11	0	0

WROUGHT-IRON TUBES AND FITTINGS—(Discount off List for lot of not less than £7 net value delivered direct from Works, 24 per cent. less above gross discounts, carriage forward if sent from London Stocks.)

Tubes.	Fittings.	Flanges.
Sizes	1" to 6"	1" to 6"
Black Gas	55% .47%	50% .57%
Blue Water	50% .42%	45% .52%
Red Steam	45% .37%	40% .47%
Galv'd Gas	40% .37%	40% .47%
" Water	33 1/2% .32%	35% .42%
" Steam	27 1/2% .27%	30% .37%
C.I. HALF-ROUND GUTTERS—London Prices, ex Works.		
Per yd. in 6 ft. lengths.	Gutters.	Angles and Stop Ends.
3 in.	1 1/2	1 1/2
3 1/2 in.	1 1/4	1 1/4
4 in.	1 1/5	1 1/2
4 1/2 in.	1 1/6	1 1/4
5 in.	1 1/4	1 1/5
O.G. GUTTERS.		
3 in.	1 1/7	1 1/3
3 1/2 in.	1 1/8	1 1/4
4 in.	1 1/10	1 1/6
4 1/2 in.	2/3	1 1/9
RAIN-WATER PIPES, &c.		
Per yd. in 6 ft. lengths.	Pipe.	Bends, stock angles.
2 in. plain	1 1/9	1 1/2
2 1/2 in.	1 1/11	1 1/4
3 in.	2 1/4	1 1/8
3 1/2 in.	2 1/10	2 1/2
4 in.	3/3	2 1/4
L.C.C. COATED SOIL PIPES—London Prices, ex Works.		
Per yd. in 6 ft. lengths.	Pipe.	Bends, stock angles.
2 in. plain	2 1/11	2 1/3
2 1/2 in.	3 1/5	2 1/6
3 in.	4 1/11	2 1/9
3 1/2 in.	4 1/5	3 1/5
4 in.	4 1/11	3 1/9
L.C.C. COATED DRAIN PIPES—London Prices, ex Works.		
Per yd. in 6 ft. lengths.	Pipe.	Bends, stock angles.
3 in. plain	4 1/3	4 1/9
4 in.	6 1/3	6 1/11
5 in.	7 1/10	7 1/12
6 in.	9 1/6	9 1/15
Gasken for jointing	38/6	per cwt.

Staffordshire	"Marked"	s.	d.
Bars	11	10	0
Mild Steel Bars	11	0	0
Steel Bars, Ferro-Concrete	11	0	0
quality, basis price	11	0	0
quality, basis price	16	0	0
Hoop iron, Galvanised	31	0	0
Soft Steel Sheets, Black—			
Ordinary sizes to 20 g.	13	10	0
" " 24 g.	14	10	0
" " 26 g.	16	10	0
Sheets Flat Best Soft Steel, C.K. & C.A. quality			
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	19	10	0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g.	21	10	0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 26 g.	23	10	0
1st and Galvanised Corrugated Sheets—			
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	18	10	0
Ordinary sizes, 6 ft. to 9 ft. to 22 g.	19	0	0
Ordinary sizes, 6 ft. to 9 ft. to 24 g.	22	0	0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	26	0	0
Best quality—			
6 ft. by 2 ft. to 3 ft. to 20 g.	22	10	0
20 g. and thicker	24	10	0
Best Soft Steel Sheets.	24	10	0
22 g. and 24 g.	26	0	0
Best Soft Steel Sheets.	26	0	0
26 g.	19	10	0
Cut Nails, 3 in. to 6 in.	19	10	0
(under 3 in. usual trade extras, suitable for METAL WINDOWS.—Standard sizes, suitable for plate houses, including all fittings, painting coats, and delivery to job, average price 1s. 4d. to 1s. 7d. per foot super.			

LEAD, &c.

(Delivered in London.)		
LEAD—Sheet, English, 4 lb. and up	49	
Pipe in coils	51	
Soil Pipe	54	
Compo pipe	54	
NOTE.—Country delivery, 30s. per ton extra; 10 3 cwt., 3s. per cwt. extra, and over 3 cwt. and cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. Old lead, ex London area, at Mills. per ton at Mills. ex country, carriage forward per ton	34	10
Do, ex country, carriage forward	35	10

COPPER.

Seamless Copper tubes (basis)	per
Strong sheet	per
Thin	per
Copper nails	per
Copper wire	per

PLUMBERS' BRASS WORK.

Delivered in London.		
NEW RIVER PATTERN SREW DOWN B.B. IRON.		
1/2 in. 1 in. 1 1/2 in. 1 3/4 in. 2 in.	29/-	45/-
NEW RIVER PATTERN SREW DOWN STAINLESS IRON.		
1/2 in. 1 in. 1 1/2 in. 1 3/4 in. 2 in.	41/6	62/-
NEW RIVER PATTERN SREW DOWN MAIN PIPE.		
1/2 in. 1 in. 1 1/2 in. 1 3/4 in. 2 in.	39/6	60/-

CAPS AND SORREWS.		
1 1/2 in. 1 3/4 in. 2 in. 3 in. 3 1/2 in. 4 in.	7/6	10/-
DOUBLE NUT BOILER SORREWS.		
1/2 in. 1 in. 1 1/2 in. 1 3/4 in. 2 in.	7/6	11/-

BRASS SLEEVES.		
1 1/2 in. 2 in. 3 in. 3 1/2 in. 4 in.	10/-	12/-
NEW RIVER PATTERN CROYDON BALL VALVE.		
1/2 in. 1 in. 1 1/2 in. 1 3/4 in. 2 in.	35/-	56/-

DRAWN LEAD P. & S. TRAPS WITH BRASS CO. SREW.		
1 1/2 in. 1 3/4 in. 2 in. 3 in.	8 lbs. P. traps	83/-
8 lbs. S. traps	83/-	45/-
TIN—English Ingots, 2/9 per lb. SOLDIER—Ph 1/2, Timmen's 1/5, Blowpipe 1/6 per lb.		

PAINTS, &c.

Raw Linseed Oil,	in pipes	....	per gallon
"	"	"	"
"	"	"	"
Boiled	"	"	"
"	"	"	"
Turpentine	"	"	"
"	"	"	"
"	"	"	"
Genuine Ground English White Lead,	per ton	5	
(In not less than 5 cwt. casks.)			
GENUINE WHITE LEAD PAINT—			
" Father Thames,"	" Nine Elms,"		
" Park,"	" Supremus,"	" St. Paul's,"	
" Spedol,"	" Polacco"	and other best	
brands (in 14 lb. tins) not less than			
5 cwt. lots.		per ton delivered	8
Red Lead, Dry (packages extra)....	per ton		5
Best Linseed Oil Putty.....	per cwt		
Fluocel			
Size. XD Quality			flu

Continued on next page.

The information given on this page has been compiled for THE BUILDER and is copyright. On this list is to give, as far as possible, the current of materials, not necessarily the highest or lowest and quantity obviously affect prices—a fact which be remembered by those who make use of this list.

IRON—	£	s.	d.	Per ton in London.
Common Bars	13	10	0	to 14 10 0
Staffordshire Crown Bars—				
good merchant quality	14	5	0	to 15 5 0

ES CURRENT OF MATERIALS (contd.)

GLASS.
H SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
urths ... 3 d.	32 oz.	fourths ...	8d.
urths ... 4 d.	32	thirds ...	9d.
urths ... 4 d.	Obscured Sheet, 15 oz.		4d.
urths ... 5d.		21	5d.
urths ... 5d.	Fluted 15oz. 6d.	21oz. 9d.	
urths ... 7d.	En'led 15oz. 5d.	21oz. 7d.	

ice according to size and substance for squares m stock.

H ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
d plate	4d.
h rolled	5d.
ed Rolled, Baltic, Oceanic, Arctic, Stip-	3d.
re, and small and large Flemish White...	
itto, tinted	9d.
Sheet	6d.
ed Rolled Cathedral	5d.
d do.	7d.

ast Plate is same price as rough rolled.

VARNISHES, &c.

	Per Gallon.
ish	Outside 0 14 0
to	ditto 0 16 0
al	ditto 0 18 0
al	ditto 1 0 0
al Carriage	ditto 1 4 0
to	ditto 1 12 0
ish	Inside 0 18 0
e Paper	ditto 0 18 0
al Cabinet	ditto 1 2 0
al Flattening	ditto 1 0 0
ying Oak	ditto 0 18 0
nd Drying Oak	ditto 0 19 0
al Varnish	ditto 1 0 0
to	ditto 1 2 0
to	ditto 1 12 0
an Gold Size	0 12 6
ack Japan	0 10 6
Mahogany Stain (water)	0 12 0
Black	0 7 6
ack	0 14 6
(patent)	1 5 0
nd Brush Polish	0 17 0
ryers in Turbine	0 9 0
Black Enamel	0 7 0

A Timber Calculator.

re received a calculator for finding the tenths of boards, baulks or felled trees. iple is immediately grasped after a of the directions, and in a second or two ind any cubic capacity from $\frac{1}{2}$ to 800 t. By making a few tests we find that remely accurate, easy to manipulate, ot make a mistake. Its size, too, is ut, for it can be carried in a vest pocket. e obtained from W H. Wortley, 7, ove, Aylesbury, price 4s. 6d.

asing Output of French Building Materials.

of the most important factories in r the manufacture of Portland cement oyed on the outbreak of war in 1914. ee factories, one near Lille, the other à-Vendin, and the third on the efore the war produced annually at e hundred thousand tons of cement. Pont-à-Vendin was occupied first in 1915, and then was converted into a store, but as it was so close to the as turned into a fortress of cement. e Germans abandoned this in 1918, inery was destroyed by explosives. ent factories were restored in 1921. en the output of French cement has idly increasing, amounting now to million tons a year instead of one alf million before the war. In the e one of the foremost cement manu- in France, the output before long will ee and a half million. Brick fac- e, suffered badly during the war. e works, one on the Aisne and the e Oise, producing about fifteen ricks a year, were utterly destroyed e stocks stolen for German defence e have been rapidly restored, and eir output was more than doubled. e noted, however, that concrete is e bricks in France; for example, the as of a cathedral that was com- e Lille in brick is now being finished e.

THE SCOTTISH BUILDER

NEW BUILDINGS IN SCOTLAND

Lanarkshire and the Government Subsidy.—The Lower Ward District Committee of Lanarkshire has decided to decline the Government's additional subsidy of £40 per house in respect of steel houses, or houses of similar type. It was pointed out by the Housing Committee to the Scottish Board of Health that they did not anticipate any difficulty in finding sufficient labour and materials to carry out their housing scheme according to the usual methods of construction.

Inverness.—STEEL HOUSES.—The Inverness Town Council has resolved by the casting vote to erect 25 steel houses as against 10 recommended by the Housing Committee.

Edinburgh.—HOUSES.—The Edinburgh Town Council has decided to build 500 houses. Of the 500 houses 304 are to be of three apartments and 196 of two apartments.

Glasgow.—EXTENSIONS.—The Governors of the Victoria Infirmary of Glasgow are making a special effort to raise funds for the extensions of the institution. They aim at obtaining a total sum of £100,000.

Dunfermline.—COTTAGES.—The Dunfermline District Committee of Fife County Council has agreed to pay a sum of £8,840 to the Wilsons & Clyde Coal Co., Ltd., to account of subsidy in respect of the erection of eight single-story cottages of three apartments, 58 flatted houses of three apartments, and 28 flatted houses of two apartments at Steeland, Saline. It was stated that the total subsidy payable in respect of the erection of houses by the Company at Steeland was £11,840.

Paisley.—BUILDINGS.—The valuation of the 57 linings dealt with by Paisley Dean of Guild Court for the year was £232,300, an increase of £24,700 as compared with the valuation of the 69 linings approved in the previous year. Plans passed included the erection of 10 tenements at Springbank-road for slum clearance

purposes, 102 houses at Lounsdale, and 214 houses at Lochfield. The plans were also passed during the year of 24 villas and bungalows, comprising 58 houses.

Dumbartonshire.—HOUSES.—The Eastern District Committee of the Dumbarton County Council has decided to ask the County Council to approve the borrowing of £20,500, as the estimated cost of 50 houses proposed to be erected in a new scheme at Bearsden. The Housing Sub-Committee are negotiating for a site on Killermont estate, near St. Peter's College. The County Council and Standing Joint Committee has approved of the borrowing £74,486 for the erection of 200 houses at Auchentoshen, Duntocher, as also £4,000 for the new bridge over the Kelvin at Killermont, and £9,000 for new sewers and works at Cumbernauld.

Renfrew.—STORE.—The Dean of Guild Court passed plans for new buildings of the Renfrew Equitable Co-operative Society, having the frontage in Pinkerton-lane. The estimated cost of the building is £20,000.

Coatbridge.—SCHOOL.—The Dean of Guild Court passed plans for a new technical school and mining college at the junction of Kildonan-street and Eglinton-street, at an estimated cost of £80,000, for the Lanarkshire E.C.

Tranent.—HOUSING.—The T.C. has decided to borrow £4,000 for housing purposes.

Edinburgh.—VARIOUS.—Plans passed by the Dean of Guild Court: Exhibit hall and store at Royal Scottish Museum, Chambers-street, for the Commissioners of H.M. Works and Public Buildings; alterations at Southfield Sanatorium, Liberton, for Royal Victoria Hospital Tuberculosis Trust, per Mitchell, Sidney & Wilson, architects, 13, Hill-street.

Glasgow.—HOUSES.—The Dean of Guild Court passed plans for the erection of garages by Corporation tenants at Mossbank and Beddrie. Others granted were: G. & J. Weir, Ltd., Cathcart, to erect four steel houses at Barfillan-drive, Cardonald; Messrs. Taylor & Wilson, Cardonald, to erect 16 houses at Kent-avenue, Jordanhill.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers—Masons', Bricklayers', Plasterers'.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/7	10d. to 1/1
Airdrie	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/1
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Coatbridge	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3 to 1/3
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dumfries	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dunfermline	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0½ to 1/3½
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½
Hawick	1/7	1/7	1/7	1/7-1/7½	1/7	1/7	1/7	1/2½
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½
Inverness	1/5	1/5	1/5	1/4	1/5	1/5	1/4	1/- to 1/2
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3½
Kirkcaldy	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3½
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/-
Lanark	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/0 to 1/3
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3
Perth	1/8	1/8	1/8	1/8	1/8	1/8	1/9	1/3½
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stirlingshire (Eastern District)	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/6½	1/3½
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 717.



CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep....	per yard cube	s.	d.
Add if in clay.....	"	1	0
Add for every additional depth of 6 ft.....	"	0	6
Planking and strutting to trenches.....	per foot super	0	5
Do. to sides of excavation, including shoring	"	1	0

CONCRETOR.

Portland cement concrete in foundation 1 to 6..	per yard cube	32	0
Add if in underpinning in short lengths.....	"	7	0
Add if in floors 6 in. thick.....	"	3	3
Add if in beams.....	"	3	9
Add if aggregate 1:2:4.....	"	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.....	"	2	6

BRICKLAYER.

Reduced brickwork in lime mortar and Fletton bricks	per rod	£	s.	d.
Add if in stocks.....	"	30	0	0
Add if in Staffordshire blues.....	"	7	10	0
Add if in Portland cement and sand.....	"	22	0	0
	"	1	10	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks.....	per ft. super	0	0	1½
---	---------------	---	---	----

POINTING.

Neat flat struck or weathered joint.....	"	0	0	3
--	---	---	---	---

ARCHES.

Extra only to the price of ordinary brickwork:—				
Fair external in half brick rings.....	"	0	0	10
Axed in stocks.....	"	0	1	9
Rubbed and gauged jointed in putty camber or segmental.....	"	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement.....	"	0	1	0
Setting ordinary register grates and stoves.....	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	"	4	15	0

ASPHALTER.

Half-inch horizontal damp course	per yard sup.	4	3
Three-quarter-inch vertical damp course	"	8	6
¾ inch on flats in two thicknesses.....	"	6	3
Angel fillet	per foot run	0	3
Skirting and fillet 6 in. high.....	"	1	2

MASON.

York stone templates fixed	per foot cube	13	0
York stone sills fixed	"	22	0
Bath stone and all labour fixed	"	10	6
Portland stone fixed.....	"	20	0

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72	9
Do. 20 in. × 10 in. Do. Do.	"	80	9
Do. 24 in. × 12 in. Do. Do.	"	90	0

CARPENTER AND JOINER.

Fir framed in plates.....	per foot cube	5	0
Do. joists	"	5	6
Do. roofs, floors, and partitions	"	6	0
Do. trusses	"	8	6

Deal rough close boarding.....	per sq.	35/6	40/-	45/-	72/-
Flat centering for concrete floor, including struts or hangers	"	50	0		
Do. to beams	per ft. sup.	1	0		
Centres for arches.....	"	1	6		
Gutter boards and bearers	"	1	0		

FLOORING.

FLOORING.		4	1	1 1/4	1 1/2
Deal-edges shot	per sq.		44/6	53/-	60/6
Do. tongued and grooved	"		49/-	57/6	65/-
Do. matchings	"	45/-	51/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

One-and-a-half moulded sashes or casements	per foot super.	1	10
Two Do. Do. Do.	"	2	1
Add for fitting and fixing	"	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights; average size	"	£	9

DOORS.

Two-panel square framed	per ft. sup.	1½	1¾	2"
Four-panel Do.	"	2/5	2/8	2/11
Two-panel moulded both sides	"	2/8	2/11	3/2
Four-panel Do. Do.	"	2/11	3/2	3/5

CARPENTER AND JOINER—continued.

FRAMES.

Deal wrot moulded and rebated.....	per foot cube	1"	1½"	2"
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	
Deal shelves and bearers.....	"	1/4	1/6	
Add if cross-tongued	"	2d.	2d.	

STAIRCASES.

Deal treads and risers in and including rough brackets.....	1"	1½"	1¾"	2"
Deal strings wrot on both sides and framed.....	2/1	2/4	2/9	—
	1/8	2/-	2/2	2/8

Housings for steps and risers.....	each	0
Deal balusters, 1 in. × 1½ in.....	per ft. run	0
Mahogany handrail: average 3 in. × 3 in.....	"	6
Add if ramped.....	"	11
Add if wreathed	"	23

FIXING ONLY IRONMONGERY (INCLUDING SCREWS)

6 in. barrel bolts.....	8½d.	Rim locks	
Sash fasteners	11½d.	Mortice locks.....	
Casement fasteners	1/5	Patent spring hinges and Casement stays.....	letting into floor and making good.....
Cupboard locks.....	1/5		

FOUNDER AND SMITH.

Rolled steel joists	per cwt.	14
Plain compound girders	"	15
Do. stanchions	"	21
In roof work.....	"	27

RAIN-WATER GOODS.

Half-round plain rebated joints.. ft. run	3"	4"	5"
Ogee Do. Do.	1/6	1/9	2/-
Rain-water pipes with ears	1/9	2/-	2/6
Extra for shoes and bends.....	each	4/4	5/11
Do. stopped ends	1/11	2/4½	3/7
Do. nozzles for inlets	2/2	2/7	3/10

PLUMBLER.

Milled lead and laying in flashings and gutters....	per cwt.	61
Do. Do. in flats	"	62
Extra labour and solder in coated cesspools.....	each	2
Welf joint	per ft. run	2
Soldered seam	"	2
Copper nailing	"	2

Drawn lead waste per ft. run	1½"	3"	1"	1½"	2"
Do. service	1/2	1/9	2/-	3/4	4/-
Do. soil	1/8	2/2	2/7	3/10	—
Bends in lead pipe	each	—	—	—	3/3
Soldered stop ends	1/2	1/8	2/1	2/10	3/6
Red lead joints	11d.	1/-	1/3	1/11	2/4
Wiped soldered joints	2/10	3/6	4/-	4/11	6/6
Lead traps and cleaning screws	—	—	—	14/7	19/6
Bib cocks and joints	6/4	9/7	15/4	41/-	—
Stop cocks and joints	15/4	17/2	25/8	64/-	—

PLASTERER.

Render, float and set in lime and hair	per yard sup.	2
Do. Do. Sirapite	"	3
Do. Do. Keen's	"	3
Add sawn lathing	"	1
Add metal lathing	"	2
Portland cement screed	"	3
Do. plain face	"	2
Mouldings in plaster.....	per 1 girth	0
One-and-a-half granolithic pavings	per yard sup.	5

GLAZIER.

21 oz. sheet plain	per foot sup.	0
26 oz. Do.	"	1
Obscured sheet	"	0
¾ in. rolled plate	"	0
¾ in. rough rolled or cast plate.....	"	1
¾ in. wired cast plate	"	0

PAINTER.

Preparing and distempering, 2 coats	per yard sup.	0
Knotting and priming	"	0
Plain painting, 1 coat	"	1
Do. 2 coats	"	1
Do. 3 coats	"	2
Do. 4 coats	"	2
Graining	"	1
Varnishing twice	"	1
Sizing	"	1
Flattening	"	1
Enamel	"	1
Wax polishing	per foot sup.	1
French polishing	"	1
Preparing for and hanging paper	per piece, 2/- to	1

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10 % on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.
 Notes accepted. † Denotes provisionally accepted.
 Notes recommended for acceptance.
 Notes accepted subject to modification.

ABERDEEN.—Twelve bedrooms and four stock at the Station Hotel, for the L.N.E. Rly. Co.:—
 Scott & Son (Aberdeen), Ltd.

ARNET.—Extension to the Queen Elizabeth Grammar school, for the Governors. Mr. J. W. (Messrs. Brown & Fisher), architect, Burystead-Wellingborough. Quantities by Mr P. J. J.

Marriott, Rushden	£17,399	2	4
Slough, Barnet	17,241	14	0
Kins & Co., Ltd., Hertford ..	16,976	0	0
Pavin, Ltd., Mill Hill	16,953	5	9
atman & Fotheringham, Ltd.,			
Islington	16,582	0	0
Higgs, Northampton	15,903	0	0
Henson & Son, Ltd.,			
Wellingborough	15,771	18	2
Ginn & Son, Hertford	14,780	0	0

BFORD.—Alterations and additions to the Engineering Works offices, for Messrs. W. H. Sons & Co., Ltd. Mr. G. P. Allen, F.R.I.B.A., architect and surveyor, 81, High-street:—
 Laughton, Bedford

FAST.—For (1) alterations to Roslyn-street; (2) alterations to Euston-street school; and electric lighting at Malone school, for the C.B. Geo. Davies, A.R.I.B.A., M.S.A., Education Officer, Belfast:—
 *Thos. McKee & Sons, Belfast .. £418 0 0
 *Wm. Kerr, Belfast .. 203 13 0
 *John Somerville, Belfast .. 105 19 2

LEAST.—Alterations to clinic in Carlisle-terrace, for C.B. Mr. W. G. Davies, A.R.I.B.A., M.S.A., Education Architect, College-square West:—
 Isaac Callen & Co., Sackville-street, Belfast

EWICK-ON-TWEED.—For bungalows and flats Leaden-road, for the T.C.:—
 Builders—*D. Storar & Sons.
 *Gardiner & Pierce.
 Joiners—*C. Cook & Sons.
 *Lillie & Renwick.
 Plaster and plasterer—*T. Turner.
 Plumbers—*Grant & Evans.
 Painters—*J. Crow & Sons.

NDENHAM.—House at Vicar's Close, for Mrs. Mr. G. P. Allen, F.R.I.B.A., architect and surveyor, 81, High-street, Bedford:—
 Laughton

STAL.—Handicraft centre at Wick-road, for C.:—
 Chown

CKBURN.—School at Pleasington, for the Rev. Van der Beek, rector. Mr. H. H. Yearsley, architect, Manchester:—
 Halewood, Hyde

CKPOOL.—Conversion of property, 77-81, Beck-road and Bute-avenue, for the Corporation. Wood, Borough Engineer and Surveyor:—
 Priestley, Marton.

CKPOOL.—New St. Mark's Church at Layton, for Rev. W. T. Evans, vicar. Mr. E. B. Dennis, F.R.I.B.A., architect, 27, Clifton-street:—
 R. Fielding & Sons, Ltd.

IGHTON.—House in Parkhurst-avenue, for the P. Drever & Son

IGHTON.—Sixteen non-parlour type houses, Ard-street, for the C.B.:—
 Laing & Sons, Ltd.
 (Subject to M.H. approval.)

STOL.—Reconditioning old houses in Kings-road, for T.C.:—
 E. Savage

STOL.—Tenders accepted for houses by the Hatter-rod, Bedminster—J. Moore, 24 non-parlour house—A. W. Norris, 6 parlour; 2 non-parlour house—G. Howell, 6 non-parlour house. Average, £444 per house.

STER.—Sixteen houses on the Cherry-grove for the T.C. City Surveyor:—
 Wood Lloyd & Co., Rock Ferry

K.—Building a technical school at Passage, for P.:—
 O'Connell

GGLESTONE (W. YORKS.).—For 34 semi-detached parlour-type houses, for the R.D.C.:—
 J. Kendall & Co., Pudsey and Wrenthorpe.

YDON.—Additions to Selhurst Grammar for boys, for the E.C.:—
 M. Bleach & Co., Norbury

EGAL.—Rebuilding of Donegal, Buncrana, and High Courthouses, for the Donegal C.C.:—
 Diver & Sons, Donegal

awford & Aiken, Buncrana .. 2,243
awford & Aiken .. 2,595

DUBLIN.—Various tenders, for the C.B.:—

Plastering work at 25, Castle-street—
 *Ryan Manufacturing and Construction Co. £115 0 0
 Painting work, Crooksing Sanatorium—
 *L. & J. Duff

Painting work, Charles-street Dispensary—
 *P. J. Watchorn & Sons

DUNGARVAN.—For (a) 12 houses for Dungarvan, and (b) eight at Abbeyside, for the U.D.C.:—
 *D. Stokes

EPSOM.—New secondary school for girls, for the Surrey E.C.:—
 *Buning & Fittion Adams, Ltd.

FLINTHAM.—Repairs and improvements at elementary school, for Notts E.C.:—
 *E. Rockley, Radcliffe-on-Trent ...

FOLKESTONE.—Groundsman's cottage at the Sports Ground, for the T.C. Borough Engineer:—
 *D. Baker & Co., Folkestone

FROME.—Twenty-four houses at Vallis Way, for the U.D.C.:—
 *S. J. Wood, Trowbridge

GAMSTON.—Improvement of bridge, for Notts C.C.:—
 *A. Graham & Sons, Huddersfield

GLASGOW.—Raising the height of three piers at Loch Katrine, together with other works, for the T.C. Mr. J. R. Sutherland, engineer, 50, John-street:—
 *John Smellie, Whiteinch, Glasgow ..

GUNTHORPE.—Bridge, for the Notts C.C.:—
 *Purdie, Lumsden & Co., Ltd., Newcastle

GUNTHORPE.—Construction of roads, for the Notts C.C.:—
 H. Coxhead & Co., Ltd., Middlesbrough

HALIFAX.—Redecoration of the Victoria Hall, Town Hall, for the C.B. Borough Engineer, Crossley-street:—
 *G. H. Moody, Halifax.

HASTINGS.—Installation of hot and cold water system at public baths, Medenat-road, for the T.C.:—
 *Fretwell Heating Co.

HASTINGS.—Forty-eight flats on the Hatton estate, for the T.C.:—
 *Simms, Sons & Cooke, Ltd.

HASTINGS.—Installation of hot water heating system at 44, Wellington-square, for the T.C.:—
 *Brightside Foundry & Engineering Co., Ltd.

HAVANT (HANTS.).—Twenty-two parlour type houses on the West-street housing estate, for the U.D.C. Mr. R. J. Cork, P.A.S.I., architect, South-street:—
 A. Godwin, Havant

E. J. Logan, London	£701	10	0
Chapman, Lowry & Puttick, Ltd., Haslemere	698	0	0
F. W. Bartlett, Fareham	697	0	0
Samuel Salter, Southsea	656	0	0
G. & R. Carrell, Havant	646	11	10
Warn & Ogden, Fareham	633	1	3
	545	0	0

HINDLEY.—Council school off Leigh-road, to accommodate 450 scholars, for the U.D.C. Mr. Herbert Wade, architect, 2, Birley-street, Blackpool:—
 *Joseph Dolan & Sons, Warrington.

HOYLAND NETHER.—Seventy-two houses in pairs on Elsecar site, for the U.D.C. Mr. J. R. Shephard, surveyor:—
 *W. Chappell & Son, Chapel Town.

HULL.—Extension to Desmond-avenue pumping sub-station, for the T.C. City Engineer:—
 C. Greenwood & Sons, Ltd.

J. T. Levitt, Ltd.	£240	0
Quibell & Son, Ltd.	225	4
R. Clemmishaw	205	0
J. Houlton & Son, Ltd.	165	15
F. Hall & Sons	162	7
City Engineer's estimate	157	10
	230	0

(All of Hull.)
LEEDS.—For (a) sub-station at Wood-lane, Farnley, and (b) sub-station at Calverley-street, for the T.C.:—
 (a)*J. Hindle

(b)*W. Rogers & Co., Ltd.
LEEDS.—For (a) interior joinery and wood fittings at Bury Branch Library, and (b) for steel fittings for Bury Branch Library, for the T.C.:—
 (a)*T. Horsman & Co.

(b)*Libraco, Ltd.
LEEDS.—Installation of a low-pressure hot-water heating apparatus in the female block of the Bramley Institution, for the B.G.:—
 *Vincent Roberts & Co., Leeds.

LIVERPOOL.—Extensions to the buildings at the University Hall, for women students, Holly-road, Fairfield, for the Board of Management. Mr. F. C. Trench, architect, 31, North John-street:—
 *Brown & Backhouse, Liverpool.

LONDON.—Three blocks of three-story flats in Wyfold-road, for the Fulham B.C.:—

Bovis, Ltd.	£20,841
J. E. Billings & Co., Ltd.	19,997
E. D. Winn & Co., Ltd.	19,975
*Perry Brothers	18,397
Borough Surveyor's estimate	19,080

LONDON.—Boiler coal store, and for repairing to girls' playground at the schools, Hornsey-road, N., for the Guardians of the Poor of St. Mary, Islington. Mr. E. J. Harrison, L.R.I.B.A., architect, 23, Berkeley-road, Crouch End, N.8:—
 Mattock Bros.

Stevens & Sons	£2,085	0
Sabey & Son	1,987	0
Wales & Murch	1,557	0
L. Lown & Co.	1,495	0
*A. C. Mackinlay	1,483	10
	1,407	10

(All of London.)
LONDON.—For electric main and lighting to the new Nurses' Home at the Islington Infirmary, Highgate-hill, N., for the Guardians of the Poor of St. Mary, Islington. Mr. E. J. Harrison, L.R.I.B.A., architect, 23, Berkeley-road, Crouch End, N.8:—
 Jacob White & Co., Ltd.

Electrical Installations, Ltd.	£820
Ellis & Ward, Ltd.	812
Sabey & Son	792
Locke & Soares	731
*W. O. Clutton	633
	598

(All of London.)
MILNGAVIE.—Forty houses, for the T.C. Mr. F. A. B. Preston, L.R.I.B.A., Burgh Architect and Surveyor. Mr. C. J. Bryden, F.S.I., Quantity Surveyor, Glasgow:—
 Bruck, &c., work—

*A. McDougall & Son, Glasgow .. £5,663 16 4
 Joiner, &c., work—

*McMillan & Gould, Glasgow .. 3,671 12 7
 Slater and R.C. works—

*Jno. Wallace, Muirhead, Chrysler .. 1,295 14 10
 Plumber and Gasfitter work—

*Jas. Scott, Glasgow .. 2,291 3 2
 Plaster work—

*Leslie Kirk, Ltd., Clydebank .. 946 12 6
 Grates—

*Falkirk Iron Co., Ltd., Glasgow 329 0 0
 Painter work—

*A. Campbell & Co., Renfrew .. 322 16 5
 Timber, fencing and gates—

*R. Kemp & Son, Glasgow 172 9 0
NEWRY.—Steel bridge over the canal, for the Harbour Trust:—

*Sir W. Arrol & Co., Glasgow

NORTHENDEN.—New institute and club premises on a site adjoining the war memorial, for the members of the Northenden Comrades and Social Club. Mr. F. W. Mountain, architect, Sale-road:—
 *E. E. Coleman, Sale

PAINTHORPE (YORKS.).—Sixteen semi-detached houses, for the R.D.C.:—
 *D. R. Snowdon & Son, Barnsley.

PORTSMOUTH.—Elementary school in Meon-road, Southsea, for the E.C. Messrs. A. E. Cogswell & Sons, architects. Mr. A. J. Sharp, surveyor. Quantities by the surveyor:—
 F. Bevis, Ltd., Portsmouth .. £37,803 1 9

J. Lay & Co., Portsmouth	£36,124	0	0
G. J. Davis & Sons, Portsmouth	35,599	0	0
Howe & Bishop, Portsmouth	35,429	8	11
H. Jones & Son, Portsmouth	35,219	0	0
Tanner Bros., Portsmouth	34,844	0	0
E. & A. Springis, Portsmouth	34,765	0	0
F. Corke & Co., Portsmouth	34,468	0	0
*S. Salter, Portsmouth	33,812	0	0

SEFTON.—Six houses in Victoria-road, Inceblundell, and twelve houses at Lydiat-lane and Russell's-lane, for the R.D.C. Mr. E. B. Bailey, L.R.I.B.A., architect, 9, Cook-street, Liverpool:—
 *Walter Spencer, Aintree.

SHEFFIELD.—166 houses on the Manor estate, for the Corporation:—
 *S. Highton & Sons (16 houses) .. £6,623 10 6
 *W. Marlow & Sons, Ltd. (37 houses) .. 15,291 0 0

*A. Morris, Ltd. (25 houses) .. 10,500 0 0
 *Melling Bros., Ltd. (25 houses) .. 11,223 0 0
 *G. M. Prying (10 houses) .. 4,455 0 0
 *J. Laver & Sons (49 houses) .. 21,060 0 0

*Building & Engineering Contractors, Ltd. (3 houses) .. 1,320 0 0
SHETLAND.—Lighthouse, dwelling house and stores, and a roadway and water supply at Eshaness, for the Northern Lighthouse Commissioners:—
 *J. Anderson, Stromness.

SKEGBY.—Construction of about 4,765 yards of stoneware and iron pipe sewers, with manholes and all appurtenant works, and the erection of detritus pits, Dortmund tanks, mud drying beds, and other sundry works, for the R.D.C. Messrs. W. H. Radford & Son, engineers, Albion Chambers, King-street, Nottingham:—
 *Ward & Tetley, Bradford

STAFFORD.—Thirty non-parlour type houses on the Littleworth housing estate, for the T.C. Mr. W. Plant, Borough Engineer:—

*F. Espley & Sons, Stafford—16 houses £7,478
*G. Sandy & Co., Stafford—14 houses 6,627

THURGARTON.—Improvement of bridge, for Notts C.C.:—

†C. S. Tomlinson, Derby £401 1 7

WALTHAM.—School at Peaks-lane, for the Holland C.C. Messrs. Scorer & Gamble, architects, Bank-street Chambers, Lincoln:—

†E. E. Dale & Sons, Ltd. £4,726 1 6

WANDSWORTH.—New town hall and alterations to the existing town hall, in the High-street, for the B.C. Mr. E. J. Elford, Borough Engineer, 215, Balham High-road, S.W.17:—

F. G. Minter, Ltd. £41,380 0
G. E. Wallis & Sons, Ltd. 41,276 0
Walter Jones & Sons, Ltd. 40,995 0
Higgs & Hill 40,400 0
James Carmichael, Ltd. 39,994 0
Marland & Sons, Ltd. 38,675 0
Rice & Sons, Ltd. 38,476 0
Garrett & Son 38,311 0
Prestige & Co., Ltd. 37,984 0
Leslie & Co., Ltd. 36,761 0
*Lole & Co., Chelsea 35,775 5

WARWICKSHIRE.—Reconstruction of six bridges on the Birmingham-Coventry main road, for the C.C.:—

*A. E. Farr £10,567 11 8

WASHINGTON.—Forty-two houses on the Spout-lane site, for the U.D.C. Mr. R. J. Swaddle, architect, Council Chambers:—

24 Houses—
*J. G. Mark, Sunderland £9,852

18 Houses—
*H. Wilson, Tatfield, Washington. 7,542

WATFORD.—Alterations and additions to the Police Station at King-street, for the Hertfordshire C.C.:—

	Alterations and Decorations.	Electric Light.
G. Wiggs & Son	£2,220 0 0	£274 0
Bracey & Clark	2,125 0 0	335 0
Clarke Bros.	2,124 0 0	280 0
Brightman & Son	2,045 0 0	295 0
*A. J. Eldridge	1,837 19 4	293 10

WAYLAND.—For (a) two houses at Banham; and (b) two houses at Rockland All Saints, for the R.D.C. Mr. Clifford Whitworth, surveyor, Attleborough:—

(A)
H. C. Tofts, Hingham £895 0 0
J. Smith Eldon, Bunwell 840 17 6
*Pearson Bros., Diss 790 0 0
(B)
J. Smith Eldon, Bunwell 840 17 6
H. C. Tofts, Hingham 800 0 0
*W. Peeke Vent, Caston 790 0 0

WIDNES.—Extensions to central premises, for the Runcorn and Widnes Co-operative Society. Plans by Architect's Dept., C.W.S., Ltd., 1, Balloon-street, Manchester:—

*Building Dept., C.W.S., Ltd., Manchester.

YORK.—Enclosing the Corn Market in Coppergate, for the T.C.:—

*W. Usher £256 9

Freight Train Traffic.

We have received from the London, Midland & Scottish Railway a map showing their goods stations and coal depots in London, to which builders and others can consign goods and materials. The map, on which routes and streets are clearly printed in black, and the stations in red, is mounted on cardboard and provided with cord, making it suitable for hanging on an office wall. Other useful information is also given, and the map may be had free on application from F. P. Kinsman, L.M. & S. Railway, Broad-street Station, E.C.2.

J. J. ETRIDGE, J^r. SLATING AND TILING SLATE MERCHANTS CONTRACTORS.

Inspections and Reports made on
OLD or FAULTY ROOFS
in any part of the country.

Telephone; Bishopsgate 1944/5, or write,
Bethnal Green Slate Works,
BETHNAL GREEN, LONDON. E.

BEST SEASONED

OAK FLOORING

AUSTRIAN
RUSSIAN
JAPANESE

PREPARATION TO ANY SECTION
CAN BE UNDERTAKEN AT ONCE

SYDNEY PRIDAY & SO

WAINSCOT OAK MERCHANTS (EST. 1880)

Phone
CLISSOLD
6254
(2 lines)

OAK WHARF
RAVENSDALE ROAD
LONDON, N.16.

FITZPATRICK & SO

Masons and Paviers,

455, OLD FORD ROAD, BOW, E

Phone: EAST 4808.

Granite Setts and Kerb (redressed and new hand), York Paving Spur Stones, Gra Chippings, and Granolithic and Sett Paving.

School & Hospital Stoves

MAKERS OF

WRIGHT'S IMPROVED and also SHORLAND PATENT
WARM AIR VENTILATING PATTERNS.

GEO. WRIGHT, LONDON
19, Newman St., Oxford St., London, W.
Burton Weir Works, Rotherham.

HIGH-CLASS

FLOORINGS

of every description in
WOOD BLOCKS. PARQUET
SEASONED T. & G. WAINSCOT OAK
TEAK AND MAPLE
FACTORY AND ROADWAY PAVING

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASANT
WANDSWORTH, S.W.18.
(Phones: Putney 1700 & 24)

J. GLIKSTEN & SON

LIMITED

Specialities in

SEASONED

HARDWOODS

MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.

REGISTERED OFFICE AND WHARF

**CARPENTERS RD.
STRATFORD
LONDON E.15**

Telephone:
EAST 3771
(5 lines)

Telegrams
GLIKSTEN 'PHONE
LONDON

COPPER ROOFING WITH CONICAL ROLLS

ABSOLUTELY WATERTIGHT. VERY DURABLE

ESTIMATES FREE

F. BRABY & CO. LTD. 352-364 EUSTON RD. N.W.1.

AND AT DEPTFORD, LIVERPOOL, BRISTOL, GLASGOW, FALKIRK & BELFAST.

THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

XXIX—No. 4,820

NOVEMBER 20, 1925

ARCHITECTURAL COMPETITIONS

THE architect's interest in public competitions is historic and perennially renescent; it is consequently a subject upon which much useful discussion can take place. Upon the various aspects of modern architectural competitions much has been written, many more often than not diametrically opposed to each other have been expressed, and much still remains to be decided.

Theory it would be easy to demonstrate that the open competition is not the best means of obtaining an architectural piece, or even a reasonably satisfactory and well-balanced composition, because the close co-operation between architect and his client, which is so essential in the earliest stages when the project takes form, is necessarily lacking; it is only to be found that many of the notable works of architecture of the past and modern times have resulted from this co-operation and exchange of ideas.

On the other hand it can be objected that, as architectural competitions in various forms have existed from time immemorial, the principle must be accepted as having stood the test of time, and probably it is the best that can be devised under a democratic system of government, it is desired to obtain the best architectural advice available and to give equal opportunities to all qualified architects.

Whether a democratic age or system of government can ever produce fine architecture (save in quite exceptional circumstances), is, of course, another question, which need not be discussed here as it does not affect the particular aspect of the question of competitions to which we wish to direct attention. It is considered in some opinions which we publish in this issue. Accepting, therefore, the modern public competition system, we may consider in what respects the system could be improved and where the weak points lie.

The chief and essential defect (which is patent to any observer) is the question of the interpretation of the conditions. Too often it happens that the assessor or jury select conditions which, presumably, satisfy the promoters and their technical advisers consider will produce a result in accordance with their desires and intentions, but which, in the end, they appear to disregard in one or more particulars when the award is made.

The present state of affairs seems eminently unsatisfactory, and we suggest that it is an aspect of the question which might be considered by the Royal Institute of British Architects. It appears obvious that uncertainty with regard to the interpretation of conditions brings discredit on the competition in the R.I.B.A., and on the whole profession; it is unfair to ask a large number of architects to compete in an important competition unless they have a reasonable assurance that the published conditions will be adhered to in the award or, alternatively, are definitely and clearly stated that the intention is to accept the design which best fulfils the intention of the conditions, taken as a whole, and with strict adherence to any particular item.

Things stand, and as recent correspondence in our columns has demonstrated, there is no sufficient indication of this kind; it does this deter many well-known architects from entering in competitions, but it also produces insincerity in the competitor who feels that he will probably be able to win the scheme considerably before it is built, and also it leads to delay in execution and general dissatisfaction to all concerned. This factor is of some importance, especially in the

case of business firms, who would probably adopt this method of obtaining the best architectural talent available if they could be reasonably certain of a swift and satisfactory result.

Another factor which does not perhaps receive sufficient notice is the one which naturally presents itself to municipal bodies of our large towns and cities. Here it is a matter of some difficulty—in the case of an unsatisfactory competition—to obtain alternative designs, because the auditors are averse to sanctioning expenditure of this kind. This is more particularly the case where an architectural or engineering staff exists, as it is obviously a much easier matter for a committee to obtain alternative designs and estimates from their own staff than to consult independent architects and provide money for assessors' fees and for premiums for a result which may be inconclusive or open to criticism.

Then, again (turning from the more general aspect of the question to those points which affect competitors), it appears to us that in most important competitions much unnecessary labour could be saved and the task of the assessor or jury could be simplified if all such competitions were arranged in two stages—a preliminary contest where sketch plans only (to as small a scale as might be possible) were required; and, later, a further competition, limited to selected architects, from whom more detailed schemes could reasonably be required.

In many cases, it would probably be quite satisfactory if a final award was made on sketch plans in the same way as (in the case of a private client) a decision is usually arrived at on such plans before the working drawings are put in hand. Anyone who has had any experience of the average competition would probably agree that between 60 and 70 per cent. of the designs sent in show a fundamental inability to grasp the essentials of the scheme, as well as a weakness in composition which causes these sets to be immediately eliminated. It therefore seems unnecessary that such competitors should spend a considerable amount of time, and sometimes a good deal of money, in elaborating schemes which are hopeless from their inception.

Finally—the most delicate point of all, upon which we touch with all diffidence—the varying methods and ability of assessors themselves must be considered. We heard recently of a well-known architect, who has had a distinguished career and great experience, but who stated that, in a competition, his aim was to select the man whom he considered gave evidence of being the most capable architect without any special reference to the design submitted. This method may, of course, give quite admirable results in practice, but it certainly increases the difficulties of the competitors. It would appear to be desirable that some clear and definite rules with regard to such things as pricing per foot cube, the elimination of non-essential plans and drawings—such as perspectives—and a schedule of marks to be awarded to competitors for each special point in the conditions, should be agreed and observed by all assessors.

It would also be an advantage if the services of such a body as the "Beaux Arts Committee," composed as it is of architects who have knowledge of the excellent method of the jury of the Beaux Arts School of France, practised in the United States and elsewhere, and who, moreover, are all architects in practice with considerable experience, could be enlisted and, perhaps, form the nucleus for a Board of Assessors to whom fees would be of less importance than a skilled judgment and impartial exercise of their functions. We feel that there is evidence of a reasonable demand that assessors should not be merely architects of high standing and personal ability, but also that they should possess the special qualifications, experience and courage required in this work, which are not necessarily acquired by the successful business architect, or the equally famous artist, but which can be acquired only by training and experience.



NOTES.

The R.I.B.A. Soirée.

To celebrate the amalgamation of the Society of Architects with the R.I.B.A. perhaps no better way could have been found than by means of a soirée; but beyond the unqualified success of the event almost the only fact to be recorded which suggested the consummation of a long-deferred hope was the large and representative gathering of members of the profession, now represented by one body—the Royal Institute of British Architects. The soirée was held in the Institute Galleries on Friday last week, and the members and guests were received by the President and Mrs. Guy Dawber, and Mr. A. J. Taylor, past-President of the Society of Architects, and Mrs. Taylor, and the evening was passed in an altogether happy fashion in conversing with friends and acquaintances and in the satisfaction which must have been generally felt that the long-deferred unification of the profession had really been brought about.

The Architect and the City.

DR. RAYMOND UNWIN'S paper on "The Architect and his City," read before the R.I.B.A. on Monday, was a suggestive and practical contribution to the everyday discussion of subjects of considerable professional interest. We give the greater part of the paper elsewhere, but we should like to refer to one of the suggestions of the author, as it

may be that, as the greater includes the less, so his suggestion that as house building far outweighs all other branches of work in volume and in value, it "exceeds it in the influence which it exerts on the minds of the people and in the extent to which it may contribute to or ruin the beauty of cities." It is, of course, natural that architects should aspire to design great buildings, but, as Dr. Unwin remarks, even that more distinguished work must, in the long run, depend on the appreciation of the public. He suggests, not only that this approach to architecture from the dwelling is best for the architect, but that "the interest and appreciation of the people can best be stirred in their home, whence it will spread in widening areas until it inspires the whole town." We refer to this point in an admirable address, as it is a suggestion which has already been made in our columns.

Our Neighbours and Ourselves.

To travel in France is to reveal to what an extent the excesses of advertising have invaded this country. Paris has, no doubt, caught something of the infection in that more cosmopolitan Paris which is not Paris itself, but away from the centre we may explore every street and open space, whether in Paris or provincial cities of France, without so much as seeing an advertisement at all. The French retain a respect for their cities which we might with advantage copy. Another difference that strikes us, to the advantage

of the beauty of their cities, from the economy it pre-supposes, more restrained lighting of the streets. Nature is not wholly excluded and adds drama to the night, which our lighted thoroughfares miss altogether except for some quiet square or street. Night has its own beauty and delight us if we will permit it, and tecture is seldom seen under better conditions or is more impressive than the shadows half-reveal and mingle their forms, translating it into dignity as it sleeps under the stars.

The Human touch in Building.

THERE is no occasion to put the very real importance in architecture in suggesting that it much lacks that contribution of craftsmanship characteristic of old crafts. Rather we think that with so general improvement we ought not so often that more human and personal touch; the unexpected quality reveals to us the closer relationship of craftsmanship to architecture. We value taste and restraint, but without always more than negative quality we lack the creative addition, and it appears that the architect's approach lacks the inclusion of the freshness more corporate thinking would give. It is only "a little more, but here it is"! In so much good building that taste and restraint rule out ostentation, and often announce itself by a rigid a convention and formality.



General View of the Liverpool Homes for Aged Mariners, Egremont (Manor House Hospital on extreme left). (See p. 736.)



Church at Chickney.

of freedom which this entails is personally a stage before new vision in these. To be an autocrat is not the best mode for the artist, and the architect is artist—and should believe that the perversion of the craftsman may be necessary for his own completion. It is not to curtail his prerogatives when, in the moral and creative sense, the strength of craftsmanship is joined to architecture.

We can imagine that Canterbury Cathedral is the most universally appealing to those who hold a reverent regard for our old Cathedrals, whether with some sense of their artistic value. One point of great interest in Canterbury is that it is one of the best documented churches in the world. As architect-in-charge of Canterbury Cathedral for the Dean and Chapter, W. D. Caroe has had a fairly long-standing knowledge of it, and has a special right to be heard on matters relating to ecclesiastical art, which have probably occupied him as widely as any other architect of the present time. He has had unique opportunities in his capacity as architect to the Ecclesiastical Commissioners of comparison and study of every large number of churches in the country, and we may gather from a lecture he delivered in the Chapter House in July that he would almost give the place of place amongst our churches to the wonderful epitome of English architecture which Canterbury presents. He says for it that not only was it the first Norman Cathedral erected in this country, but that the documents relating to it show practically every step in its erection. The reprint of his interesting lecture, which has just been issued, deals with the building under its Dean and Chapter down to 1829. A reproduction of a water-colour painting by Thos. Johnson of the cathedral as it appeared in 1657, which was given to Mr. Caroe, is given with the lecture.

We read, in connection with a new invention for shuttering concrete, that "the system can be adapted in order to give a plain face, or a face resembling stone blocks, or even half-timbered effects to concrete houses." There can be no valid reason why concrete should not be satisfactorily and pleasantly used as a filling between oak framing, or even weaker panels in concrete used in the same way between reinforced framing members. We rather fear, however, that the announcement that concrete can be made to imitate half-timber may be taken literally, and that if it is found at all possible to produce a real sham in concrete it will quickly be perpetrated. We hope that builders will unite in keeping our comparatively new material free from the more depressing manifestations of pretending to be something that it is not.

The Hudson Disfigurement.

RESPONSIBLE people who disapprove of Mr. Epstein's panel will, we feel sure, join with those who admire it in deploring the foolish piece of vandalism committed by irresponsible young men in disfiguring the memorial. If youths feel themselves at liberty to destroy public property that they do not like, nothing can be safe and every new work will be in danger of wanton injury. This argument is independent of the fact that the better the work the greater will be its danger, since a conventional waxwork replica of a stout gentleman complete with umbrella and trousers would be accepted as a matter of course and would therefore be immune from molestation.

Colours in Concrete.

VARIOUSLY-COLOURED concrete, manufactured by combining certain pigments with the aggregate, seems likely to come into vogue for the walls and roofs of London houses. The London County Council have, it appears, decided to build concrete houses in various colours, which will, according to an evening contemporary, remove the reproach so often levelled against the concrete house, that it looks grey and dingy. "It is now possible," remarks our contemporary, "to reproduce all kinds of well-known building stones in the form of concrete, and so satisfactorily that the average man would never know the difference." The external use of colour for stucco or concrete has not hitherto received the attention it deserves, and architects will doubtless welcome this opportunity to introduce a novel form of decoration. But, in seeking to educate the architectural taste of the average man, let us not encourage him to admire shams that would have enraged Pugin and horrified Ruskin.

An Ancient Church.

THE church at Chickney which we illustrate, recently visited by the Essex Archaeological Society, is no longer used for regular worship, but its antiquity and architectural interest are such that it is hoped to raise a sufficient sum to preserve it from ruin or destruction. Among other features of pre-conquest date is the double-splayed window which can be seen in the photograph. The parish was possessed by "Siward, a King's Thegn," in the time of Edward the Confessor.



Church in Belgium : Thirteenth Century.
Watercolour by F. ROSCOE.

GENERAL NEWS

Guildhall Art Gallery.

A scheme will soon be brought before the Court of Common Council for rebuilding the Guildhall Art Gallery on a larger scale.

Harrow School Tower.

The south tower of Harrow School Speech Room has been completed from plans by Sir Charles Nicholson; it is designed for a belfry which will accommodate a bell of 12 cwt.

Archcliffe Fort, Dover.

Arrangements have been completed with the military authorities at Dover for the demolition of Archcliffe Fort, which is necessary before the rebuilding of the railway station can be carried out.

Proposed Hull Bridge.

A scheme for the construction of a new bridge over the River Hull, at an estimated cost of £275,000, will be included in the next omnibus Bill which the Hull Corporation will submit to Parliament.

Old Sadler's Wells.

In the course of clearing up the debris of the old Sadler's Wells Theatre, workmen have disclosed one of the ancient wells which were once famous for their supposed medicinal properties.

Proposed University, Hull.

A meeting to inaugurate the scheme for a University College at Hull, which has been made possible by the recent generous gift of £250,000 from Mr. T. R. Ferens, has been held at the Hull Guildhall.

Coloured Concrete Houses.

Mr. G. Topham Forrest, architect to the London County Council, has announced that the L.C.C. will in future build in coloured Portland cement. This will improve the appearance of the house without having periodically to re-colour the external walls.

Fitzwilliam Museum.

Mr. Dunbar Smith, F.R.I.B.A., of 6, Queen's-square, London, W.C.1, has been appointed architect for the extension of the Fitzwilliam Museum, Cambridge. New manuscript and coin rooms are to be added.

Proposed Sunderland Quay.

Sunderland Town Council has adopted a scheme for a deep-water quay on the riverside at the East End. This includes the construction of a quay 600 ft. long, and a warehouse 300 ft. long, with the necessary roads and railway lines. The cost is estimated at £200,000.

Barnsley Proposed Mining College.

Plans for the proposed new mining college at Barnsley, which is to conform to the architecture of the proposed Town Hall, are now being prepared, the architects being Messrs. Briggs & Thornely, Royal Liver Building, Liverpool.

St. Ermin's Hotel, Westminster.

Mr. Ernest Yates, estate agent, of Bond-street, W., has purchased the building formerly known as St. Ermin's Hotel, Westminster, and will convert it into service flats, residential and other clubs, including a women's Bath Club and a public restaurant.

An Appointment.

Mr. Richard Wylie, A.R.I.B.A., of Grainger-street West, Newcastle, has been appointed Diocesan Surveyor to the Durham Diocesan Dilapidations Board, in succession to Mr. W. J. Moscrop, of Darlington, who has retired after occupying the post for thirty-four years.

Oak and Concrete Houses.

Six houses of the "Tibbenham" type are to be erected at Bellingham. The essential feature of these houses consists of walls of an oak frame with a filling of concrete. The

Minister of Health has approved of their cost being charged against the Assisted Housing Scheme.

Salisbury's Ancient Buildings.

Steps are being taken by Salisbury Town Council to preserve the ancient buildings of the town as a result of the projected scheme of the Ministry of Health, which may adversely affect cathedral cities from an artistic standpoint. The only regulations that the Ministry are asking the local authorities to enforce are those in regard to houses that have been condemned as unfit for human habitation.

South London Housing.

The Housing Committee of the London County Council wish to accept a proposal for obtaining possession for housing purposes of a site of about 2 to 3 acres in White Hart-street, Kennington, which forms part of the estate of the Duchy of Cornwall. The site is suitable for redevelopment by the erection of dwellings capable of accommodating about 900 persons.

A Long Island Venice.

A scheme is now under way for constructing on Long Island an "American Venice," at an estimated cost of £2,000,000. Contracts have been given for the construction of the necessary canals and waterways, and also for a large lagoon, 240 ft. by 600 ft. It is stated that "the all-the-year-round homes to be built on this tract will follow in every way the Italian architecture which makes Venice so picturesque."

Ulster Building.

A commencement has been made at Stormount Castle estate, with the building by the Government of Northern Ireland of the new Parliamentary buildings, at a cost of £1,000,000. The architects are Messrs. Briggs & Thornely, Royal Liver Building, Liverpool, and Messrs. Knott & Collins, Adelphi-terrace House, W.C.2.—Plans are in course of preparation for 134 houses for ex-service men, and another 179 are soon to be built.

St. Clement's Church Restored.

The church of St. Clement's, Eastcheap, built by Wren in 1686, will be reopened on Monday after restoration work to the roof. Two years ago it was discovered that the timbers of the roof had been entirely eaten through by the "death-watch" beetle, and the church was closed under a "dangerous structure" notice. The only real remedy was the erection of a new roof, which has now been effected. The beautiful wreath on the old ceiling (Wren's work) was carefully taken down and has been skilfully replaced on the new ceiling.

Excavations at Ur.

Mr. C. Leonard Woolley, Director of the Joint Expedition of the British Museum and the University of Philadelphia, addressing a meeting held recently in Kingsway Hall, spoke of the discovery of a temple excavated near the city of Ur in the Chaldees. It was built by an important King of Ur, who reigned somewhere between 3,500 and 3,300 B.C., and was of brick covered with wooden panelling, raised upon a platform approached by a flight of stone steps. At the door stood statues of lions made of copper, and on each side of the door were columns encrusted with mosaic in mother of pearl and red and black stones. Along the base of the walls were statues of bulls in metal, the oldest metal statues known to us by a thousand years, and so well made that modern brass founders said they could not beat the work. Above this was a frieze with figures of white stone inlaid against a black background, representing cattle and farmyard scenes. They also found a small marble tablet which was the foundation stone of the building, and the inscription on it explained that the Temple was built in honour of the goddess Nin-Kharsag. Near the Temple, Mr. Woolley said, he found a cemetery of the same date; round the bodies were placed the things they had needed in this life—foodstuffs in jars, weapons and tools in the case of a man, and beads, rouge, and eye-

paint in the case of a woman (which she believed in an after life).

Turning to the city of Ur, Mr. Woolley says its main feature was the Ziggurat—the tower upon which stood the holy Temple of the city, dedicated to the Moon God; it was 200 ft. long, 150 ft. wide, and still stood 70 ft. high. It was made of solid brick set in bitumen instead of mortar.

COMPETITION NEWS

House Building, Moor Park.

Moor Park, Ltd., announce that Messrs. Crossley & Sons, of Bromley, Kent, have been awarded the first prize in this competition.

Competitions Open.

Particulars published in "The Builder."

- Town Hall, C.C., Pretoria. Open to architects residing in South Africa or Registered under Architects' Act, of 1909, Transvaal. Assessor to be appointed by R.I.B.A. Premiums: £250, £150, £100....
- Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply parties., 35, Old Queen-street, S.W.1 April 24
- New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool Aug. 7
- Houses for Smaller Middle-Classes and Intellectual Workers. Held under auspices of International Federation of Building and Public Works. Prizes: 1st, 500 dollars; 2nd, 300 dollars; 3rd, 200 dollars. Write to Director-General of the International Federation, 17, Avenue Carnot, Paris Oct. 30.
- Art Gallery and Museum, Birkenhead. Limited to competitors practising within 20 miles of Birkenhead since January 1, 1923. Premiums: £250, £175, £100. Sir Robert Lorimer, A.R.A., assessor. £22s. deposit. Apply Curator, Central Public Library, Birkenhead Oct. 18
- Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London. Aug. 14
- Royal National Eisteddfod of Wales, Swansea. Competitions: (1) National Parliament House of Wales (Prize, £100); (2) Street Facade to a Large Stores (Prize, £25); (3) Set of Measured Drawings of Architecture (Prize, £25). Apply to General Secretary of Eisteddfod, W. Talog Williams, 24, Goat Street, Swansea. Mr. Arthur Keen, F.R.I.B.A., Assessor. Nov. 6
- Incorporated Architects in Scotland: (1) Rowand Anderson Medal and £100; City Art Gallery and Museum; (2) Rutland Prize (£50) for Study of Materials and Construction; (3) Prize (£10 to £15) for 3rd year Students in Scotland; (4) Maintenance Scholarship, £50 per annum for 3 years. Apply Secretary of the Incorporation, 15, Rutland-square, Edinburgh Nov. 6
- Plan for construction of Conference Hall, for League of Nations, Geneva. International Competition, Sir John Burnet being British representative on Jury of Assessors. 100,000 Swiss francs to be divided among architects submitting best plans. Programmes with R.I.B.A., 9, Conduit-street, where intending competitors should apply. Single copies from Secretary-General, League of Nations, Geneva, on payment of 20 Swiss francs. Jan. 2
- *Guisborough Proposed New Hospital Competitions when "warned" or veto R.I.B.A. are starred.



War Memorial and Roll of Honour to the Men of Dover.

MR. RICHARD R. GOULDEN, Sculptor.

[This memorial is erected in front of the Municipal Offices. The materials are Cornish granite with a bronze central feature. The figure of Sacrifice is grasping a flaming Cross, his feet encircled with thorns.]

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

St. Paul's Cathedral.

SIR,—Mr. Henthorn Stott's interesting letter in *The Builder* raises some points which ought to be decided in the interests of the proper repair of St. Paul's Cathedral. A comparison of St. Paul's and St. Peter's brings into prominence Wren's mastery of the science of economic building construction. St. Peter's, built in Rome within walking distance of the massive remains of antiquity, is a ponderous building erected regardless of expense in accordance with a grandiose tradition. St. Paul's is built in a land whose other cathedrals are Gothic buildings and whose tradition favours an intelligent fineness rather than brute mass in building. St. Peter's dome has cracked and has been repaired, in spite of its enormous thickness of material, and because of faulty disposition of weight and thrust. Nearly all the defects in St. Paul's may be attributed to Wren's attempt to erect a domed central feature comparable in height with that of St. Peter's (when measured from the top of the main vaults), upon an open plan of Gothic character with continuous aisles and with piers and walls of extremely slight dimensions.

Wren's chief mistake, if it can be called a mistake to build so noble a monument, was to attempt too much with insufficient means. His building has lasted more than two hundred years, and is failing now through wear and tear in every part, not through a blunder of design in any particular part. A slight unequal settlement on the subsoil indicates economy in foundations. The outward leaning walls confess to economy in the buttressing arrangements. Cracks in the main piers show that too much money was not spent on them. The thirty-two counterforts have proved somewhat too slight for their function as distributors of weight and thrust. The thirty-two diaphragm walls have proved just insufficient in strength to unite the inner and outer drums of the dome. The upper part of the west towers have been found so thin as to need repair to make good the erosion of the last two hundred years.

Consistent and studious economy is apparent throughout the whole structure, and the structure as a whole needs treatment of a comprehensive order based upon a thorough examination and analysis of pressures and resistances in every part. I have shown in my book, "The Preservation of St. Paul's Cathedral and Other Famous Buildings," how such an analytical survey may be undertaken, by means of superimposed plans and by the making and testing of analytical models, and I have also outlined some of the operations that will be necessary to reinstate the building. Such repairs will naturally be expensive, for they would aim at giving to the building the strength that Wren denied it for lack of funds, but as Mr. Henthorn Stott appropriately asks: "Are not those vast sums now being spent in danger of being utterly lost?" It is my own firm conviction that the present grouting and patching scheme is far worse than useless, and that the money spent upon it is worse employed than if it were thrown into the sea. To apply grout under pressure to rubble-filled, ashlar-cased piers already suffering from bursting pressures applied by a tremendous eccentric oblique load, and to apply it before the arches are centred or the piers in any way shored up is to invite a disaster, and the process should be stopped forthwith. The material of the core in the piers is of a nature to make grouting futile, and the conditions of oblique eccentric loading are such as to make its application dangerous.

Mr. Henthorn Stott raises the question whether Wren would not advise demolition; but this is a question which cannot be an-

swered. Wren himself was called upon to act as conservator from time to time, and showed a disposition in some cases to adapt the old work to the uses of his own time rather than to demolish it. He certainly condemned old St. Paul's, but he was not in possession of modern means of repair. "Cost as well as sentiment must be considered," but can any limit of cost be assigned to the repair of a priceless monument? Actually vast sums have been spent from time to time on patching schemes little less futile than that now being applied. Within the last generation both the west front and the south transept gable have been stitched in with substantial tie-bars to the moving bodies whose thrust is forcing them out! No one has protested that the cost of these measures has been grudging by the public, and there is no reasonable doubt that the large sums necessary for comprehensive repair would be forthcoming in response to a straightforward appeal in favour of a thoughtfully and thoroughly devised scheme.

Too much stress must not be placed upon what Wren might or might not have meant by the various devices he used in his building. His problem was to erect a sound new structure; ours is to maintain and reinstate an old structure moving steadily towards collapse. Wren very possibly felt quite satisfied with his work, which could not have been improved upon without violating (a) limits of expense, (b) his conception of what was due to the claims of the good Roman Manner, (c) his expressed reluctance to use reinforcement except as an additional precaution.

By departing from the use of round-headed arches Wren might have made the bastions take some of the weight of the dome, but the good Roman manner insisted upon the round-headed arches. A greater spread of abutment in bastions and transepts would have made it possible for him to spread the weight, but the expense was prohibitive. Chaining the bastions and transepts in with a central tension ring of reinforcement would also have permitted of weight-spreading operations, but the formidable extra cost would have imposed an insuperable obstacle to this even had Wren wished to use tensile reinforcement.

The great chain of reinforcement employed by Wren at a higher level probably does violence to his own maxim that buildings should be designed to stand without iron. He provided a circular podium to the outer dome in a position where its weight would modify the lateral pressures of the inner dome and the cone, but there is no doubt that the chain is doing useful work and has been taking strain from the time the building was supplied with its lantern.

In the present repairs it is not money that is lacking, but knowledge. The Commission, after a partial survey of the building, has decided upon a pernicious scheme of so-called repair by grouting, and the new committee probably feels compelled to uphold it in spite of advice and criticism. Some slight signs of comprehension are to be seen in the adoption by the committee of my suggestions that reinforcement would be necessary, that the drums should be encircled with reinforcement, and that the National Physical Laboratory should be employed to discover an appropriate metal for the purpose, but much remains to be done. As I have already insisted elsewhere, a complete survey of the building must be the first step.

WILLIAM HARVEY.

Waterloo Bridge.

SIR,—It is rather surprising to see Sir Reginald Blomfield's letter in *The Times* criticising a brother architect's report on Waterloo Bridge after his (Sir Reginald's) recent remarks at the opening meeting of the Institute on architects criticising each other's work in the public Press. It is fairly obvious that Sir Reginald has missed the whole point of Sir Edwin Lutyens' report. Nothing could confirm the necessity for leaving the bridge as it is more than does this report. Sir Edwin was consulted officially and Sir

Reginald's criticism is unsportsmanlike. has any protest to make let him make it through the official body representing the profession The Royal Institute.

In his speech at the Institute Sir Reginald spoke of "young architects." It is generally believed that when an architect ceases to be young he no longer counts in the scheme of things. If the profession does not keep its young, even at 80, he has mistaken his mission. We all wish to see the Bridge preserved and Sir Reginald may rest assured that the profession can be trusted to see that it is served. No sacrifice is too great which serves such gems as Waterloo Bridge.

WILLIAM DAVIDS

Edinburgh.

[We would point out that in his speech R.I.B.A. Sir Reginald laid no strictures the criticism of opinion on matters of importance such as the threat to Waterloo Bridge. What Sir Reginald deprecates Press criticism by architects of the architecture work of their professional brethren.—Ed

MEETINGS

MONDAY, November 23.

Architectural Association.—Mr. M. Robertson on the "A.A. Excursion, 1931-34, Bedford-square, W.C.1. 7 p.m.

TUESDAY, November 24.

College of Estate Management.—Mr. B. Unwin on "Town Planning." At 35, Lincoln Inn Fields, W.C.2. 5.30 p.m.

WEDNESDAY, November 25.

Liverpool Architectural Society.—Mr. J. brick on "Robert Adam." At 13, Hanover street.

St. Paul's Ecclesiological Society.—Mr. Woolley on "De La Mare Brass in St. Paul's Cathedral, and some Nottinghamshire Lincolnshire Easter Sepulchres." At 9, G street, W.1. 8 p.m.

THURSDAY, November 26.

Stepney Public Libraries.—Mr. E. W. Piper on "An Evening in Westminster." At 236, Cable-street, E.1. 8 p.m.

Victoria and Albert Museum.—Mr. Kendrick on "English Tapestries." At Kensington, S.W.7. 6 p.m.

Association of Architects, Surveyors Technical Assistants.—Annual Bohemianing Concert. Carr's Restaurant, 264, The W.C.2. 7 p.m.

Forthcoming Books.

Professor A. E. Richardson, of University College, and Mr. H. Donaldson Ebbel Philadelphia, are producing a fully illustrated account of "The English Inn: Past and Present," dealing with its history, so coaching, signs, small taverns, and old. The book is illustrated from photographs, old prints, and sectional skeletons. The same authors have also just finished on "The Smaller English House of the Renaissance," in which the course of "middling" dwelling is traced from the time to the accession of Victoria. The illustrated from photographs, drawings, prints. Both books will be issued very by Messrs. B. T. Batsford, Ltd.

Obituary.

We regret to record the death, following operation and short illness, of Mr. C. F. a director of Messrs. Archibald D. D. Sons, Ltd. The late Mr. Chettle entered service of the late Sir Archibald Davidson pupil, after leaving Ardington College. 45 years of age, and was a member Institution of Structural Engineers. many years had taken an active part in management of the Company's affairs.

ARCHITECTURAL COMPETITIONS.

PROFESSIONAL OPINION.

give below the views of a number of leading architects on the subject of architectural competitions. Attention is also drawn to the leading opinion in this issue.

architect who has had much experience in competition work agreed that there was a cause for dissatisfaction with regard to the conduct of competitors, but was reluctant to give opinions for publication unless he was in full of the approval of the Competitions Committee of the R.I.B.A. The attitude taken by this architect is typical of many others and indicates that there is a good deal of unrest never finds public expression.

Mrs. A. W. S. and Kenneth M. B. Cross are in view of the general dissatisfaction with the awards made in several recent competitions, it seemed a pity that the Common Reform Society was no longer in existence. (This Society was one formed some years ago to protect the interests of young architects, and it was subsequently merged in the Competitions Committee of the R.I.B.A.) The speakers thought it might well be remedied. They pointed out that in existing competitions it was very difficult to say anything in criticism of competition awards because they were immediately accused of unprofessional conduct, or of possessing a biased attitude. Unfortunately in this connection criticism could be carried to an extent that it became actually unhealthy and seriously detrimental to the advancement of the art of architecture in this country. But perfectly honest criticism appeared to be unacceptable to many members of the architectural profession, and as an alternative Messrs. Cross suggested that there should be some sort of an Appeal set up to review flagrant cases of unfair awards. Of course, if this were done competitors bringing frivolous complaints to the Court would have to be penalised. There should be no appeal against injustice or in accordance with the spirit of the constitution of our country, and the anomaly in the case of architectural competitions should be right. Turning to the question of the jury, the speakers mentioned three complaints in which the jury system had proved faulty. In the case of the Manchester Art Gallery Competition a Committee of five had been appointed by the R.I.B.A., but the only result had been a statement that no award could be taken because it would cut the basis of the competition system! In this case the whole question turned upon the interpretation of certain conditions of the competition, which, as drafted, were of an absolutely definite nature. It had been argued, however, that the speakers' view was illogically, that conditions of a competition could justifiably be changed if as the result a better plan could be produced. But the conditions of the competition ought to constitute the essence of the contract between the promoters and the competitors; as such they should be rigidly adhered to both by the promoters and their assessors or assessors, and by the competitors themselves. If they were to be changed at will all confidence in the competition system as at present conducted would be destroyed. Generally speaking, Messrs. Cross thought that the conditions should be drafted as far as possible. At present there were usually far too many clauses, and they were often contradictory. Causes of complaint would be, however, considerably lessened if the assessors would make a plan of their own in accordance with the conditions so as to obtain a grasp of the problem to be solved. With regard to the appointing of assessors it was a question whether this duty should not be the responsibility of the whole Council of the R.I.B.A. rather than that of the President alone. Decisions upon any individual were implied, and under the present method of appointment

one was often confronted with the anomaly of an assessor who had never designed a building of the type required judging the designs submitted by men who were specialists. As to limited competitions, it was almost impossible to introduce any kind of control, which however was badly needed, perhaps indeed more badly needed than in open competitions. In all cases the assessor's report, which should comment, however briefly, upon every design submitted to his judgment, should be available at the exhibition of the competitive designs, and extracts from it published in the professional press.

Messrs. Nicholas & Dixon-Spain said that, in their view, if the conditions of the R.I.B.A. be adhered to and the assessor dealt with the matter carefully upon those lines, the result should be satisfactory. Regarding elasticity or otherwise of conditions, they were of opinion that essentials should be "fixed" and a most carefully considered schedule be given; subject to this, the greater the latitude given to competitors, the better within such limits. They were definitely in favour of the single assessor as against a jury. They had confidence in any competent assessor giving a reasonable award. Assessors were, unlike the Pope, fallible. The tendency in some quarters to criticise assessors' awards was perhaps unprofessional, and would tend to make the position of assessors not readily accepted by the most suitable. The modern tendency to $\frac{1}{8}$ in. scale drawings was reasonable, and in large projects the "double-barrelled" basis was good. "Replies" should be sent as promptly as possible to competitors.

Professor A. E. Richardson gave his views under four heads, as follows: (1) It was impossible, he said, to define conditions in drawing up a scheme for a competition which could be interpreted literally by many competitors. In arranging a competition an assessor, or assessors, should make a preliminary plan showing the general arrangement. This could be done after consultation with the promoters of the scheme, and would enable a clear view to be obtained of the feasibility of the building. The arrangement having been ascertained, the programme for the competition should then be framed in general terms, allowing the utmost latitude to the competitors for interpretation, the only governing factor to be closely adhered to being that of cost. (2) From experience, he could say without hesitation that the jury system was infinitely preferable to that of the single assessor. The jury system was a safeguard against the imitation of an assessor's style, or of any attempt to exploit his architectural mannerisms. With a jury, the competitor had a fairer chance, and his design usually received fuller consideration than was the case when a single assessor reviewed the designs. (3) The present system governing the direction of limited competitions was open to many objections; one was the unfortunate tendency to limit the invitation to coterie architects without any reference to the claims of the general profession. This could be remedied by adopting the system of a rota, which should be in the hands of the Council of the R.I.B.A., and members of the Institute should be asked to nominate architects from time to time. Much of the present dissatisfaction would by such means be removed. (4) The assessor or assessors when framing the conditions for a competition, should pay more attention to the competitors, especially where questions of drawing were concerned. Everything should be done to minimise the labour of a competitor, especially in an elementary contest; for example, pencil drawings would illustrate the idea of a building quite as well as drawings elaborately worked out and inked in. The object of a competition was to obtain the best idea for a building, and it could not be said that under present conditions this desirable result was obtained. Neither was it reasonable when conditions were too rigid to expect every competitor to keep within definite limitations other than cost.

Mr. Howard Robertson said the dissatisfaction

which has followed upon the awards in several recent competitions was evidence that the competitive system is still far from perfect. An analysis of complaints seemed to show that they arise (a) from the feeling that the best design had not been selected; (b) from the conviction that the winning design had violated the conditions. As regards (a), the assessor might safely be assumed to be honest and sincere, and the tendency to adopt the jury system was a safeguard against prejudice or preference. As regards (b), there had been many instances of such violations, and it was unfair to expect disappointed competitors to be satisfied, when they lodged complaints in the appropriate quarter, with the remark that the assessor's award was final and binding. The conditions were a contract, and the contract was binding on both parties. He believed that half the difficulties in competition work would disappear if the schedule of requirements was made less binding. In other words, he would suggest that the competition programme be fully detailed, as at present, but that it should be qualified by some such paragraph as the following: "The above schedule represents the accommodation, &c., required, but competitors are at liberty to suggest any alternative arrangements &c., desired." This would allow the competing architect to draft a scheme which might often be superior to the plan roughed out by the assessor or his clients and around which the programme was so often written. The programme stated the requirements, in general terms and even in detail, but the competitor was still left free to provide something better if he could do so. Mr. Robertson understood that in America the programme was less tied up by rigorous conditions than is the case here. He suggested also that every effort be made to reduce unnecessary labour. In cases where $\frac{1}{8}$ in. details were called for, it was surely unnecessary to ask for $\frac{1}{4}$ in. scale elevations when the subject was a large building. The recent Manchester Art Gallery competition, although assessed by an able jury, seemed to have been a failure under the two headings mentioned. It was very easy to criticise and make complaints, but many competitors must have made valuable criticisms and suggestions when voicing their grievances, and if these were tabulated and considered by the R.I.B.A. Competitions Committee they might assist in the formation of a satisfactory system.

Mr. Stanley C. Ramsey (of Messrs. Adshead & Ramsey), said that if the best results were to be obtained from the competition system, competitors should be allowed every possible freedom. Nowadays, with the elaborate instructions and minutely detailed requirements, the assessors themselves virtually designed the building. It would be far better, having determined the main schedule of accommodation to the satisfaction of the promoters, to leave the solution of the problem to the competitors themselves. He believed in the jury system, but in addition to the three professional assessors there should be a fourth member—a layman, representing the building owners. On the general question of competitions, Mr. Ramsey regretted the "post mortem examination" that follows upon almost every competition. Persistent controversy could only end in shaking public confidence in the competition system. Having got architects of standing to act as assessors, he thought that competitors should be content to accept the result in a sporting spirit. Were there not, asked Mr. Ramsey, too many competitions nowadays? He thought that competitions were unnecessary except for the more important buildings. With regard to limited competitions, there ought always to be a qualified architectural assessor, unless the promoters were ready to pay each architect fees equal to the R.I.B.A. scale of charges for sketch designs.

New Art Museum at Naples.

The famous Villa Floridiana, given by Ferdinand IV, King of Naples, to his second wife, the daughter of the Sicilian Duke of Florida, is to be used as a museum, to house the Di Martina collection.



THE ARCHITECT AND HIS CITY.

At last Monday evening's meeting of the R.I.B.A., at 9, Conduit-street, W., Dr. Raymond Unwin, F.R.I.B.A., in the course of a paper on this subject, said he had found in that remarkably interesting rectorial address delivered by the Prime Minister recently some confirmation of the feeling which impelled him (the speaker) to adopt that subject; the feeling that there was need to direct attention to the special sphere of art in city building. For in the fairly full description which the Premier gave of the types of men trained in our Universities, the artist found no place, though there was an allusion to the art of speech. This omission, he feared, was only too representative of a British specialisation which, as regards the sphere of his (the speaker's) work at least, he was convinced we carried too far. Consequently in the councils of our modern city builders, the voice of the artist was too seldom heard; the value of the advice which he might give was too little understood; and the character of the work accomplished was suffering in consequence. Never perhaps (he continued) was the need for dwellings and the other products of industry greater throughout the world than it was to-day; never probably was there so extensive equipment or such latent power of production; yet how difficult seemed the task of applying that immense power to satisfy those urgent needs. Why was this, and why they might well ask should it be recalled now? The reason was that, like our modern cities, industrialism had developed haphazard, lacking order, lacking design. In city building these were the very qualities which it was the function of man's artistic faculty to contribute. He feared the deficiency of that contribution in the sphere of city building was but part of a general neglect. For the industrial age, having smothered man's natural hunger for beauty in a mass of material production, had lost the ability to understand the artistic temperament or to appreciate its proper function in human society.

The temperament called artistic was difficult to define, and frequently misunderstood; it included, in greater or less degree, the imagination to see visions of what might be, the desire to realise them, and the power to give clear expression to them. It constituted one of the most practically valuable gifts with which man could be endowed, if according to the degree and character of the endowment its possessors could be made to play their proper part in the human community.

The full faculties needed for creative work in the fine arts were, however, possessed by very few of those who shared the temperament. Unfortunately, the fact that there were a few who not only saw visions of great beauty, but had the exquisite power of expressing them in so-called works of art, had led to the assumption that these forms of expression were the only ones appropriate for the artist; and that it was the duty of all those who shared the endowment, shunning practical affairs, to seek, however imperfectly, to express themselves in one or other of the fine arts. Hence we saw hundreds of those who had been blessed with some moderate degree of artistic gifts wasting their lives in the production of second-rate pictures or art fancies! Meanwhile the practical affairs of the community lacked the inspiration

and design which their imagination if properly trained might well have been adequate to contribute. It was small wonder that the artists standing or thrust aside from the main streams of life had too often been content to play in the eddies; and at times in mischievous mood to tease the rest of society by persuading them to accept jazz patterns for great paintings, and for statuary human effigies compiled from the child's box of bricks.

The terms artist and practical man represented no complete or scientific division; most men enjoyed in some degree and might learn to use the faculties of both; otherwise where would the architect be? Nevertheless, the terms did represent with sufficient accuracy a specialisation of temperament, of faculty, and of methods of work, the understanding of which was necessary for co-operation between the two types of men, as its appreciation was important for the public. Without attempting exact definition, we associated especially with the artistic temperament or faculty the power to see that which was not there, to call up visions of what might be. An example of method might best illustrate what was meant. The planning of a cottage home was generally thought to be very simple. The ordinary person supposed that the plan was the result of following a few easily learnt rules, coupled with regard for sundry "don'ts"; that a short list of requirements could be made, and that by a system of modification, trial and error, ticking off the points as dealt with, the design could be compiled. These methods had their place, no doubt, but it was not thus that real designs emerged. The truth was that the problem, far from being simple, was as complex as the family life which the dwelling was destined to accommodate. Every room should have its appropriate aspect, size, shape and relation to the other parts of the house. Ready inter-communication must be provided without involving sacrifice of space in the building, loss of comfort in the rooms, or waste of time to its future occupants. Each room in turn must have its door, window, fire, or other parts in right relation and arranged to leave suitable spaces for furniture. All this must be kept within strict limits of cost; and in addition to being convenient in use and comfortable to rest in, the building should be pleasing to look upon; which meant that its mass must set happily on the site, and its colour harmonise with its surroundings; that the plan should be one which would roof well and light well, and that the proportions of all the external parts should so harmonise that the whole design would look well.

It would be realised that in the making of such a design if the place, size or form of any part was modified a score more parts would need to be adjusted to restore the right relation or the balance of the composition; a tedious process, and little likely to succeed on the compilation method. How, then, did the artist work on such a problem? When he came upon the site, as Kipling expressed it, "he made a magic"; and as he intently meditated on the problem there rose before him an image of the cottage that was to be. He saw the spot where it should stand, the form and colour which would best fit into the picture. He saw, too, the opportunities for use and enjoyment which the site afforded and watched the life being lived there. He did not try to remember, one by one, the innumerable "do's" and "don'ts"; for should he be tempted to put the door, window and fire in wrong relations, he would see the cook standing in her own light, or the door swinging irritatingly against the easy chair in which the occupant was trying to read. Instead of the effective compiling of details, the artist held the plastic design suspended in his imagination while he studied it and moulded it, seeing by an instantaneous series of pictures the effect on the exterior view of each internal modification, working the details of plan or elevation with the whole always visible in the back of his mind to help him and check him. This process of design was frequently swift in working, for imagination acted by flashes; but it was not easy, and needed both training and a special

kind of knowledge. To create the pictures mind must be stored with the properties which composed them. The requirements, the conditions and, in this case, the life of the occupants must be so thoroughly and sympathetically understood as to have become almost instinctive equipment.

Referring to town-planning, he thought that in every case there was much preparation to be done; thorough knowledge of that which must precede and be the basis of useful work of that which might be. That knowledge spoke of as the survey; in order that it might be adapted to the designer's method, it should be set out as far as possible in graphic form. It would equally be much to be done after the design had expressed his vision in preparing the design for practical execution. What he urged was that the function of the artist, the stage of design should not be overlooked. Let the preparatory work be as scientific and as complete as might be when the actual planning stage was reached there was need for the imagination of the trained designer to lay hold of the multitudinous conditions, conflicting interests and requirements, and, with a vision of the city life as present as a guide, to appraise them at their relative value. The designer would study the site, picture its opportunities for work, business or for play, and would mould his vision of the ideal city until it satisfied the needs and was itself so harmonised with the natural features of the land, that city and nature became welded into one conception, a complete design. This, it seemed to him, was a special contribution which the artist had to make to city building; he must contribute his vision of what the city might and should be, and translate that vision into the design which it could be realised.

The practical man or engineer, already versed in all the sciences connected with town planning, if he had the necessary artistic faculties, should cultivate them until he became also a designer and creator of beauty. The architect already trained in design might, by the economic and engineering problems which he became also a master of the sciences of the subject. Either might cover the whole field of work if he was possessed of all the necessary powers. But it must be recognised that the work was lavished on few men with such liberality and that the methods of work were so different that the practise of either might render success in the other. The detachment from much detail and the free use of imagination which were essential for the designer might be dangerous for the engineer. The necessary concentration of the constructor on the execution of his detail and the security of each of his edifices might tend to restrict the free use of imagination which was the designer's gift.

Turning to the subject of housing, Dr. Unwin said that, after strenuous and long successful efforts to build enough houses to relieve the shortage, at last one could feel that the problem had been continued on a steadily increasing scale long enough to have acquired considerable momentum, and it became possible to give attention to other aspects of the work than the mere increase of quantity; possible to hope that greater care and attention would be devoted, both centrally and locally, to the wider subject of town-planning. The first war assisted housing scheme spent itself by the end of 1922. That scheme resulted in the building of about 215,000 houses. In 1923, Mr. Chamberlain, the present Minister, introduced the Housing Act, a great effort to stimulate building, under which 122,719 houses had already been completed by October 1st. The number of houses under construction and the number under construction had increased steadily month by month, until over 100,000 were completed in the month of September, and over 70,000 were in course of construction. Under the various schemes of financial assistance by the Government or the local authorities, To these must be added the houses built by private enterprise. During the last period for which there were records they accounted on the average for over 5,700 more per month. Assuming that the rate to have been maintained, a total

houses would have been completed during the month of September. This was city building on a small scale. From returns published in the *Labour Gazette*, this great housing effort was to represent over two-thirds of the value of the buildings of all kinds erected in the building industry. American figures showed this proportion. It was hardly too much to inquire how much of this work had been done by the co-operation of the artist and the practical man. How much of it adorned, and how much disfigured our land? The answer was not easy to find.

It was that he saw inspired him with hope; in many places excellent work was being done; greater freedom had been profitably used. A few of cases where recent housing estates were well laid out and were being covered by houses which in design would bear comparison with our beautiful traditional cottages, in comfort and sanitation far exceeded those which, moreover, did not exceed the average prices, proving that good design, though costly in thought and care, need not be expensive in money. But he saw also much that fell short of this standard, and no little inspired apprehension as to what might be opening in some places! Cases had come to his notice reproducing many of the worst of the nineteenth-century industrial towns—a lay-out devoid of interest or merit, inconvenient and uncomfortable, aspect ugly, north living-rooms and south larders; and as might be expected in such cases, elevations consisting of incongruous features unharmoniously combined.

It ought not to be; it was little better than a waste that we should to-day be using our scarce resources to such ill effect. That we were still be destroying the remaining beauty of our land by development such as described only be regarded as spendthrift extravagance. And what of the wider field of town and regional planning? Here, too, he thought, the lines were favourable for an advance; many of the economic tensions and practical requirements, many of the methods for reconciling conflicting interests having effect to proposals had still to be worked out. Nevertheless, a great deal had been accomplished—309 local authorities were engaged in making town-planning schemes; regional committees were co-ordinating the work of wider areas, covering in all nearly 10,000 square miles. On the basis of the science of town planning so far evolved, plans were being made. Whether that basis had or had not reached something of final form, it was equally important that the imagination of the artist should play its part in forming these plans. He did not complain that since 1909 we had directed our main attention on the practical problems which had to be dealt with, much less that the labour on these problems should be neglected; the method was natural to us as it was to them, and it was a good method; it was one, however, which had been found very helpful in countries whose natural methods were different. But it was not the whole; and he suggested that the time was now ripe when the art with real economy add a little more to the vision, more of the design which led to greater beauty than we had hitherto put in our plans. He said this the more so because some of the work already done was proving that order and design, in their relation, were not valuable only for their contributions to beauty, but that without even the practical utilities might break down. The road junction which merely provided straight lines for the traffic on plan, when built, did not prove confusing to the human mind, but of such order, such symmetry, such beauty in the forms of the sites, and the groups of buildings as would explain the junction to approaching drivers. Some people always said that art or design consisted in sacrifice of important practical considerations for the mere appearance. On the contrary, the art of art, of design, too often meant the only supremely important con-

siderations to a few petty practical details; as when all that made a place worth living in was destroyed for the practical advantage of crowding a few more people into it! No such natural conflict, in fact, existed; the practical and the artistic were two aspects of one purpose, and both were equally necessary to successful attainment; without the other each alike was maimed.

It was natural and well that all young architects should aspire to play a distinguished role in their profession, to design the greater buildings for which monumental character was appropriate. But even that more distinguished work must in the long run depend on the appreciation of the public; and he suggested that house building, which far outweighed all other branches of work in volume and in value, also exceeded it in the influence which it exerted on the minds of the people, and in the extent to which it might contribute to or ruin the beauty of cities. That eminence might be reached in this work needed no proof in the presence of their honoured President; that lasting fame might also be found, the names of the brothers Adam testified. If there was even a measure of truth in his view that this approach to architecture from the dwelling was best for the architect, and that the interest and appreciation of the people could best be stirred in their home whence it would spread in widening areas until it embraced the whole town, then he suggested that in our architectural training greater emphasis might be laid on this work. Let every student study the life of the home and learn to plan and design the small house thoroughly; let him follow this with some study of the combination of small houses into buildings composed of two, three, four, or more dwellings, and the further combining of these larger units both in plan and elevation into more extensive groups, developing by the arrangement architectural relations and unity, in harmony with the contour or other features of the ground. This afforded a truly fascinating field of design which few had yet explored, and fewer mastered. From this he would proceed to the development of sites and their relation to the town plan; when in due course he came to exercises in monumental design he would at least have some idea of their place in the city, and the background against which they should stand.

Referring to ways in which architects could help to preserve the beauty of cities, Dr. Unwin said that in one town excellent work was being done. The resident architects formed a panel under the leadership of one of their number who acted as consultant to them and to the town council, co-ordinating their work and advising the authorities. He apportioned the building among them, himself doing no building, but co-operating with the authority and their engineer in the town or site planning. From the high average of work resulting, he judged the arrangement to have no small educational value for the architects, as it certainly conferred much benefit on the city. There were many ways in which this influence might extend. The first and the one most under their control was a thorough knowledge of the work and what was required. That was not all; but he said to the younger architects and the students, if they would so qualify that they could do this work sufficiently well, there was to-day a better chance than had existed for many a year, that the opportunity to work towards the improvements of the homes and the beautifying of the city would come to those who were ready for it. It could hardly be doubted that we were entering a period of planning and co-ordination of work in many spheres, a period when he believed the architect and the designer would have an opportunity to strike out from the eddies into the main stream of life and play a more important and a more worthy part than they had often played in the recent past.

Discussion.

Mr. G. L. Pepler, proposing a vote of thanks, said that architects and town planners, if they were to be successful, must have public opinion behind them. The public must be made to realise the absolute necessity of saving the

beautiful countryside. It was necessary to make clear to the public in a graphic way the forces at the basis of the town-planning movement, so that they should see the necessity of accepting the solution offered. There was much work for architects to do in the matter of graphic representation. They should start with the ideal. If they began by considering the difficulties they would not get anywhere, and the plan would be makeshift and patchwork.

The Very Rev. the Dean of Canterbury seconded the vote of thanks, and referred to the many problems of the nature touched upon by Dr. Unwin that had to be dealt with in the Canterbury neighbourhood in connection with the industrial development of East Kent. The speaker pointed to the example set by Stockholm, with its many fine buildings, beautiful streets and dwelling houses, and entire absence of slums.

Professor S. D. Adshad, supporting the vote of thanks, said he would like to see more attention paid to the architectural value of important road crossings and connections. It was the buildings that made places, and not the lines of the roads. He regretted to see small builders monopolising enormously potential building sites in a way that must be an aggravation to the general public for years to come. We ought to make the control of building operations as strict as possible. If we did not reserve the beautiful parts of the country while they were yet unspoiled, it would be an everlasting reproach upon the early days of town planning.

Mr. I. G. Gibbon, C.B.E., said that though he admired Dr. Unwin's address, he had to insinuate a few doubts. The terms "artistic temperament" and "design"—what did they mean? Did they mean anything more than merely constructive imagination? That quality was not the monopoly of the so-called artistic temperament. Constructive imagination was just as necessary to the Ford car and to the man who made it. He thought that our problem was one rather for the social economist, who might, of course, be either an engineer or an architect, but he (the speaker) would have more confidence in architects if he saw in them more evidence of a power to group their buildings.

Col. C. H. Brassey (Ministry of Transport) complained that some of the new garden suburbs were very confusing through being laid out on the principle of the Chinese garden.

Mr. W. R. Davidge said he hoped that Dr. Unwin's influence might be brought to bear upon the by-law department to prevent the beautiful spots of the countryside from being desecrated. Town planning was nowadays largely confined to the plan, but it was essential that the town planner should control and co-ordinate the buildings to be erected on that plan.

Mr. Ebenezer Howard said that manufacturers appreciated the cost of wasteful transport in connection with their businesses, but failed to see the same thing as it applied to their employees.

Mr. Edward Warren said he failed to see why so much county money should be devoted, as it was in Berkshire, to devices for enabling motorists to rush about the country at a great speed, nor why fine old buildings should be sacrificed to that modern Juggernaut, the motor car.

Mr. Gilbert Jenkins said it might be asked whether it was a good plan to spread garden suburbs all over the countryside. It might become necessary to compel people to live in flats to prevent the countryside from being covered over.

Major Corlette said there were vast open areas throughout the Empire waiting to be peopled. It was possible to pull down the slums and make garden cities in the middle of London.

The President (Mr. Dawber) said that the planning of suburban development was often good, but the buildings were sometimes a disgrace to modern architecture. The public needed to be educated, but so did architects and public officials.

Dr. Unwin briefly replied.

LEADING CONTENTS. PAGE

ARCHITECTURAL COMPETITIONS	727
NOTES	728
COMPETITION NEWS	730
CORRESPONDENCE	732
ARCHITECTURAL COMPETITIONS: OPINIONS OF LEADING ARCHITECTS	733
R.I.B.A.	734
SOCIETIES AND INSTITUTIONS	742
THE TOWN-PLANNING INSTITUTE.....	743
ARCHITECTS' AND BUILDERS' INQUIRY BUREAU	745
THE BUILDING TRADE	746
BUILDERS' BENEVOLENT INSTITUTION DINNER	747
THE PUBLIC WORKS, ROADS AND TRANSPORT CONGRESS AND EXHIBITION	748
THE DECORATORS' EXHIBITION, MANCHESTER	750
NEW BUILDINGS IN LONDON	752

ILLUSTRATIONS

Bank of England Dining Club, Tokenhouse Yard.

This building occupies the site of the old Auction Mart, Tokenhouse Yard. The Auction Mart, built in 1864 from plans by Mr. G. Somers Clarke, was regarded at the time as an innovation in City building; in some respects, it was certainly in advance of what was being done at that date. The site lies almost right over the course of the ancient Walbrook, and instead of attempting to carry down the walls to a great depth to secure a solid foundation, the architect chose to build on a concrete raft covering the whole area of the site. The walls were very substantial—some of them over 3 ft. thick to their full height. The floors were carried on heavy built-up wrought-iron girders—a material then only beginning to be used in ordinary building work. On these were laid timber floor joists filled in for part of their depth with concrete. Externally, the walls were of Portland stone, with very elaborate carved bands, mouldings, architraves and cornices, the bulk of which were in red Mansfield. The staircase was of stone and the rooms on the principal floors were large and lofty. In the rebuilding scheme for the Bank of England it has been arranged to utilise most of the sub-basement walls and the concrete raft on which these rest; but as much greater floor space was required for dining rooms, kitchen, and stores of the restaurant, this has been secured by introducing one additional floor in the height occupied by the lofty Auction Rooms, and adding two more above. By taking full advantage of modern steel-frame construction, hollow tube flooring, and thinner walls, the total weight of the new and enlarged structure remains the same as before, and makes it possible to carry the larger building on the existing concrete raft. The new building is being faced with Portland stone on a granite base. In certain parts which overlook the old churchyard of St. Margaret's, Lothbury, it has been found possible to re-use the old Portland stone ashlar facing of the Auction Mart.

St. Mary's College, Strawberry Hill.

St. Mary's College was erected at Brook Green, Hammersmith, in 1850, for the training of teachers for Catholic elementary schools, and served that purpose for seventy-five years. Owing to the increase in the number of students and to the need of better grounds for games, the Catholic Education Council decided to part with their building and acquire larger premises elsewhere. Twickenham was chosen with the approval of the Board of Education, and some thirty acres were purchased from the Dowager Lady Michelham, the site including "The Mansion," Strawberry Hill, which consists of the villa built by Horace Walpole in the middle of the eighteenth century, and the considerable additions made to it by the Countess Waldegrave a hundred years later. The Catholic Education Council wished to keep these buildings unchanged if possible; so the villa has been repaired and assigned for the use of the resident teaching staff, and the subsequent additions adapted for the service of the College, the old ball-room being reserved as an assembly room

for the students. The new buildings, which have been erected to the south of the existing ones, in order to preserve the amenities of the site, with its splendid lawns, comprise, on the ground floor, the refectory, chapel, class-rooms, and common-rooms; while the upper floors are devoted to the bed-sitting rooms of the students. The materials used in the construction are London stocks with Bath stone dressings and Welsh slates, the flat roofs being laid with vulcanite by Vulcanite, Ltd. Water for the use of the students is laid on in every room. The contractors are Messrs. L. H. & R. Roberts, of Lower Clapton-road, E.; and the sub-contractors are as follows: T. Webster, Ltd., plastering; Williams, Smith & Evans, slating; Newsome & Co., glazing; Acme Flooring & Paving Co., wood blocks; Musgrave & Co., sanitary fittings; and Waygood-Otis & Co., lifts. The contractors for the repairs to the older buildings are Messrs. Messom & Sons, of Twickenham; all the work has been carried out under the supervision of the architects for the College, Messrs. Pugin & Pugin, of London and Liverpool.

H.B.M. Legation, Montevideo.

The new Legation building will be erected on a recently purchased site containing an area of 2,850 square metres. The ground faces the new "Parque de los Aliados," now in course of formation. The position has the advantage of an open aspect with views from two road frontages, and for official residential purposes it is conveniently near to the city. Rented office accommodation is provided in the business quarter, a district unsuitable for an official residence for the Minister. The accommodation to be provided in the new Legation will therefore be almost entirely residential, with adequate reception rooms for entertaining purposes. Business rooms will be provided for the Minister and a secretary. The site affords space for a small garden with a tennis court at the back, and a garage with chauffeurs' quarters will be provided. The building will be of fire-resisting construction with reinforced concrete foundations; and the façades will be finished in white Portland cement. Arrangements are now being made for tenders to be obtained, and it is hoped that the building will be in progress shortly. The architect for the work is Mr. R. J. Allison, C.B.E., F.R.I.B.A., Chief Architect, H.M. Office of Works.

Suggested Designs for New L.C.C. Tenements.

The earlier tenement buildings erected by the L.C.C. were planned so that there was separate access to every room, and each flat was provided with a separate bathroom. The provision of separate access to the rooms meant a certain loss in room space, and in the case of the three-story flats it was decided to do away with internal corridors and to provide rooms inter-communicating. This type of planning is now the normal and is applied in the case of the proposed new buildings recently designed by Mr. G. Topham Forrest, and illustrated in this issue. One of these shows a block suggested for an area in East London. It has been designed in a rather freer manner than is usually the case. The other illustration shows the suggestion for some experimental blocks of tenement dwellings of novel design both in construction and in the character of the accommodation provided. A special type of steel and concrete construction has been designed by which brickwork can be dispensed with, and which is based on the utmost economy of material compatible with stability, weather-proofness, and protection from extremes of heat and cold. As regards the character of the accommodation, the Council proposes in connection with this experiment in construction to provide accommodation which will be intermediate between that provided in the common lodging-house and in the self-contained tenement occupied by the more prosperous class of worker. A small proportion of the lettings would be of the bed-sitting-room type suitable for the accommodation of single persons and aged couples. The rooms would be equipped like an ordinary living room and would have, in addition, a metal bedstead which, during the daytime, could be shut up in a ventilated recess.

War Memorial Annexe, Liverpool Homes for Aged Mariners.

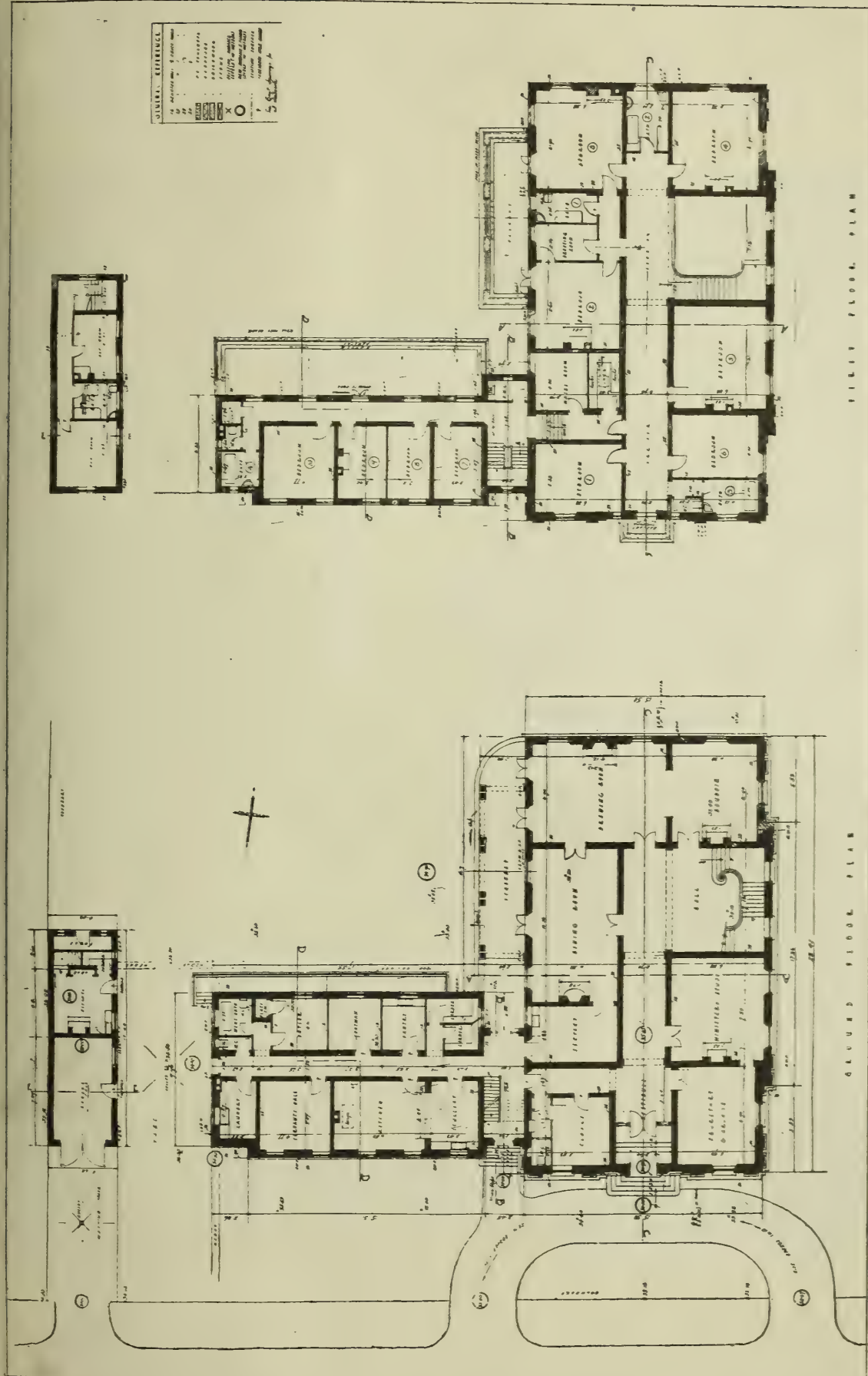
This building has been erected by the Mersey Marine Service Association at the Home for Aged Seamen, Egremont, to provide dormitories for twenty-four men. It is connected at north end of the main building by a corridor to balance a generally similar annexe to the south. The completed buildings form a prominent feature of the riverside, character and proportions of the new work determined by the necessity for harmony with the existing premises of Victorian character. Ample accommodation in spacious dormitories is provided, the divisions being kept clear of the floor for cleanliness and ventilation. The building is fitted with every convenience for the comfort of its inmates and is fire-resisting throughout. The general contractors were Messrs. J. A. Milestone & Ltd., Wallasey. Among the sub-contractors were Killick & Cochran, Liverpool, heating hot water; Rea Metal Casements, Ltd., Liverpool, casements and leaded glass; Cheswallasey, electric lighting. The building was opened by Admiral Earl Jellicoe of Scapa on October 23, when a memorial tablet was unveiled by him. This memorial was supplied by Messrs. E. A. Clark, Ltd., Liverpool, to the design of the architects, Messrs. Lewis & Smith, of Liverpool. The cost of this work has been defrayed by public subscription and donations. The Mersey Marine Service Association rely entirely on the generosity of the public to enable them to carry out their beneficent work on behalf of seamen in general and aged sailors and their widows at the Homes, Egremont.

The Manor House Hospital, Liverpool Homes for Aged Mariners and Widows of Seamen.

This late Georgian mansion has been converted into an infirmary for aged mariners and widows of seamen. It stands at the north angle of the estate and faces the River Mersey from which it is to some extent screened by trees. The problem of conversion into an infirmary has been overcome by the addition of a ward for nine women on the south side of the building, with all necessary bath accommodation on the ground floor. The existing building provides many rooms, which have been adapted to their present purposes for staff, sitting-rooms and kitchen accommodation on the ground floor. On the first floor are wards for fourteen men with lavatory accommodation over the wards, staff bedrooms, and accommodation on the second floor of the building provides service bedrooms, &c. The hospital has been carefully fitted up with all modern conveniences, a new installation and electric lighting. The same of the old building have been carefully preserved and the new additions kept in harmony with them. The main entrance to the hospital is marked by a memorial tablet to record the generosity of Mr. Andrew Gibson, J.P., who has borne the whole cost of the work, and the opening of the building for its beneficent purposes by Admiral Earl Jellicoe of Scapa. The premises have been enlarged and reconditioned by Mr. John Crowhurst, of Birkenhead, the contractor, under the supervision of Messrs. Lewis & Smith, architects, of Liverpool. The general view of the Homes for Aged Mariners (p. 736) shows the Manor House Hospital at the right, the left facing the river and the War Memorial Annexe on the left-hand side of the picture, the building in the centre of the picture.

Venice Yard House and Mayfere House, Grosvenor Square, Westminster.

These houses are of the non-basement type and each has the dining-room on the ground floor, together with the service quarters at the back. The sitting-rooms are arranged on the first floor; and the bedrooms, &c., on the two upper floors. The façades are faced with thin Dutch bricks, and the quoins and window surrounds are of cheery red English bricks. The roofs are covered with sand-faced tiles. The buildings were Messrs. Holliday & Greenwood, Mr. W. Hill, F.R.I.B.A., was the architect.

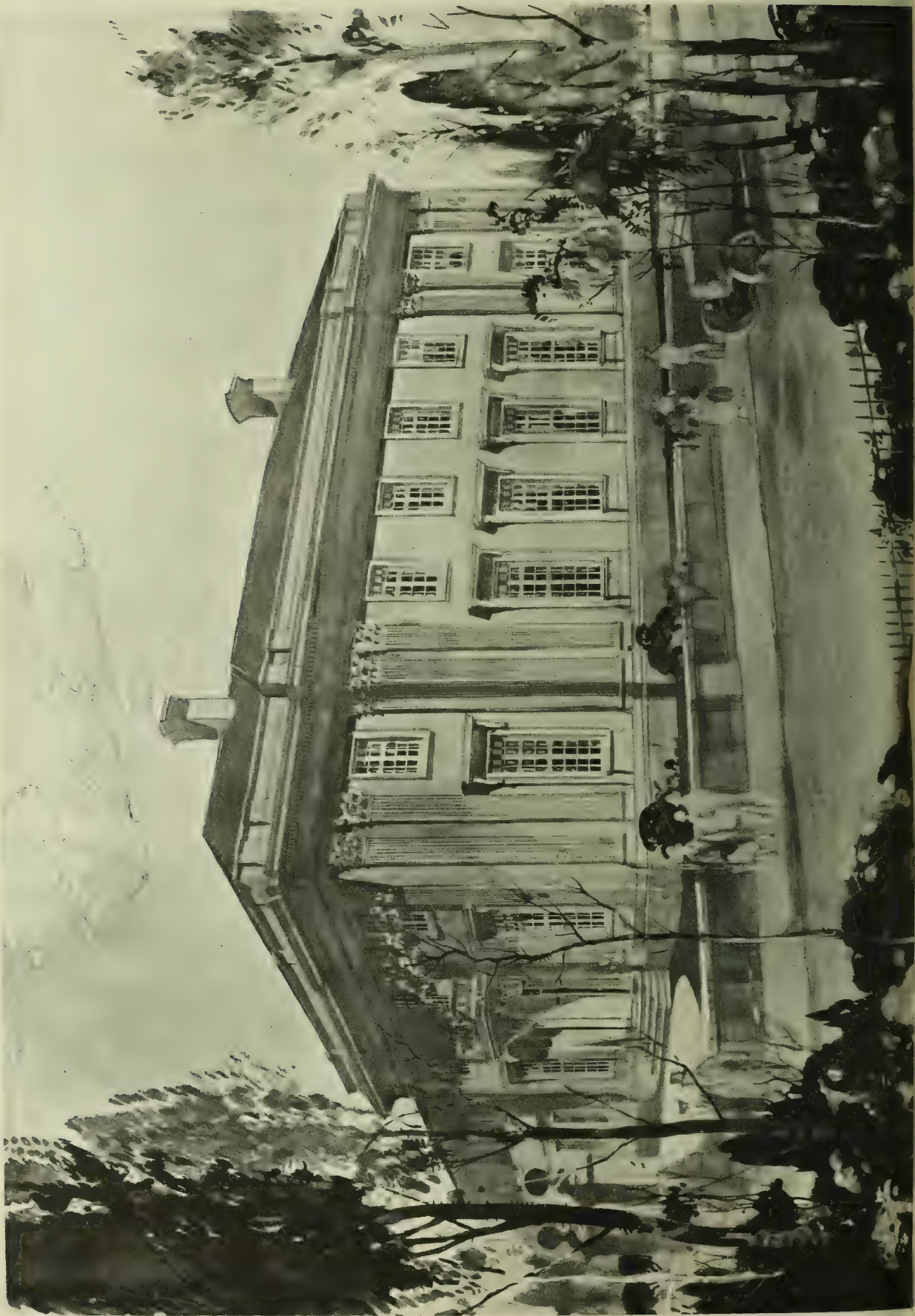


H.B.M. Legation, Montevideo: Ground and First-Floor Plans.
Mr. R. J. ALLISON, C.B.E., F.R.I.B.A., Chief Architect, H.M. Office of Works.



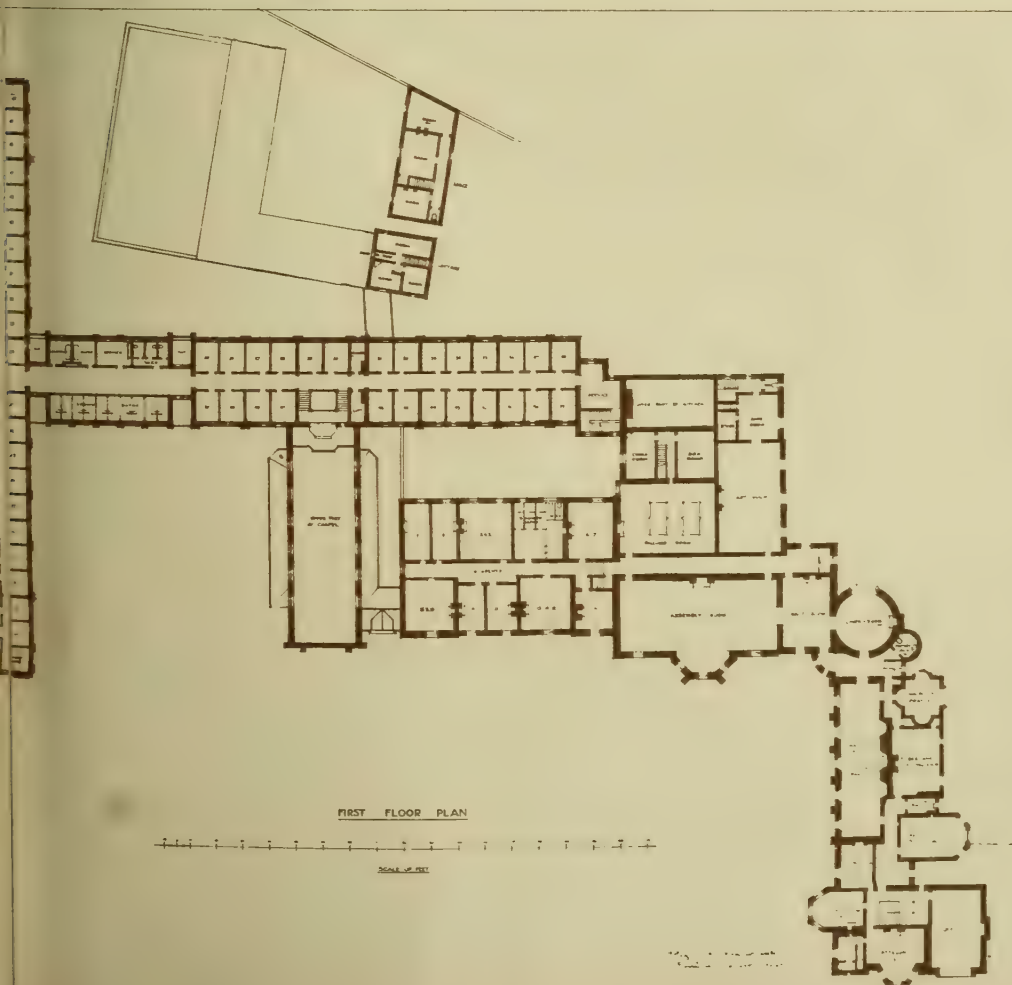
Houses in Smith-square, Westminster.

MR. OLIVER HILL, F.R.I.B.A., Architect.



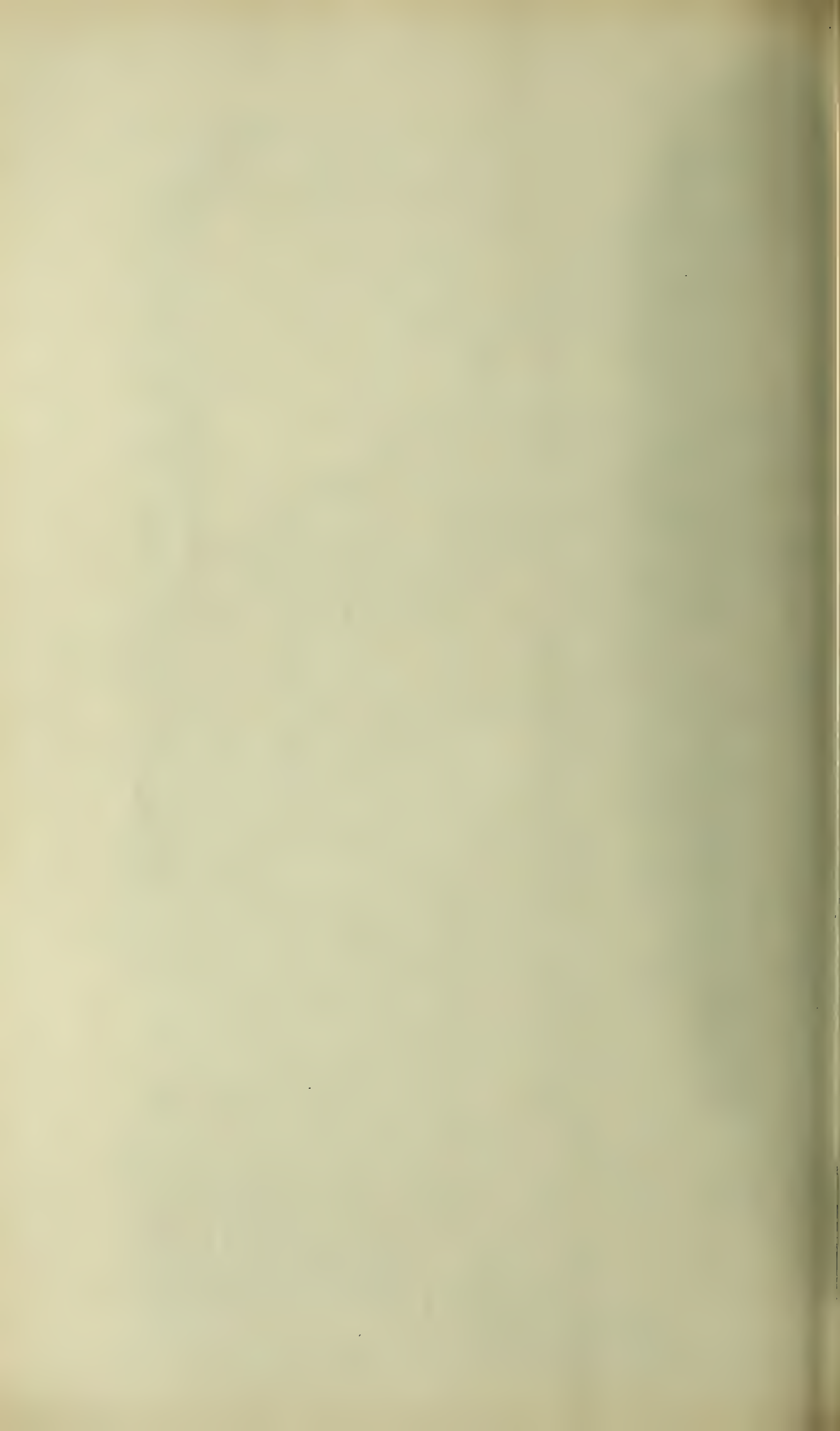


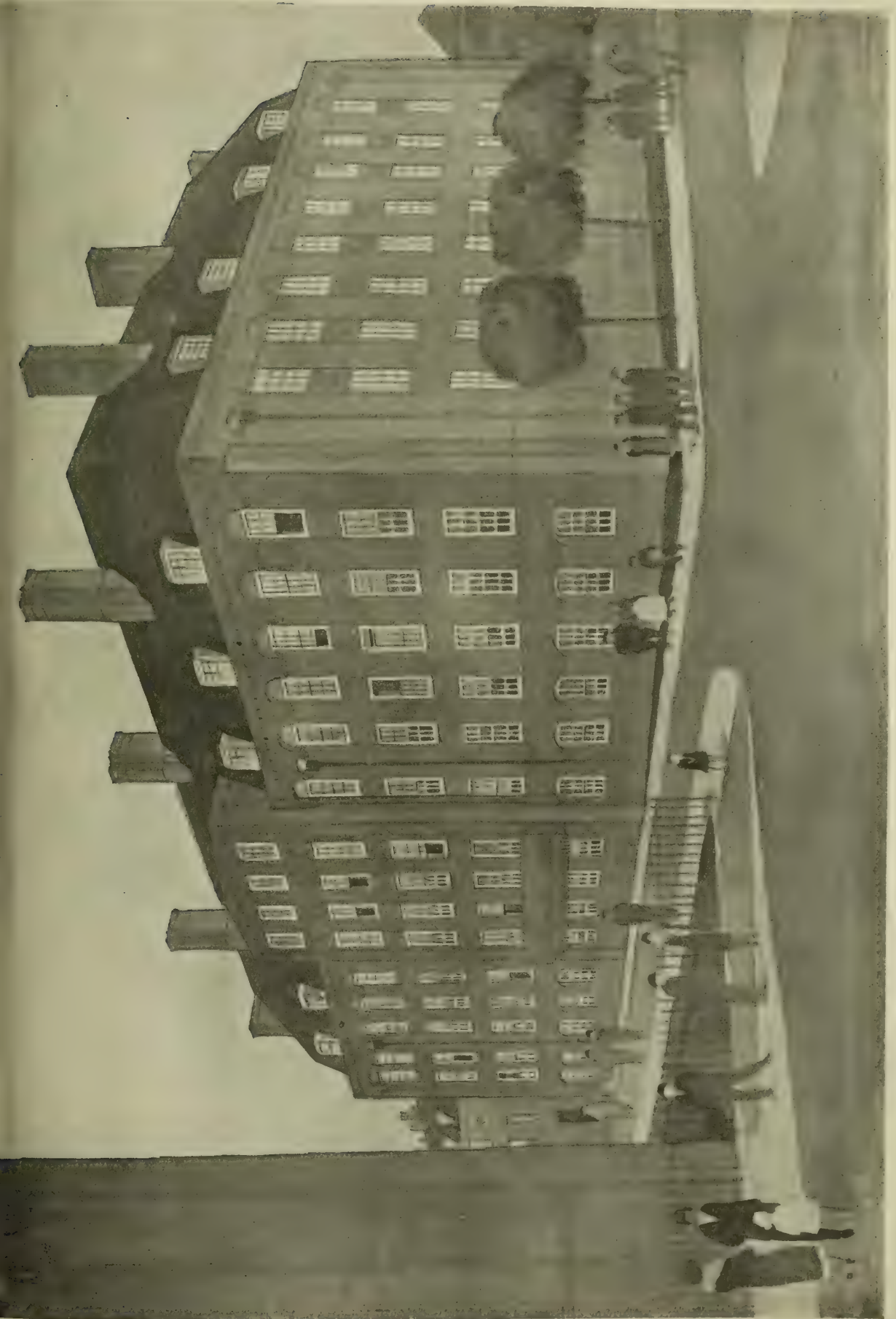
GROUND FLOOR PLAN.



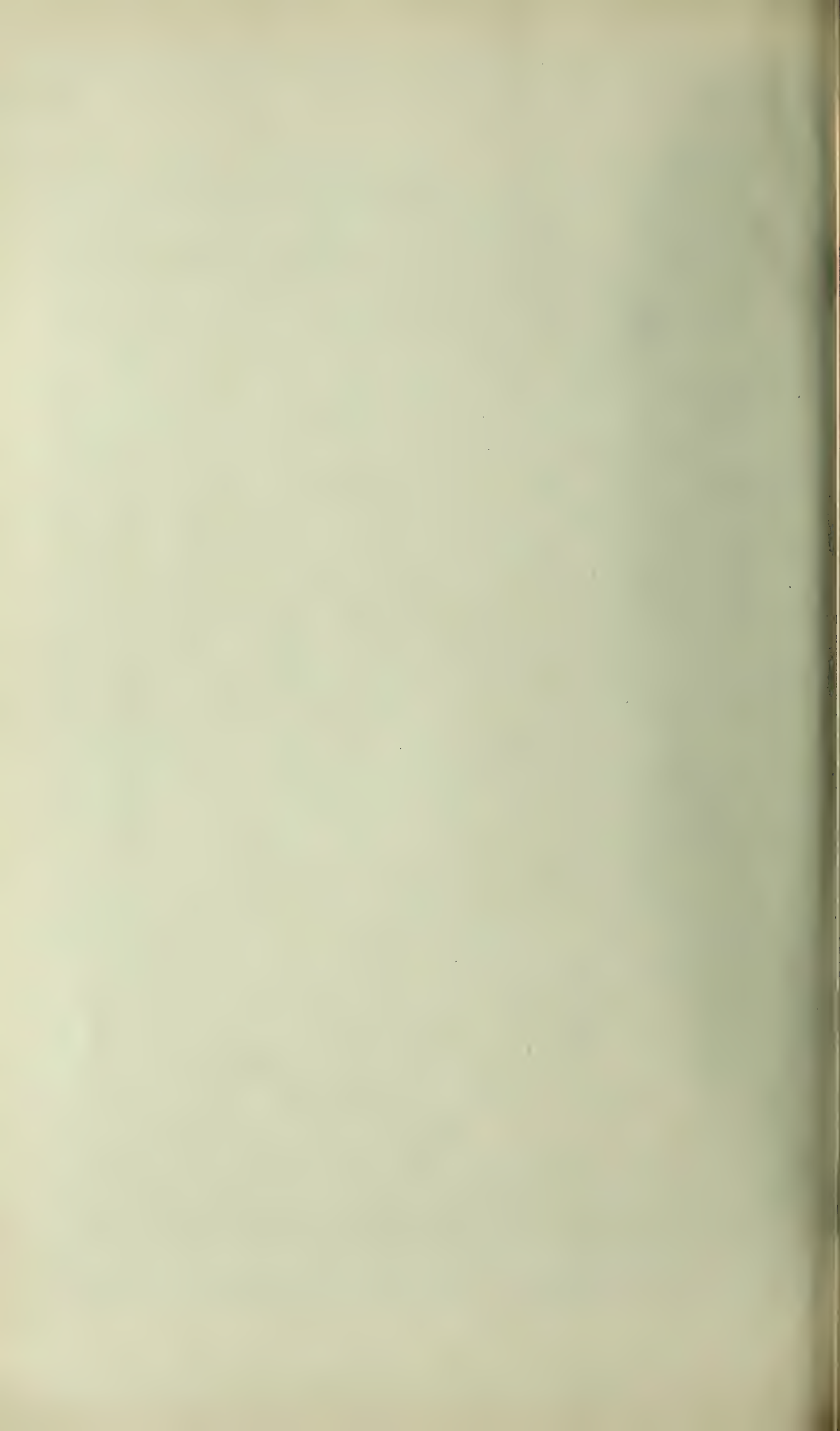


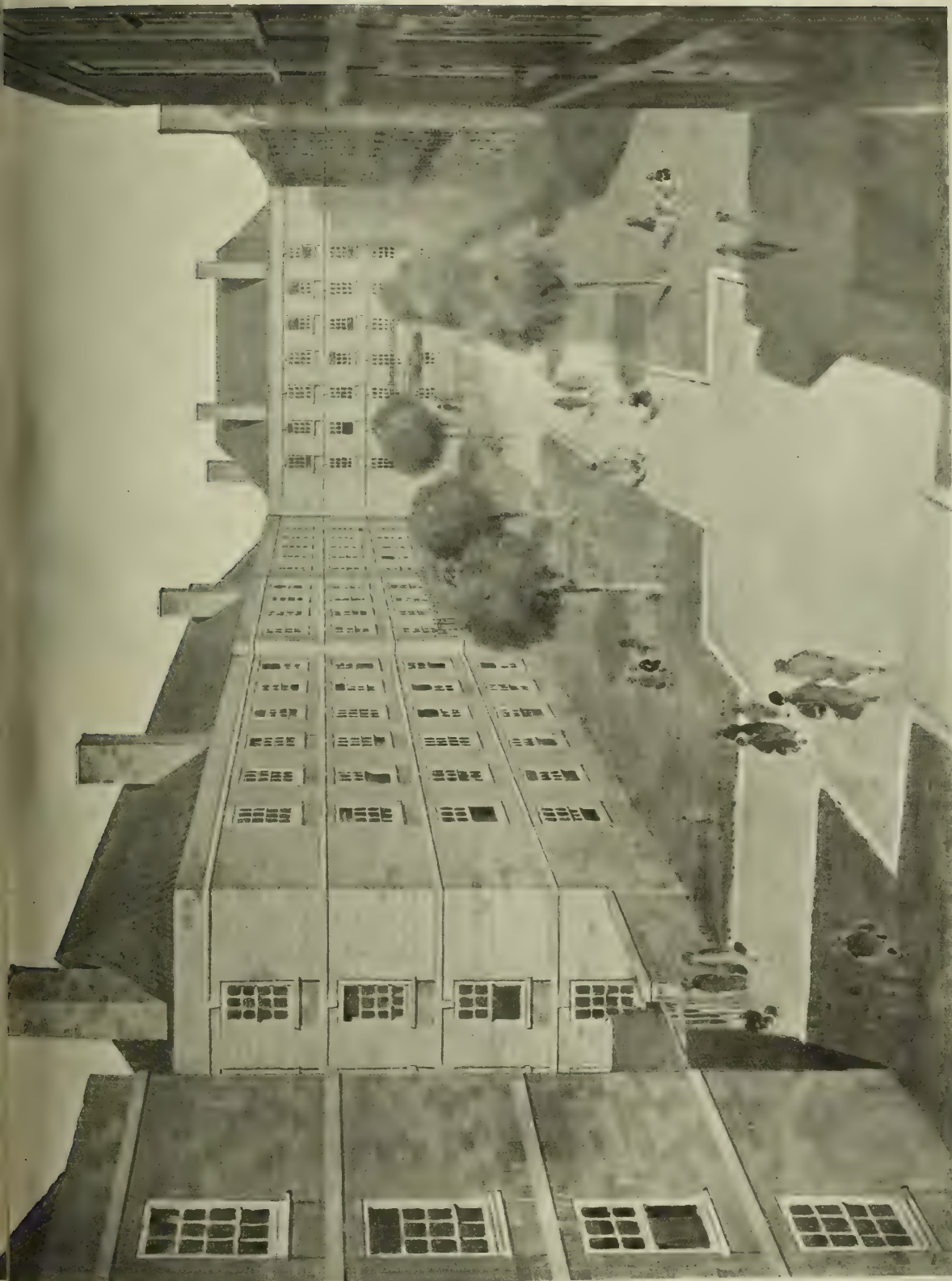






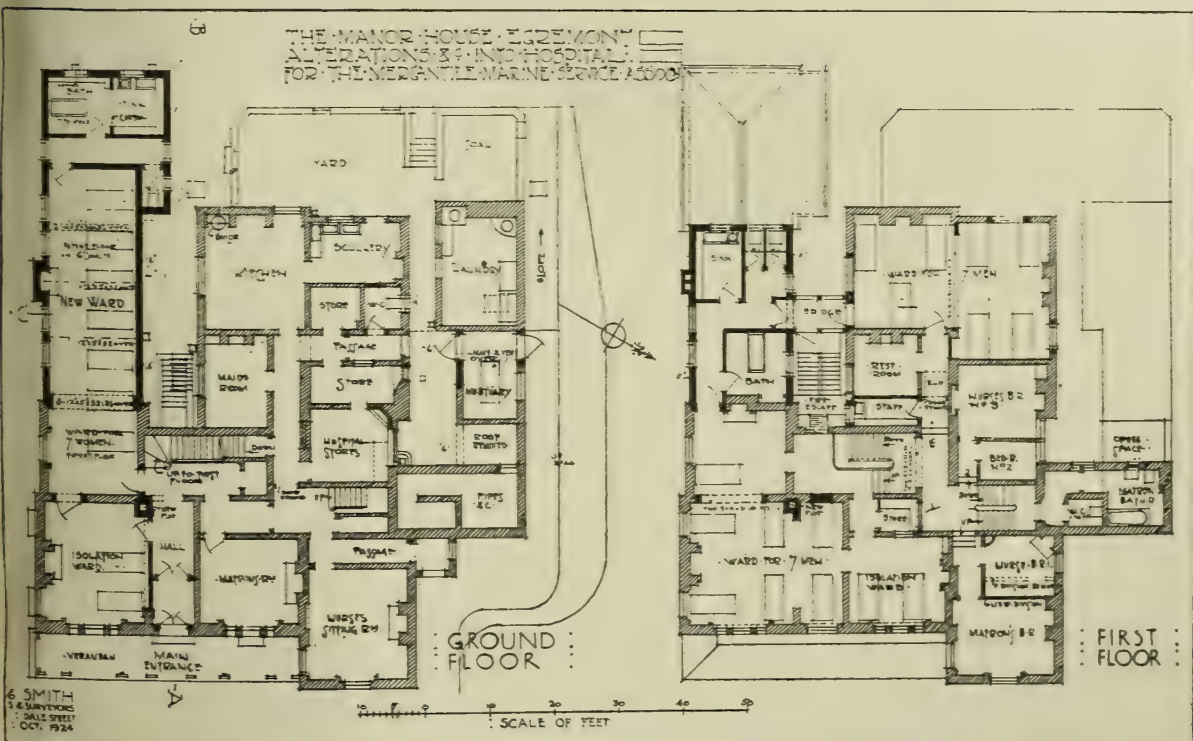
Suggested Design for New L.C.C. Tenement Dwellings. Mr. G. TOPHAM FORREST, F.R.I.B.A., Architect to the L.C.C.





Suggested Design for Experimental Blocks of L.C.C. Tenement Dwellings.

Mr. G. TOPHAM FORREST, F.R.I.B.A., Architect to the L.C.C.



The Manor House Hospital, Liverpool Homes for Aged Mariners and Widows of Seamen, Egremont.

MESSRS. LEWIS & SMITH, Architects.

SOCIETIES AND INSTITUTIONS

R.I.B.A.

Following are notes from the Minutes of the Council meeting, held on November 2 :—

Waterloo Bridge.—It was decided to send to the London County Council the letters received from the President of the American Institute of Architects and the Franco-British Union of Architects on the subject of the preservation of the Bridge.

Cambridge School of Architecture.—Six drawings of a Terminal Railway Station by the late J. M. Whitelaw (Soane Medallist, 1913) were presented to the Cambridge School.

The Board of Architectural Education.—A comprehensive scheme for the reconstitution and enlargement of the Board of Architectural Education was approved by the Council and will be brought into operation forthwith. (Details of this were published in our last issue.)

R.I.B.A. Examinations.—On the recommendation of the Board of Architectural Education it was decided : 1, To require students entering courses recognised by the R.I.B.A. to become registered as Probationers immediately upon entering such courses ; 2, to urge upon students the extreme importance of availing themselves, when they become eligible, of exemption from the R.I.B.A. Intermediate Examination and subsequent registration as Students R.I.B.A. ; 3, to urge students eligible for exemption from the R.I.B.A. Final Examination to sit for the R.I.B.A. Examination in Professional Practice and thus qualify themselves under the usual conditions for candidature as Associates.

R.I.B.A. Visiting Board.—The reports of the Visiting Board on the following schools were accepted by the Council :—1, Birmingham ; 2, University of Sheffield ; 3, Armstrong College, Newcastle-upon-Tyne ; 4, Leeds School of Art.

"The Architect and His Work."—A pamphlet entitled "The Architect and His Work," prepared by the Practice Standing Committee, is to be published forthwith.

Qualified Architects and Housing Schemes.—Steps are to be taken to call the attention of the Minister of Health to the failure of local authorities to employ qualified architects in connection with their housing schemes and to urge him to take steps to ensure that in future only qualified architects are employed on this work.

Restrictions on Tendering.—Particulars of the decision on this subject were given in our issue for November 6.

The Architects' Benevolent Society.—A grant of £100 was made to this Society.

The British Waterworks Association.—Mr. H. D. Searles-Wood and Mr. P. M. Fraser were re-appointed to represent the R.I.B.A. on the Standing Committee on Water Regulations.

The British Engineering Standards Association.—The following were appointed to represent the R.I.B.A. :—Sectional Committee, 15/- on Vitrified Ware Pipes : Mr. D. R. Tucker. Sub-Committee, 1½/- on Cast Iron, Half-Round, O.G. and other Moulded Gutters : Mr. C. F. Skipper, Mr. Max Clarke. Sectional Committee, 32/- on Sand-Lime Bricks : Mr. T. Wallis, Mr. H. D. Searles-Wood. Sub-Committee, 32/1 Materials and Manufacture : Mr. T. Wallis, Mr. H. D. Searles-Wood.

Membership of the R.I.B.A.—The resignations of the following members were accepted with regret :—F. S. Baker (F.), V. A. Lawson (L.). The following were reinstated as members of the R.I.B.A. :—W. S. R. Bloomfield as Associate, R. T. Tilley as Licentiate.

MODERN TOWN GROWTH.

Lecturing on this subject at Birmingham University, Mr. William Haywood, F.R.I.B.A., said that industrial towns of to-day had not the definition of form so apparent in towns of the past. Old cities were closely massed to simplify defence, and they had little of that irregularity of growth which in a modern town often extended far beyond its parliamentary boundaries. A misleading conception of modern town conditions was given by maps which defined administrative areas as independent units. Such maps were

apt to convey wrong notions of town-planning problems, which were so closely related to adjoining areas that town planning was now generally associated with regional planning in order that all matters of mutual interest might be adjusted by agreement among neighbouring authorities. This fusing of urban interests was best shown on the latest density maps of the Royal Geographical Society ; especially with respect to Lancashire, where Liverpool, Manchester and the towns between formed one great belt of boroughs, the mutual problems of which needed joint agreement.

That section of town planning which dealt with the removal of slums inherited from the first half of the nineteenth century was thought by some reformers to be best cancelled in favour of new communities or garden cities, artificially limited in extent to 30,000 or 50,000 inhabitants, and built on land owned jointly by their citizens, or held in trust for purchase by them at their convenience. Garden city policy opposed the evils of overcrowding, the exploitation of land values, and the growth of great cities, by substituting fully detached, self-supporting and healthy communities as satellites of great towns, separated from the parent cities by park belts, yet effectively associated with them by rapid transport services. The real merits of this policy were such that it was in some danger of being regarded as a panacea. Its advocates were apt to regard great cities as always unhealthy and undesirable ; whereas such evils were the natural legacy of a period which knew nothing of modern town planning, by virtue of which great towns might be as agreeable and healthy as small ones.

There were social, educational and architectural possibilities in great towns which garden cities must always lack ; for it was unlikely that the small cities of the past which were eminent in these respects could have any counterpart to-day. Athens was a small city, but it was also a State, and the home of a world power. There was great need for garden cities, but there was need also for great towns from which congestion and slums had been removed, and in which certain deficiencies had been made good. English cities were still backward in the provision of facilities for organised recreation in congested areas. Beginnings had been made here and there ; but so far as adult recreation was concerned, our brewers had been quick to see the need, and, out of their huge profits, had anticipated the municipal authority. Public-houses had been built recently in different parts of the city which possessed practically all the accommodation necessary for a type of recreation which—together with children's playgrounds—should be almost a municipal monopoly, systematically allocated throughout the built-up parts of the town, and brought into its structure as inseparable from a complete expression of civic life.

WESTMINSTER HALL ROOF.

At the premises of the Royal Society of Arts, 18, John-street, Adelphi, on Friday last, under the chairmanship of Sir Wm. Bull, Sir Frank Baines, Director of Works, gave a lantern lecture on the roof of Westminster Hall. He commenced by giving a brief history of the Hall, which was originally built for William Rufus between 1097 and 1099. It was believed, he said, that the roof trusses of this first hall did not span its width in one piece, but were conjectured to have had two intermediate lines of posts upholding it, thus dividing the hall into a centre "nave" and two side aisles. This stood for nearly three centuries, until 1394, when Richard appointed John Gednes, Clerk of Works, to rebuild it ; the master carpenter employed was a man named Hugh Herland. In those days foremen and workmen were given no plans, but made their own measurements and set to work by themselves. Herland designed the roof and built it, to all intents and purposes, personally. It was safe to say that it was the most wonderful

timber roof in the world ; the whole thing incomparably fine, both in conception and execution. It was carried out on an immense scale, for the hall is 290 ft. long, 69 ft. wide, has a capacity of a million cubic feet. The beams used had to be big in comparison with the upper collar beam, for example, weighed 10 tons. And although practically every beam suffered from the ravages of the Death Beetle—some had left as little as 1½ in. of the original 24, and many pins were broken—the roof still remained in position after over five centuries—a truly marvellous statical scheme. The touch of a genius was evidenced by Herland's carving of the figure of an angel on the hammer beams, airily supporting the mighty posts.

The decay and repair of the roof were illustrated by a series of slides, which showed how the beetle had made on the roof over two-thirds of the original timber had gone. When the great arch cracked and the whole roof settled 22½ in., the wooden beams acted as levers to the distortion. To prevent further ravages, every member of the roof had been sprayed with a solution that was believed to be an effective deterrent, and this spray would be repeated from time to time.

Previous repair had been ineffective. Sir Charles Barry had put steel shoes at the joints of the principal rafters and the hammer beams, and 2½ in. rods to supplement the trusses. This had proved futile and had upset the equilibrium of the roof. The lecturer pointed out that his own preservation work the roof was no more like Herland's original than it had ever been before. The timber itself was still functional, and the distortion was left to speak of the roof had stood. It had been objected that the use of steelwork was inappropriate, without it 90 per cent. of the old work the timber would have had to be replaced. The work had been done in such a way, however, that no steel was visible from below—none of the 98 tons of steel construction obtruded on sight. In conclusion, said the lecturer, the thought of the roof of this structure of no importance was good for another 500 years.

ST. PETER AND THE POPES.

A history of the building of the world-famous architectural group, St. Peter's Cathedral, at the Vatican, was given in a lecture by Sir Banister Fletcher, at the Central School of Arts and Crafts on November 4. On the return of the Popes from Avignon, said Sir Banister, the Vatican was a city of ruins and ripe for the action of the Renaissance. Only one Gothic church had been built, and the basilican church was neglected and decaying. Martin V began to repair the desolation, but it was reserved for a later Pope to initiate the building of the Vatican's great cathedral. The site was not unlike the pagan tradition and Christian use in the Vatican hollow of the Janiculum, the fabled shrine of Etruscan "vates" or seers, there had been first the oratory of a saint, then a basilican church built by an Emperor for a Pope, and lastly rose the cathedral of the Renaissance.

In 1506, under Julius II, Bramante started a gigantic plan with four great piers for the dome at the centre of his Greek cross. In his succession came Raphael, Peruzzi, Sangallo, and Giulio-Romano, with their various designs, but in 1546 the great Michelangelo returned to the plan of the Greek Cross and began the dome. Again, after Giacomo della Porta and Vignola, whose cupolas gave scale to the dome, Carlo Maderna, with his lengthened nave and unpleasing façade, both of which dwarfed the soaring dome. Thus through successive centuries the building grew, and the old continuing it was handed on as a heritage from Pope to Pope, who, each in turn, employed architects. It was, said the lecturer, difficult to estimate in terms of ordinary building designs, proportions, and construction the extraordinary building. "It overawes by size ; it awes rather than attracts ; it impresses by magnitude rather than by splendour. There is everywhere a baffling absence of detail and this is nowhere better realised than in the chapels, large as independent churches

THE TOWN-PLANNING INSTITUTE

ESSOR PATRICK ABERCROMBIE presided at the first meeting of the current session of the Town-Planning Institute, at 92, Victoria-street, S.W., on Friday last. He took as the subject for his address "The Extension of the Planning Spirit," and said it was not what everyone would agree as to what the actual extent of the sphere over which to-day the spirit of town planning should be inclined to say that its boundaries were dictated by the powers of existing Acts, but that as they had been recently, and were being extended as to built-up areas by the Public Health Act of this year. The spirit of the spirit, they would continue, would be manifested in more authorities making use of these powers, making use of them more quickly and more effectively: in a word, the sphere of town planning was clearly being extended; what was now wanted was rather the cultivation of this wide field than the extension of its boundaries. There was much to be said for this view. The number of local authorities who had had schemes finally approved by the Ministry of Health was still only 85, when more authorities had submitted schemes and were awaiting their sanction, 119 in all 19 authorities and 26 schemes. It did not seem a large number out of the 1,000 authorities in England and Wales who had prepared schemes, and of the 240 authorities who had a population of 20,000 and over, who had submitted schemes by the beginning of the year 1929. At the same time, the number of Preliminary Statements which have been submitted, numbering nearly 100, was much more encouraging; half of these statements had been approved and as the practice had been towards making the Preliminary Statements almost indistinguishable (on plan) from the final Scheme, there were therefore about 50 town-planning schemes practically finished, involving 85 local authorities and 287,297 inhabitants. This indicates no inconsiderable expenditure of technical energy, but there was a very terrifying amount of work to be got done if these schemes were to be ready by the year 1929. It had been sometimes suggested that many of the schemes lacked imagination. This might be true, but at the same time it was, perhaps, somewhat unfair. Town planning, like architecture (but unlike sculpture or painting, which were not practical) must or should be carried on whether a scheme arose to do it or not, or whether the town who was doing it felt inspired at that time or not. Towns must grow: plans must be made to satisfy Ministers of Health: a scheme could not be had to order, and some places were incapable of lofty schemes, as some people were securely humdrum. Provided such areas rose to a high standard of level of decency they should not be disappointed; but to meet even this demand there should be a steady stream of young town planners turned out from their various educational establishments equipped with the knowledge that could only be gained by specialised training. The Ministry's Report notes that the increase in the past year has been larger among authorities upon which town planning is not compulsory; this voluntary submission surely indicates an extension of the spirit, and was probably due in some degree to the operation of regional committees, the rural authorities being as urban of which were urged to pass the motions. But he was afraid here there was a danger of "Fainté" schemes. Would such schemes ever come to fruition? They could work and pray for the extension of the town-planning spirit to inspire these rural areas and especially their councils.

In addition to this normal town planning, there was also the sphere of regional work which had so widely extended its influence in the past few years. Here it was a question of the influence of the effect produced. Sometimes it was inclined to feel that it would be well

if the main lines of a regional plan could be embodied in a special Act or if a regional scheme (apart from a joint town-planning scheme) were made possible under amended legislation; for sooner or later regional rating would be found essential for complete realisation.

Then there is the development plan, including as it did the replanning of built-upon areas, a subject which they had specially set aside for discussion during this session. How many towns really possessed a plan or a policy of growth? How many had settled what was to be done with their slum areas when they were cleared—what ultimate density for their population they were going to aim at; what was to be their zoning aim? At best many of them had not gone beyond a road plan. There was scope for the whole of the brains of the Institute to be let loose on their industrial towns for the next few years.

While they were extending their dominions, there was a danger that they might be losing ground where they thought that town-planning influence was completely entrenched. He meant in the site planning of residential areas. Not, perhaps, so much in actual planning, although some faint echoes of the by-law suburb were to be heard in the land, as in the make-up and width of streets. One of the spectacular triumphs of town planning in the past was the break-up of the standardised road. Highway committees had looked on sourly at the laudable efforts of housing committees to cheapen municipal schemes, and now, when private enterprise was returning and the private citizen was inclined to buy his own house and was forced to make his own road in front of it, they saw a chance of returning to the old expensive standards. The spirit of town planning must re-assert its dominion over this ground if it was in danger of being lost.

These were the recognised haunts of the spirit of town planning, and many would say that there was ample scope for an extension of their influence within this established periphery. But just as Churches felt impelled to missionise abroad before they had wholly converted their native inhabitants, so should the Institute aim at shedding its beneficent light ever further afield. But for what did this spirit, when disengaged from its bodily envelope of technical town planning, stand? It was not merely having a plan based upon the requirements of a programme. It was with them not only a plan, but an organic plan. The town planner, unless he envisaged growth, was lost—his scheme must possess an élan vital or it was still-born. The essential quality of such growth was clearly harmony, which alone distinguished growth according to plan from haphazard accretion. A programme of requirements upon which was based an organic plan leading to a process of harmonious development—all this was included in the expression "The Town-Planning Spirit."

Could it usefully be extended to new spheres? What of industrial planning? The arrangement of the factory proper was surely the last word in economy and local efficiency; but in the case of one of these industries which, like town planning, could only gradually realise their full stature, did they always see this adherence to a far-seeing plan? Was there not sometimes apparent a sort of hand-to-mouth slap-dash haphazard? The detailed planning of industrial zones was one of the gravest problems before town planners to-day. What was required was first a collection of data of factory and warehouse requirements, and then an exhaustive research into their existing and possible combinations. Had anything been done since Mr. Gaunt read his paper with its wealth of suggestion based upon his unique experience at Trafford Park and Letchworth?

There was next the consideration of harmony in street design. They could watch any day in Regent-street a group of architects—some of the foremost in this country—performing a series of acrobatic tricks in stone, each attempt-

ing to outdo the other with an ingenuity and verve worthy of a better cause. No music-hall audience would tolerate for a moment an individualistic display of so many mutually destructive artists, appearing simultaneously. Complete harmony and ensemble playing was required by the public in its amusements. In the Middle Ages, at the Renaissance, and when Nash planned Regent-street, there was a kind of natural feeling for harmonious design. Examine the picturesque towns of Belgium or South Germany, and they would find the points of emphasis were unerringly made by gable or tower, just as they were later by formal pediment or monumental arch. There was no such rightness about much of the modern effort—the buildings might for the most part have been equally well designed for anywhere else. What was the explanation? It could only be that the modern architect and his public had yet to be inoculated with the spirit (or should he say bacillus?) of civic design. The architect (*pur sang*) had not yet advanced beyond the stage of social development of the speculative builder of 40 years ago, who used to lay out his own building plot with sublime unconcern for that of his neighbour. It was the æsthetic result which was paramount here; yet on mere economic grounds was not associated design an advantage? Each single building appeared to need the emphasis of giant columns, sculptured bands, recessed fronts and corner domes in order to make it hold its own in the general uproar. He asserted, however, that Nash and his associates' lower buildings in humble stucco, cream painted, produced quietly a more imposing effect by reason of the continuity of his street picture and the sparing use of points of emphasis. The modern spirit of civic design did not in any sense demand a prescribed and hard uniformity; it was a spontaneous social co-ordination that they wanted allowing play to human interests, and not the regimented subservience of aristocratic control visible in the Rue de Rivoli.

The countryside was an even more pressing problem. After all, their towns were already mostly ugly; but the country was still beautiful and was therefore in greater danger. What they lack here was any system at all of landscape design, not as applied to open spaces and parks (a comparatively easy matter), but to the ordinary countryside in which change was taking place. It ought to be and was possible for a stretch of country to absorb a large amount of building without losing its natural character, or at any rate without destroying its beauty, though its character might be modified. Where could they turn for any guidance in this matter?

Now the Chinese long ago reduced this development of landscape to a definite system of æsthetics known as Feng Shui. This had been described as the science of "adapting the residence of the living and the dead so as to co-operate and harmonise with the local currents of the cosmic breath." It was thus lifted on to the highest plane; it is related on the one hand to the Chinese pre-occupation with the fact that man is merely a temporarily detached and animated fragment of the earth, soon to return to it; and, on the other, to their intense veneration for natural scenery and especially lofty mountains. The word Feng Shui actually meant Windwater, for it was considered (and justly) that the ultimate forms assumed by mountains and valleys was the outcome of the moulding influence of wind and water; but this notion had been immensely amplified so that "at every place there are special topographical features (natural or artificial) which indicate or modify the universal spiritual breath." Thus the alterations of natural forms by human intrusions had a good or bad effect according to the new forms produced. Infringements of these rules or neglect of their study are punished sometimes by Nature, other times by man. Water, the archetype of humility, because it always sought the lowest place, would resent interference with its natural bent, and as the humble could lose their tempers, it would rage forth from confinement, as happened so disastrously at Dolgarrog. What would be the Chinese moralisation to be

drawn from this? That in establishing a village at the bottom of the valley and in the very pathway of the water, the projectors had given insufficient study to Feng Shui, or wind-water. This mistake could never have been made in China. The professor of Feng Shui, whose job it was to study and expound the forms which the spiritual forces of nature had produced and to prescribe the ways in which all buildings, roads, bridges, canals, and railways must conform to them was in a stronger position than the English town planner. He had the people behind him—they had to persuade the people to back them up. But whether they based their aesthetic upon Chinese premises or not, there was need for them to give much more study to this rural development problem than they had done in the past. Their maturely developed countryside was in many places undergoing a sudden change; many causes have been at work, such as the ceaseless efforts of propagandists towards industrial and residential decentralisation; the desire of the family man to own a small house and garden; and the return to the road method of population distribution after three-quarters of a century of railway travel. However much the decentralisationists were satisfied to see the satellite village and suburb springing up everywhere, the sociologist and town planner realised that they had been caught unawares. Vast areas of the countryside were being colonised with little more rationale of social grouping or economies of estate development or aesthetics of country planning than existed during the industrial revolution of last century. The Town-Planning Acts only partially helped; the restriction of density of houses, that potent engine of urban reform, was of no avail here—houses were too loose rather than too dense; the submission of plans of estate development was not of much use when it was only a question of stringing bungalows and cottages along the frontages of existing roads. The restriction of wide areas to agriculture and the stimulation of building activity at chosen spots would seem to be the things to do, but how to do them was another matter. Where the country change was due to some local natural cause, such as the discovery of coal or ironstone, the practical aspect of the problem became more defined, and, they trust, is capable of solution under regional planning.

Finally, there was one department in which, fortunately, the town-planning spirit had been long at home, but not sufficiently occupied—he alluded to the preparation of the programme of requirements for a town or region—in other words, a Civic Survey. Before the town-planning spirit had breathed life into it this was a dead corpse of statistical matter. It was Professor Geddes who saw that they must appeal to the eye as well as to the mind, and that the pictorial appeal was much quicker than the written word. And that by reason of this swiftness of assimilation it was possible to compare different aspects of civic or country life which formerly had been held apart by impenetrable partitions. There was no need to labour this field for their energies. Map-maker was first cousin to plan-maker, and it was essential that the man who was to make the plan of growth should have a hand or say in the maps that were prepared to show existing conditions. A number of these Civic Surveys had been prepared and published. The latest to appear in book form had just arrived from Dublin, prepared by Mr. Horace O'Rourke. This was a splendid volume, a noble result of town-planning effort directed to this end. Would that their other capital cities—London and Edinburgh—possessed similar surveys available to every citizen!

SIR R. PAGE proposed a vote of thanks to the President, and pointed out that there was need to impress on the public that nearly all the evils in life—slums, housing shortage, destruction of amenities and inconvenience of daily travel—were due to failing to town plan in the past.

MR. M. HARRIS seconded the motion and it was carried.

MR. C. C. READE gave some details of the steps being taken in the Malay States to provide for town planning, and emphasised the point of how important it is that town planning should be developed in the Dominions overseas.

DISPUTABLE BUILDING CONTRACTS.

On November 12, at the University, Sheffield, Captain W. T. Creswell, Barrister-at-Law, read a paper on "Disputable Building Contracts" to the Sheffield, South Yorkshire and District Society of Architects and Surveyors. The President of the Society, Mr. H. L. Paterson, F.R.I.B.A., was in the chair.

At the outset Captain Creswell referred to the fact that he had been privileged to read a paper to the Society on "Land Values" in 1910, and that it was his desire to bring out in his paper those points which appeared to him, from his experience gained whilst practising in the profession of an architect and surveyor and in recent years at the Bar, would be of service to his listeners. In defining the terms building agreement and building contract it was shown that they have the same legal significance. The contract between the employer and the architect or surveyor is a personal contract. The latter should be careful to put himself in a position to prove the existence of a contract; and to know, when a contract should be in writing and sealed, how and when contracts can be verbally varied, and what is sufficient release or discharge. Dealing with contracts under seal, and with public bodies and corporations, opportunity was taken to refer to the case of *Nixon v. Erith Urban District Council* (1924, 1 K.B. 87), and to compare the decision given therein with the case of *Lawford v. Billericay Rural District Council* (1903, 1 K.B. 772). Reference was also made to the case of *Piggott v. Wandsworth Borough Council* (1924) in dealing with the architect's remuneration.

The duties of an architect and surveyor comprised the preparation of plans and superintendence of work to conclusion. To prepare plans and specifications merely constituted him a draughtsman; but authority to obtain tenders constituted him an agent, with all its attendant liabilities. Such authority, however, did not authorise him to enter into a contract on the employer's behalf, even if the tender received is within the approximate estimate or the amount the employer is prepared to pay.

The remuneration of the architect and surveyor depended on a contract to pay what is reasonable; and in the absence of any agreement only what is reasonable can be recovered.

The ownership of plans was settled by the case of *Gibbon v. Pease* (1905, 1 K.B. 810). In the absence of any agreement they were the property of the employer, though the architect and surveyor still retained the copyright in them.

A person appointed to value is not an arbitrator. A valuer used his skill and knowledge only; an arbitrator acted in a judicial capacity. If an architect or surveyor acted as a valuer and appraised property, real and personal, and receives fees, he must hold a licence.

The power of the architect and surveyor to designate persons as sub-contractors depended entirely on the terms of the contract between the employer and the general contractor for the works. Without the consent of his employer, conditions of the building contract could not be waived or varied. An act to be within the scope of the architect and surveyor's authority must be an apparently necessary one. There is no implied authority that he could order extras or, unless the contract so provided, deviate from the work originally intended. Variations ordered must not completely change the character of the work contracted for. Even when the employer consented to alterations he was entitled to know the cost.

An "estimate" given as an "offer" had been held to be binding. Errors in tenders led to difficulties and were best adjusted at the commencement of the work. Fraud on the part of an employer or his agent rendered the employer liable to the contractor.

When the general contractor had contracted not to sublet, the employer might reject any sub-contractor, though the contract between the sub-contractor and the general contractor was still binding. Liability of payment to sub-contractors was specially dealt with, and the

cases bearing thereon, especially that of *Horton v. Glamorgan County Council* (1915, 1 L.T. 112), which placed the liability with general contractor.

Supervision and approval of work during execution was touched upon. No one has the approval of work could be over-exact, capricious, but must act in a *bona fide* manner. The architect and surveyor was usually the one to approve the work, and he must act initially and independently between the contractor and the employer. When his approval made a condition precedent to payment he was in the position of a quasi-arbitrator.

Disputes arising out of delay in completion of the contract, and the meaning of penalties distinguished from liquidated damages, were considered, together with matters arising out of the inclusion of the "defects and maintenance clause—power as to 'retention monies,' &c."

The granting of "progress," "completion" and "final" certificates was perhaps the important function of the architect and surveyor. It was a personal charge and they be given by himself, though another might assist him in taking measurements, &c. "Progress" certificates were not conclusive. The "completion" certificates marked an important stage, and should always be given. The "final" certificate was, as its name implied, final, and not be questioned for inaccuracy, negligence or set aside, except in special circumstances, as for fraud or collusion or for capriciousness holding it. The finality of a certificate, however, be destroyed, as was the case in *Robins v. Goddard* (1905, 1 K.B. 294). Disputes would arise, however good the contract, the necessity for the inclusion of the architect's claim was emphasised—a claim was understandable and not so altered by other clauses in the contract. It was made impossible for a lawyer to interpret Under its provisions the review of the architect's final certificate if given amidst a dispute was made possible.

MR. F. J. O. CODDINGTON, Barrister-at-Law, proposed a vote of thanks, which was seconded by Mr. F. E. P. Edwards, F.R.I.B.A., Architect; Major C. B. Flockton, F.R.I.B.A., and others joining in the discussion.

THE WEEK IN PARLIAMENT

In reply to Captain Bowyer, Sir K. Wood said that on November 1 the number under the Housing Acts of 1923 and 1924 was as follows:—

	Act of 1923.
(1) No. of houses completed	116,811 ..
(2) No. of houses under construction	42,601 ..
(3) No. of houses definitely arranged for but not started	29,840 ..
(4) No. of houses authorised but not definitely arranged for	49,036 ..
Total	238,288 ..

Sir K. Wood informed Mr. T. Thomson that the total number of houses erected with assistance since the war was 344,274, of which 212,458 had been built by local authorities, 131,816 by private enterprise. The number of houses completed under the various Housing Acts up to November 1, 1925, was:—

	No. of Houses Completed	
	Local Authorities.	Private Enterprise.
Housing, Town Planning, &c., Act, 1919 ..	168,610 ..	4,545 ..
Housing (Additional Powers) Act, 1919 ..	— ..	39,186 ..
Housing, &c., 1923 Act ..	28,848 ..	87,963 ..
Housing (Financial Provisions), 1924 Act ..	15,000 ..	122 ..
Total ..	212,458 ..	131,816 ..

CHITECTS' & BUILDERS' INQUIRY BUREAU

am glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on matters.

be appeal to our correspondents to submit their questions on paper of a size easily filed, and written as far as possible, or, better still, in typewriting!—ED.

Roads.

—Some time ago I connected a house to a main sewer and had to cross the road. I had a contract with the Council to keep the road in good repair for twelve years and take all responsibility for any accidents. A few weeks after completing my job the trench had settled a little, so I sent down to fill it in. On arrival he found the men already there with the steam-roller. He has now sent me in an account for 12s. 6d. for the same. Am I liable?

CONTRACTOR.

Treatment of Dairy Floors.

[REPLY TO "DAIRIES," OCTOBER 16.]

—I would suggest a hard red granolithic floor topping laid $\frac{1}{2}$ in. thick on a good concrete bed. A floor of this description will successfully withstand the normal working conditions of a dairy floor, and at the same time is not affected by lactic acid, whilst it is both proof and greaseproof.

E. C. MATTHEWS.

By-Law Questions.

[REPLY TO "DURBAN," NOVEMBER 6.]

—(1) *a* and *b*: I believe I am correct in saying "Yes." *c* and *d*: Depends entirely on the class of goods to be stored or made. (2) The party walls must be at least 8 in. thick of brick or similar approved incombustible material. (3) 8 in. brick or similar approved material. (4) A building "not a dwelling" and not of the warehouse class." (5) But consider the effect upon insurance. (6) If the ground floor of a store, certain goods stored would be excluded. All the above is modified by the extent to which the local authority avails itself of powers to relax bye-laws for housing schemes. Q.

Pickling Paint off Woodwork.

—I have some old woodwork which has been painted with many coats of paint that the more delicate of the mouldings have become filled up. I should be glad if anyone would suggest a method of getting rid of the whole of the paint, leaving the wood as clean as new.

OLD DEAL.

Size of Radiators.

—I am obliged to "Data" for his letter in your last issue with reference to this question, and with give the further information he has given. (1) Window area, approximately 100 sq. ft. (2) boiler in kitchen adjoining room, level, about 14 ft. direct run to position of radiator; (3) gas fire, 16 in.

A COMFORT.

Condensation.

—A kitchen and scullery with painted walls suffer from condensation to an extraordinary extent—the drips fall on to the gas stove, the maids, the food, and everything else. Windows are kept fairly well open, and there are ventilating gratings near the ceiling. Can you suggest anything that can be done to remedy the defect?

H. W. FINN.

Internal Finish to Exposed Walls.

[REPLY TO "SUBSCRIBER," OCTOBER 30.]

—Your correspondent says, "No cement plaster can be expected to have a long life if it is allowed to become more or less permanently damp." May I be allowed to point out that this does not apply to all cements.

A. H. G. B.

Hospital Windows.

SIR,—Is there a special glass on the market that allows the ultra violet rays to penetrate? Has such a glass been used in any hospitals in this country?

T-SQUARE.

Height of Adjoining Chimneys.

[REPLY TO "W. & D.," NOVEMBER 13.]

SIR,—If the outside side walls of the buildings are to become party walls when the new building is erected, the carrying up of the chimneys embodied in these walls would be stipulated in the party wall award. In other case, the new building owner would be liable for an action for damages for any nuisance caused by the new works, including smoky chimneys, and it would be advisable to obtain permission to raise the neighbour's chimneys to the required height rather than wait for such an action. Such permission should be readily obtained, or if refused, would probably be taken to absolve from subsequent action.

NEIGHBOUR.

Circular-Headed Door Frame.

[REPLY TO "QUERIST," NOVEMBER 13.]

SIR,—It is more usual and effective to "splice" the joints between the parts from which the frame is built up, and to do so in jagged form so that the break in the grain is less obvious.

JOINER.

The method illustrated is, I believe, now adopted, but mostly on second-rate jobs. For first-class work I should always use the older and better mode of construction—viz., keys and wedges—unless the architect specifies otherwise.

OLD CHOPSTICK.

Responsibility for Drainage Work.

[REPLY TO "DRAINS," NOVEMBER 13.]

SIR,—Your correspondent's letter does not give a very clear idea of the actual state of affairs. If the cess pit in the first place was a temporary measure pending the installation of a ready-planned main drainage scheme, then it was the duty of whoever was responsible for supervising the original construction of the house to obtain particulars of the drainage scheme as to levels and runs, so that the arrangements might be suitable for connecting up when the time came. If, however, the main drainage scheme is a late addition that was not under consideration at the time the house was built, then his client cannot be called upon to connect to a new sewer that is at too high a level to serve the property. There appears to have been lax supervision to allow work to begin before levels had been taken. The estate surveyor could have given levels at any point if applied to, and it would appear that this information had not been sought. I do not think the estate could be called upon to pay for work undertaken under these circumstances. Is there a separate sewer for surface water and sewage? If not, it appears that the house drainage already finds its outfall into a main sewer, and by a lucky mistake might remain as it is R. P.

SIR,—Under Section 21 of the Public Health Act, 1875, the owner or occupier of any premises within the district of a local authority has a right to drain into the sewers of that authority under certain conditions. The right, as regards the admission of domestic drainage, is absolute. Section 23 of the Act gives power to the local authority to enforce the drainage of undrained houses, provided there is a sewer under the control of the authority not more than 100 ft. from the site of such house. If Section 38 of the Public Health Acts Amendment Act, 1907, is in force, the local authority may cause a drain that is proposed to be connected to be opened up for inspection and examination, and no communication may be made with the sewer until the surveyor certifies that it may be properly made.

Section 23 of the Public Health Act of 1875 does not enable the authority to require alteration of the system of drainage to a house, or to abolish a cesspool, and drain into a sewer if the system of drainage is "sufficient" in itself, and at the cost of the owner or occupier. If the authority is seeking to make a complete new scheme of drainage, it must bear the expense itself. Under Section 24 of the Act, a drain communicating with a sewer, though sufficient in itself but not adapted to the general sewerage system of the district, may be closed, the local authority bearing the expense of providing a new drain. "Drains" would appear to have been unfortunate enough in carrying out his project to connect to the sewer at the back and in finding insufficient fall; and if Section 38 of the Public Health Acts Amendment Acts 1907, is in force, it does appear that since no communication of a drain to a sewer can be made "until the surveyor certifies that it may be properly made" there was an obligation on the part of the authority to certify. Failing to do so it (the authority) should in equity bear the expense caused to "Drains"; but "Drains" has no legal remedy against the authority to enforce the claim.

As to the work now proposed, querist's client, unless he can show "sufficient" drainage existing, would appear to be in the position that he must connect with the sewer if it is within 100 ft. and at his own expense.

DRAINS.

Replies have been sent direct to inquiries for :—

Address of Manufacturers at Stourport; Suppliers of Pyrol Paint Remover; Address of Concrete Firm; Steel Houses to U.S.A.; Damp-proof Material.

Information Wanted.—We shall be glad if any reader can give us the names of the makers of: (1) Flat, rough, porous tiles, size about 12 by 16 by $\frac{3}{4}$ in. thick; (2) "Durex" distemper; (3) "Key" Cement.

WAR MEMORIALS

Cardiff.

The Cardiff War Memorial Committee have sent a communication to the Cardiff Parks Committee stating that they have agreed to the erection of the proposed national memorial in Alexandra Gardens.

Dragoon Guards.

A memorial has been unveiled in the south-west transept of Canterbury Cathedral to the men of the 6th Dragoon Guards who fell in the war. It is of marble with two side panels of white onyx and an inlaid panel in lapis lazuli, and surmounted by a horseman in bronze. Beneath is a chamber containing an illuminated book in which are inscribed the names of 200 Guards. The memorial was designed by Mr. Darcy Braddell, and Mr. Esmond Buxton was the sculptor.

Carnoustie.

The local war memorial has been unveiled. Designed by Mr. Thomas Beattie, sculptor, of Edinburgh, it consists of a semi-circular wall, with end piers and central pedestal, upon the latter of which is a 9 ft. figure of a Black Watch soldier.

Drogheda.

A memorial unveiled recently at Drogheda is in St. Mary's-square. It is in the form of a 16 ft. white limestone Celtic cross with bronze panels.

Houghton.

A memorial executed by Mr. F. Doyle Jones, of Chelsea, has been unveiled at Houghton-le-Spring, Durham. It is in the shape of a 20 ft. cenotaph, with the figures of a soldier and a sailor in relief, and surmounted by a St. Cuthbert's cross.

Warrington.

A monolith designed by the borough surveyor, Mr. A. M. Ker, has been unveiled at the foot of the Mersey Bridge to the 1,132 Warringtonians who fell in the war.

THE BUILDING TRADE

THE NEW PUBLIC HEALTH ACT, 1925—III

PART III OF THE ACT.

Sanitary Provisions.

This Part of the Act is also adoptive, with the limitations already explained.

Drains.

Section 36 amends section 25 of the Public Health Act, 1875, in respect of the penalties incurred by a person who has constructed the drains of a house in contravention of that section. On conviction the Court may in addition to or in lieu of the penalties imposed under section 25, order that the drain be re-laid or amended by the person convicted of the offence and on failure to comply with this order the local authority may do the work and recover the expenses as a civil debt from the person guilty of the offence.

Section 37 requires a little explanation. It enacts, "The local authority may, if they think fit, by agreement with and at the expense of any person owning or occupying premises abutting on any street, not being a highway reparable by the inhabitants at large, lay down, take up or relay or renew in across or along the street such drains as may be requisite or proper for connecting the premises with any sewer which has been laid in the street doing as little damage as may be and making compensation for any damage done by them." This section, as is stated in the Memorandum, is directed to deal with a question raised by the decision in *Wood v. Ealing Tenants, Ltd.* (1907, 2 K.B. 390; *The Builder*, August 17, 1907). By section 21 of the Public Health Act, 1875, owners and occupiers of premises within the district are entitled to cause drains to empty into sewers of the local authority. In *Wood's* case, at the foot of the plaintiff's premises was a passage owned by the defendants in which was a "sewer," as the pipe in question drained several houses all in the possession of the defendants and thus maintainable by the local authority. The local authority at the request of the plaintiff had connected his drains from the end of his garden with this sewer by placing a connecting pipe in the passage. The defendant had removed this connection and the plaintiff brought an action for trespass, but the Court held his action failed because neither the plaintiff nor the local authority had any right to lay a connection on private land and this sewer was not laid on land by the local authority for which they had paid compensation.

This section appears curiously worded in that it hardly suggests the conference on the local authority of a definite right hitherto withheld by the law.

Section 38, which we refer to below, it should first be noticed, amplifies the provisions contained in section 18 of the Public Health Acts (Amendment) Act, 1890, and repeals that section as respects any area in which this section comes into force. It also supplements section 21 of the Public Health Act, 1875.

Under section 21 of the latter Act where an owner or occupier desired to connect his drains with a sewer of the local authority it was provided that the connection should be made "subject to the control of any person who is appointed by the authority to superintend the making of such communications," and under section 18 of the above Act of 1890, the local authority may do the work themselves if requested by the owner or occupier.

Section 38 empowers the local authority in lieu of appointing a person under section 21 of the Public Health Act, 1875, and without the previous request of the owner or occupier, to do the work themselves, and it also alters the provisions as to the costs of the expenditure incurred from those prescribed in section 18 of the Act of 1890.

By subsection (2) before any work is executed,

the cost or estimated cost shall be paid to the local authority or security be given for the payment of the same. By subsection (3) any excess shall be repaid by the local authority whilst by subsection (4) if there proves to be a deficit it may be recovered by the local authority summarily as a civil debt. Subsection (5) merely repeals subsection (3) of the Act of 1890.

Section 39 needs no special notice here. It is one of the sections not adoptive by rural councils, and it requires notice to be given to the urban authority of the intention of any person to reconstruct or alter drains communicating with sewers or cesspools except in cases of emergency, when special conditions are applied.

Section 40 provides that in any street not reparable by the inhabitants at large, if the local authority for the purposes of main drainage or otherwise require a larger sewer to be made than could lawfully be required under any enactment relating to private street works the person by whom the sewer is made shall construct the enlarged sewer, but the additional cost as certified by the surveyor, or in case of dispute as determined by a petty sessional court shall be paid to such person by the local authority.

The Memorandum contains an important note on this section, stating that it does not refer to cases where notices to pave and make-up private streets have been given by the local authority, and in default of compliance the local authority is doing the work, for in such cases it has already been decided in the case *Acton Urban District Council v. Watts* (67 J.P. 400) that the local authority may construct a sewer larger than is necessary in connection with the works required so long as the extra cost does not fall upon the frontagers, but this section applies to a case where an owner intends to construct a sewer before any notices to make-up the private street have been given.

Section 41 imposes a penalty on any person who wilfully or negligently allows petroleum to enter any sewer or drain communicating with a sewer.

Section 42 extends the provisions of section 36 of the Public Health Act, 1875, as to the provisions of "sufficient" water closets by providing that if the surveyor reports that the soil-pipe in connection with a watercloset is not properly ventilated, that closet shall not be deemed "sufficient" within the provisions of section 36.

We need not notice section 43, which relates to nuisances in tents, vans, &c., but may pass to the last section in Part III, section 44, which relates to—

Obnoxious Trades.

This is a section not adoptive by urban councils where the population is less than 20,000 without the consent of the Minister, and not adoptive by rural councils. It is directed to defining what is the "establishment" of an offensive trade within the Public Health Acts, 1875, to 1907.

We can pass over Part IV of the Act which relates to verminous premises. It is adoptive.

PART V OF THE ACT.

Watercourses and Streams.

This Part of the Act is also adoptive.

Section 51 enables urban authorities to require watercourses or ditches on any land laid out for building, or on which such land abuts, which in the opinion of the urban authority require to be wholly or partially filled up or covered, to have such works executed, before the building operations are begun, in connection with them by the owner, as may be necessary for effecting the objects aforesaid, "or for substituting for

the watercourse or ditch a pipe, drain or with all necessary gullies, pipes and means for conveying surface water through the land. There is a penalty for non-compliance.

Subsection (3), however, enacts that in this section shall authorise an urban authority to require the execution of works upon land of any person, other than the owner of the land laid out for building, with the consent of that person, or prejudicially to the rights of any person not being the owner of the land so laid out.

Section 52 provides that it shall not be within an urban district to culvert or cover any stream or watercourse except in accordance with plans and sections to be approved by the urban authority within six weeks after plans and sections have been submitted. Absence of approval within six weeks is consent. Subsection (2) however, provides that no requirement of the urban authority as to plans and sections shall oblige or compel any owner to receive upon his land to make provision for the passage of a quantity of water than he would have been obliged to receive or to permit to pass in this section.

Subsection (3) is curiously worded as follows: "If, with the consent of the owner of the land, the urban authority shall require the owner to make provision for the passage of a larger quantity of water than he is obliged to permit at the time of the commencement of the works under this section, any additional cost occasioned by such requirement shall be borne by the owner of the land."

By subsection (4), any difference arising from the expediency or necessity of the works may be determined by a petty sessional court. Subsection (5) imposes a penalty for breach of the provisions contained in this section.

Section 53 requires owners and occupiers of urban districts to repair maintain and keep in good order culverts and failing compliance with the provisions of the Act the urban authority can do the work and recover the expenses summarily as a civil debt.

By section 54 subsection (1) a watercourse within an urban area which is so choked up as to obstruct or impede the proper flow of water along the same and thereby to render probable an overflow of the water on to land and property adjacent to the watercourse or to hinder the usual effectual discharge of water through the same is to be deemed a nuisance within the meaning of section 36 of the Public Health Act, 1875. It is, however, provided that "Nothing in this section shall be deemed to impose any liability on any person other than the person by whose act or omission the nuisance arises or continues."

Subsection (2) excepts from the operation of this section parts of watercourses navigated by vessels employed in the carriage of goods by water. The memorandum of the Ministry points out that section 94 of the Public Health Act, 1875, under which notices of nuisance are given provides that if the nuisance by whose act default or sufferance the nuisance has arisen or been continued cannot be removed then the notice can be served on the owner or occupier of the premises. The above provision will not enable the notices under this section to be served on anyone except the person by whose act, default or sufferance the nuisance arises. When the person guilty of occasional nuisance cannot be found, the memorandum suggests that possibly the following subsection shall notice (section 55) would enable the urban authority to do the work themselves and recover the expenses from the owners or occupiers.

Section 55 enacts, "an urban authority may if they think fit contribute the whole or part of the expenses of the execution of works for the purposes mentioned in this part of the Act by agreement with owners or occupiers themselves execute any such works or borrow, subject to the provisions of the Act."

Acts 1875 to 1907 the amount of any
nt under this section.

section concludes Part V of the Act. but
section with the above provisions it is
ry to revert to sections 11 and 12.

on 11 provides, "Nothing in this Act
ejudice or affect the powers of any railway
y or the owners trustees or conservators,
under powers conferred by Parliament,
anal, inland navigation, dock or hartour
any enactment to culvert or cover any
or watercourse, or shall extend to any
or covering of a stream or watercourse
cted by a railway company, or by such
persons, and used for the purposes of the
canal, inland navigation, dock or
unless the consent of such company or
is obtained by the local authority."

on 12 enacts that the powers conferred by
of this Act shall not, without the written
of the London County Council, be exer-
with respect to any stream, watercourse,
or culvert vested in that Council by the
olis Management Act, 1855.

ARTS VI AND VII OF THE ACT.

ne Parts of the Act are not adoptive.
I relates to Recreation Grounds. Part
Infectious Diseases and Hospitals, and
d not refer to them here. The provisions
ry to the subjects we have touched upon
ed in Part VIII, which is not adoptive,
e already referred to, and Part IX, Baths
ashhouses, lies outside the scope of this
as we have strictly confined our observa-
those sections which we consider will be
rest to our readers.

ion 83, "for removing doubts," declares
re purposes mentioned in section 154 of
blic Health Act, 1875, which relates to
urchase of premises for the widening,
g, enlarging or otherwise improving any
or making a new street, include the
ement and development of frontages or
lands abutting on or adjacent to any

BOOK REVIEWS

te for House, Farm and Estate. By F.
ALLARD. (London: Crosby Lockwood
Son.) Price 7s. 6d.

author of this book is certainly an
iast for concrete, but few will agree with
hen he says "The stereotype system of
iron and brick, which is so often an
y partnership, must give way to con-
p. For some purposes concrete has no
but, costs being equal, we very much
whether English people will ever prefer
in concrete houses when brick is available.
ok such as this, of only 100 pages, printed
e type, we would suggest that the space
be used to more advantage by giving more
actional details and omitting some of the
tions; some of these, while excellent
raphs of rural scenery, do not help the
in search of information on how to build.

ing for Craftsmen. By W. G. SUTHER-
ND. The Decorating Arts Journals Co.,
d, 9, Albert-square, Manchester. Price
1s. net.

many years there has been a real need
book dealing with stencils and stencilling
ractical and workmanlike manner. This
w appeared. It is written and illustrated
G. Sutherland, and includes a chapter
at well-known exponent of the art of
ding, Mr. W. Davidson, and three pages
signs for Church work by Mr. E. Dinkel.
work is copiously illustrated, one page
in colours. The combination of letter-
and illustration covers practically every
of the subject. The book is more than one
craftsman—it is a book for the student
e master, for no one in search of inspira-
or suitable stencil treatment for any job
ook further. It is printed in clear type,
e illustrations are self-explanatory. The
forms a fitting companion to the "Sign-
s," published last year, which has proved
successful.

BUILDERS' BENEVOLENT INSTITUTION DINNER

THE seventy-third annual dinner of the
Builders' Benevolent Institution was held on
Thursday evening, November 12, at the Hotel
Victoria, the President, Mr. George J. Aldous,
M.C., A.I.O.B., occupying the chair. Among
those present were: Messrs. E. Guy Dawber,
P.R.I.B.A.; Ralph Knott; Robert Angell;
T. S. Darbyshire; Ernest J. Brown; Roland B.
Chessum; F. Higgs; J. Graham Mallett;
A. B. H. Colls; C. J. Trollope; A. B. Falkner;
G. Perry Nash; J. Chessum; R. A. Hinds;
W. Godson; F. A. Minter; C. J. Bennett;
Ben Carter; B. C. Aldous; T. Stirling; A.
Ritchie; G. H. Parker; R. L. Roberts; F. S.
Corby; Edward Corderoy; John T. Bolding;
C. Hamilton; F. T. Dear; R. J. Troup; A. F.
Vigor; F. T. Ingram; Chas. Laurence; W. W.
Lawrence; and many others.

The loyal toasts having been honoured,

Mr. A. B. H. Colls, proposing the toast of
"The Builders' Benevolent Institution and
its President," said that all who were in that
room fully realised the noble work that was
being carried on by the Institution. There was
no institution in the country performing a more
humane or more useful work. Though the
pensions that they were able to award were
small, they meant to their recipients all the
difference between comparative comfort and
penury. They enabled pensioners who were
living with relatives at least to contribute their
portion to the family exchequer. There was one
criticism that he had to make, and that was that
the Institution was not so well supported by
builders as it should be. He saw around him
many loyal friends of the Institution, but by
no means all of those who ought to be there.
They wanted to increase their income. If every
member of the Master Builders' Association
would contribute a guinea to the funds,
that would mean a sum of 350 guineas. There
was no more deserving cause than that of
relieving the burden of those who had suffered
misfortune, and he hoped that this appeal for
support would not fall on deaf ears. When, he
continued, he heard, as a member of the Com-
mittee, that Mr. Aldous had consented to
accept the Presidency of the Institution, he
and the other members were very pleased.
Mr. Aldous was a rising young man in the
building trade, being managing director of
Messrs. F. & H. F. Higgs, one of the most
respected firms in the industry. Mr. Higgs,
whom he was very glad to see present, was
himself a past-President, and had done yeoman
service for the Institution. Mr. Aldous had not
missed a single committee meeting, and had
personally investigated many claims to pension
in his own time.

The President, in responding, said he felt
honoured to occupy a chair that had been filled
by many senior to himself in years and experi-
ence. He had been generously supported, and
was pleased to say the contributions to the funds
amounted to something in the neighbourhood
of fifteen hundred pounds. He would like to
refer to the great loss the Institution had sus-
tained by the retirement, through ill-health, of
Mr. Frank May, who had occupied the office of
Treasurer for eighteen years. Mr. May had
been an unfailing attendant at Committees,
and had always given them the benefit of his
experience and advice. They all hoped that he
would be speedily restored to health. They had
been fortunate enough to persuade Mr. Archie
Colls to undertake the duties of Treasurer, and
they all felt that the funds of the Institution
could not be in better hands. Having observed
that they were honoured by the presence that
evening of Mr. Guy Dawber, P.R.I.B.A., the
President referred to the negotiations which had
taken place between their Institution and the
Architects' Benevolent Institution, with a view
to the taking out of builders' insurances through
the latter body (which also acted as an insurance
agency), and dividing the resulting commissions
between the two institutions, thus materially
increasing the income of two very deserving

charities. They had recommended the scheme
for acceptance, but the Master Builders' Associa-
tion had decided that they could not recommend
it to the rank and file of their members. It had
therefore been dropped for the present, but he
hoped that, at some future time, something
of the sort would be adopted. The President
then gave a detailed account of the history of
three of the Institution's pensioners in order
that his hearers might know something of the
type of man they were supporting. The three
cases were all those of master builders who
were at one time in a large way of business, but
who had fallen on evil days through no fault
of their own. It was a real pleasure, said the
President, to know that the declining years of
these honourable men had been made, through
the Institution, free from care and want. There
could not be a more deserving charity for
builders to support than that of the Builders'
Benevolent Institution. Concluding, the Presi-
dent said that it was due to his uncle, Mr. F.
Higgs, that he was proposed for that office, and
he was glad to be able to follow in his uncle's
footsteps.

Mr. Roland B. Chessum, proposing the toast
of "The Architects and Surveyors," said
he had had that privilege on many occasions,
and it was no mean toast. He had had the
pleasure of knowing intimately some of Mr.
Dawber's predecessors, and recalled the name
of Mr. Paul Waterhouse, a man who had earned
widespread esteem and affection. He wished
Mr. Dawber a very successful term of office.
It was a relaxation, a pleasure, and a delight to
them to meet the architects and surveyors,
whose presence that evening was a sign of
sympathy with those of their number who fell
by the way and needed a helping hand. He
coupled with the toast the names of Mr. Guy
Dawber, P.R.I.B.A., and Mr. Graham Mallett,
F.S.I.

Mr. E. Guy Dawber, replying, thanked Mr.
Chessum for the sympathetic way in which
he had proposed the toast. During the course
of many years of practice he had met many
builders, and he numbered them among his best
friends. The builder was the corollary of the
architect. The architect might prepare the most
beautiful design on paper, but without the aid of
the builder he was absolutely powerless. Builders
often prepared and carried out designs them-
selves, but perhaps without such happy results
as when they worked with an architect. He
was glad to find the Institution in a flourishing
condition, though he could not but feel sorry
that the scheme of insurance which had been
worked out had not been allowed to come to
fruition. He hoped very much that ultimately
they would be able to give it a trial.

Mr. J. Graham Mallett replied for the Sur-
veyors.

At this point the President announced that
the total contributions amounted to
£1,517 1s. 6d.

Mr. G. Perry Nash proposed the toast of
"The Visitors," to which Capt. S. F. Corby
replied.

The final toast, "The Vice-Presidents,
Trustees, Committee and Stewards," was pro-
posed by Mr. A. B. Falkner and responded to
by Mr. John T. Bolding.

Staff Dinner.

The directors and management of Messrs.
James Keith & Blackman Co., Ltd., ven-
tilating, heating and lighting engineers, were
recently entertained by the staff of the head
office and London works of the company to
a dinner at the Connaught Rooms, Great Queen-
street, W.C. 2. Hosts and guests numbered 110,
and at the special request of the hosts the
chair was taken by Mr. T. W. Alsop (the chair-
man of the company), who was supported by
Mr. T. B. Callard (director), Mr. C. Tuson
(director), Mr. George Keith (managing director),
Mr. J. W. Hampshair (director and manager),
Mr. W. B. Richards (assistant manager), and
Mr. M. Burningham (secretary).



THE PUBLIC WORKS, ROADS AND TRANSPORT CONGRESS AND EXHIBITION

THE Congress and Exhibition opened yesterday at the Royal Agricultural Hall, Islington. The Congress consists of a series of debates on papers read by members of such institutions as the Associations of Local Authority, the British Waterworks Association, and the Institution of Municipal and County Engineers. We give below a brief summary of some of the papers contributed, and some notes on exhibits. The Exhibition closes on November 26.

Partial Purification of Sewage by Activated Sludge.

The object of this paper, which was by Mr. H. C. Whitehead, Assoc.M.Inst.C.E., Engineer to the Birmingham Tame and Rea District Drainage Board, was to bring before the Congress certain aspects of the manipulative problem of sewage purification, more particularly as regards the use of activated sludge for the partial purification of sewage. The problem as a whole might be divided into various operations, dependent upon the composition of the sewage and the mentality of the engineer or chemist. For the present purpose it would suffice to take the following simple sub-divisions:—(1) Removal of settleable solids; (2) removal of colloidal solids; (3) oxidation of dissolved impurities in the liquor; (4) treatment and disposal of resultant sludges. It was desirable that each of these operations be separately performed. Attempts to perform dual operations in a sub-division of a plant often led to loss of efficiency in one or other of the operations. It would be observed that an essential feature was the separate conditioning of the sludge employed for flocculation purposes. The economic efficiency of a bio-aeration plant was dependent upon a combination of biological and mechanical efficiencies. The mechanical operations necessary to the process were—(1) Mixing of sewage liquor and sludge; (2) aeration of the mixture; (3) propulsion of the mixture through the plant; (4) separation of the sludge from the effluent; (5) return of the sludge to the mixing-and-aeration tank. The power consumed in the first operation was relatively large, and probably exceeded 60 per cent. of the total consumption. Operations (3) and (4) demanded little power, and usually were met by available gravitation fall in the works. Operation (5) might be accurately estimated, and accounted for 5-10 per cent. of the whole consumption. The problem of aeration did not present the same difficulty as that of mixing. As the power required was so much smaller than the power required for mixing the allowable margin in efficiency might be greater; the usual mechanical means of aeration were surface disturbance. In conclusion, he said that it generally fell to the lot of an engineer in this country to enlarge an existing sewage disposal works, rather than to start *de novo*, and for this reason he trusted that his paper might be of some value to engineers faced with the commoner, and generally more difficult, problem.

Activated Sludge Experiments at Bradford.

Mr. J. A. Reddie, F.I.C., chief chemist of the Bradford sewage works, divided his remarks on this subject under two headings, viz. (1) Nitrogen losses in an activated sludge tank; and (2) Partial treatment of a strong sewage by activated sludge. Speaking on the former, he said that it might be of interest to some of the members of the Congress to record the results obtained in an experiment carried out with the object of obtaining some information as to the nitrogen gains and losses in an activated sludge tank dealing with a strong sewage. He illustrated this with four tables, finding that on all the forms of nitrogen the loss worked out at 18.60 per cent., or a retention of nitrogen of 81.4 per cent.

Referring to Part 2 of his paper, he said that the treatment of sewage by activated sludge

was generally regarded as a process complete in itself, and in the case of the majority of sewages it was only as a complete process that it could be economically considered. But in the case of strong sewages, which might contain abnormal amounts of difficult trade wastes, it seemed that it might usefully be considered and experimented with, as a partial process, either as a final method after a preliminary tank treatment, or as a preliminary to a high-rate filtration process. Experiments in this direction would always be justified in the case of a sewage having any abnormal features. The experience with Bradford sewage had been that it was impossible economically to produce by activated sludge in one operation a satisfactory final effluent, but when the question of further treatment was entered upon, it was found that an effluent such as this could be passed on to filters at a rate greatly in excess of the normal filtration rate of the Bradford tank effluent.

Sewage Disposal of Rural Areas.

Mr. W. H. Makepiece, F.Inst.S.E., the City Sewage Engineer for Stoke-on-Trent, dealt with this subject both from an engineering and economic aspect. He said that purely residential property was not in itself of sufficient value to carry (economically) a sewerage system and disposal plant unless the houses were very concentrated. This was rarely the case, and consequently the cost of large lengths of sewers in a rapidly growing residential rural area was very great. Instances occurred where the cost of the sewerage system was at least equal to one and a-half times, up to as much as three times the assessable value of the property it was intended to serve. Consequently, many necessary schemes of sewerage were held up, with consequent health disadvantages, because of the great financial cost involved in the form of rates to the occupier. It therefore seemed to be necessary that some revision should be made in the requirements and responsibilities of the community with regard to such cases. Groups of from 30 to 100 houses could be successfully treated by a de-centralised method of disposal rather than a centralised one. In many cases the size of the sewer was altogether unnecessarily large. The works were frequently constructed to deal with the whole of the sewage on the Ministry of Health's minimum requirements, without any apparent consideration as to the number of times in a year the maximum rate of flow was experienced. With more careful consideration in the design of drainage schemes on a de-centralised basis, it would often be the means of saving many thousands of pounds in rural areas, and the health advantages would not be any less than in the more comprehensive schemes. Decentralisation would do much towards improving these sanitary conditions, cheapen the cost of such schemes tremendously, and if supported by some national or county grant (which was now extended to such things as education of all sections, roads, and similar public services) would be the means still further of taking the town-dweller, with the present-day facilities of doing so, out into the country.

Sludge Disposal.

Mr. P. G. Lloyd, F.C.S., F.I.S.E., who is the manager of the Kingston Sewage Disposal Works dealt with the subject of sludge. He first outlined the existing methods of disposal, namely, depositing at sea, pressing, lagooning, burning, as a manure, or treating it chemically as in operation at Birmingham. Summarising the returns from 99 sewage works contained in the 1922 Proceedings of the Association of Managers of Sewage Disposal Works, one found that 67 used lagoons, 19 presses, 16 land and 3 trenching. From time to time efforts had been made to obtain by-products from sludges. The extraction of grease as carried out at Bradford, the sale of which had produced a considerable revenue, was applicable only to sewages that had a high

grease content. In 1915 costly experiments were carried out at Wimbledon by the Oils Syndicate for the extraction of oil and production of carbon from sludge, but these were disappointing, and nothing came of it. The lecturer had heard that experiments recently been carried out for the extraction of a by-product from sludge that had promising future. He was not at liberty to mention what the by-product was, but he informed that the promoters would be taking the output from several sewage works conveyance to a central depot for treatment, and although not in a position to pay for it, the municipalities would at any rate be relieved of further trouble. To the knowledge, however, of many sewage works, excellent results had been obtained by the use of sludge as a manure. What was required was cheap production in a convenient form above all, cheap transport. The whole must be conducted on commercial lines; useless to expect farmers and growers to take it as a duty; it remained, therefore, to sell in competition with other manures at a price that would tempt the user to give a trial. He had formed the opinion that the sludge problem was still with us, and means easy of solution. It remained for the works or process to determine their salvation.

THE EXHIBITS.

The Ransome Machinery Co., Ltd., Victoria-street, S.W.1, are showing in their tilting drum concrete mixers on Stand 5. They are made in three sizes, the Feather, the Lightweight, and the Welterweight, with output capacities per eight-hour day of approximately 14.5-16, 55-60, and 92-100 cubic yards respectively, so that they are suitable for small builder or the large contractor, and capable of dealing with every class of concrete work. Although strongly made, they are light in weight and, having large road wheels, are transported from place to place. Others include a hand-power moulding press, a Harvey concrete slab machine, a steel tilting wheelbarrow, and steel piling and plant.

The exhibit, on Stand 12, of the British forced Concrete Engineering Co., Ltd., Dickinson-street, Manchester, consists of a number of photographic enlargements illustrating road work in which B.R.C. fabric has been used. These photographs cover various types of road work taken from all parts of the country. The material exhibits include, of Fabric Number 9 and samples of the B.R.C. top and bottom reinforcement; a concrete slab showing the position of the fabric in the road; and an actual section of tarmac reinforced with the fabric taken from a road a few years ago. Another interesting feature of the exhibit is the showing, three times enlarged, of a film of the construction of fourteen B.R.C. roads at Tilbury.

Another interesting stand is that of the Liner Concrete Machinery Co., Ltd., of Glasgow Bridge, City-road, Newcastle-on-Tyne, showing their "A" type "Liner" concrete moulding machine. This is particularly suitable for the manufacture of flags, channel fence-posts, sewerage blocks, &c., and makers state that only one is required for all of a council's or corporation's needs. The "Liner" combination slab, block and channel machine is also on view, its name indicating various purposes. Last, but not least, show their patent "Semi-Dry" concrete machine which they claim effects a saving of 10 to 15 per cent.

On Stand 5 the Rawplug Co., Ltd., Gloucester House, Cromwell-road, S.W., showing a large variety of labour-saving devices, the foremost, of course, being the well-known Rawplug; the gripping power of this little appliance is being demonstrated throughout the day. The Rawplug bolt anchor deserves particular attention, as its functions are so many where the utility of the Rawplug ceases. Other exhibits include bathroom fittings, screws, liquid porcelain, Durofix and Dur

er, it is stated, when applied to bright
ables them to retain their brilliance
definitely.

chemical preparations of Messrs. Brunner,
Co., Ltd., are displayed on Stand 10,
they have arranged a display of some of
er softening alkalis, calcium chloride
aying on roads, &c., water treatment,
ing, &c., silicate of soda for case-
concrete roads, floors, &c. (an
machine illustrating this hardening
working on the stand), prevention of
olveny, &c. On this stand are shown
e products of the Castner-Kellner
Ltd., and the Buxton Lime Firms

and 13 the Phoenix Engineering Co.,
Chard, Somerset, are showing their
Extra Rapid" bitumen sprayer. This
has a capacity of 160 gallons and is
th a powerful double-acting spraying
e suction of which is controlled by a
special design embodied in the base of
o and so arranged that one movement
from "work" to "hot air" and *vice*
is complete with flexible steel hose,
pe and spraying nozzle. There is also
continuous heating hand tar-spraying
of 160 gallons capacity; a road drying
shing outfit, with removable pan of
s capacity; a 50 gallons vertical tar
h boiler; a "Floodgate" hand lift
ers' pump, mounted on a steel barrow;
phragm hand lift contractors' pump.

Goodwin, Bardsley & Co., Ltd., of St.
a Ironworks, Leicester, are showing a
ent Acme granulator for the production
ings; a No. 1 ($\frac{1}{4}$ yard) original open
er with hoist, batch-measuring and
hopper, self-contained engine, auto-
water tank, &c.; an improved portable
veyor or loader with steel framework,
heels, power unit, &c., and a patent
indrical dryer, complete with patent
draught, cyclone dust collector, &c.,
on wheels.

d that should not be missed is that of
uke & Bell, Ltd., of Carlton Engineer-
ks, Lichfield, Staffs. They have on
l-ton capacity petrol motor lorry for
haulage work and the transport of
fuse; end-tipping body with patent
hand-operated tipping gear mounted
dorris" 1-ton chassis, with a body of
ft. or 100 cub. ft. capacity as required.
ver's cab is provided with side doors
ustable windscreen. There is also a
weeping attachment, suitable for use
motor vehicles, to sweep 6 ft. wide; a
h sprinkler tank is fitted to minimise
sturbance, and dust shield drawbar
with draw and buffing springs. Other
include a "Carlton" revolving sewage
or, suitable for filter beds up to 40 ft.
; a "Grip" patent manhole cover
me for heavy road traffic; and a
"manhole cover and frame for heavy
ffic. This latter is a cheaper type of
an the first, and possesses some of its
ges.

and 47 the Neuchatel Asphalte Co.,
53, Victoria-street, S.W.1, are exhibi-
bles of their asphalt suitable for all
road work, footways, roofing, building
, and photographs of contracts carried
the United Kingdom. There is a daily
on of cinema films showing the "Naco
asphalt plant in operation and the
ion and laying of asphalt macadam
nited mastic asphalt. The firm are the
ors of the Abruzzi Mines at Scafa,
Italy, and sole concessionaires of the
l Government of Neuchatel, Switzer-
all asphalt mining rights in the Val
ers. In addition to the laying of their
ompressed asphalt powder and granited
stic asphalt, the company undertakes
facing with natural bitumen in the form
coat or single-coat asphalt macadam,
h purpose, in conjunction with Messrs.
Paxman & Co., Ltd., the Colchester
s, they have brought out a new portable
drying and mixing plant—the "Naco

Pax" plant, which is on view at the latter's
stand.

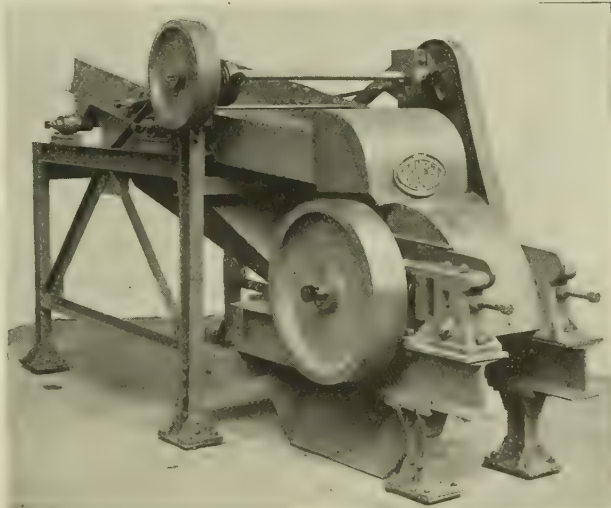
The Millar Machinery Co., Ltd., have on view
five of their machines. The 8-ton standard
portable asphalt plant is the product of long
experience in the manufacture and operation of
asphalt-mixing machinery. These machines are
supplied for hourly outputs of 3 $\frac{1}{2}$ tons, 8 tons,
12 tons and upwards. The 4L "Jaeger" con-
crete mixer has a batch capacity of 7 cubic feet
unmixed, and 4 $\frac{1}{2}$ cubic feet mixed, and an
average daily output of 40-50 cubic yards. The
other exhibits are a "Tructractor" fitted with
an automatic end dumping body, and having a
hopper capacity of 30 cubic feet; a concrete
cart; and a single diaphragm pump. These
latter have a capacity of 6,000 and 12,000
gallons per hour.

On Stand 51 the Limmer and Trinidad Lake
Asphalt Co., Ltd., are showing samples of the
standard native bitumen; their asphalt mac-
adam taken from various roads throughout the
British Isles; "Lithocrete" on Trinidad
asphaltic concrete; compressible rock asphalt;
Lithofalt paving blocks; "Lithocrete" paving;
mastic asphalt as applied to modern buildings;
samples of "Viasphalt" (a bituminous powder
for enriching tarmacadam); samples of "Tar-
bit" (a solution for enriched tarmacadam);
details of asphalt macadam plants and all forms

road roller, weighing 9 tons empty; a 6-ton
tandem roller; a 4-ton "Cummer" plant; and
a concrete mixer.

Messrs. Ruston & Hornsby, Ltd., of Lincoln,
are exhibiting on Stand 66 some of their
machines, of which the most outstanding is the
No. 6 Universal excavator. This combines the
uses of a standard crane navy, a dragline, a
grabbing navy, a trench excavator, a pile-
driver and a crane. It can be mounted on rail
wheels, road wheels or caterpillars, and can be
fitted with a steam engine or electricity. There
is also on view a horizontal airless injection oil
engine made to run on the cheapest oils obtain-
able; fuel consumption is as low as 42 lbs. per
b.h.p. per hour even in the larger sizes. This
series includes engines from 16 to 34 b.h.p. The
exhibit also includes a class "M" horizontal
oil engine, a class "E.P." portable crude oil
engine, a Thermax boiler, a "P.M." pumping
plant, and various pumps.

On Stand 67 the exhibit of the Expanded
Metal Company, Ltd., York Mansions, Petty
France, Westminster, S.W.1, consists of
samples of the company's products and
photographs of a few of the more important
municipal works carried out on its systems.
The samples include "Expamet" "RR"
reinforcements for concrete roads, &c.;
"Expamet" expanded steel sheet reinforcement



"Winget" Combined Clinker-Screening and Crushing Unit.

of roadmaking equipment as manufactured by
Roadways Equipment, Ltd.; Hutchinson's
testing apparatus and instruments for standard-
ising bituminous road materials, &c. The
above exhibits will be supplemented by photo-
graphs, and a daily exhibition of cinematograph
films showing the Trinidad Lake asphalt indus-
try; the manufacture and application of mastic
asphalt; and the preparation and laying of
compressible rock asphalt.

Messrs. Brookes, Ltd., of 65, Victoria-street,
S.W.1, and its branches are showing, on Stand
53, samples of their productions in connection
with roadways and footways. These include
specimens of granite from their English, Welsh,
Scotch, Channel Islands and Scandinavian
quarries, showing their productions of setts,
macadam and chippings, and architectural
granite; specimens of tarred granite and tarred
slag; specimens of their "Nonslip" stone for
footways, &c.; and samples of their glazed
brick and fireclay productions, artificial stone,
mosaics, terrazzo, jointless flooring, &c.

On Stand 61 Messrs. Marshall, Sons & Co.,
Ltd., of Britannia Ironworks, Gainsborough,
Lincs, have an interesting display of their
machines. These include a 10-ton compound
road roller, class S, with piston valve working at
180 lb. per sq. inch, and fitted with two-time
"Allen" scarifier. The transmission is on the
four-shaft principle and embodies a four-pinion
differential. There is also a "Universal" type

for concrete; "Expamet" and "BB" lathings
for plasterwork; "Exmet" reinforcement for
brickwork, concrete blockwork, &c.; a section
of kerbing reinforced with "Kerbmet"; and
some "Expamet" treble-layer reinforcement.

On Stand 68 the British Steel Piling Co., Ltd.,
of 54A, Parliament-street, London, S.W.1, are
exhibiting their "Wonder" tilting drum con-
crete mixer mounted on road wheels, and another
complete with power loader and automatic water
tank; a "Zenith" half-yard concrete mixer
mounted on road wheels, complete with power
loader and automatic water tank; an "SA"
builders' hoist, fitted with petrol engine; a
"Zenith" steam friction winch with boiler; and
sections of Universal and "Simplex" steel sheet
piling. There is also a pile-driving plant,
complete with model McKiernan-Terry piling
hammer operated by compressed air, and two
other McKiernan-Terry hammers.

Messrs. Winget, Ltd., of Grosvenor-gardens,
Westminster, S.W. 1, have arranged a large and
interesting display of machines on Stand 69.
The accompanying illustration is of their com-
bined clinker screening and crushing set. Note-
worthy exhibits on this stand include a No. 2
crusher, complete with petrol engine on portable
carriage; a No. 1 portable conveyor; a Warwick
2 $\frac{1}{2}$ cubic ft. mixer, a semi-spiral mixer, and
a 1926 model of their chain spade engine-driven
portable road mixer; a No. 3 automatic slab-
making machine; a No. 1 universal pressure

machine, fitted with kerbmaking outfit; and a model of the 100 ton automatic stone-drying and tarring plant. Several of these machines are running for demonstration purposes.

Messrs. Frederick Parker, of Viaduct Works, Catherine-street Extension, Leicester, have an imposing array of machines on Stand 76. These include a 14 in. by 7 in. "Monarch" stone breaker, solid body pattern, complete with revolving screen mounted on road wheels. The screen is carried by external girders from the sides of the crusher, with timber-feeding platform and end-supporting pedestals, enabling the whole unit to be easily transportable, and providing ample accommodation on the feeding platform. There is also a concrete mixer of 7 cubic ft. capacity, with automatic loading hopper, a "Lister" petrol engine, Coventry roller chain transmission, automatic water tank, &c. Other exhibits include a 12 in. by 4 in. solid body type granulator, designed to deal with 2½ tons per hour down to ¼ in. material; a 5½ tons per hour granulator; a "Little Giant" concrete mixer, to turn out 300-350 batches per day of 4 cubic ft.; a double-armed type trough paddle mixer; a "Monarch" blake crusher, to deal with 8 tons per hour; a 4 cubic ft. concrete mixer; a horizontal belt-driven friction hoist; a set of five crushing rolls; various barrows; and a dryer.

The Croft Granite, Brick & Concrete Co., Ltd., of Croft, near Leicester, have arranged an interesting display of their products on Stand 87. These include "Crofmac" granite, Leicester-shire broken granite and chippings, and granite in various forms, including paving flags, kerbs and channels, fence and rail posts, doors, hoods, and brackets.

On Stand 103, William Shepherd & Sons, Ltd., together with their associated companies, the Harlington Quarries, Ltd., and Shepherd's Paving Block Co., Ltd., of Milkstone, Rochdale, are showing their road surfacings. These include asphaltic slag, asphaltic limestone, bituminous asphalt, "Shepafalte" (a new mastic asphalt), their tramway paving blocks, and "Shepfast" composition for laying wood block and boarded floors, which the makers claim to be preservative and a preventative of dry rot. The stand telephone number is Clerkenwell 8206.

Messrs. Builders' and Contractors' Plant, Ltd., have a big array on Stand 116. The chief exhibit is asphalt plant No. 2s. This combines many improvements, notably, automatic feeding, triple long drying drum, oil-firing for drying and heating, scientific grading apparatus, the "Roll" (no paddle) system of mixing, high delivery, and the whole arranged in such a way as to achieve real portability and occupying a minimum of space. Other exhibits include a tarmacadam plant, a "Roll" concrete mixer, a road heater for running repairs, a "B.C.P." granulator for the production of road chippings of exact grade, a clinker breaker, handling machinery, sand and gravel plant, stationary equipment.

The British Portland Cement Association, Ltd., of 20, Dartmouth-street, Westminster, S.W. 1, "an organisation for extending and improving the use of concrete," occupy Stand 126. This exhibit shows the utility and versatility of concrete for municipal purposes. It includes a section of all-concrete road with expansion joint and white lines; paving, kerbing, and channels; treguard; culvert; catchpit; direction and mile posts. Examples of concrete representing various natural stones are on view, demonstrating that concrete of pleasing colour and texture suitable for bridge construction, &c., can be produced.

On Stand 134, the Lafarge Aluminous Cement Company, Ltd., of Lincoln House, 296-302, High Holborn, London, W.C. 1, are exhibiting their "Ciment Fondu," an indecomposable cement of high-alumina content. Its qualities include high initial resistance at twenty-four hours, and complete immunity from attack by sea-water, and sulphur-impregnated waters and earths. The exhibit demonstrates its application as a binder for macadam road surfaces. Descriptive data and tests are given of its general use for all forms of structural engineering work.

THE DECORATORS' EXHIBITION, MANCHESTER

An event of interest to the building and decorating trades is the N.S.P.P. Coalition and Decorators' Exhibition, which opened in Manchester on Tuesday last and closes to-morrow, Saturday. The National Society for the Preservation of Property (by paint and varnish) is doing a very useful work in educating the public in the economies that may be effected in painting and varnishing at proper intervals. The Society is just now emphasising that at this season of the year particularly favourable estimates may be obtained for interior decoration work, and that the most skilled workmen are more readily available than during the spring. The following are the principal events in connection with the Exhibition and N.S.P.P. conferences:—Tuesday, November 17, N.S.P.P. Council Meeting, Midland Grand Hotel. Wednesday, at 11 a.m., Exhibition opened by Lord Stanley of Alderley, City Hall, Deansgate; Open Meeting, Milton Hall: speakers, Right Hon. Charles A. McCurdy, P.C., K.C., Mr. F. W. Goodenough, and Mr. Geoffrey le M. Mander. Thursday, Annual General Meeting of the National Federation of Master Painters and Decorators of England and Wales, Milton Hall; evening, Annual Dinner of the same institution, Midland Grand Hotel. To-day, Friday, at 10 a.m., N.S.P.P. General Meeting, Milton Hall; 12 p.m., N.S.P.P. Council Meeting, Milton Hall.

Following are notices of some of the principal exhibits:—

Messrs. Drew, Clark & Co. show the "Diamond" extension ladders, which have now established themselves as a convenience to master painters. They also show a more recent device, the "Raprig" scaffolding—a handy, rapid and economical method of erecting scaffolding on the unit system—which has many advantages for painting firms, especially those concerned with church, theatre or cinema work, or other jobs on which large scaffolding is required. This scaffolding can be fitted with wheeled legs, enabling the whole structure to be moved about the apartment which is being treated.

Messrs. The Eclipse Rail-track Ladder Co., of Bristol, have specialised in extension goods from the point of both speed and safety in use; amongst their extension patents special attention is called to their ladders, scaffold boards, steps, and fire escapes; they also manufacture many other specialties, amongst which may be mentioned various designs of steps, paper-hangers' improved folding tables, adjustable ladder brackets, hand trucks, and fire hose carts, etc. The firm's works are laid out for mass production; no tool or machine is omitted that can help towards improving the quality of the goods manufactured.

Messrs. The Silicate Paint Company, of Charlton, London, S.E.7, exhibit three rooms treated with Duresco. The principal room is designed in the Adam style, with the other two rooms showing pleasing effects obtained at moderate cost by well-chosen colours and simple decorations in Duresco. For the whole of the woodwork throughout the stand the Company's well-known flat oil paint, Silpaco, is used. An interesting feature of the exhibit is the display of decorative panels by the winners of prizes offered by the Company for the best decorated panels executed in Duresco by employees of members of the Master Painters' Federation.

Messrs. Naylor Brothers (London), Ltd., show four rooms and small central office representing drawing and dining rooms, bedroom and kitchen or bathroom, and suggesting decorative schemes and colours as well as showing the various products in actual use. Amongst the Naylor products to be seen are the varnishes, "Suwideo," "One Coat Oak," and "Encaustic Copal" flat varnish, "S.E.G." and "Supermatt" paints, "Bel-

dec" and "Suwena" enamels, and "rodec" water paint. The fascia and of the stand are finished with the imitation stone paint, "Petrumite." stand are to be seen various other displayed on panels, frames, and in other

Messrs. Hoyle, Robson, Barnett & Co. (in association with John Smith & Son, Ltd.), combine to show a practical interest, both from a manufacturing and decorative point of view. Through stand the firm's well-known materials as they would be under every-day conditions and no attempt has been made to get which would be impossible in domestic surroundings. The stand shows columned fronts bearing distinct schemes tied together by a lettered frieze and dominant note of "Petunia" Hoyle's gold inscriptions. Various of the firm's specialties are shown with advantage stand, which has two rooms, representing dining-room and a lounge, designed for practical use to the decorator.

Messrs. Pinchin, Johnson & Co., Ltd., incorporating Wilkinson, Heywood & Co., show the decorative effects obtainable of the range of Pinchin, Johnson super which comprise Deydol Distemper, Flat Wall-Finish, Satinette Enamel, Superval, and Gripon Super-Paint. Other specialties also exhibited are "Oblique" undercoating white and "Figaro" enamel gloss paint, which gives a high gloss finish coupled with a high durability. Other exhibits of finishing iron paints, preservatives, stains, and varnishes for all purposes and every

Messrs. The Walpamur Company show an exhibit comprising a loggia, lounge hall and boudoir. The kitchen is painted with "Duradio" enamel paint may be easily washed without injury. In the panelled hall the material is "Walpamur" water paint, and the strips are treated with "Muromatte" and finished with "Yeoman" "Muromatte" flat oil paint is the used on the walls of the boudoir, and the woodwork is finished with "Mirabol." The outside of this exhibit is painted Nile green and azure blue "Duradio" the front door with Drop Black and with "Yeoman" hall door varnish.

Messrs. Glico Petroleum, Ltd., show grades of "Glico" white spirit (a substitute), specially distilled to meet requirements of paint, varnish, and manufacturers, also boot, floor, furniture, metal-polish manufacturers, and of many products in which the use of turpentine good substitute, is essential. It is completely water-white, quick-drying, of sweet and entirely free from acid, oil and Samples of "Decco Turps," an alternative American turpentine, is also shown essential points of this are that it cheaper than American turpentine, range of distillation, drying proper odour are similar to those products.

Messrs. Goodlass, Wall & Co., Ltd., mounted by entablature and cornice. "Non-bleeding" fast red, the stand firm is supported by columns of model which display "Combinol" gloss green. Use has been made of the stand as follows:—A complete front elevation of a bungalow with ornamental fencing and garden. The fencing and jalousie is painted in "Combinol" gloss deep green shade. A copy of oak half-timbering carried out in deal treated with "Brustane," the plaster walls between a coat of buff "Pintesco." Another shows the front of a town house, finished in Napier green and Goodlass door varnish. On the third side is the

ed lounge room, the walls of which graduated tones of "Combinol." side displays a bathroom, the whole s and woodwork of which are in "white enamel.

Thornley & Knight, Ltd., have a rich Superfine Snow White enamel used to finish the main columns—alustrade, whilst the fascia has d in Flat White Japan, with the pale gold colour. The front of the office, including the painted ps in the frieze panel, etc., and elevation farthest from the main including the painted decorations, executed in "Tekamatte" wall latter elevation is of a Georgian ne frieze panel, inspired by Wedg- shows boars' heads decoratively encircled with oak leaves and deep vellum monochrome has been the boars' heads and acorns, whilst are in a lighter tone of the ground ne frieze is further enriched by gold, and an inner dice pattern so gilt. Panel and other mouldings bronzed, scumbled with "Scum- the lights wiped off. A medallion ainted in monochrome, and intro- the centre panel, completes the he back and remaining side eleva- been treated in varying standard Asbestolin" water paint, and the d decorations of these elevations en carried out in this material.

Dixon's White, Ltd., exhibit ex- work which show that Dixon's apable of producing excellent paint- r finishes, but particular stress is s value as an undercoating for was the demand for the material rpose that induced the manufac- apply a ready mixed Dixon's White oating. Fluxine enamel, another is a slow-drying enamel, perfectly not lose its colour on exposure. e paint, another exhibit, is now architects for use on comparatively t. This paint can be applied to eting, and pieces of asbestos sheet- with it are exhibited for inspection. paint is a paint of high gloss that exterior exposure, whether against air of manufacturing towns or the tivity of sea air. The Company e all classes of white and coloured nishes, liquid dryers, distempers, paint, and other materials.

Mander Brothers, Ltd., show a n decorated with some of the firm's e colours used are all standard r convenience the reference e given. The following brief speci- y be of interest: Interior—coved ualine (water paint). Ivory (No. ad white (No. 49). Walls: Aqua- paint). Japanese blue (No. 203). rey (No. 25). Exterior—fascia: lat oil paint). Blue (No. 33,075). frieze: Vernasca (flat oil paint). No. 33,075). Doors and woodwork: ite enamel and ebony black finish. t of the pavilion the panels have ed to show a selection of the stan- of Vernasca—Nile Green (No. reen (No. 69), Powder Blue (No. (No. 64), Crimson (No. 32), Tan

Naylor Brothers (London), Ltd., and distributing agents for lin McArthur and Co., Wall- (ntreal); exhibit the 1926 range ers, from the cheapest up to grades of "brushed," "over nd "embossed." This Canadian de to the English standard width, gs are the pick of those produced p, American, and Continental e Colin McArthur wallpapers are ly new to the English market, ve long been known in Canada. e easily obtained from large stocks ondon and Glasgow.

THE SELECTION OF STONE FOR BUILDING

A LECTURE on this subject was delivered by Professor A. P. Laurie to the students of the Royal Academy of Arts, on November 18. Professor Laurie began by describing the various stones that were used for building purposes, and gave some account of their chemical composition. He then went on to deal with the two main groups of stones which are used for building—sandstones and limestones—and described the various causes of the weathering of the stone. He pointed out that the most serious cause of weathering to-day was the attack on the stone of the acid oxidised products of sulphur, due to the burning of the sulphur in coal; and went on to show that this was not confined to the towns, but was found in build- ings even in remote districts.

The action of the sulphur acids resulted in the formation in the case of limestones, and in the case of sandstones which contain calcite, of calcium sulphate which was slightly soluble in water, and so would cause the stone slowly to waste away. But the most serious effect of calcium sulphate was its crystallisation with the stone, resulting in the stone being mechan- ically broken up. In illustration of this he showed experiments on the breaking-up of stone by the crystallisation of salts within it, and explained the conditions under which these took place, and illustrated this by experiments made on crystallisation in capillary tubes. He pointed out that as far as sandstones are concerned, it was possible to select sandstones for building which were practically free from calcite, and should, therefore, be used in modern cities. In the case of limestones, all that could be done was to select a stone which would best resist this form of attack. Much depended upon the susceptibility of the lime- stone to attack, which could be tested by exposing small cubes to an acid vapour, and by measuring the rate of absorption of water and evaporation from the stone, which could also be made the subject of laboratory tests.

He described experiments on certain selected limestones, showing how much they differed in susceptibility to attack and in tendency to break up, owing to the crystallisation of the sulphate of lime. Apparently one of the conditions was that there should be free and rapid evaporation from the stone after wetting, so as to draw the sulphate of lime to the surface and prevent it crystallising inside the stone. This raised the question as to whether the hosing of buildings during hot weather would not be of advantage. Further research was required in these directions, but in the mean- time it was quite possible to guide the architect, both in the selection of sandstones and in the selection of limestones by chemical analysis and by experiments on the rate of attack of acid vapours upon samples of the stones.

Metropolitan Water Board.

The twenty-second Annual Report of the Metropolitan Water Board for 1924-25 has just been published, and may be obtained from the Board's publication agents, Messrs. P. S. King & Son, Ltd., 2, Great Smith-street, Westminster, S.W., price 5s. The Report contains 123 pages divided under such headings as Constitution, Water Rental, Water Rates and Charges, Supply, Storage, &c., and concluding with a comparison of the active equipment of the water works before June, 1904, and at the present time. From this latter it is seen that against the 4,115 million gallons capacity for unfiltered water in 1904, we have now a capacity of 12,907 million gallons. The corresponding figures for filtered water are 244 and 320 respectively. The Report also contains two coloured diagrams showing (a) the average daily supply from the several sources, 1915-16 to 1924-25, and (b) the Thames flow and abstraction, and rainfall in the Thames Valley for the same period.

NEW RAILWAY FOR NORTH-WEST LONDON

THE new double-track extension line, jointly constructed by the Metropolitan and London & North-Eastern companies, to Croyley Green and Watford, was opened recently. This new line offers many advantages. It makes Watford easier of access; it will tend to relieve the congestion of the inner suburban areas of the Metropolis by opening up a residential district offering wide scope for building operations; and, at the same time, materially improve London's transport facilities. The station is conveniently situated on the south-west side of the town, adjoining the Cassiobury Park Estate, and the advent of the new railway will enable extensive development to take place.

The train service provided over the new route is 140 trains daily. A proportion of these will be operated electrically by the "Metro" to Baker-street and thence through to City stations, whilst the London & North-Eastern Railway will introduce a new service of steam-operated express trains to and from Marylebone. In addition to this, a northerly junction will permit of a service being maintained from Watford to Rickmansworth and various stations north of this point, both on the Metropolitan and L.N.E.R. systems, and will also provide Watford with a direct means of access to numerous important districts in the Midlands, the North of England and Scotland.

The new line, although only 2½ miles in length, has cost £300,000, and has entailed the exca- vation of half-a-million cubic yards of gravel and chalk, the building of a number of heavy embankments, the erection of ten bridges, and the laying out of extensive goods yards. The most important bridges are those over the River Gade, the Grand Junction Canal, and the railway at Croyley Green; in the case of the first-named, it was found necessary, owing to the persistent presence of water in the chalk abut- ments, to have recourse to monolithic construc- tion and timber piling; whilst the Croyley Green bridge is particularly interesting, inasmuch as it carries not only the roadway but the station buildings in addition. A boldly conceived burrowing junction has been provided at Harrow to permit heavy cross direction traffic to be expeditiously handled. The construction of this entailed the cutting of a tunnel under the Aylesbury line, and the introduction of 12,600 cubic yards of concrete and brickwork and half-a- mile of new permanent way.

The whole of the work on the new line has been carried out under the supervision of Mr. E. A. Wilson, chief engineer of the Metropolitan Railway, acting for the joint companies, the resident engineer being Mr. J. Martin Clark; and the station buildings were designed by the Metropolitan Railway Company's architect, Mr. C. W. Clarke, A.R.I.B.A. The general contractors were Messrs. Logan & Hemingway, of Doncaster; whilst the steelwork for the bridges was supplied by Messrs. Eastwood Swinger & Co., Litchurch, near Derby.

New Thames Bridges.

The erection of a new bridge over the Thames at Hampton Court was considered by the Surrey County Council at a recent meeting at Kingston. It was reported that an agreement would probably be arrived at with the Ministry of Transport and the Office of Works whereby the portion of Hampton Court Palace grounds required for the new bridge would be made available. The Ministry of Transport wrote, suggesting that it would be advisable for Surrey and Middlesex County Councils to apply for Parliamentary powers to enable them to erect a new bridge at Hampton Court and bridges over the Thames on the line of the new Chertsey arterial road. The Council approved the situa- tion of the proposed Hampton Court bridge.

New Bournemouth Housing Estate.

A syndicate has bought Branksome Dene, Bournemouth, for housing purposes. The plan- ning of the estate will be in the hands of Messrs. Jackson & Greenen, architects and surveyors, of Yelverton-road, Bournemouth.

NEW BUILDINGS IN LONDON.

Acton.—A row of shops with flats over are to be erected on a site near Acton Town Underground Station, to plans by Messrs. Douglas Smith & Barley, 50, Queen Anne's Gate, Westminster. Mr. J. Weller, contractor, Sutherland-grove, Southfields, S.W.4.

Argyll-street.—The premises at Nos. 12, 13 and 14, Argyll-street, W.1, adjoining Oxford Circus Tube Station, are to be converted into a block of offices, with shops on the ground floor, having been sold by Messrs. S. B. Clark & Son, 8, New Cavendish-street, W.1. Messrs. J. H. Phillips, agents, 24, Pall Mall, S.W.1.

Artillery-row.—A site covering about 14,800 sq. ft. is to be let on building lease, the surveyors being Messrs. Foord & Salburg, 9, Clarges-street, W.1.

Brent.—A large estate near Brent tube station has been sold by Mr. Ernest Owers, The Parade, Golders Green, N.W., for development. Houses, &c., are to be erected.

Ealing, W.—A start has been made with the Village Park housing scheme (No. 2) of 400 houses and flats for the Ealing Borough Council. The Conducal Construction Co., Ltd., Westminster, are the contractors.

East Acton.—Messrs. Eydmann, Street & Bridge, surveyors, 242, Acton High-street, W.3, have prepared a scheme for a large number of residences on the East Acton estate, W.3.

East Ham.—New shops, &c., are to be built in Myrtle-road, E.6, to the plans of Mr. R. Banks-Martin, J.P., architect, 121, Plashet-grove, E.6, acting on behalf of the East Ham Shopping Hall Co., Ltd.

East Sheen.—The Columbia Garage Co. propose to build premises to comprise lock-up garages, showrooms and flats to the design of Mr. R. B. Rowell, A.R.I.B.A., architect, 5, The Triangle, Upper Richmond-road, S.W.

Edgware.—A shopping parade, with two floors of flats above, is being erected in the Mall by Messrs. James Smith & Son, Ltd., builders, South Norwood, S.E.25. Messrs. Young & Co., steelwork, Nine Elms Ironworks, S.E. Mr. Leslie Raymond, F.S.I., surveyor, Golders Green, N.W.

Edgware-road.—The Grand Cinema at 280, Edgware-road, W.2, is to be rebuilt and extended so as to accommodate about 2,000 persons. Mr. James Watt, Bromley-road, Catford, S.E., contractor. Mr. E. A. Stone, F.S.I., architect, 20, Berkeley-street, W.1.

Fleet-street.—Messrs. Brown & Barrow, Lennox House, Norfolk-street, W.C.2, have prepared designs for a modern office and warehouse building in New-street-square, E.C.4.

Gunnersbury.—A housing scheme, consisting of 14 residences, in Gunnersbury-lane, and 12 others in an adjoining new road, is to be carried out by Messrs. William Walkerdine, Ltd., builders, 115A, Walmer-road, W.10.

Hendon.—Messrs. O. P. Drever & Co., Ltd., Queen's-road, N.W.4, are reconstructing a row of shop property near Hendon Central Station to provide for a Ministry of Transport road widening.

Howick-place.—Among improvements projected by the Army & Navy Co-operative Stores, Ltd., is the building over of a yard in Howick-place, S.W.1, in order to provide a new restaurant on the first floor. Sir Aston Webb & Son, architects, 19, Queen Anne's Gate, S.W.1. Messrs. Frederick Smith & Co., Ltd., builders, 8, Bush lane, E.C.4.

Isleworth.—It is proposed to build a new public-house, to be called the Osterley Park Hotel, in Wood-lane. Mr. A. E. Sewell, architect to Messrs. Truman, Hanbury, Buxton & Co., Ltd., Brick-lane, E.1.

Lambeth.—Extensive alterations are to be carried out at Milburn House, S.W., to adapt the premises as a maternity home, and a contract has been placed with Messrs. A. H. Inns, Ltd., Cox-court, Gray's Inn-road, E.C.1, at £7,500.

Leicester-square.—A large cinema, complete with cafe, dressing-rooms, stage, &c., is to be built upon the site of the Empire Theatre, in

Leicester-square, W.1, at a cost of £1,000,000 by the Metro-Goldwyn Films Corporation. The theatre will seat 3,500 persons, and is being designed by Mr. Chancellor, of Messrs. Matcham & Co., Warwick-court, Holborn, W.C., and Mr. T. W. Lamb, of New York, joint architects.

Marylebone-road.—The Committee of the Western Ophthalmic Hospital, at 155, Marylebone-road, N.W.1, are raising funds towards a sum of £30,000 required to extend their existing accommodation, to plans prepared by Messrs. Young & Hall, 17, Southampton-street, W.C.1.

Pall Mall.—Messrs. Higgs & Hill, Ltd., South Lambeth-road, S.W., are erecting a building at No. 47, Pall Mall, S.W.1, for offices and showrooms, consisting of basement, ground floor, mezzanine and four upper floors.

Piccadilly.—Messrs. Felton & Sons, Ltd., florists, of Hanover-street, W.1, have acquired the ground floor area of the corner of Devonshire House in Piccadilly and Stratton-street, W.1, which they propose to have fitted up as showrooms.

Piccadilly.—Messrs. Meakers, Ltd., outfitters, of Cheapside, E.C.2, have secured large premises at Nos. 47-48 which, after alterations and refitting, are to be opened as a showroom. Messrs. Bower & Gibbs, company's architects, 14, Riding House-street, W.1.

Poultry.—Messrs. Rice & Son, 15, Stockwell-road, S.W.9, have secured the contract for the excavations and work up to ground floor level in connection with headquarters for Messrs. The Midland Bank, Ltd.—the first contract to be awarded. Messrs. J. A. Gotch & Saunders, 9, St. Mildred's-court, E.C.2, and High-street, Kettering, architects. Messrs. Holland & Hannen and Cubitts, Ltd., 256, Grays' Inn-road, W.C., building managers. Mr. H. McI. Whickstead, 1, New-court, Lincoln's Inn, W.C.2, quantity surveyors.

Rainham.—A scheme for the building of 100 houses is to be carried out by Messrs. Monolithic Concrete Houses, Ltd., Aldwych House, Aldwych, W.C. A contract has been placed with Mr. P. F. Wood, Whybridge Estate, Rainham, at approximately £42,000.

Regent-street.—Demolition of premises in Regent-street and Market-street, S.W.1, having an area of 14,700 ft., has been commenced by Messrs. St. Mary's Wharf Cartage Co., Ltd., 13, South Wharf, Paddington Basin, W.2. Mr. John Murray, F.S.I., surveyor to H.M. Office of Woods and Forests, 11, Suffolk-street, S.W.1.

Regent-street.—The contract for shop fronts and fittings at No. 121, Regent-street, W.1, has been placed with Messrs. Stanley Jones & Co., Ltd., Stowe-road, Shepherd's Bush, W.

Regent-street.—Mr. F. J. Wills, F.R.I.B.A., 62, Oxford-street, W.1, has been instructed by the Governors of the Regent-street Polytechnic to prepare plans for extensions to the building, costing about £25,000. Buildings of eight stories are proposed.

Regent-street.—The steel frame-work for the superstructure for Messrs. Austin Reed, Ltd., is in progress of fabrication by Messrs. Moreland, Hayne & Co., Ltd., 80, Goswell-road, E.C.1. Messrs. W. F. Blay, Ltd., Spital-street, Dartford, contractors. Messrs. United Stone Firms, Ltd., 104, Stewart's-road, S.W. 8, stone work. Messrs. Ragusa Asphaltic Paving Co., 25, Oxford-street, W.1, asphaltting. Messrs. Rosser & Russell, Ltd., 37, Duke-street, W.1, heating and hot water. Messrs. P. J. Westwood & Emberton, architects, 7, Adam-street, Strand, W.C.

Rupert-street.—A new cafe is to be opened after alterations, by Messrs. S. F. Snack Cafe. Messrs. R. M. Pearson, 63, Dean-street, Oxford-street, W.1.

St. James's-street.—Demolition of premises on the site of the second section of St. James's House, in St. James's-street and Ryder-street, S.W.1, has been completed by Messrs. St. Mary's Wharf, Cartage Co., Ltd., 13, South Wharf, Paddington Basin, W.2. Messrs. Arthur Vigor, Ltd., builders, Knightsbridge, S.W.1. Messrs. Smith-Walker, Ltd., steelwork, 22, Tothill-street, S.W.1. Messrs. Kleine Patent Fire-Resisting Flooring Syndicate, Ltd., floors, 133, High Holborn, W.C. Mr. George Vernon, 22, Conduit-street, W.1, architect to the owner, Mr. Robert Lomax.

St. Martin's-le-Grand.—Another part of old G.P.O. site is to be developed and floor building with a floor area of over 100,000 sq. ft. is to be erected, for which a has been placed with Messrs. Rice & Son, 15, Stockwell-road, S.W.9. Messrs. Ganton, Finsbury House, Blomfield-street, E.C.2, architects to the estate.

Southampton-row.—Foundations are to be constructed for the large hotel to be erected by the Imperial Hotels, Ltd., Rushey Green, W.C. Direct labour is being employed by the company's architect. Messrs. Trickett & Steel Co., Ltd., reinforced concrete engineers, 22, Cranley-gardens, South Kensington, S.W.7.

Strand.—Redecoration and the fitting of modern equipment is to be carried out on the south block of the Hotel Cecil, W.C. part of the hotel property will be taken later.

Streatham-vale.—New roads are to be constructed upon a large estate at Streatham, S.W., preparatory to the erection by Messrs. R. M. Miller & Co., 2, Ravenstone-street, Balham, S.W.1, about 900 houses.

Teddington.—It is hoped to place the foundations for the erection of the cottage hospital. Mr. John Armitage, 42, Clarence-road, Teddington, Middlesex, and equipment, approximately £13,000.

Walthamstow.—Nearly 200 brick houses are to be erected on the Higham's Hill estate, under the administration of Mr. G. W. H. Orford-road, E.17.

Welwyn.—An additional 40 houses are to be erected on an estate in London-road, prepared by Mr. H. G. Cherry, 7, Buckingham-street, Adelphi, W.C.

Wembley.—Mr. H. E. Skull, 1, Chaplin-road, Wembley, is to build a new cinema in the district.

Westminster.—A new residence of No. 57A, Catherine-street, S.W.1, is to be erected by Messrs. Courtney & Son, Ltd., builders, 377, Albany-road, S.E.1, under supervision of Messrs. T. H. Mawson & Co., architects, 26, Victoria-street, S.W.1. The quantity surveyor is Mr. W. T. Davenport, F.S.I., 32, Victoria-street, S.W.1, and Warrington.

Wilkesden.—Plans for a large factory in Whitby-avenue, Park Royal, W.10, approved. Messrs. Walter Bridges & Co., architects, 37, Parliament-street, W.C.

Wood-street.—The steelwork of a new automatic telephone exchange is to be erected. Messrs. Higgs & Hill, Contractors, South Lambeth-road, are the contractors. Messrs. Archibald D. Davidson, Ltd., steelwork, Steelworks-road, S.W. H.M. Office of Works, architect, Gate, Westminster, S.W.

Woolwich.—The Theatres and Amusements Committee of the L.C.C. has sanctioned the building and enlargement of the Beresford-square, S.E., to accommodate 2,000 persons. Mr. Bertie Crew, 75, Shaftesbury-avenue, W.1.

New Factory near Bardney

A site for a sugar beet factory has been obtained and surveyed at Bardney, near Lincoln. A company is being formed and building will begin shortly.

Builders' Estates.

Mr. R. Allen, contractor, of Wiltshire, has left net estate of £23,395.

Mr. S. Hind, retired, of "Hillcrest," Leyland, Lancashire, has left net estate of £7,717.

Mr. W. Heggie, retired, of Scotland, Glasgow, has left net estate of £5,306.

Mr. J. Brailsford, of Penn-street, Ashfield, Nottingham, has left net estate of £8,181.

Mr. James Ellingworth, builder, has left net estate of £29,525.

TES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	C'p'ters-Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Lab'ers.
re	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
gton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ey	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
	1/9	1/9	1/8	1/9	1/9	1/9	1/9	1/4
head	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
gham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
urn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
emouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
rd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
ater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
on	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
idge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
am	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
sford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
gham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
field	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ster	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
try	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
gton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
m.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
m. (Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
urne	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
stone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/1
ester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
ham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
by	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Yarmouth.	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
ord	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
x	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
gate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
spools	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
aga	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/1
ord	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
ersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ch, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
ster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ngton Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ter	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
eld	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
in	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
pool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ly	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
on 12 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
on 12-15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
horough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
stone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
hester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
field	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
yr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
sbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
istle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ort, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
ch	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
gham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
m	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
m	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
l	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
uth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
pridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
mouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
n	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ig	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
ale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ster	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ans.	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
lens.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
rough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
ld	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
sbury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
lampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
ton-on-Sea	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
ort	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ort	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
on-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
on-Trent	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
land	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
lea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
on	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
on	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
ay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
idge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
ield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ll	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
ngton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
or	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
or	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
hampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
ster	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

NOVEMBER 23.—Belfast.—PLUMBING.—Plumbing work and electric wiring of three additional villas and a gate lodge at Purdyburn Villa Colony, for the C.B. Tulloch & Fitzsimons, architects, 21, Castle-place. Deposit £2 2s.

NOVEMBER 23.—Bristol.—LIGHTING.—Electric lighting of the extension to the Bristol Docks Offices, Queen-square, for the Port Authority. W. S. Skinner & Sons, architects, Orchard-street; and H. T. Sully, consulting engineer, 28, Baldwin-street. Deposit £2 2s.

NOVEMBER 23.—Cardiff.—HOUSES.—100 houses at Ely, for the T.C. Architect. Deposit £2 2s.

NOVEMBER 23.—Clutton.—HOUSES.—Ten houses at Farrington Gurney, for the R.D.C. Mr. Hawker, architect, Council Houses, Temple Cloud. Deposit £1 1s.

NOVEMBER 23.—Clutton.—HOUSES.—Twelve houses at Chew Magna, for the R.D.C. Mr. Hawker, architect, Council Houses, Temple Cloud. Deposit £1 1s.

NOVEMBER 23.—Edinburgh.—PAINTING.—Outside painter work to be carried out immediately at David Kilpatrick, London-street, Lorne-street, Roseburn, South Bridge, and Tollcross schools, for the E.C. J. Stewart, Executive Officer.

NOVEMBER 23.—Epping.—Erection of (1) Two terraces of six cottages, and (2) a pair of semi-detached cottages; each cottage to contain six rooms (inclusive of scullery) and bathroom, for the U.D.C. G. J. Creed, solicitor, Epping.

NOVEMBER 23.—Folkestone.—HOSPITAL BUILDINGS.—Erection of new Out-patients' Department, Wards, Solarium, &c., for the Committee of Management of the Royal Victoria Hospital. J. L. Seaton Dahl, F.R.I.B.A., Radnor Chambers, Folkestone. Deposit £2 2s. by cheque.

NOVEMBER 23.—Liverpool.—SCHOOL.—New elementary school at Walton Hall-avenue, for the T.C. Land Steward and Surveyor (Architectural Department). Deposit £4 4s.

NOVEMBER 23.—Lyme Regis.—HALL.—Church hall for the Parish of St. Michael's, Church-street, Lyme Regis. J. H. Bilzard, F.R.I.B.A., Lansdowne House, Castle-lane, Southampton. Deposit £1 1s.

NOVEMBER 23.—Manchester.—DEPOT.—Tramcar depot at Birchfields-road, Fallowfield, for the T.C. City Architect. Deposit £2 2s.

NOVEMBER 23.—Preston.—HOUSES.—100 non-parlour houses, for the C.B. Borough Surveyor. Deposit £2 2s.

NOVEMBER 23.—St. Andrews.—HOUSES.—Twenty-four houses, East Langlands site, for the T.C. W. Watson, Burgh Surveyor. Deposit £1 1s.

NOVEMBER 23.—Sunderland.—SCHOOLS.—Secondary schools on the Barnes estate, Durham-road, for the C.B. W. & T. R. Milburn, architects, 19, Fawcett-street. Deposit £5.

NOVEMBER 23.—Tyldesley-with-Shakerley.—HOUSES.—Thirty houses on the Sale-lane site, for the U.D.C. F. E. Jones, Engineer and Surveyor. Deposit £1 1s.

NOVEMBER 23.—Uxbridge.—CONVENIENCES.—Keeper's lodge, lavatories, shelters, entrance gates, &c., on Farnside Memorial Recreation Ground, for the U.D.C. W. L. Eves, F.R.I.B.A., 54, High-street.

NOVEMBER 23.—Wath-upon-Deane.—CONVERSION.—Of privies into water closets, and the erection of new w.c.s. together with the necessary drainage, at about 64 houses in West Melton and district, for the U.D.C. F. J. Allott, Sanitary Inspector.

NOVEMBER 23.—Windygates.—HOUSES.—Forty-six houses, for the Kirkcaldy D.C. G. B. Deas, architect, Central Chambers, Kirkcaldy. Deposit £1.

NOVEMBER 24.—Hartbill.—PAINTING.—Painting and renovation of the Council school, for the C.C. A. Rayner, Education Office, Ecclesfield.

NOVEMBER 24.—Houghall.—SHED.—Timber framed lecture shed, at the Horticultural Station, for the Durham C.C. F. Willey, F.R.I.B.A., 34, Old Elvet, Durham.

NOVEMBER 24.—Hull.—WORKSHOPS.—Ferro-concrete work, for the construction of workshops, on the land in Ringrose-street, for the T.C. F. W. Bricknell, City Engineer.

NOVEMBER 24.—Ilford.—HOUSES AND MAISONNETTES.—Erection and completion of 98 houses and 24 maisonnettes, together with their necessary house drains, at the Horns-road estate, Barkingside, for the U.D.C. H. Shaw, M.Inst.C.E., Engineer and Surveyor, Town Hall. Deposit £5 5s.

NOVEMBER 24.—Ilkeston.—HOUSES.—Sixty-eight houses and footpaths, drainage, and fencing, on the Southern housing estate, for the T.C. Borough Surveyor. Deposit £2 2s.

NOVEMBER 24.—Maldon.—HOUSES.—Twenty-four workmen's dwellings, for the R.D.C. Wm. Almond, Engineer and Surveyor.

NOVEMBER 24.—Plymouth.—REORGANISATION.—Of the hot water service at the Borough Mental Hospital, Blackadon, for the C.B. J. Wibberley, Borough Engineer and Surveyor.

NOVEMBER 24.—Reading.—ALTERATIONS.—Altering and adapting a part of the disused police station at High Bridge, for the purposes of a mortuary, post-mortem chamber and Coroner's court, for the C.B. Borough Surveyor. Deposit £2 2s.

NOVEMBER 24.—Stretford.—SCHOOL.—Open-air school in Longford Park, for the E.C. P. Howard, A.R.I.B.A., 88, Mosley-street, Manchester. Deposit £1 1s.

NOVEMBER 25.—Barnet, Herts.—HOUSES.—Erection of 19 pairs of houses at Shenley-road, Boreham Wood, and six pairs of houses at Hillside-avenue, Boreham Wood (a certain amount of work on these houses has already been done), for the R.D.C. A. J. Wilshire, Surveyor to the Council, Council Offices, Boreham Wood. Deposit £2 2s., by cheque.

NOVEMBER 25.—Barnet, Herts.—HOUSES.—Erection of eight pairs of houses and block of three houses, for the R.D.C. A. J. Wilshire, Surveyor to the Council, Council Offices, Boreham Wood. Deposit £2 2s., by cheque.

NOVEMBER 25.—Belfast.—SCHOOL.—For (1) public elementary school at Ormeau Park; and (2) electric wiring and fittings for new schools, Euston-street and Templemore-avenue, for the C.B. Education Architect, Education Office, College-square.

NOVEMBER 25.—Holywell.—ADDITIONS.—Additions at Holywell County School, for the Flintshire E.C. R. G. Whitley, A.M.I.C.E., County Surveyor and Architect, County Offices, Mold. Deposit £3 3s.

NOVEMBER 25.—Llantwit Fardre.—REPAIRS.—Repairs and adaptation of house and buildings at Tydraw Farm, Llantwit Fardre, for the Glamorganshire Agricultural Committee, T. Mansel Franklin, Clerk of the Glamorgan Agricultural Committee, Glamorgan County Hall, Cardiff.

NOVEMBER 25.—Sheffield.—HOUSES.—Thirty-six parlour-type houses on the Dykes Hall estate, Hillsborough, for the T.C. F. E. P. Edwards, F.R.I.B.A., City Architect. Deposit £2.

NOVEMBER 26.—Epping.—HOUSES.—Erection of 46 houses, for the Epping R.D.C. Messrs. Tooley & Foster, F.F.R.I.B.A., architects, Buckhurst Hill, Essex.

NOVEMBER 26.—Gateshead.—ADAPTATIONS.—For works of adaptation at the Employment Exchange, Windmill Hill, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

NOVEMBER 26.—Plymouth.—REPAIRS.—To certain premises situate at 35, Albert-road, for the C.B. R. J. Fittall, Town Clerk.

NOVEMBER 26.—Woodford.—ADDITIONS.—To the Woodford Bridge Hotel, for F. W. Mills. F. W. Mills, Woodford Bridge Hotel, Milton Damer, Beaworthy.

NOVEMBER 27.—Aghingal.—HOUSES.—Houses at Radley, for the R.D.C. W. W. Earwaker, surveyor, 9, Bath-street. Deposit £2 2s.

NOVEMBER 27.—Ashington.—COURT.—Police court at Ashington, for the C.C. J. A. Bean, County Surveyor, Moot Hall, Newcastle-upon-Tyne. Deposit £1 1s.

NOVEMBER 27.—Catford, S.E.—NEW CHURCH.—Erection of first portion of the Church of St. John, Southend Village, Catford. Sir Charles A. Nicholson, Bart., architect, 2, New-square, Lincoln's Inn, W.C.2. Deposit £2 2s.

NOVEMBER 27.—Dublin.—RESTORATION.—Of Balla ex-R.I.C. Barracks, Co. Mayo; Goresbridge ex-R.I.C. Barracks, Co. Kilkenny; Kenmare ex-R.I.C. Barracks, Co. Kerry, and Liscasey (new station), Co. Clare, for the Commissioners of Public Works, J. J. Healy, Secretary, Oifig Oibreach Poblí, Office of Public Works, Baile Atha Cliath. Deposit £1 each.

NOVEMBER 27.—Elland.—PAINTING.—District Secondary School, for the Governors. L. Clegg, Clerk, Holywell Green, Halifax.

NOVEMBER 27.—Liverpool.—BUILDING.—Administrative block and superstructure of main buildings, bus shed, and oil store, Edge-lane Tramworks, for the T.C. Land Steward and Surveyor (Architectural Department). Deposit £5 5s.

NOVEMBER 27.—Lodsworth.—HALL.—Village hall, for the Committee. H. R. Moseley, hon. secretary.

NOVEMBER 28.—Bristol.—FLATS.—Eight blocks of two flats and one block of four flats, at the Bedminster Down housing site, for the T.C. L. S. McKenzie, City Engineer and Surveyor, 51, Prince-street. Deposit £1.

NOVEMBER 28.—Huyton-with-Roby.—WALLING.—Taking down stone and brick fence walling and rebuilding, in connection with road widening works, Huyton Hey-road, Huyton, for the U.D.C. H. Finister, P.A.S.I., Surveyor. Deposit £1.

NOVEMBER 28.—Sheffield.—PAINTING.—Painting and repairs to interior and exterior of offices, Commercial-street, for the T.C. S. E. Fedden, General Manager and Engineer, Commercial-street. Deposit 10s. 6d.

NOVEMBER 28.—South Elmsall.—ALTERATIONS.—Alterations and additions to the Pretoria Working Men's Club. Secretary.

NOVEMBER 28.—Stamford.—HOUSES.—Twenty-four houses on the New Cross-road housing site, for the T.C. Borough Engineer. Deposit £3 3s.

NOVEMBER 28.—Wakefield.—HOUSE.—Garage and house, Cliff-lane, for the West Riding C.C. Architect, County Hall, Wakefield.

NOVEMBER 30.—Chelmsford.—COTTAGES.—Six pairs of cottages at Deadman's-lane, Writtle, together with the reconstruction of a length of new road and the required drainage and excavation for a water main, for the R.D.C. J. Dewhurst, Engineer and Surveyor, Council Offices, Waterloo-lane.

NOVEMBER 30.—Peterborough.—EXTENSION.—Of the electricity works, for the C.B. H. A. Nevill, Engineer and Manager.

NOVEMBER 30.—Sheffield.—PLUMBING.—Plumbers' and glaziers' work required for general repairs, for the E.C. P. Sharp, Director of Education.

NOVEMBER 30.—Wandsworth, S.W. 18.—SWIMMING BATH.—Erection of a new swimming bath and appurtenant buildings in connection therewith, at Streatham High-road, S.W. 15, for the Borough Council. Ernest J. Elford Borough Surveyor, 215, Balham High-road, S.W. 17. Deposit £2 2s.

DECEMBER 1.—Barnsley.—WARDS.—New wards for women and children, at the Beckett Hospital, for the Committee. Chas. F. Moxon, architect, Regent-street South.

DECEMBER 2.—Hornchurch.—FENCING.—Erection of about 1,014 ft. run of oak fencing at the Cottage Homes, for the Guardians of the Poor of the Parish of St. Leonard's, Shoreditch. F. Danby Smith, F.R.I.B.A., Parliament Mansions, Victoria-street, S.W.1.

DECEMBER 2.—London, E.2.—ALTERATIONS.—Alterations to the bakehouse at St. Leonard's House, Kingsland-road, for the Guardians of the Poor of the Parish Church of St. Leonard. F. Danby Smith, F.R.I.B.A., Parliament Mansions, Victoria-street, S.W.1. Deposit £2.

DECEMBER 2.—Rochford.—HOUSES.—Erection of workmen's dwelling-houses at Thundersley and Rayleigh, for the R.D.C. A. C. Madge, Surveyor to the Council, Rayleigh. Deposit £1 1s. for each block of houses.

DECEMBER 2.—Thedwastre.—COTTAGES.—Six cottages at Walsham-le-Willows, for the R.D.C. Hunt & Coates, architects, 51A, Abbeyside-street, Bury St. Edmunds.

DECEMBER 3.—Hanwell.—PAINTING, &c.—To the Central London District School, Greenford-avenue, Hanwell, W.7, for the Managers. G. P. Morrell, Clerk to the Managers.

DECEMBER 3.—Fethruth.—REDECORATING.—For (1) the interior of the Chapel buildings, (2) the interior of the Memorial Hall buildings, (3) the interior of the Sunday school buildings, at the Wesley Chapel, for the Trustees. Rev. C. F. Atherton.

DECEMBER 3.—Stockton-on-Tees.—ADDITIONS.—Extensions and additions to the Oxbridge-lane cemetery, for the T.C. J. P. Wakeford, Borough Engineer. Deposit £1 1s.

DECEMBER 4.—Avonmouth.—POST OFFICE.—Erection of a Post Office and Telephone Exchange, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, London, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners).

DECEMBER 4.—Cork.—RESTORATION.—Of St. Luke's ex-R.I.C. Barracks, for the Commissioners of Public Works. J. J. Healy, Secretary, Oifig Oibreach Poblí, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

DECEMBER 4.—Hemel Hempstead.—MATERNITY WARD BLOCK.—Erection of a one-story Maternity Ward Block for 10 beds, for the Governors of the West Herts Hospital. Robt. L. Butterfield, Clerk to the Hospital, West Herts Hospital.

DECEMBER 4.—Howth.—RECONSTRUCTION.—Reconstruction and adaptation of the Coast Guard Station, Co. Dublin, for the Commissioners of Public Works, J. J. Healy, Secretary, Oifig Oibreach Poblí, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

DECEMBER 4.—Leenane.—SCHOOL.—Erection and furnishing of Leenane (proposed) National School, Co. Galway, for the Commissioners of Public Works. J. J. Healy, Secretary, Oifig Oibreach Poblí, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

DECEMBER 4.—Yeovil.—HOUSES.—Eight houses at Montacute, eight houses at Rimpington, eight houses at Tintinhull, for the R.D.C. Petter & Warren, F.F.R.I.B.A., "Old Sarum."

DECEMBER 5.—Moorthorpe.—RESLATING.—The Empire Theatre, near Pontefract. W. T. Lynam, architect and surveyor, Hemsworth, near Pontefract.

DECEMBER 5.—Staines.—HOUSES.—Erection of 52 houses of varying type upon their Worple-road building estate, for the U.D.C. E. J. Barrett, Assoc. M.Inst.C.E., Engineer and Surveyor, Town Hall, Deposit £2 2s.

DECEMBER 5.—Brighton.—Re-building Nos. 164 and 165, Western-road, for the County Borough of Brighton. David Edwards, M.Inst.C.E., F.S.I., Borough Engineer and Surveyor, Town Hall, Brighton. Deposit £2 2s.

DECEMBER 7.—Friern Barnet, N.11.—HOUSES.—Erection of 100 houses, for the U.D.C. F. P. Kindell, A.M.Inst.C.E., Engineer and Surveyor, Council Offices, The Priory, Friern Barnet-road. Deposit £2.

DECEMBER 7.—Halifax.—LIBRARY.—For (a) Branch library at Skircoat Green, and (b) the extension of the Technical College, for the C.B. W. H. Ostler, Secretary to the E.C. Deposit, £1 1s. each.

DECEMBER 7.—Shoreham-by-Sea.—COTTAGES.—Eight cottages in Gordon-road, for the U.D.C. Town Surveyor.

DECEMBER 7.—Skegness.—BATHING POOL AND ORCHESTRAL PIAZZA.—Erection of a bathing pool, dressing-boxes, bungalows, pump and filter-house, administrative block, &c., and an orchestral piazza, promenade, refreshment room, shelter and conveniences, the whole of the constructional works being in reinforced concrete, for the U.D.C. R. H. Jenkins, Engineer and Surveyor, Council Offices. Deposit £1 1s.

DECEMBER 7.—Southport.—ENGINE HOUSE.—Erection of a brick engine-house and other work in connection therewith at the Bickerstaffe pumping station, for the Southport, Birkdale and West Lancashire Water Board. C. Burton Ede, Assoc. M.Inst.C.E., Engineer and Manager, 14, Portland-street, Southport. Deposit £2.

DECEMBER 8.—Barking.—SCHOOL DINING HALL.—Erection of a dining hall at the Abbey School, for the Essex C.C. Education Committee. County Architect, Springfield Old Court, Chelmsford. Deposit, £1 1s. to County Accountant.

DECEMBER 8.—Epsom.—HOUSES.—For (16) Burgh Heath, (20) Tadworth, (20) Cheam, (30) Cobham, for the R.D.C. Surveyors.

DECEMBER 8.—Gosforth.—ADDITIONS.—Regent Pit depot, and also to the Council Chamber for the U.D.C. Geo. Nelson, Engineer and Surveyor.

DECEMBER 8.—Heaton, Newcastle-upon-Tyne.—SCHOOLS.—Two secondary schools for 500 boys, girls respectively, for the Newcastle-upon-Tyne George Connell & Son, Quantity Surveyors, Buildings, 25, New Bridge-street, Newcastle-upon-Tyne. Deposit £5.

DECEMBER 8.—London, E.C.2.—ROOFING.—Removing the present roof and erecting a new and other works to Block E at the Bethlem Hospital, for the Guardians. C. Faulkner, Clerk, Administrative Offices, Bishop's-road. Deposit £3 3s.

DECEMBER 8.—Swansea.—Erection of new ment rooms, beach shelter, promenade, &c., at Slade Bay, Langland, for C.B. Swansea. E. Morgan, A.R.I.B.A., Borough Architect, 3, P. place, Swansea. Deposit £3 3s.

DECEMBER 8.—Totnes.—Erection of a Post Contracts Branch, H.M. Office of Works, King's-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners).

DECEMBER 9.—Hammersmith, W.6.—AND MATERIALS.—Work and materials required erection of a combined transformer sub-station at Shepherd's Bush Green, W. 12, for the Metropolitan Borough Council. R. Hampton Clucas, Engineer and Surveyor, Town Hall. Deposit, £1 1s.

DECEMBER 9.—Manchester.—TELEPHONE CHANGE.—Erection of a telephone exchange at Hurst. Contracts Branch, H.M. Office of Works, Charles-street, S.W.1. Deposit £1 1s. (payable to the Commissioners).

DECEMBER 10.—Harrow.—For the erecti Press building at H.M. Stationery Office, C. Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners).

DECEMBER 11.—Barking, Essex.—SCHOOL.—Erection of a central school for 640 children in Wilford gardens, within the district, for the Education Committee. C. J. Dawson, F.R.I.B.A., Architect, Committee, Clock House Chambers, Barking. £5 5s.

DECEMBER 11.—Leyton.—SCHOOL.—Erection of the Knotts Green Special School, for the U.D.C. John H. Jacques, L.R.I.B.A., 61, Wellesley, Stratford, E.15. Deposit £2.

DECEMBER 14.—Banff.—HOUSES.—One house at the Burgh housing site, for the T. Brodie, Town Clerk.

DECEMBER 15.—Durham.—SCHOOL.—For (a) General builder's work in connection alterations and improvements at Forest of Council School, and (b) additions and alterations for the E.C. F. Willey, F.R.I.B.A., F.S.I., Elvet, Durham.

DECEMBER 15.—Worthing.—CONVENIENCES.—Erection of conveniences at Selden Lawns, W. for the Corporation. Borough Surveyor, M. Offices, Tudor Lodge. Deposit, £1 1s.

DECEMBER 25.—Birmingham.—HOUSES.—Erection of 125 non-parlour two-bedroomed houses at Morecam-road Greet, for the Public Works and Planning Committee of the City. Herbert H. Phares, M.Inst.C.E., City Engineer, The Council, Birmingham. Deposit £1 1s.

JANUARY 18, 1920.—Bakewell.—ADDITIONS.—Hospital, on Monyash-road, for the Haddon Hospital Committee. Chas. Flint, L.R.I.B.A., Quadrant, Buxton. Deposit £2 2s.

NO DATE.—Banbury.—HOUSES.—Erection of 38 houses at Grimsbury, for the B.C. S. Borough Surveyor, Banbury.

NO DATE.—Darfield.—REPAIRS.—To walls of the Council school, for the West Riding E.C. Gibbs, Divisional Clerk, Education Offices, C. No DATE.—Haydock.—SCHOOL.—Technical at Haydock, for the Lancashire E.C. H. County Architect, 16, Ribblesdale-place, Liverpool. Deposit £2.

NO DATE.—Trawscod.—HOUSE.—House at Trawscod, near Aberystwyth, for the G.W.R. Howard-Jones, L.R.I.B.A., "Plas Ynys," Cardiganshire.

NO DATE.—Wood Green, N.—HOUSES.—Erection of 24 houses on the Noel Park Estate, for the Labourers' & General Dwellings Co., Ltd. County Architect, 1, Cromwell-road, South Kensington.

MATERIALS, etc

NOVEMBER 23.—Coseley.—MATERIALS.—6,500 of clean granite or cold blastslag, broken and set for the U.D.C. Berrington & Son, engineers, 21, Chancery, Lichfield-street, Wolverhampton. Deposit £2 2s.

NOVEMBER 23.—Felling.—CEMENT.—Six ending June 30, 1920, or for twelve, macadam stone kerb, setts, &c., Portland cement, sanitary cast ironwork. Surveyor.

NOVEMBER 23.—Rcmford.—GRANITE.—5,500 broken granite, for the R.D.C. Highway S. 164, South-street.

NOVEMBER 23.—West Sussex.—MATERIALS.—(1) broken granite, quartzite, or other approved and chippings; also tarrad macadam; (2) pit face flints and pit flints, and washed shingle, suitable for surface tar treatment; also bind materials, for the C.C. H. W. Bowen, County Surveyor's Office, Southgate House, Chichester.

NOVEMBER 23.—West Sussex.—TAR.—200,000 of tar, for the C.C. H. W. Bowen, County Surveyor's Office, Southgate House, Chichester.

NOVEMBER 25.—Bilston.—LEAD.—Pig lead a wool for the jointing of cast iron pipes, for the R. A. Webster, Engineer.

NOVEMBER 25.—London.—BLOCKS.—50,000 of yellow deal paving blocks, for the Isling Borough Engineer.

fication by both sides.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ABERCARN.—The Council has given their Engineer instructions to proceed with a number of out-of-work schemes, estimated to cost between £15,000 and £20,000, as soon as the Unemployment Grants Committee sanctioned the grant applied for.

ALVASTON.—The U.D.C. recommend that application be made to the M.H. for permission to erect a further twelve houses at Allenton.

ASH GREEN.—A central school for 500, to cost £30,000, is to be provided by the Warwickshire E.C.

ATHERSTONE.—Warwickshire E.C. are shortly to prepare a scheme for a new central school.

BEBINGTON.—The Cheshire C.C. has asked the County Surveyor to prepare a scheme for a bridge on the main road.

BEDLINGTON.—The U.D.C. has decided upon a large scheme for the conversion of existing sanitation methods to water carriage system.

BEDWORTH.—A proposal for enlarging the Leicester-road school is being considered by the Warwickshire E.C.

BELFAST.—A public inquiry has been held into an application by the Corporation for sanction to a loan of £250,000 for the purpose of making advances under the Small Dwellings Acquisition Acts.

BEVINGDON.—Herts E.C. have decided to invite tenders for the erection of an elementary school for about 200 children, the estimated cost being £6,500.

BIGGLESWADE.—The R.D.C. has decided to make application to the M.H. for sanction to borrow £3,000 for housing purposes.

BISHOP AUCLAND.—Durham E.C. has acquired a site for the erection of an elementary school.

BLACK NETLEY.—Essex C.C. are acquiring 25 acres of land in connection with the proposed enlargement of the sanatorium.

BLACKPOOL.—The Corporation has decided to proceed with the erection of a destructor in the Bispham district. The Borough Surveyor has prepared plans for the construction of a model yachting pool opposite end of Harrow Side-lane, South Shore. The scheme has been approved and adopted by the Corporation.

BLACKWELL.—North Riding C.C. are negotiating for the land required for the scheme for the improvement of the bridge and approaches.

BOLTON-ON-DEARNE.—The U.D.C. has decided to call a conference of neighbouring authorities on the question of establishing a maternity home in the district.

BRAMPTON.—A proposal is afoot for an extension to the Isolation Hospital by the R.D.C.

BRENTWOOD.—Essex C.C. are seeking sanction for a loan of £2,725 for the erection of a superintendent's house at the lunatic asylum.

BRIGHTINGSEA.—The Essex E.C. has purchased a site for the proposed subjects' centre.

BRISTOL.—The Corporation has prepared a scheme, which has been provisionally approved by the Electricity Commissioners, for constructing a new generating station at Portishead, at a cost of £980,000. Mr. W. H. Peters has purchased a site at St. Philip's Marsh, for the erection of garages to cost £3,000. The Corporation have acquired all the properties comprising the site for municipal buildings in College Green, excepting "The Star" Tavern, for which compulsory purchase powers are to be obtained.

BUXTON.—Messrs. T. W. Woolworth & Co., Ltd., have acquired a part of the Shakespear Hotel, which is to be adapted to their requirements to the plans of Mr. Wm. Pridde, the company's surveyor.

CANVEY ISLAND.—The M.H. has held an inquiry into the application of the Rochford R.D.C. for approval of a preliminary statement of proposals for development in connection with the Canvey Island town-planning scheme.

CARDIFF.—An early start is to be made with the preliminary works upon the site of the new hospital at Llandough, which the B.G. are to build this winter, at a cost of £170,000. Plans have been prepared by Messrs. Willmott & Smith, 4, Park-place.

CATERHAM.—The M.A.B. recommend that approval be given to the renewal of the boilers at the Mental Hospital, the centralisation of the domestic hot water system and the installation of electric light and electric motors, at £38,250.

CHELMSFORD.—The Clerk to the E.C. reported that he had visited the B.E. with a view to forwarding the approval of the plans of the proposed new school. Application is to be made for sanction to borrow £23,600 for the scheme.

CHERTSEY.—The U.D.C. has received a letter from the architect covering a letter from Messrs. Lacey & Sons, giving the following revised figures at £25,430 as the allocation of the tendered price of the 46 houses to be erected on the Pyrcroft site.

CHICHESTER.—The West Sussex E.C. has recommended the erection of a secondary school for 230 boys.

COLCHESTER.—The Essex E.C. recommend the re-building of the dining and recreation room at the Junior Technical School, at a cost of £448.

CONSETT.—Durham County E.C. has decided to erect an elementary school for 350 children at the Grove estate.

DARVELL.—The East Sussex C.C. has recommended the total estimated cost of the amended scheme for the Darvell Hall Sanatorium at £9,130 10s. 6d.

DERBY.—The T.C. has received sanctions to loans for the provision of houses: £33,900 for 100 two-bedroom houses, £5,538 for 12 houses, and £115,000 for 250 Thorncliffe houses.

DIDCOT.—The Berkshire C.C. recommend the spending of £475 in enlarging the police station.

DONCASTER.—The Watch Committee recommended spending £23,000 on a new fire station in Grey Friars-road.

DOWNHAM.—The L.C.C. recommend that, subject to the approval of the M.H., the freehold of a site, about 1.04 acres in extent, be sold for £1,000 to the Church of England authorities for the erection of a church.

DUNCHURCH.—The managers of the Boys' School are considering the erection of a new school.

DUNDEE.—Plans and sections of proposed new buildings, &c., have been lodged at the Office of the City Engineer Arbroath-road, sports pavilion for directors of Dundee High School; architect: J. Findlay, 33, Albert-square.

DUNMOW.—The R.D.C. has accepted tenders for the erection of houses, as follows: Pair at Bardfield Saline, Pring, £850; pair, Barnston, Goodey, £836; four, Broxton, Ratcliffe, £1,650; twelve, Chelmsford-road, Dunmow, Goodey, £4,728; six, Church End, Dunmow, Goodey, £2,254; two, Little Easton, Goodey, £869; six, Stebbing, Bush, £2,558.

EASINGTON.—Plans for an elementary school at Easington-lane have been prepared by the Durham E.C.

EAST HAM.—Shops are to be built on the site of St. John's Church, now being demolished.

EAST SUSSEX.—An improvement scheme in the Newhaven-Rottingdean road involving widening the highway to 50 ft., at an estimated cost of £160,000, was approved by the C.C.

EPPLETON.—A site for an elementary school has been purchased by the Durham E.C.

EXMOUTH.—The M.H. has given formal sanction to the borrowing by the U.D.C. of £3,750 for the purpose of subsidy grants under the Housing Act.

FISHBURN.—The B.E.C. has approved the provision by the Durham E.C. of a new school for 200 senior scholars.

FOLKESTONE.—The Borough Engineer has been instructed to prepare plans for the erection of a shelter. The T.C. has also instructed the Borough Engineer to construct a concrete retaining wall of the Road of Remembrance. Tenders are to be invited for the erection of the Women's convenience in Beach-street.

GAINSBOROUGH.—A proposal is afoot for the erection of a sugar beet factory.

GREAT BURSTAD.—The Essex E.C. recommend the erection of additional class-rooms at the Council school, at a cost of £5,190.

HADLEIGH.—Four additional class-rooms and offices have been recommended for erection at the Council school, at a cost of £3,590, by the Essex E.C.

HAROLD COURT.—The Essex C.C. recommend the spending of £314 on repairs to the sanatorium.

HARTLEPOOLS.—The Port and Harbour Commissioners have approved a tender for the new house, which is to cost £3,958.

HASTINGS.—The Housing and Improvements Committee has approved plans prepared by the Borough Engineer for the proposed lay-out of the land along the new road from Red Lake to a point near "King's Head" Inn, Winchelsea-road, for the purpose of a housing scheme, and recommend to the T.C. the lay-out to be approved, and that the Borough Engineer be instructed to prepare estimates of the cost of construction of the road and sewer and for the erection of fifty houses.

HAWKSWELL.—The Essex E.C. recommend adaptation of premises for a cookery centre school, at a cost of £140.

HEBBURN.—The U.D.C. is to purchase 956 a-lard at a cost of £3,200 for housing.

HEMSWORTH.—The House Committee of the Capital propose extensions to their premises and have been prepared by W. T. Lynden, surveyor.

HERTFORD.—The C.C. has approved the erection of a new Grammar School, to accommodate about 81 at an estimated cost of £35,000; also to an expenditure of £5,000 for the provision of a caretaker's miniature rifle range, cricket pavilion, road-making.

HERTFORDSHIRE.—Herts C.C. has authorised preparation of a scheme, in conjunction with the Councils and joint hospital boards, for the provision of hospital accommodation for cases of pulmonary fever.

HESWALL.—Cheshire C.C. are to extend the station, at a cost of £875.

HILL END.—Formal approval was given to the utilisation of 130 acres of the Hill End Mental Estate for the purposes of the proposed new institution for mental defectives, and Mr. G. Midgley, Caxton House, Westminster, was appointed to the County Council as to the best arrangement made for the treatment of sewage and also as to water supply to Hill End Mental Hospital, a proposed new institution for mental defectives.

HILLSBOROUGH.—The congregation of the Church of the Sacred Heart are raising funds for the erection of a new church and for school extensions.

HINCKLEY.—The R.D.C. has appointed a sub-committee to proceed with the scheme for the erection of 150 houses in the industrial villages.

HINDHEAD.—The architect has agreed with the decision to complete the church as originally planned, the cost being £5,320.

HOUGALL.—Durham C.C. has arranged to at the river bank at Hougall Farm, including the formation of eight concrete jetties at a cost of £3,000.

HOUGHTON-LE-SPRING.—An alternative site obtained by the Durham L.C. for the erection of an elementary school.

HOVE.—The T.C. are proposing to erect Aldington district two new sub-stations, at £21,000. The T.C. passed plans: E.C. six detached houses and seven garages, at £3,000.

HUCKNALL.—The M.H. has sanctioned the erection of twenty houses, at a cost of £10,500. Plans for factory extensions for Messrs. Spencer & Co. passed.

HULL.—Mr. F. Bilton has offered to undertake the erection of a further 200 to 500 houses at £475 per house for 200, and £475 for 500. The Housing Committee approved the plans forwarded by the contractor for the erection of 200 houses on the East Hull site Wild system. The City Architect is to prepare plans for enlarging the Chapel at the crematorium. Plans to be prepared for a refreshment pavilion in East Hull. The provision of a mental clinic is being considered by the Hospitals Committee. Plans have been prepared for the second portion of the Francis School. The E.C. has approved plans for the erection of an elementary school for 250 children in North Hull. In connection with the new infectious hospital at Cottingham it has been decided that accommodation shall be for a twenty-six bed and a ten-bed cubicle block, and that the attractive buildings be based on a hospital of 374 beds. The Health Committee are considering provision of a coroner's court in Castle-street. M.H. has sanctioned a loan of £12,000 for the purpose of workshops for the works committee in East Hull street.

HUNGERFORD.—The M.H. has sanctioned housing schemes for Kintbury and Up Lathbury and approved of the tenders, for erection of 100 houses on the Racecourse site.

JARROW.—Plans have been prepared by the J.E.C. for the erection of an electrical laboratory secondary school.

KENTWORTH.—A site for a central school is obtained by the Warwickshire E.C.

KERESLEY.—Warwick E.C., who are now erecting a school at Keresley, has decided to erect a school for 150 infants.

KIRKBRISTON (YORKS).—A scheme is being considered by the Huddersfield E.C. and the C.C. proposed erection of a new secondary school at Keresley Bridge, Kirkbriston, with accommodation for 400 pupils.

KNUTSFORD.—The U.D.C. are seeking sanction to a scheme to cost £61,500 for works of sewerage disposal.

LAINDON.—The Essex E.C. recommend the erection of the proposed new school, at a cost of £7,980.

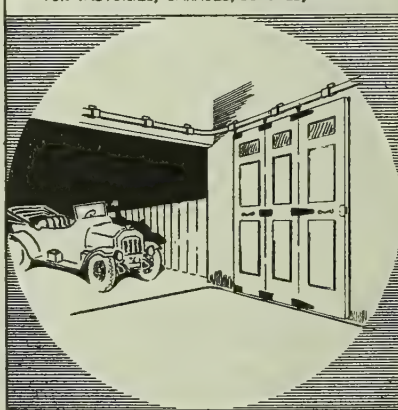
LEAMINGTON.—Warwickshire E.C. are considering the provision of equipping a laboratory for mechanical and engineering students, at a cost of £1,500.

LEPPS.—Sanction is to be sought for a loan of £19,000 for the erection of baths at Stocks Hill. M.H. has sanctioned a loan of £2,583 for the erection of a branch library at Harehills. Sanction is being sought for a loan of £15,000 for the erection of 28 houses.

THE "HENDERSON" SYSTEM

SLIDING DOOR GEAR

FOR FACTORIES, GARAGES, SCHOOLS, ETC.



"TANGENT JUNIOR" FOR LIGHT DOORS.

"TANGENT SENIOR" FOR HEAVY DOORS.

WRITE FOR BOUND CATALOGUE B.24 TO:-

P.C. HENDERSON, LIMITED.

BARKING, ESSEX. PHONE. EAST HAM 247.

* See also our List of Contracts, Competitions, etc.

ASS GATES. Sanction has been given to the purchase of housing land off York-road and Selby-road at a cost of £25,350. The Tramways Committee has asked the architect to prepare plans for an extension of the depot at Swinegate. The City Engineer is to prepare plans for a convenience at Stanningley-road, Bramley. The C.C. has prepared plans of the bridge they propose erect under the railway in connection with the construction of the portion of the Ring-road from Gelderd-road to Whitehall-road. Another 500 houses are to be provided. A site for a branch library is to be obtained at the Middleton housing estate. The City Engineer has prepared plans for sports pavilions, shelters and benches to be erected in various parks.

LEITCHWORTH.—Herts E.C. has voted £290 for the provision of further sanitary accommodation at the Emore School, Letchworth.

LEYLAND.—The U.D.C. has decided to carry out a scheme for the erection of 50 houses.

LEWIS.—The U.D.C. passed plans: J. E. Nelson, houses at Nottingham-road; J. A. Dartnall eight new, Belgrave-road.

LONDON (BETHNAL GREEN).—The L.C.C. recommend borrowing by the B.C. of £17,389 for paving and laying works within the borough.

LONDON (CLAPHAM).—The Parochial Church Council All Saints', Franciscan-road, has decided to rebuild St. Swin's, Kellins-street, at a cost of about £3,000. J. J. Waterman is the architect.

LONDON (SHEPPERS' BUS).—The L.C.C. recommend the expenditure of £7,000 in respect of the shepherd's Bush disused fire station and the adaptation the premises for housing purposes, provided that the ground floor and basement may be let for commercial purposes.

LONGFORD.—Warwickshire C.C. have now obtained sanction for the widening of the bridge.

LONGRI GE.—The Architect to the Lancashire C.C. is in hand preparation of plans for the erection of 43 houses on the Wheatheaf estate.

LOUGHBOROUGH.—An inquiry has been held into the proposed town-planning scheme of the Corporation the M.H.

LOWESTOFT.—The T.C. recommend that the plan of a Borough Surveyor for the reconstruction of the keel-dock Groyne be approved and that the work be carried out, and application be made to the M.H. for sanction to a loan of £1,350 for carrying out of the work.

MANCHESTER.—The E.C. are purchasing property in Shotton Old-road for a practical instruction centre.—A loan of £54,000 is being obtained for works at new sites at Chorlton and Didsbury.—Swimming-baths are to be constructed at Debdale Park and Shotton Park at a cost of £5,000.—Shelters and villas are to be erected in various parks, at a cost of £4,000.—The B.E. has approved the plans for the new secondary school for girls.—The E.C. are making provision for the erection of a new special school.—A loan of £2,894 has been sanctioned for the erection of a handicraft centre at Heald-place.—Land at Barlow Moor-road has been transferred to the E.C. for the erection of an elementary school.—The B.E. have approved plans for the reconstruction of the Shotton central school.—The E.C. has completed the purchase of a site at Openshaw for the erection of a technical school.—Additions are to be made at the variety of the Manchester University, Burlington-road, Chorlton.

MANSFIELD.—Messrs. A. & W. Flatau & Co., Ltd., of London, have purchased land on Sutton-road for the proposed erection of a silk mill. The plans have been prepared by A. E. & T. Sawday, 56, London-road, Leicester.

MARSTON.—The original design for widening Marston ridge has been modified by the Warwickshire C.C. The Bridge has been scheduled as an ancient monument. The cost is estimated at £3,500.

MARSTON GREEN.—Warwick C.C. are negotiating a site for the erection of a police house.

MIDLEBROUGH.—The managers of the St. Andrew's Roman Catholic School, Marsh-street, have decided to enlarge the school by about 320 places.

MIDDELEWICH.—The L.M.S. are negotiating with the Yorkshire C.C. regarding the proposal for a new bridge.

MILSUMER NORTON.—The U.D.C. has decided to make application to the M.H. for sanction to a scheme for the erection of 26 houses.

MORETON.—Cheshire E.C. has obtained sanction for loan of £14,000 for the erection of a school.

MORPETH.—The T.C. has approved plans for the erection of a number of houses on the Bennet's Walk estate.

NETTLESWORTH.—Plans are being prepared by the Durham E.C. for the erection of an elementary school.

NEVENDON.—The Essex E.C. recommend the erection of the proposed new school at an estimated cost of £7,430.

NORTHAMPTON.—The C.B. recommend that 60 brick houses be erected in Lindsay-avenue and ad No. 13 on Abington site, and the Borough Engineer be instructed to prepare necessary plans.—The Water Engineer has been instructed to carry out works at a cost of £1,000, at the Cotton Mill dam and reservoir.—The B.E. has approved of the purchase of the site in St. George's-avenue for £7,150, for the new technical college, for which the M.H. has given permission for sanction to the borrowing of the money.—A convenience is to be built in Miller's Meadow at a cost of £450, and one in Regent-square at a cost of £400.—The C.B. estimates the cost of road works at £40,000, for which they have sanction.—The Engineer has submitted plans showing the position of the slipper baths, offices, laundry, &c., in Miller's Meadow, and the elevation of the building, which the B.E. has approved. The cost is estimated at £4,500.—Plans passed: 14 lock-up garages and workshop in Court-road and Gregory-street, for Wm. Coe; eight houses in Boughton Green-road, and twelve houses in Clatterfield-road, for A. L. & H. W. Chown.

NORTHWICH.—Cheshire E.C. has purchased a site at a cost of £1,000 for the erection of a central school.

NUZZATON.—Warwickshire E.C. propose the erection of a technical school, at a cost of £5,000.

PENRITH.—The U.D.C. are to carry out improvements at the Fair Hill Isolation Hospital, at a cost of about £300.

PETERBOROUGH.—The R.D.C. has agreed to make application to the M.H. for a loan of £9,000 in connection with the housing scheme at Boro' Fen and Newborough.

PITSEA.—The Essex E.C. recommend the erection of two additional classrooms at a cost of £1,550, at the Council school.

PLYMOUTH.—The National Provincial Bank, Ltd., Bishopgate, E.C.3, are to build new branch premises, to the plans of A. S. Parker, F.R.I.B.A., 34, Bedford-street.

PORTMALOC.—The War Memorial Hospital Committee are to embark on a scheme of new buildings. An ideal site overlooking Borthyngs Cove has been obtained.

QUARRY BANK.—The U.D.C. has decided to apply for loans amounting to £14,000 for housing purposes.

RAMSGATE.—Dame Janet Stancomb-Wills has offered to provide a home, containing 31 bedrooms, for the nursing staff of the Hospital.

RIPGATE.—The R.D.C. have prepared a scheme for widening Shipley Bridge. It is proposed to provide a public convenience at Horley.

ROTTERHAM.—The R.D.C. has received formal sanctions from the M.H. to the borrowing of the following monies for the erection of houses: £14,954, for 30 at Treton; £14,037, 30 at Aughton; £27,658, 58 at Brinsworth; £9,348, for the houses and £250 for land in connection with the 20 houses to be erected at Loughton.—Application is to be made to the M.H. for sanction to the erection of a further 57 houses at Brampton Bierlow. A plan has been prepared showing the proposed development of 25 acres of land at Thrybergh for housing and recreation purposes.—A contract for the erection of 20 houses at Catcliffe for £9,400 has been sealed.

RUGBY.—Warwickshire E.C. are to prepare a scheme for a central school for about 400 children, the estimated cost being £20,000.

ST. ALBANS.—A large factory for the manufacture of artificial silk hose is to be erected in the town by the St. Albans Hosiery Mills, Ltd., a new company with whom is connected Messrs. Ballington, Ltd., 45, Basinghall-street, E.C.2.

ST. LEONAR S.—Sanction has been given by the Herts C.C. to the expenditure of £130 in the renovation and re-decoration of the interior of the Hertfordshire Children's Convalescent Home.

SEAFIELD.—The R.D.C. has obtained sanction from the M.H. to borrow £7,200 for the erection of houses and £400 for the purchase of another building site.

SEAFIELD.—The T.C. passed various plans, including 28 houses, Patmore-street, and eight houses, Windmill-lane, for T. Pye; nine houses and garage, Chorley-drive, for J. W. Sivil.

SHOTTON.—The Roman Catholic Trustees have agreed to provide a school for about 250 children at Fleming Field.

SOUTHAM.—A central school is to be provided by the Warwickshire E.C., at a cost of £20,000, and providing accommodation for 300 scholars.

SOUTHEAST-ON-SEA.—The C.B. passed plans: Ten lock-up garages, Oakfield Park-drive, G. W. Eves, Ltd.; sixteen houses, Cricketfield-grove, R. W. Walker; schools, Westborough-road, trustees of the Primitive Methodist Church; twenty flats, Olive-avenue, United Women's Homes Association, Ltd.; six houses, Southbourne-grove, and four houses, Clatterfield-gardens, C. Neil.

SOUTH SHIELDS.—The General Committee passed a resolution that the present Children's Ward at the Ingham Infirmary be extended in accordance with plans to provide cots already endowed by the South Shields War Memorial Committee.

STAMFORD.—A start is being made upon the construction of a new reservoir, for the Rugby Corporation, at an estimated cost of £120,000.

STOKE-PORT.—Plans approved for fourteen houses in Larkhill-lane, for W. Bullus.

STREETHOUSE (W. YORKS.).—The Featherstone U.D.C. has approved of plans for fifty houses.

STRETTON.—Arising out of a recommendation from the Sites and Buildings Sub-Committee, the E.C. has resolved that a building plot of land in King's-road be purchased as a site for a new public elementary school for the accommodation of 1,200 scholars.—The U.D.C. resolved that application be made to the M.H. for sanction to borrow a further sum of £40,000 for housing purposes.—The Council resolved that the scheme for the erection of sixteen cottages in Nelson-street be approved and application be made to the M.H. for approval.—The Manchester Tramways Committee are proposing to erect a refuge at Barton-road and Chester-road, and a shelter at Taylor's-road, Gorse Hill.—The Council has resolved that the improvement scheme and estimate for the widening of the railway bridge over Barton-road be approved, and that application be made to the M.H. for sanction to the borrowing of £2,900 to defray the cost.

SURBITON.—The U.D.C. is to make application to the M.H. for sanction to loan £26,000 for housing purposes.—The cemetery is to be extended at an estimated cost of £1,620.

SUTTON COLDFIELD.—Warwickshire E.C. are taking steps to secure premises for the enlargement of the technical school.

TAKLEY.—Repairs and alterations to the Brewer's End Council school, at a cost of £650, is to be carried out by the Essex E.C.

TANFIELD.—The U.D.C. has decided to erect 46 houses at Crookgate Bank Top, Burnopfield, by direct labour. Mr. J. R. Heslop is the architect.

TORQUAY.—The T.C. passed plans: Ten houses, Warberry-vale estate, for the Daison Estate, Ltd.; twelve houses off Westhill-lane, R. E. Narracott; 187 houses on Daison estate, for Messrs. Vanstone.

TUNBRIDGE WELLS.—The T.C. has approved the recommendation that, subject to the sanction of the

M.H., 21 houses and 12 flats be erected on the Hawkenbury site.

TYNEMOUTH.—The E.C. are seeking sanction to borrow £15,000 for extensions at the Priory School.—The Housing Architect is to prepare a lay-out of land at Cullercoats for 50 houses. Plans are to be prepared for houses on the southern portion of the Bolkwell estate.

UCKFIELD.—Mr. Currie, of the Mayfield Tenants' Ltd., has requested that the R.D.C. should assist them in a scheme for housing working men at Mayfield, land for which had been purchased and which is sufficient for 20 cottages.

UPTON.—Cheshire C.C. has obtained sanction to borrow £1,462 for improvements at the mental hospital.

UXBRIDGE.—The U.D.C. are considering the question of a drainage scheme, which is estimated to cost £82,583.

WAKEFIELD.—The Corporation has decided to erect a wholesale warehouse on the Market estate at a cost of about £3,500, and tenders are to be invited. Approval has been given to the proposal for extending the maternity hospital at a cost of £5,000. Messrs. J. Smith are negotiating for a site for the erection of an inn on the Lupset housing estate. The M.H. has sanctioned schemes for erecting 306 houses on the Lupset and Portobello housing estates. Messrs. Massie & Holdsworth are to develop the Woodthorpe estate. A scheme for the development of an estate in Horbury-road has been prepared by A. E. Lockwood. The Housing Committee are considering proposals for erecting eight shops on the Lupset estate. Alternative plans have been prepared by the housing architect for the new school at Portobello. A scheme is to be prepared for the provision of school accommodation on the Lupset estate.

WALTON (SURREY).—The U.D.C. are proposing to build 50 more houses.—The Council are also considering the question whether steps should be taken to acquire the electricity undertaking which serves the district. The expenditure is about £80,000.

WANTS WORTH.—The B.C. are considering the question of providing convenience accommodation.—The Council recommend that the scheme of erecting 14 self-contained flats on the site in Blackshaw-road acquired for the purpose be proceeded with and application made to the M.H.—The B.C. recommend the erection of 169 houses on the Fuzedown estate, at a cost of £95,200, and 40 houses on the Southfields estate, at £24,300.—Plans passed: Tysoe & Harris, 70 houses at Kirkstall-road and New Park-road, Streatham, and in proposed new road between those roads; G. E. Sturgis & Son, 12 houses in Merton-road, Southfield; W. Davies, eight lock-up garages at rear of 52, Upper Tulse-hill, Streatham; Goul & Metcalfe, 10 houses at junction of West Hill-road and Wimbledon Park-road, Southfield.

WANSTEAD.—Arrangements are being made by the Essex E.C. for erecting the first portion of the county High School, the cost being £38,000.

WELLFIELD.—Plans of the Durham E.C. for a secondary school have now been approved by the B.E.

WELLINGBOROUGH.—The R.D.C. passed plans: Six parlour and 12 non-parlour type houses for Wollaston-road, Irchester.

WEMBLEY.—A sum of £3,400 has been paid for a site for the new elementary school.

WEST MERTON.—A school is to be built for the Surrey E.C., at a cost of £13,500.

WITBY.—Plans have been prepared by Messrs. Masons, of Leeds, for the reconstruction of W. Horne & Sons, Ltd., premises, in Skinner-street.

WITFIELD.—Plans have been prepared by J. L. Edwards, architect, 88, Moseley-street, Manchester, for the erection of 19 houses in Kingley-road.

WOLKINGTON (CO. DURHAM).—The U.D.C. has approved a plan prepared by Hays & Gray for a further 30 houses by direct labour.

WILKINSON.—Warwickshire E.C. has decided to erect a mining school.—It is also proposed to build a mining school library, at a cost of about £1,200.

WINWICK.—Alterations and repairs are being proposed to be done at St. Oswald's Church, at a cost of £2,600. The architect has not been chosen.

WIRRAL.—Cheshire C.C. has decided to support the application of the Wirral R.D.C. for a loan of £123,000 for a sewerage scheme.

WITNESS.—The congregation of St. Paul's Church has passed plans of the proposed new vicarage.

WOKING.—The Surveyor has been asked to prepare a scheme for extending the present fire station, at a cost of about £2,500, and alternately for a complete new station on a new site.

WOMBWELL.—The M.H. has approved the proposal of the U.D.C. to build 76 houses on the King's-road site.

WORCESTER.—The T.C. passed plans for six houses in Athelstan-road and seven houses in Battenhall-road, for A. E. Chance.

WORPLES ON.—A new infants' school and additions to mixed school are to be built at Perry-hill, Worpleston, costing £5,500; and a sum of £1,780 is to be spent for alterations to Wood-street school.

WORTHING.—The West Sussex E.C. has proposed extensions to the Boys' Secondary School, at a cost of £4,500.

WORSBOROUGH.—The U.D.C. has decided to proceed with the erection of 22 houses.

WYEWLEY.—The U.D.C. are proposing to build new offices.

WYKE.—The Corporation are considering the provision of lavatory accommodation in Parliament-street.—To provide bathing facilities for school children, the City Engineer is to prepare a scheme for covering in one of the open-air baths.—The Corporation are to proceed with the clearance of the Hope-street unhealthy area and a block of twelve houses is to be erected for tenants who will be displaced.—The Housing Committee recommend inviting tenders for the erection of 400 houses.—A housing site at Camphelon-lane is being obtained, at a cost of £2,000.—Further inquiries are being made by the Housing Committee regarding cast-iron houses.—The M.H. has given sanction to the T.C. for the erection of a further 406 houses on Tang Hall.

PRICES CURRENT OF MATERIALS

Following to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by inquiry.—Ed.

BRICKS, &c.

1 crl, 600 Alongside, in River Thames up to London Bridge.	£ s. d.
First Hard Stocks	4 3 6
Second Hard Stocks	3 13 6
Per 1,000, Delivered at London Goods Stations.	
Flemons, at	£ s. d.
King's Cross	2 13 3
Do. grooved for plaster	2 15 3
Do. Bullnose	3 8 3
Best Stourbridge Fire brick:—	
2 1/2 in.	8 11 0
3 in.	10 3 0
GLAZED BRICKS—	
Best White	D'ble Strich's 30 0 0
Ivory, and	D'ble Headers 27 0 0
Salt Glazed	One Side and
Stretchers	two Ends 31 0 0
Headers	Two Sides and
Quoins, Bull-	one End 32 0 0
nose and 4 in	Splays and
Flats	Squints 29 10 0
Second Quality, £1 per 1,000 less than best.	
and buff, £2 extra over white. Other colours, Hard	
Glaze, £5 10s. extra over white.	

BREEZE CONCRETE SLABS.

Delivered London	s. d.
1 in. per yd. super	1 11
2 1/2 in.	2 4
3 in. per yd. super	2 9
4 in.	3 6
Thames Ballast	10 6 per yd.
Pit Sand	13 9
Thames Sand	14 6
Best Washed Sand	14 6
3 in. Shingle for Ferro-	12 9
Concrete	14 0
in. Broken Brick	11 6
Pan Breeze	7 6
Per ton delivered in London area in full van loads.	
Best Portland Cement, British	Standard Specification. Test £2 18 0 to £3 3 6
31s. alongside at Vauxhall in 80-ton lots.	
Ferrocete per ton extra on above.	0 10 0
Super Cement (Waterproof)	4 8 0
Roman Cement	5 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 10 0
" Pink	3 0 0
Plaster, Coarse, Pink	3 12 6
" White	5 12 0
" Fine	3 9 0
Sirapite, Coarse	3 17 0
Finish	2 11 9
Grey Stone Lime	2 11 9
Chalk Lime	2 4 6
Best Ground Blue Lias Lime	32 0 0
Hair	1 12 0
Granite Chippings	
NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months, carr. pd.	
Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dp.	

STONE.

BATH STONE—delivered in railway trucks at	s. d.
Westbourne Park, Paddington, G.W.R., or	
South Lambeth, G.W.R., per ft. cube.	2 9 1/2
Do. do. delivered in railway trucks at Nine	
Elms, L. & S.W.R., per ft. cube.	2 11 1/2
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft.	
average, delivered in railway trucks at	
Nine Elms, L. & S.W.R., or South Lambeth	
Station, G.W.R., per ft. cube.	4 4
Do. do. delivered on road wagons at above	
stations, per ft. cube.	4 5
White basebed, 3d. per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every foot over	
20 ft. average, and 1/2d. beyond 30 ft.	
HORTON WOOD STONE—	
Delivered at any Goods Station, London.	7 0
Small random blocks, up to 10 ft. cube. P. ft. cb.	17 0
Random blocks from 10 ft. and over	27 0
Sawn two sides	32 0
Sawn three or four sides	
YORK STONE, BLUE—Robin Hood Quality.	
Delivered at any Goods Station, London.	s. d.
6 in. sawn two sides landings to sizes (under	
30 ft. super.) Per ft. super	5 6
6 in. rubbed two sides, ditto.	6 0
6 in. sawn two sides slabs (random sizes)	2 3 1/2
2 in. to 2 1/2 in. sawn one side slabs (random	
sizes)	1 6 1/2
1 1/2 in. to 2 in. ditto, ditto.	1 4
HARD YORK—	
Delivered at any Goods Station, London.	
Scrapped random blocks	6 3
6 in. sawn two sides landing to sizes (under	
40 ft. super.) Per ft. super	5 11 1/2
6 in. rubbed two sides ditto	2 10 1/2
4 in. sawn two sides slabs (random sizes)	2 1 1/2
3 in. ditto	9 0
2 in. self-faced random flags	

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 6s. 6d.; Moulded, 7s. 9d.; Cills, 8s. 3d.	
--	--

WOOD.

GOOD BUILDING DEAL.			
Inches.	per stat.	Inches.	per stat.
3 x 11	28 0	3 x 6	21 0
4 x 9	25 0	3 x 11	25 0
4 x 8	24 0	2 x 11	25 0
4 x 7	23 0	3 x 9	24 0
4 x 6	21 0	2 x 9	23 0
3 x 7	20 0	3 x 4	22 0
2 x 11	27 0	1 x 9	26 0
PLANED BOARDS.			

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
3/4	20/-	1 1/4	31 -
1	25/-	1 1/2	34 -

TONGUED AND GROOVED FLOORING.		MATCHING (BEST).	
Inches.	per sq.	Inches.	per sq.
1	25/-	1 1/4	16/6
1 1/4	31/-	1 1/2	19/-
1 1/2	34/-	1 3/4	24/-

BATTENS.		SAWN LATHS.	
Inches.	s. d.	Inches.	s. d.
3/4 x 2	6 per 100 ft.	1" AND UP THICK.	0 2 4

Per bundle	1" AND UP THICK.	0 16 0 to 0 13 0
Dry Austrian Wainscot, per ft. cube		0 15 4
Dry American and/or Japanese Figured Oak, ft. cube		0 11 0 to 0 13 0
Dry American and/or Japanese Plain Oak, ft. cube		0 16 0 to 0 13 0
Dry sq. edged Honduras Mahogany, ft. cube		0 13 0 to 1 1 0
Dry Log cut Honduras Mahogany, ft. cube		1 4 0 to 1 10 0
Dry Cuba Mahogany, ft. cube		0 13 0 to 0 15 0
Dry Teak, ft. cube		0 11 0 to 0 14 0
Dry American Whitewood, ft. cube		4 10 0 to
Best Scotch glue, per cwt.		4 7 0 to 5 10 0
Liquid Glue, per cwt.		

SLATES.

1st quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.									
		£	s.	d.		£	s.	d.	
24 by 12	....	37	12	6	18 by 10	....	21	2	6
22 by 12	....	34	0	0	18 by 9	....	18	12	6
22 by 11	....	31	5	0	16 by 10	....	17	12	6
20 by 12	....	29	15	0	16 by 8	....	13	15	0
20 by 10	....	25	12	6					

TILES.

Best machine-made tiles from Broseley or Staffordshire district	Per 1,000 f.o.r. London.	£ s. d.
Ditto hand-made ditto		5 12 6
Ornamental ditto		5 17 6
Hip and valley tiles		6 2 6
(per dozen)		0 9 6
		0 9 0

METALS.

JOISTS, GIRDERS, &c., to LONDON STATION PER TON—	£ s. d.
R.S. Joists, cut and fitted	12 10 0
Plain Compound Girders	14 10 0
Stanchions	16 10 0
In Roof Work	19 10 0

MILD STEEL ROUNDS.

To London Station, per ton.	£ s. d.
Diameter.	£ s. d.
1/2 in.	12 0 0
3/4 in.	11 0 0
1 in.	10 15 0
1 1/4 in.	10 10 0
1 1/2 in.	10 10 0
2 in.	10 10 0
2 1/2 in.	10 10 0
3 in.	10 10 0
3 1/2 in.	10 10 0
4 in.	10 10 0
4 1/2 in.	10 10 0
5 in.	10 10 0

	Tubes.	Fittings.	Flange.
Black Gas	60 %	50 %	60 %
Galvanised Gas	45 %	40 %	50 %
Blue Water	55 %	45 %	55 %
Galvanised Water	38½ %	35 %	45 %
Red Steam	50 %	40 %	50 %
Galvanised Steam	32½ %	30 %	40 %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft.	Gutters.	Angles and Stop	Mnds.
3 in. lengths	1 1/2	1 1/2	3 1/2
3 1/2 in.	1 1/4	1 1/4	3 1/2
4 in.	1 1/2	1 1/2	3 1/2
4 1/2 in.	1 1/4	1 1/4	3 1/2
5 in.	1 1/2	1 1/2	3 1/2
3 in.	1 1/2	1 1/2	3 1/2
3 1/2 in.	1 1/4	1 1/4	3 1/2
4 in.	1 1/2	1 1/2	3 1/2
4 1/2 in.	1 1/4	1 1/4	3 1/2
5 in.	1 1/2	1 1/2	3 1/2

RAIN-WATER PIPES, &c.

Per yd. in 6 ft.	Pipe.	Bends, stock	Branches.
2 in. plain	1 1/2	1 1/2	1 1/2
2 1/2 in.	1 1/4	1 1/4	1 1/4
3 in.	1 1/2	1 1/2	1 1/2
3 1/2 in.	1 1/4	1 1/4	1 1/4
4 in.	1 1/2	1 1/2	1 1/2
4 1/2 in.	1 1/4	1 1/4	1 1/4
5 in.	1 1/2	1 1/2	1 1/2

L.C.C. COATED SOIL PIPES—London Prices, ex Works.

Per yd. in 6 ft.	Pipe.	Bends, stock	Branches.
2 in. plain	1 1/2	1 1/2	1 1/2
2 1/2 in.	1 1/4	1 1/4	1 1/4
3 in.	1 1/2	1 1/2	1 1/2
3 1/2 in.	1 1/4	1 1/4	1 1/4
4 in.	1 1/2	1 1/2	1 1/2
4 1/2 in.	1 1/4	1 1/4	1 1/4
5 in.	1 1/2	1 1/2	1 1/2

L.C.C. COATED DRAIN PIPES—London Prices, ex Works.

Per yd. in 6 ft.	Pipe.	Bends, stock	Branches.
2 in. plain	1 1/2	1 1/2	1 1/2
2 1/2 in.	1 1/4	1 1/4	1 1/4
3 in.	1 1/2	1 1/2	1 1/2
3 1/2 in.	1 1/4	1 1/4	1 1/4
4 in.	1 1/2	1 1/2	1 1/2
4 1/2 in.	1 1/4	1 1/4	1 1/4
5 in.	1 1/2	1 1/2	1 1/2

IRON—

Common Bars	£ s. d.	£ s. d.
Staffordshire Crown Bars—	13 10 0	14 10 0
good merchant quality	14 5 0	15 5 0

Staffordshire Marked

Bars	£ s. d.	£ s. d.
Mild Steel Bars	16 10 0	18 10 0
Steel Bars, Ferro-Concrete	11 0 0	12 0 0
quality, basis price	11 0 0	12 0 0
Hoop iron, basis price	16 0 0	17 0 0
Galvanised	31 0 0	32 0 0

Soft Steel Sheets, Black—

Ordinary sizes to 20 g.	£ s. d.	£ s. d.
2 ft. to 3 ft. to 26 g.	13 10 0	14 10 0
24 g.	14 10 0	15 10 0
26 g.	16 10 0	17 10 0

Sheets Flat Best Soft Steel, C.R. & C.A. quality—

Ordinary sizes, 6 ft. by	£ s. d.	£ s. d.
2 ft. to 3 ft. to 20 g.	19 10 0	21 10 0
Ordinary sizes, 6 ft. by		
2 ft. to 3 ft. to 22 g.	21 10 0	22 10 0
24 g.	23 10 0	25 10 0

Flat and Galvanised Corrugated Sheets—

Ordinary sizes, 6 ft. to	£ s. d.	£ s. d.
9 ft. to 20 g.	18 10 0	19 10 0
Ordinary sizes, 6 ft. to		
9 ft. to 22 g. and 24 g.	19 0 0	20 0 0
Ordinary sizes, 6 ft. to		
9 ft. to 26 g.	22 0 0	23 0 0

Sheets Galvanised Flat, Best quality—

Best Soft Steel Sheets,	£ s. d.	£ s. d.
6 ft. by 2 ft. to 3 ft. to	22 10 0	23 10 0
20 g. and thicker.	24 10 0	26 10 0
Best Soft Steel Sheets,		
22 g. and 24 g.	24 10 0	26 10 0
Best Soft Steel Sheets,		
26 g.	26 0 0	27 0 0
Cut Nails, 3 in. to 6 in.	19 10 0	21 0 0

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting to coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	49 10 0
Pipe in coils	51 0 0
Soil Pipe	53 0 0
Compo pipe	54 0 0
NOTE.—Country delivery, 30s. per ton extra; lots under 3 cwt., 3s. per cwt. extra, and over 3 cwt. and under 12 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.	
Old lead, ex London area,	34 10 0
at Mills. per ton	
Do., ex country, carriage forward	35 10 0

COPPER.

Seamless Copper tubes (basis)	per lb.
Strong sheet	"
Thin	"
Copper nails	"
Copper wire	"

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIG COOKS	£ s. d.
IRON.	
1/2 in. 1 in. 1 1/2 in. 2 in.	29/- 45/- 76/- 153/- 246/- 510/- per doz.
NEW RIVER PATTERN SCREW DOWN STOP COOKS	
UNIONS.	
1/2 in. 1 in. 1 1/2 in. 2 in.	41/6 62/- 92/- 174/- 300/- 538/- per doz.
NEW RIVER PATTERN SCREW DOWN MAIN FERRULES	
1/2 in. 1 in. 1 1/2 in. 2 in.	59/6 60/- 116/- per doz.

CAPS AND SCREWS.

DOUBLE NUT BOILER SCREWS.

BRASS SLEEVES.

NEW RIVER PATTERN CROYDON BALL VALVES, S.

DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING

8 lbs. P. traps

8 lbs. S traps

TIN—English Ingots, 2/9 per lb. SOLDIER—Plumbers

1/2, Timmen's 1/5, Blowpipe 1/6 per lb.

PAINTS, &c.

Raw Linseed Oil, in pipes	per gallon	0 3
" " in barrels	"	0 3
" " in drums	"	0 3
Boiled " in barrels	"	0 3
" " in drums	"	0 3
Turpentine in barrels	"	0 6
" in drums (10 gall.)	"	0 6
Genuine Ground English White Lead, per ton	59 15 0	
(In not less than 5 cwt. casks.)		
GENUINE WHITE LEAD PAINT—		
"Father Thames," "Nine Elms,"		
"Park," "Supremus," "St. Paul's,"		
"Spedlo," "Polacco" and other best		
brands (in 14 lb. tins) not less than		
5 cwt. lots.	per ton delivered	80 15
Red Lead, Dry (packages extra)	per ton	55 10
Best Linseed Oil Putty	per cwt.	0 15
Fluocel		0 15
Size, XD Quality	per cwt.	0 15

Continued on next page.

ICES CURRENT OF MATERIALS (contd.)

GLASS.
ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.	Per Ft.
z. fourths ... 3 d.	32 oz. fourths	8d.
z. thirds ... 4 d.	32 " thirds	9½d.
z. fourths ... 4 d.	Obscured Sheet, 15 oz.	4d.
z. thirds ... 5½d.	" 21 "	5½d.
z. fourths ... 5 d.	Fluted 15oz. 6½d., 21oz. 9½d.	
z. thirds ... 7½d.	En lled 15oz. 5½d., 21oz. 7½d.	

A price according to size and substance for squares from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
rolled plate	4½d.
ough rolled	5½d.
ough rolled	5 d.
figured Rolled, Baltic, Oceanic, Arctic, Stip-	
polyte, and small and large Flemish White..	6½d.
Ditto, tinted	9d.
White Sheet	6d.
White Rolled Cathedral	5½d.
do.	7½d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.	Per Gallon.
	£ s. d.
Varnish	Outside 0 14 0
ditto	ditto 0 16 0
Copal	ditto 0 18 0
Copal	ditto 1 0 0
Copal Carriage	ditto 1 4 0
ditto	ditto 1 12 0
Varnish	Inside 0 18 0
Pale Paper	ditto 0 18 0
Copal Cabinet	ditto 1 2 6
Copal Flattening	ditto 1 0 6
Drying Oak	ditto 0 18 0
Hard Drying Oak	ditto 0 19 0
Copal Varnish	ditto 1 0 0
ditto	ditto 1 12 0
ditto	ditto 1 12 0
Japan Gold Size	0 12 6
Black Japan	0 10 6
and Mahogany Stain (water)	0 12 0
Swick Black	0 7 6
n Black	0 14 6
ing (patent)	1 5 0
th and Brush Polish	0 17 0
d Dryers in Terebine	0 9 0
as Black Enamel	0 7 0

TRADE NEWS

Lead Manufacture: New Developments.
The Associated Lead Manufacturers, Ltd., the Cookson Lead & Antimony Co., Ltd., the Lancaster, W. W. & R. Johnson & Sons, the Rowe Bros. & Co. (Bootle), Ltd., and the Brimsdown Lead Co., Ltd., who control in the United Kingdom the most important works at Newcastle-on-Tyne, London and Liverpool, for the manufacture of white lead, lead oxides, &c., have recently acquired the Harburger Chemische Werke Schöen & Co., A.G., whose works are situated in the neighbourhood of Hamburg. The German plant will, for the time being, manufacture lead oxide only. It is being brought up-to-date, and its capacity is being considerably increased, as it is intended to supply not only the German market but also the northern European markets for which the plant is well situated.

Motor Oils.

Friction is a force that can never be entirely eliminated however exactly the parts of a machine are made and assembled. It can be considerably diminished by using a good lubricant, although however refined the oil it is not free of much avail if it is not of the best consistency for the special type of motor for which it is used. Willcox's high grade motor oils are claimed to cover every individual requirement of splash, pressure, lubricating or force-feed systems, and the makers state that it will ensure satisfactory running together with economy in oil consumption and repairs.

Concrete Blocks.

The Cambridge Artificial Stone Co., Ltd., claim that their "Casco" breeze blocks lend themselves to adaption to any elevation and in the same way as bricks, but, being lighter, 18 in. by 9 in. by 8 in., they are capable of being handled and bonded more quickly. A leaflet we have received quotes the instance of one skilled man and two labourers laying 100 of these blocks in eight hours—this is equivalent to over 4,000 clay bricks. To this may be added the saving in mortar. The breeze block, too, provides a better and more natural surface for rough-cast and internal plaster.

THE SCOTTISH BUILDER

STEEL HOUSES IN SCOTLAND

The question of the increased subsidy offered for housing in Scotland is to be raised in Parliament in the course of the next few days. We understand that the exact position is that the Prime Minister, in agreement with the Chancellor of the Exchequer and the Minister of Health, has offered this increase under strictly limited conditions. The increased premium of £40 a house is only made available in respect of a maximum of 4,000 houses. But these have to be manufactured by firms who guarantee an output of at least 1,000 houses a year. The amount of skilled labour utilised is to be limited to 10 per cent. The forms of construction will, of course, have to be rigorously approved by the experts concerned. Even when these conditions are fulfilled, it rests with local authorities, and not with the Government, to decide on the number and type of the houses with which they propose to proceed.

In Scotland three types of the so-called steel houses have or are being built. Weir houses have been erected for a colliery company just outside Glasgow in addition to the demonstration houses. Houses of the type designed by the Duke of Atholl are completed at Robroyston, and are actually occupied by tenants on the Langlands estate at Govan and at Dalmauir, in addition to those that have been built for the Highlands district Committee. In Edinburgh in the course of the next few days, houses with the roof of steel devised by Colonel Peter Nissen will be built. Aberdeen, in an official report made by the Director of Housing estimates the cost of a Weir house of the Cathcart type to be £490, exclusive of the cost of transport of materials to site and travelling expenses. Weir houses of the Eastwood type to be erected by Cupar are estimated to cost about £440 per house.

Innerleithen.—HOUSING.—The Town Council has accepted tenders amounting to £5,640 in connection with the housing scheme.

NEW BUILDINGS IN SCOTLAND

Edinburgh.—SHELTERS.—The Dean of Guild Court has passed plans for a tennis shelter at Inverleith Park and a football shelter at Liberton Public Park, to be erected by the Corporation.

Glasgow.—EXTENSIONS.—A site has been purchased for the erection of Houldsworth Homeopathic Hospital at West Balgray. Sir John Burnet is the architect.

Bo'ness.—HOUSES.—The Linlithgow C.C. has arranged with the Duke of Hamilton's trustees for ground for eighteen additional steel houses proposed to be erected at Newtown, near Bo'ness.

Aberdeen.—PREMISES.—The Aberdeen Harbour Commission has passed a plan for fish-curing premises proposed to be erected at Raik-road, for Mr. J. M. Davidson, per Messrs. Sutherland & George, architects.

Perth.—HOUSES.—The Town Council has adopted a further housing scheme. The Public Health Committee recommended that the Council should take advantage of the recent offer of the Prime Minister of the additional subsidy of £40 for certain types of houses, and that fifty houses should be erected under this scheme.

Stirling.—BRIDGE.—The Central District Committee of Stirling C.C. has been informed that the cost of a bridge proposed for erection over the River Forth between the burgh of Stirling and the village of Cambuskenneth, would be £12,862, including the cost of approaches.

Hawick.—HOUSES.—The T.C. has resolved to proceed with the erection of another block of six two-roomed houses at the top of the Loan, and the burgh surveyor has been instructed to prepare lay-out plans of sites at Gladstone-street, Oliver Park, and other suitable places.

Burntisland.—HOUSES.—The Board of Health has approved of the erection of twenty houses on the Haugh site, and the Town Council are to invite tenders.

BUILDING TRADE WAGES IN SCOTLAND.*

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers—Masons', Bricklayers', Plasterers'.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/7	10½d. to 1/1
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3
Blairstown	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Coatbridge	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dumfries	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dunfermline	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/0 to 1/3½
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3
Hawick	1/7	1/7	1/7	1/7-1/7½	1/7	1/7	1/7	1/3
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3
Inverness	1/5	—	1/5	1/4	1/5	1/5	1/4	1/- to 1/2
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3
Kirkcaldy	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/-
Lanark	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/0 to 1/3
Leith	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3
Perth	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/9	1/3
Stirlingshire (Eastern District)	1/8-1/10	1/8 1/10	1/8	1/9	1/7	1/8	1/6½	1/3½
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 753

CURRENT PRICES FOR BUILDING WORK IN LONDON

EXCAVATOR.		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep....	per yard cube	11	0
Add if in clay.....	" "	1	0
Add for every additional depth of 6 ft.....	" "	0	6
Planking and strutting to trenches.....	per foot super	0	5
Do. to sides of excavation, including shoring	" "	1	0
CONCRETOR.			
Portland cement concrete in foundation 1 to 6.....	per yard cube	32	0
Add if in underpinning in short lengths.....	" "	7	0
Add if in floors 6 in. thick.....	" "	3	3
Add if in beams.....	" "	3	9
Add if aggregate 1:2:4.....	" "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.....	" "	2	6
BRICKLAYER.			
Reduced brickwork in lime mortar and Fletton bricks.....	per rod	£ 30	s. 0 d. 0
Add if in stocks.....	" "	7	10 0
Add if in Staffordshire blues.....	" "	22	0 0
Add if in Portland cement and sand.....	" "	1	10 0
FACINGS.			
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks.....	per ft. super	0	0 1½
POINTING.			
Neat flat struck or weathered joint.....	" "	0	0 3
ARCHES.			
Extra only to the price of ordinary brickwork:—			
Fair external in half brick rings.....	" "	0	0 10
Axed in stocks.....	" "	0	1 9
Rubbed and gauged jointed in putty camber or segmental.....	" "	0	6 0
SUNDRIES.			
Damp course in double course of slates breaking joint and bedded in Portland cement.....	" "	0	1 0
Setting ordinary register grates and stoves.....	each	1	0 0
Setting kitchener, including forming flues, &c., with all necessary fire bricks.....	" "	4	15 0
ASPHALTER.		s.	d.
Half-inch horizontal damp course.....	per yard sup.	4	3
Three-quarter-inch vertical damp course.....	" "	8	6
¾ inch on flats in two thicknesses.....	" "	6	3
Angel fillet.....	per foot run	0	3
Skirting and fillet 6 in. high.....	" "	1	2
MASON.			
York stone templates fixed.....	per foot cube	13	0
York stone sills fixed.....	" "	22	0
Bath stone and all labour fixed.....	" "	10	6
Portland stone fixed.....	" "	20	0
SLATER.			
Welsh 16 in. × 8 in. 3 in. lap, including nails....	per square	72	9
Do 20 in. × 10 in. Do. Do.....	" "	80	9
Do 24 in. × 12 in. Do. Do.....	" "	90	0
CARPENTER AND JOINER.			
Fir framed in plates.....	per foot cube	5	0
Do. joists.....	" "	5	6
Do. roofs, floors, and partitions.....	" "	6	0
Do. trusses.....	" "	8	6
Deal rough close boarding.....	per sq. 35/6	40/-	45/-
Flat centering for concrete floor, including struts or hangers.....	" "	50	0
Do. to beams.....	per ft. sup.	1	0
Centres for arches.....	" "	1	6
Gutter boards and bearers.....	" "	1	0
FLOORING.			
Deal-edges shot.....	per sq. 44/6	53/-	60/6
Do. tongued and grooved.....	" "	49/-	57/6
Do. matchings.....	" "	45/-	51/-
Moulded skirting, including backings and grounds.....	per ft. sup. 1/6	1/9	2/0
SASHES AND FRAMES.			
One-and-a-half moulded sashes or casements.....	per foot super.	1	10
Two Do. Do. Do.....	" "	2	1
Add for fitting and fixing.....	" "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights; average size.....	" "	3	9
DOORS.			
Two-panel square framed.....	per ft. sup. 1½	1½	2"
Four-panel Do. Do.....	" 2/1	2/4	2/6
Two-panel moulded both sides.....	" 2/5	2/8	2/11
Four-panel Do. Do.....	" 2/8	2/11	3/2
	" 2/11	3/2	3/6

CARPENTER AND JOINER—continued.		s.	d.
FRAMES.		s.	d.
Deal wrot moulded and rebated.....	per foot cube	14	14
Plain deal jamb linings framed.....	per ft. sup. 1/7	1/8	1/1
Deal shelves and bearers.....	" "	1/4	1/6
Add if cross-tongued.....	" "	2d.	2d.
STAIRCASES.		s.	d.
Deal treads and risers in and including rough brackets.....	1" 2/1 1½" 2/4 1¾" 2/9 2" —		
Deal strings wrot on both sides and framed.....	1/8 2/- 2/2 2/8		
Housings for steps and risers.....	each	0	1
Deal balusters, 1 in. × 1½ in.....	per ft. run	0	6
Mahogany handrail: average 3 in. × 3 in.....	" "	11	23
Add if ramped.....	" "	11	23
Add if wreathed.....	" "	11	23
FIXING ONLY IRONMONGERY (INCLUDING SCREWS).		s.	d.
6 in. barrel bolts.....	8½d.	Rim locks.....	2
Sash fasteners.....	11½d.	Mortice locks.....	4
Casement fasteners.....	1/5	Patent spring hinges and letting into floor and making good.....	19
Cupboard locks.....	1/5		
FOUNDER AND SMITH.		s.	d.
Rolled steel joists.....	per cwt.	16	16
Plain compound girders.....	" "	19	19
Do. stanchions.....	" "	21	21
In roof work.....	" "	27	27
RAIN-WATER GOODS.		s.	d.
Half-round plain rebated joints.....	ft. run 3" 1/6 4" 1/9 5" 2/-		
Ogee Do. Do.....	" " 1/9 2/- 2/6		
Rain-water pipes with ears.....	" " 1/9 2/7 —		
Extra for shoes and bends.....	each 4/4 5/11 —		
Do. stopped ends.....	" 1/11 2/4½ 3/7		
Do. nozzles for inlets.....	" 2/2 2/7 3/10		
PLUMBER.		s.	d.
Milled lead and laying in flashings and gutters.....	per cwt.	64	64
Do. Do. in flats.....	" "	63	63
Extra labour and solder in coated cesspools.....	each	0	0
Welf joint.....	per ft. run	1	1
Soldered seam.....	" "	1	1
Copper nailing.....	" "	0	0
Drawn lead waste per ft. run.....	1/2 1/9 2/- 3/4 4/-		
Do. service.....	1/8 2/2 2/7 3/10 —		
Do. soil.....	— — — — —		
Bends in lead pipe.....	each 1/2 1/8 2/1 2/10 3/6		
Soldered stop ends.....	" 11d. 1/- 1/3 1/11 2/4		
Red lead joints.....	" 2/10 3/6 4/- 4/11 6/6		
Wiped soldered joints.....	" — — — — —		
Lead traps and cleaning screws.....	" — — — — —		
Bib cocks and joints.....	" 6/4 9/7 15/4 41/- —		
Stop cocks and joints.....	" 15/4 17/2 25/8 64/- —		
PLASTERER.		s.	d.
Render, float and set in lime and hair.....	per yard sup.	2	2
Do. Do. Sirapite.....	" "	2	2
Do. Do. Keen's.....	" "	2	2
Add sawn lathing.....	" "	2	2
Add metal lathing.....	" "	2	2
Portland cement screed.....	" "	2	2
Do. plain face.....	" "	2	2
Mouldings in plaster.....	per 1 girth	0	0
One-and-a-half granolithic pavings.....	per yard sup.	0	0
GLAZIER.		s.	d.
21 oz. sheet plain.....	per foot sup.	1	1
26 oz. Do.....	" "	1	1
Obscured sheet.....	" "	1	1
½ in. rolled plate.....	" "	1	1
½ in. rough rolled or cast plate.....	" "	1	1
½ in. wired cast plate.....	" "	1	1
PAINTER.		s.	d.
Preparing and distempering, 2 coats.....	per yard sup.	1	1
Knocking and priming.....	" "	1	1
Plain painting, 1 coat.....	" "	1	1
Do. 2 coats.....	" "	1	1
Do. 3 coats.....	" "	1	1
Do. 4 coats.....	" "	1	1
Graining.....	" "	1	1
Varnishing twice.....	" "	1	1
Sizing.....	" "	1	1
Flatting.....	" "	1	1
Enamel.....	per foot sup.	1	1
Wax polishing.....	" "	1	1
French polishing.....	" "	1	1
Preparing for and hanging paper.....	per piece, 2/-	1	1

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10 % on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 Fire Insurance. The whole of the information given on this page is copyright.

TENDERS

communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.
 Denotes accepted. † Denotes provisionally accepted.
 Denotes recommended for acceptance.
 Denotes accepted subject to modification.

AIRDRIE.—Reconstruction of railway bridge at Kirk-street, for T.C.:—

*J. Wall, Fulford £4,595 9 0

ALTRINCHAM.—Strengthening Smith's Bridge, Cheshire C.C.:—

*Bethell & Sons, Sale..... £526 15

BACKFORD.—Brick work for Canal bridge, for Cheshire C.C.:—

*W. H. Brocklesby, Birkenhead £1,793 5 9

BARNES.—Painting Council houses, for U.D.C.:—

*F. B. Ellmer..... £733 5

BARNLEY.—Seventy-two houses on the Elsecar, for the Hoyland Nether U.D.C. Mr. J. R. Sphard, architect:—

*W. Choppell & Son, Chapel-town.

BARNLEY.—Twenty-eight houses on the Snydale estate, for the Cudworth U.D.C.:—

H. Hibbert & Sons, Barnsley £15,120

H. Schorah, Shafton 14,477

Oaklands, Ltd., Wombwell 12,992

F. Monnie Co., Rotherham 12,740

*J. Stothard, Cudworth 12,600

BARNLEY.—Office premises in Barnsley-road, for Cudworth U.D.C. Mr. J. A. Haigh, surveyor:—

*J. Stothard, Cudworth.

BIRKENHEAD.—Motor garage for the Birkenhead operative Society. Architect's Dept., 1, Balloon-st., Manchester:—

*W. E. Hughes, Birkenhead.

BISHOP AUCKLAND.—Alterations and extensions Sunnyside school, for Durham E.C.:—

*Beadle & Chapman £2,630 13 9

BOLTON-ON-DEARNE.—Seventy houses with cellars and sewers, for the U.D.C.:—

*Leadley, Firth & Whittington (Doncaster), Ltd. £29,948 10 4

BRIDLINGTON.—Sanatorium buildings at the pool, for the East Riding E.C.:—

*J. M. Smallwood & Sons £3,144 0 10

BURTON-ON-TRENT.—School for girls at "The Glads." Winsill, for the Governors of the endowed Schools. Messrs. Wm. & T. R. Milburn R.I.B.A., architects, Sunderland; Mr. R. S. Moorland, L.R.I.B.A., surveyor, 10, High-street:—

Samuel Gee & Sons, Ltd., Derby £46,775

J. K. Ford & Weston, Ltd., Derby 46,440

R. Kershaw & Sons, Burton-on-Trent 46,000

Henry Edwards, Ltd., Burton-on-Trent 45,900

G. H. Adams, Burton-on-Trent 41,677

*G. Hodges & Son, Burton-on-Trent 41,600

CAISTOR.—Additional block to the Isolation Hospital at Osgodby, for the R.D.C. Mr. J. P. Mason, surveyor:—

*Marshall & Son, Nettleton, Caistor £2,196

CHALLET.—Reinforced concrete road, for Cheshire C.C.:—

*C. L. Warren, Seacombe..... £6,590

CHESHIRE.—Erection of carthouse at small farms, for C.C.:—

*Geo. Brookes, Banbury..... £505 12

King Estate—

*H. Hilditch & Sons, Wimberley.. 531 0

CHESTER.—Forty-four houses in Lewis-road, for C.C.:—

*E. & A. Spriggins £20,680

HISWICK.—Alterations and additions to 100, 101, and 102, for the Express Dairy Co., Ltd. Mr. Frank Potter, F.R.I.B.A., architect:—

C. Gray, Acton Park £4,297

W. Daley & Co., Acton 4,220

Jarman & Co., Richmond 4,098

W. S. Barton & Co., Ltd., Holborn 3,995

R. Hewitt, Ltd., Acton 3,847

F. Troy & Co., Ltd., Hampstead 3,793

J. Woollard & Son, Ltd., Acton 3,717

HORLEY WOOD.—Twenty houses on the site at Hamlet, for the U.D.C. Mr. C. W. Richardson, architect:—

J. Mead, Ltd., Chesham £12,253 10 0

E. Carter, North Wood 12,018 10 0

W. Wheeler, Chorley Wood 11,959 0 0

Gomm & Sons, Ltd., Chesham

Bois 11,942 0 0

Rust & Ratcliffe, Chesham 11,915 0 0

Darvell & Sons, Chorley Wood 11,907 0 0

H. Neal, Ltd., Northwood 11,755 0 0

Lovell & Sons, Gerrards Cross.. 11,489 0 0

Brown & Co., Chesham 10,170 19 6

W. E. Ellis, Croxley Green 9,795 0 0

DITCHFIELD.—Widening and improvement of approaches to Ditchfield Canal Bridge, for Cheshire C.C.:—

*R. & T. Howarth, Rochdale..... £3,244 10

CREAM.—Roof repairs at County Girls' School, County E.C.:—

*R. Southern £494 12

DURHAM.—Heating apparatus at County Girls' School, for County E.C.:—

*R. T. Vaux & Son, Sunderland.. £369 16 6

DURHAM.—Reconstruction of Browney Bridge, for C.C.:—

*Sir Robert McAlpine & Sons .. £12,039 12 9

Steelwork—

*Cleveland Bridge & Engineering Co., Ltd. 1,025 0 0

DORKING.—Four percolating filters, two humus tanks, and incidental works, for the U.D.C. Mr. S. S. Gettings, Surveyor:—

*Hartley & Co., Westminster.

*Adam Hydraulics, York.

ERSKINE FERRY.—Bridge over the Forth and Clyde Canal, for the Dumbartonshire C.C.:—

*Sir W. Arrol & Co..... £10,420

FYVIE.—Plumbing work to Woodhead School, for the Aberdeenshire C.C. Mr. W. L. Duncan, Architect, Turriff:—

Henderson & Milne, Aberdeen.. £816 1 4

James Laing & Sons, Inverurie 449 0 0

Chas. Duthie & Sons, Turriff.... 493 0 0

George Ritchie, Oldmeldrum .. 423 0 0

*Anderson & Lowe, Turriff..... 415 0 0

GLASGOW.—Excavator, mason, and brick works of the new lavatory and cloak-room block in the quadrangle of the old municipal buildings, for the T.C.:—

*J. Emery & Sons £16,940 13 10

GLASGOW.—Lavatory accommodation at the Fruit, &c., Market, for the T.C.:—

*A. Watson & Co., Ltd. £364 16 4

GLASGOW.—Erection of Elder Park Clinic, for the T.C.:—

(a) Construction of the centre with terrazzo blocks:—

*Brodie, Campbell & Co. £2,534 2 2

(b) Carpenter works:—

*McMillan & Gould 1,153 19 0

(c) Glazier work

*Malloch, Ltd. 135 13 10

(d) Slater work:—

*J. Cuthbertson & Son 445 2 3

(e) Plumber works:—

*J. Paterson & Co., Ltd. 502 2 8

(f) Plaster work

*W. Tonner & Son 250 14 5

(g) Heating installation:—

*C. F. Howden 244 4 8

(h) Iron railings and gates:—

*W. Mason & Co. 233 17 8

(i) Tile work:—

*J. Youden & Son, Ltd. 234 16 0

GLASGOW.—Boundary fence at Belvedere Hospital, for the T.C.:—

*A. & J. Main & Co., Glasgow £290

GLASGOW.—Entrance gates at Knightswood Hospital, for the T.C.:—

*Steel & Co., Glasgow £115

GLASGOW.—Extension of Bellefield Sanatorium, for the T.C.:—

(a) Wright works:—

*D. Purdie & Sons, Ltd. £3,263 16 8

(b) Glazier work:—

*Baillie & Telfer 669 19 8

(c) Slater work:—

*W. Walker & Sons 1,921 12 10

(d) Plumber work:—

*Hugh Twaddle & Son..... 4,682 11 3

(e) Plaster work:—

*T. Glaister 4,035 7 5

(f) Tile work:—

*Robert Brown & Son, Ltd. 1,623 9 6

HALSTEAD.—Rebuilding of the old portion of Stone Bridge, for the Essex C.C.:—

*J. S. Norton, Halstead..... £1,500

HAMPTON.—Houses on the Priory-road site, for the U.D.C. Mr. S. H. Chambers, surveyor:—

Each.

Wright & Sons, Hampton..... £570 0 0

A. J. Thair, Isleworth..... 533 6 8

H. March, Hampton 451 7 2

Barnard & Mackenzie, Stratford 447 5 0

A. D. Martin, Harlow 437 16 11

Paget & Gilkes, Teddington 430 0 0

A. D. Martin, Harlow 426 9 9

J. Singleton & Sons, Hampton Hill

..... 420 0 0

H. G. Adams, London..... 415 0 0

Universal Housing Co., Rickmansworth

..... 413 10 0

*W. H. Peocover, East Sheen... 395 0 0

W. Shepherd, Hampton 382 0 8

A. D. Martin, Harlow 374 19 11

HARPENDEN.—Waiting room and store at the cemetery, for the U.D.C.:—

*A. Harris & Son..... £168

HOVE.—External painting work at the baths, King's Esplanade, for the T.C.:—

*Goord Bros., Brighton..... £145

IPSWICH.—Twenty houses on the Racecourse site for the T.C.:—

*R. G. Seaman..... each £509

LEEDS.—Conveniences at the junction of Marsh-lane and East-street, Cherry-row, Roundhay-road, and Woodhouse-lane, for the T.C. Mr. W. T. Lancashire, City Engineer:—

*G. Monkman, Leeds..... £2,213 18 8

LEEDS.—Painting and cleaning pavilions "A" and "B" and part of the administration block at the Infectious Disease Hospital, Seacroft, for the T.C.:—

*Wm. Greenwood & Sons, Leeds..... £232

LITTLE HEATH.—Teacher's house at the County Council school, for the Herts E.C.:—

*Shadbolt & Nash, North Mimms... £1,045

LONDON.—Additions and alterations to laboratory at North-Eastern Hospital, for the M.A.B.:—

M. Greenwood & Son, Ltd. £1,949 0 0

F. E. Smith, 29, The Drive,

Purfleet 1,895 5 8

W. H. Wagstaff & Sons 1,675 0 0

T. J. Gabb 1,667 0 0

J. Darch, Ltd. 1,595 0 0

C. H. Boyd & Son, Ltd. 1,541 0 0

*A. H. Inns, Ltd. 1,523 0 0

(All of London.)

LONDON.—Painting and repairs at the South Wharf, for the M.A.B.:—

J. Darch, Ltd., London £997 0

C. H. Boyd & Son, Ltd., London 942 0

W. Mills & Sons, Ltd., Blackheath 897 0

T. J. Gabb, Westminster 827 19

A. Black & Son, Forest Hill 797 0

Burnard & Pickett, Ltd., Wallington 779 0

E. Proctor & Sons, Plumstead 779 0

J. Dennis, St. Albans 594 5

*D. C. Bowyer, Belvedere

..... £948

LONDON.—Installation of low-pressure hot heating apparatus at S. Anne's Home, for the M.A.B.:—

The Brightside Foundry & Engineering Co., Ltd., London..... £357

Saunders & Taylor, Ltd., Manchester .. 310

Wm. Griffiths, Sons, & Cromwell, Ltd., London 304

*J. Combe & Son, Ltd., London 270

LONDON.—Additional buildings at the Hospital at East Dulwich-grove, S.E., for the Southwark B.G. Messrs. A. Saxon Snell & Phillips, 9, Bentinck-street, W.1.:—

M. Greenwood & Son £3,480 2 0

A. V. Goad 3,462 0 0

W. Chappell..... 3,341 13 11

W. H. Wagstaff & Sons..... 3,254 0 0

H. J. Goodman 3,225 0 0

Geo. Everitt & Sons 3,098 0 0

*Prestige & Co..... 3,064 0 0

W. T. Champion & Son 3,028 8 6

H. Kent 3,015 0 0

(All of London.)

(Accepted subject to M.H. approval.)

LONDON.—External painting work and minor repairs to the Hospital, East Dulwich-grove, S.E., for the Southwark B.G. Messrs. A. Saxon Snell & Phillips, architects, 9, Bentinck-street, W.1.:—

C. H. Boys & Son £4,642 0 0

Stonely & Co. 4,545 0 0

J. Scott Fenn 4,379 0 0

Edward Proctor & Sons 4,100 0 0

M. Greenwood & Sons 3,950 19 1

Wm. Mills & Sons, Ltd. 3,869 0 0

W. T. Champion & Son..... 3,787 15 0

C. N. King 3,722 1 0

Geo. Everitt & Sons 3,698 0 0

J. L. Catterall & Sons, Ltd..... 3,590 0 0

Munro 3,516 0 0

A. V. Goad 3,495 0 0

W. Chappell..... 3,489 8 9

A. H. Inns, Ltd. 3,384 0 0

Prestige & Co..... 3,350 0 0

W. J. Simms, Sons & Cooke, Ltd., Nottingham 3,187 0 0

*D. C. Bowyer, Belvedere 3,154 12 3

(All of London.)

LONDON.—Shelters, lavatory accommodation, sun platforms and chalet, and various other works, at the Hospital, St. Dunstan's-road, Fulham Palace-road, S.W.6, for the Fulham B.G. Messrs. A. Saxon Snell & Phillips, architects, 9, Bentinck-street, W.1.:—

*W. H. Wagstaff & Sons, London.... £2,375

MANCHESTER.—House, shop, and lock-up shop and garage on a site in Stockport-road. Mr. H. A. V. Newsome, architect and surveyor, 2, Blue Board-court:—

*General contractor—J. Manion, Cheadle.

NORTHAMPTON.—Decorative repairs to 97 houses on the Far Cotton site, for the T.C. :—

*W. B. Parbery £977 7 6

NORTHAMPTON.—Decorative repairs to houses at Abington site, for the T.C. :—

Briton-road and Wheatfield-road South (11)—

*W. Hodgson £102 7 6

Lindsay-avenue (18)—

*W. B. Parbery 224 0 0

Birchfield-road (19; shops 4)—

*A. G. Cowling 227 0 0

Wheatfield-gardens (22)—

*F. Brawn 235 0 0

Broadway East (12)—

*W. B. Parbery 117 0 0

NORTHFLEET.—Twenty-six houses at Northfleet House estate, for the U.D.C. :—

*W. Fox.

NUNEATON.—Two police houses at Princes-road, for Warwick C.C. :—

*Meigh & Green £1,754 19

ORSETT.—128 non-parlour type houses, for the R.D.C. :—

*Pavitt Bros.

*Walsham, Ltd.

PAIGNTON.—Ten houses, for U.D.C. :—

*Knapman Bros. per house £520

PAIGNTON.—Twelve houses at Preston, for U.D.C. :—

*Unity Builders (Paignton), Ltd.
Per house £520

PETERBOROUGH.—Six houses at Eyebury-street, Eye, for the R.D.C. :—

*Gutteridge & Sons. £2,575

PRESTON.—Alterations to Lostock Hall Hospital, for the House Committee :—

*Brucklayer, concretor, floors and heating—T.

Croft & Son, Ltd.

*Joiners—L. Cartwell & Sons, Ltd.

*Plumbers and painters—C. W. Mallot.

*Filders—Conway & Co., and W. Cooke.

(All of Preston.)

SALE.—Reconstruction of Altrincham-road, for the Cheshire C.C. :—

*Bethell & Sons, Sale. £6,338 9 4

SURBITON.—Fifty houses at Tolworth, for the U.D.C. :—

*Messrs. Thorogood £21,249

SOUTH SHIELDS.—Extensions to the Children's Ward at the Ingham Infirmary, for the War Memorial Committee :—

*J. A. Young & Co., Tyne Dock. £2,995

THAKEHAM.—Fifty-eight houses, for the R.D.C. :—

*A. Guest, Langport. £23,150

WAKEFIELD.—Reconstruction and extensions to the Brewery in Parliament-street, Westgate, for Messrs. Clarkes, Ltd. Mr. W. Wrigley, architect :—

*Brickwork—A. C. Green, Wakefield.

*Concrete—Messrs. Concrete, Ltd., Leeds.

WELLINGTON.—Extensions at infant's school, for Durham E.C. :—

*Walton Bros, Crook. £1,683

WESTHOUGHTON.—Twenty-six non-parlour type "A" houses on the Windgates housing site, Chorley-road :—

*E. & S. Street, Ltd., Kersley.

WORCESTER.—Conversion of old bakehouse into Nurses' Home, for the B.G. :—

*W. H. Hunt. £580

WINGATE.—Reslating roof, &c., at elementary school, for Durham E.C. :—

*T. Coates, Durham. £454 3 11

YORK.—Alterations and additions to the engine house and offices at the generating station, for the T.C. Mr. F. W. Spurr, City Engineer :—

*Wm. Birch & Sons, Ltd., York.

J. J. ETRIDGE, J^r. Ltd

SLATING AND TILING

SLATE MERCHANTS

CONTRACTORS.

Inspections and Reports made on
OLD OR FAULTY ROOFS
in any part of the country.

Telephone: Bishopsgate 1944/5 or write,
Bethnal Green Slate Works,
BETHNAL GREEN, LONDON. E.

FLOORINGS

of every description in
WOOD BLOCKS. PARQUETRY
SEASONED T. & G. WAINS. OT OAK
TEAK AND MAPLE
FACTORY AND ROADWAY PAVING

STEVENS & ADAMS

LIMITED
VICTORIA MILL, POINT PLEASANT
WANDSWORTH, S.W.18.
(Phones: Putney 1700 & 2457)

FITZPATRICK & SON

MASONS & PAVIORS

Secondhand and Redressed (equal to new)
Granite Setts and Kerb.

York Paving, Crazy Paving, Rockery Stone,
Granite Spur Stones made to order.

Granite Chippings and Tarmacadam.

Granolithic and Sett Paving.

WRITE, PHONE or CALL :—

**455, OLD FORD RD.,
BOW LONDON, E.3.**

Phone: EAST 4808.

School & Hospital Stoves

MAKERS OF
WRIGHT'S IMPROVED and also SHORLAND PATENT
WARM AIR VENTILATING PATTERNS.

GEO. WRIGHT, LIMITED (LONDON)
19, Newman St., Oxford St., London, W.1
Burton Weir Works, Rotherham.

Telephone OLISOLD 13
Many years connected
with the late Firm of
W. H. LASCELLES & Co.
of Sunhill Row.

OGILVIE & CO.,
Mildmay Works, Mildmay Avenue, Islington, L.
EXPERTS IN HIGH-CLASS JOINERY.
ALTERATIONS AND DECORATIONS.

Telegrams: 'Frolic, Liverpool' 'Phone 228 Bank
E. B. BURGESS & CO.
6, CASTLE ST., LIVERPOOL.
**WOOD BLOCK FLOORING
AND PARQUETRY.**

J. GLIKSTEN & SON

LIMITED

Specialities in

**SEASONED
HARDWOODS**

**MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.**

REGISTERED OFFICE AND WHARF

**CARPENTERS RD.
STRATFORD
LONDON E.15**

Telephone: EAST 3771 (5 lines)
Telegrams: GLIKSTEN 'PHONE LONDON

Wheatly & Co.,

SPRINGFIELD TILERIES, NEWCASTLE, STAFFS.

Phone: Newcastle, Staffs, 101.
'Grams: "Wheatly, Trent Vale."

Estd. Over 50 Years.
Brand: TRITON.

SPECIALITIES.

Rustic, Sand Faced and Hand Pressed Tiles in Blue, Blue Brindled, Red, Light Brindled and Dark Brindled Colours. Extensive stocks held of many varieties of Flooring Quarries, Ridge Tiles, Garden Edging Tiles, Air Bricks, Blue Bricks, Copings, etc., etc.

Price List and Catalogue, or Illustrated Brochure of Roofing Tiles free on demand.

N.B.—ALL our products are Hand-made by the Plastic Process.

HOWELL J. WILLIAMS

Builders Ltd.

High-Class Building
and
Joinery Work

11/17, BERMONDSEY STREET,

Telephone: HOP 202 LONDON BRIDGE, S.E.1

Builders of very many well-known Banks, Office and Business premises. Our works especially convenient for City Building and fittings.

THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

L. CXXIX.—No. 4,321

NOVEMBER 27, 1925

THE DANGER OF A STEREOTYPED TRAINING

M R. GUY DAWBER, in his Inaugural Address at the Royal Institute, alluded at some length to the important question of education, which, as he says, is so closely bound up with the "advancement of civic architecture" that the aims of the Institute achieving the latter must necessarily include a great deal of attention to the former. The improvement in methods of training both in schools and under the system of pupilage, is at present the subject of a great deal of earnest study and endeavour on the part of the Board of Architectural Education. This, indeed, the responsibilities of which have enormously increased during the last few years, is, as we know, at present being re-estimated and greatly enlarged; and while this is an indisputable move on the part of the Institute, it is worth while considering into the growth of the school system which has made this reorganisation necessary, even if it is too early to draw from such an examination any very definite conclusions. The whole question of technical training is bound up with—almost entirely governed by—the nature of the calling to which the student is ultimately to enter. This calling is not wholly a matter of unfettered choice, for, with the will in the world, it is impossible for the man who does not possess a minimum of natural qualifications to succeed in such a difficult profession as architecture. A taste for draughtsman-ship and a feeling for the practical and constructive side of engineering operations are not alone sufficient, however highly developed, as the endowment of the man who is aiming at the execution of architecture in its fullest sense, for the architect must be a designer and creator. Nor does the born designer necessarily possess the constructive sense and the business capacity to enable his conceptions to be put into the flesh; only in a favoured few do we find the qualities of designer and constructor combined in anything approaching equal proportions.

It is, perhaps, unfortunate, but perfectly true, that some designers are more remunerative than others, and that there are capabilities which have a higher market value than others of another type, though of proportionate degree. Between the artist of eminence and his peer in the world of finance there is generally a broad gap in the matter of pecuniary reward for merit and hard work. The artist merely happens to be born into what is a less remunerative sphere. His "line" is not so good, though perhaps he has other rewards as compensation. A similar analogy we find within our own profession—these qualities of practical reward for effort. The born creator and designer is seldom the highest paid or the most successful practitioner; for the plums generally fall to the architect who is rough of an artist to recognise good work, who has enough of an organisation to ensure that he gets it, but who above all has the gift for creating confidence in his clients and producing remunerative work for his office.

The schools of architecture are a microcosm of the profession, and the students within the schools reveal the same tendencies of type, temperament, and natural aptitude. There are students who are born business men, others with a highly developed design sense, and still others whose talent very largely lies in the execution of the routine of the architect's office. There are types of men who are gifted with the personality of leaders, and others who either do not desire leadership or have not the capacity for it.

The question then arises: "With what end in view are all these men (and women) to be trained?" Are they all hoping one day to become practising architects, either independently or in partnership, or are some of them preparing for another calling—professional draughtsman or architectural assistant? And if the latter exists in any school this duality of ultimate aim, should the system of training be identical for both categories? There is no doubt whatever that there are some men who

become invaluable assistants, but who will never develop into successful practitioners on their own account. And there are, on the other hand, well-authenticated cases of famous and successful architects who, as architectural assistants, were complete and miserable failures. Looking back on their own insufficiencies and the hardships ensuing thereon, these eminent men may feel inclined to smile indulgently at their early blunders and the swift retribution from their harassed employers. But it is no shame to them to suggest that were they themselves faced with a similar incompetent from school or office-pupilage, the smile of indulgence would be a very forced one.

In comparing training at a good recognised school with that generally obtained under the pupilage system, and assuming in each case a student of average ability, there is no question whatever that in the vast majority of cases the school-trained student is far better equipped for the ultimate business of becoming a practising architect. And it is equally certain that the office-trained man has a more immediate and definite value as an architectural assistant in certain categories of office routine. The office pupil with a thorough grounding in routine such as surveys, sanitation, the Building Act, and detailing of the ordinary sort is a very useful and valuable person. So valuable that he is kept at the job of what he can do so well, while his often pitiable attempt at design are tolerated (and then, perhaps, carefully removed with rubber) on account of his prowess in other fields. Such a man, if gifted with intelligence and initiative, may develop later into a head assistant or business partner, and he is the invaluable and well remunerated standby of many eminent men who cannot possibly cope with these details if they are to carry out large and multifarious projects.

The school-man, on the other hand, may easily be a more highly sensitive designer than his office-trained employer. Accustomed to analyse, fresh from a course of theory and design, his fingers may itch to be at his employer's board, to plan and design and decorate, leaving the "dirty work" to other hands. Not realising the practical difficulties and limitations of the hard-earned "job," he sees only art for art's sake; and perhaps muddles up the door frames and bungles the drainage plan, but ultimately he simmers down and becomes a useful adjunct to the office.

Anybody concerned with technical training, such as the Board of Architectural Education, will sooner or later be faced with the question of deciding whether there is not danger, with the increase of schools and the general effort towards Intermediate and Final Recognition, of the school courses becoming stereotyped and producing only one category of student—the architect type. Is there not also the assistant type, and should he not be frankly recognised? At present he is to an extent catered for, since excellent Polytechnics and Schools of Building exist, and the fees therefor are proportionate to the less ambitious scope of their instruction, but a correspondent writing in reference to these schools, says: "These institutions may very naturally tend towards the setting up of a full architectural curriculum of schools such as London and Liverpool Universities and the A.A. Their facilities and equipment may be less complete, yet they will offer a cheaper if less thorough course, and draw students from the more specialist architectural schools. Will not this tend towards the development of a weaker type of school-trained student—the man not born to a profession and yet not trained to find a practical wage-earning career as a valuable assistant? Possibly the real value of the strength of the architectural school training lies in maintaining the existence of a few big and efficient schools, training, quite frankly, to recruit the profession of the practising architect; while other schools, equally well equipped and specialising for their purpose, train the fully-equipped assistant."

NOTES.

Architectural Competitions.

We give on p. 768 some further opinions on the subject of architectural competitions, following the opinions published last week, from which it is evident that while there is a widespread desire to improve the system, there is no general agreement how it is to be brought about. We must not forget that the subject has received a great deal of consideration by the R.I.B.A., and that we have the Institute Regulations, the Model Form of Conditions, and the Suggestions for the Guidance of Assessors, and if competitors will make the right use of those documents a good many difficulties which correspondents refer to would not arise. If the three documents we refer to require further amendment after the considerable revision that was made only last year, all that is necessary is to give notice of the amendments required and have them discussed at a general meeting. We should like further information in reference to the remarks in the case of the Manchester competition given by one of our correspondents in our last issue, that the Institute issued a statement that "no action could be taken because it would cut at the basis of the competition system." We understand that no such statement was ever made by the R.I.B.A.

The Rima Controversy.

It is a pity that in the heat of controversy people should so lose sight of proportion as to concentrate their dislike on the Hudson Memorial only, which, however much we dislike it, cannot be regarded as failing more completely than other examples of statuary recently erected in London streets. The Committee of this memorial are those at whom

the criticism should be directed. It is very hard to attack an artist because he gives us what we asked for. If the subscribers were so careless when giving their money as not to inquire how it was proposed to be used, they have no right to complain of the results. The commission having been given to Epstein, everyone acquainted with the arts knew what the sculptor was likely to give them. And it must be remembered—which can but seldom be said—that so far as the sculptor's craft is concerned, the relief is executed in the right way—more than can be said of much of the statuary occupying public sites. It is the expert who has failed us. It is the subscribers who are mostly to blame for the result, in that none of them objected to the employment of the sculptor beforehand. We do not like the memorial, but common fairness compels us to protest against those who would now wish to ruin the sculptor's reputation because he has given them what they asked for; and we have in mind the unedifying circumstances under which Gilbert suffered eclipse, and the attitude of his brother sculptors on that occasion. Artists should be very slow to attack each other, and should not join in any such proceedings.

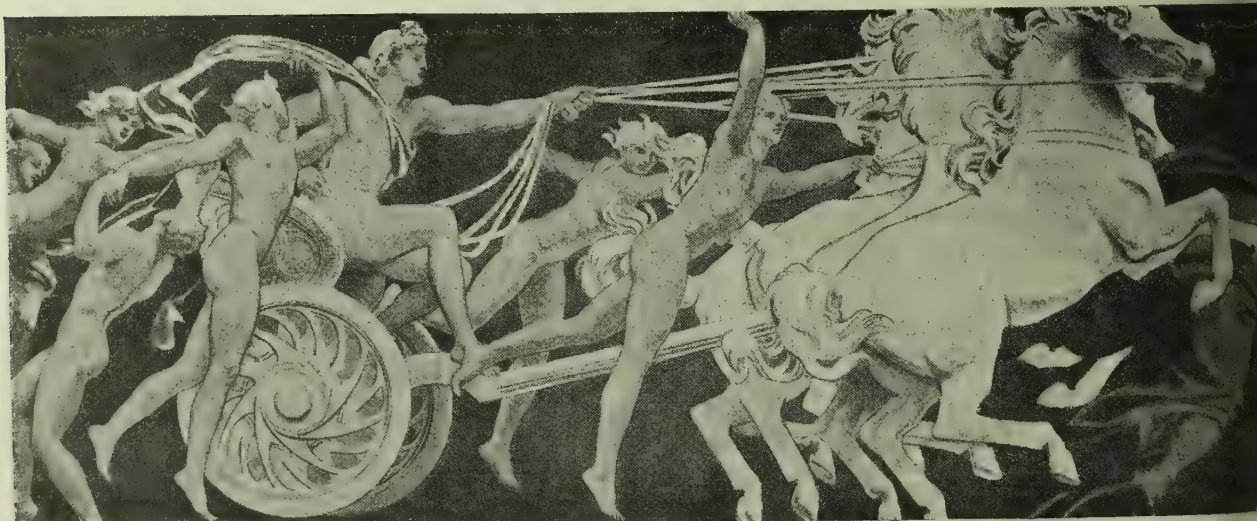
Coloured Cottages.

IN view of Mr. Topham Forrest's announcement that he proposes to use colour in concrete houses to be built on some of the London County Council housing estates, it may be interesting to note that this idea is already being carried out by Mr. Louis de Soissons on some 500 working-class houses he is carrying out on the Public Utility Society section of Welwyn Garden City, although the methods used at Welwyn and that proposed for the London estates are different. Mr. Topham Forrest proposes, we gather, to use coloured cements—that is, cements in

which the colouring material has been incorporated by the manufacturer—at Welwyn the colour is obtained by mixing cement and pigments or by painting on the site and applying the mixture with a wash. Blue, pink, grey, and other colours are being blended together on the same streets, and those interested in the subject can see the effect for themselves at Welwyn. As Mr. de Soissons mentioned to us the other day, it was common practice in the past to colour cottages in different colours with washes, and it is hoped to get the same effect with cottages built of concrete materials.

School Building.

WE are informed that Eustace Percy, President of the Board of Education, has ordered an investigation to be made into alternative methods of building schools. Accordingly a committee has been appointed on which Sir Charles Ruthen, Director-General of Housing at the Ministry of Health, Sir Frank Baines, Director of Works at the Office of Works, Mr. G. F. H. Clay, Architect of the Board of Education, Mr. Topham Forrest, Architect to the London County Council. Both Sir Charles Ruthen and Sir Frank Baines served for the last year upon the committee presided over by Sir Ernest Bouverie, who has been inquiring into methods of building houses other than with brick. In view of the increased expenditure on school building and the urgent need that schools considered to be out of date and inadequate for modern needs should no longer be used, "it is hoped," writes our correspondent, "that this Committee will be able to recommend the use of steel, concrete or even timber building in certain areas. Mr. Topham Forrest, who made a special inquiry into the whole question of school architecture during his recent visit to the United States, has reported that in



Reproduced by permission of the Museum of Fine Arts, Boston.

APOLLO IN HIS CHARIOT WITH THE HOURS

New Mural Decoration by Sargent in the Museum of Fine Arts, Boston.



HOUSES OF PARLIAMENT.

South Front: Anston stone shaft and iron crown above parapet wall in second bay of Victoria Tower.

es, is understood to be acting for the
mittee, and it is believed that at
one entirely novel form of con-
tion can be adopted with a reduction
ost of at least £10 per place."

At the interview between
onomy. a deputation of the Associa-
tion of British Chambers of
merce and the Chancellor of the
Exchequer, Mr. Machin, President of the
Association, drew attention to the increase
expenditure by local authorities from
£100,000 before the war to £160,000,000
at the present time, an increase which,
he said, was in great part due to the
constant and ever-increasing requirements
of Government departments upon local
authorities. In connection with this
subject he also called attention to the
inadequacy of the accounts of such Depart-
ments as the Ministry of Health, the
Ministry of Labour, the Office of Public
Works and the Ministry of Agriculture,
in that he stated that such accounts
do not show the costs of the
activities of the Departments enabling
criticism to be made in detail. The
Chancellor of the Exchequer in his reply
referred to the fact that whilst resolutions
pertaining to economy were supported in
the House of Commons in the abstract,
an attempt to effect economy in any
particular direction was at once stren-
gely resisted. The above observations
are food for thought. The double

system of budgeting is every year becom-
ing more open to objection. The public
eye is fixed on the national budget, but
the local budget escapes criticism and
consideration, yet the rates exercise the
same influence over industry as do the
taxes, as both high rates and heavy
taxation mean increased cost of pro-
duction.

THE above figures illustrate
Local this: In 1914 the local
Expenditure. expenditure of forty millions
represented about one-fifth
of the national expenditure, but in the
period of eleven years it had increased
by 120 millions, and now represents a
sum approaching the national budget of
those days. The proportion between the
two sums remains the same, that is, the
local expenditure still is one-fifth of the
national expenditure, but the cost of the
war and the interest on the huge debt is
represented in the national budget, and
it surely is very significant that the local
budget has kept pace with it under such
conditions. The war expenditure is
looked upon as a more or less temporary
burden which will eventually be wiped
out, but unless a halt is called in local
expenditure any relief will be more than
neutralised and in normal times the two
budgets will tend to equal one another.
It is obvious we cannot continue to
proceed on such lines and hope to retain
our overseas trade.



HOUSES OF PARLIAMENT.

East Front, South Centre Tower Pinnacle in centre of north side:
View showing method of construction by insertion of iron tie-rod to
receive stonework of finial and weather vane. Disintegration
of stone due to oxidation of iron and development of vents.

GENERAL NEWS

Blackpool Sea Defence Scheme.

Work has begun on a second line of defence against sea encroachment at Blackpool; it will consist of a wall of concrete rocks supporting a concrete sea wall.

Proposed Birmingham Aerodrome.

The Air Ministry propose to buy buildings and 179 acres of land at Castle Bromwich from the British Teme and Rea Drainage Board for £60,000, to be used as a site for an aerodrome.

Denaby's New Hall.

The new Epworth Hall at Denaby was opened recently. It has been built on the site of the old building at a cost of £9,800, the architect being Sir A. Gelder, of Hull.

Proposed Aldershot Military Church.

Sir Robert Lorimer, A.R.A., of Edinburgh, has been appointed architect for the Scottish Presbyterian Church which is to be built for the barracks at Aldershot. The edifice and furnishings are estimated to cost £15,000.

Proposed Birmingham Viaduct.

The Public Works Department of the Birmingham Corporation propose to construct a new arterial road, 80 ft. in width, which will cross New-street Station, and thus provide direct access from the northern to the southern part of the city.

Obituary.

The death has taken place in Belfast of Mr. Robert M. Young, M.A., of Messrs. Young & Martin, architects and civil engineers. He was a member of the Royal Irish Academy, a Fellow and twice Vice-President of the Royal Society of Antiquaries of Ireland, a Fellow of the Royal Institute of British Architects, a Vice-President and later President of the Ulster Society of Architects, Honorary Treasurer of the Presbyterian Society of Ireland, and Warden of the Royal Academy of Ireland.

St. Paul's.

Mr. Charles Ferrar, Superintendent of the grouting trials carried out in 1913-14 at St. Paul's Cathedral, and Superintendent of Works at St. Patrick's Cathedral, Dublin, and Winchester and Lincoln Cathedrals, writes to inform us that at that time a thorough survey of the building, its surroundings and subsoils was made, and illustrated by a set of 14 diagrams, &c., "which probably Mr. Harvey has never seen." Boring and grouting trials were carried out in different parts of the building during a period of nine months. The strengthening of the subsoil, by percolating it with Portland cement, was carried out from the surface down to the London clay. This was at the time pronounced a great success. It paved the way for what is now being done to the fabric, and, in the opinion of our correspondent (if the strengthening of the subsoil is carried out), provides the solution of the problem.

The Italian Renaissance.

The later art of the Italian Renaissance, especially the work of the declining Baroque spirit, which reacted from the formalism of the older work, was the subject of a lecture by Sir Banister Fletcher at the Central School of Arts and Crafts. He dealt more particularly with the work of Venice and the neighbouring cities of Vicenza, where much work was carried out by Palladio, including the celebrated Basilica built round an earlier structure, and the circular type as Villa Carra at Vicenza. Palladio was the architect of Italy most associated with English Renaissance, as our Inigo Jones, on his visit to Italy, was inspired by much of Palladio's work, and introduced his regularised type of design into this country, as seen in the Banqueting Hall, Whitehall.

In a further lecture Sir Banister dealt with the resemblances and contrasts between the Renaissance in Italy and in France. He pointed out that whereas the earlier work of France was strongly flavoured with the Gothic spirit, as in

the castles on the Loire, thus creating a transitional style, in Italy the classical tradition had been so prominent throughout even the Medieval period that the Renaissance was from the first a Roman style in nature. The differences in the positions and planning of the Italian and the French palaces were clearly brought out, and some interesting slides were shown to drive the salient points home, thus preparing the way for the more detailed study of French Renaissance architecture in his next lecture.

WAR MEMORIALS

Easington.

Mr. W. Pratt has been appointed sculptor to the local cenotaph, a granite cross surmounted by a polished sword and laurel wreaths.

Bathgate.

A memorial in the form of a 28 ft. obelisk has been unveiled at Bathgate. This forms only part of the scheme, a number of cottages having also been erected for the benefit of local disabled men.

Stockport.

The war memorial, in the form of an art gallery, has been opened at Stockport. The architects are Messrs. Halliday, Paterson & Agate. The scheme embraces a remembrance hall in which there is a triumphal marble group executed by Mr. Gilbert Ledward.

Taunton School.

Lord Eustace Percy recently opened a war memorial building, comprising science laboratories and an art section, at Taunton School, erected at a cost of £11,000 to the designs of Mr. E. Vincent Harris.

Carnoustie.

This memorial was designed by Messrs. Bruce, Son & Morton, architects, of Dundee, not Mr. Thomas Beattie, as stated in our last issue. The latter was the sculptor.

MEETINGS

FRIDAY, November 27.

Glasgow Architectural Craftsmen's Society.—Mr. A. Ling on "Antiquities of Morayshire." At the Royal Technical College. 7.45 p.m.

FRIDAY-SATURDAY, November 27-28.

Royal Sanitary Institute.—Visit to Plymouth.

MONDAY, November 30.

Royal Institute of British Architects.—A Business General Meeting. At 9, Conduit-street, W.1. 8 p.m.

TUESDAY, December 1.

College of Estate Management.—Mr. C. G. Eve on "Rating in the Metropolis." At 35, Lincoln's Inn Fields, W.C.2. 5.30 p.m.

WEDNESDAY, December 2.

Institution of Heating and Ventilating Engineers.—Mr. J. E. Boaz on "The Requirements of Ablutionary and Recreative Bathing Establishments as affecting the Heating and Ventilating Engineer." At Olympia. 7 p.m.

THURSDAY, December 3.

Institution of Electrical Engineers.—Professor S. P. Smith on "An All-Electric House." At Savoy-place, Victoria Embankment, W.C.2. 6 p.m.

Institution of Structural Engineers.—Mr. H. G. Lloyd on "A Method of Testing Concrete Blocks." At Denison House, 296, Vauxhall Bridge-road, S.W.1. 7.30 p.m.

The Auctioneers' and Estate Agents' Institute.—Mr. B. W. Adkin on "The forthcoming alterations in the Law of Property, as affecting Copyholds." At 29, Lincoln's Inn Fields, W.C.2. 7.30 p.m.

COMPETITION NEWS

Branch Library, Gabalfa.

The Cardiff City Council invite designs for a branch library at Gabalfa, to be built on a site in St. Athan-road, on the Mynachdy Estate. The competition is limited to qualified architects within the City of Cardiff. Premiums of £50, and £30. Mr. Sidney K. Green, F.R.I.B.A., is the assessor. Applications accompanied by a deposit of £2 2s., to be made to the Librarian, Central Library, Cardiff. Designs to be sent in by January 16, 1926.

Competitions Open.

Particulars published in "The Builder."	See
Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply particulars, 35, Old Queen-street, S.W.1	April 24
New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool	Aug. 7
Houses for Smaller Middle-Classes and Intellectual Workers. Held under auspices of International Federation of Building and Public Works. Prizes: 1st, 500 dollars; 2nd, 300 dollars; 3rd, 200 dollars. Write to Director-General of the International Federation, 17, Avenue Carnot, Paris	Oct. 30
Art Gallery and Museum, Birkenhead. Limited to competitors practicing within 20 miles of Birkenhead since January 1, 1923. Premiums: £230, £175, £100. Sir Robert Lorimer, A.R.A., assessor. £2 2s. deposit. Apply Curator, Central Public Library, Birkenhead	Oct. 16
Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London	Aug. 14
Royal National Eisteddfod of Wales, Swansea. Competitions: (1) National Parliament House of Wales (Prize, £100); (2) Street Facade to a Large Store (Prize, £25); (3) Set of Measured Drawings of Architecture (Prize, £25). Apply to General Secretary of Eisteddfod, W. Talog Williams, 24, Goat Street, Swansea. Mr. Arthur Keen, F.R.I.B.A., Assessor	Nov. 6
Incorporated Architects in Scotland: (1) Rowand Anderson Medal and £100: City Art Gallery and Museum; (2) Rutland Prize (£50) for Study of Materials and Construction; (3) Prize (£10 to £15) for 3rd year Students in Scotland; (4) Maintenance Scholarship, £50 per annum for 3 years. Apply Secretary of the Incorporation, 15, Rutland-square, Edinburgh	Nov. 6
Plan for construction of Conference Hall, for League of Nations, Geneva. International Competition, Sir John Burnet being British representative on Jury of Assessors. 100,000 Swiss francs to be divided among architects submitting best plans. Programmes with R.I.B.A., 9, Conduit-street, where intending competitors should apply. Single copies from Secretary-General, League of Nations, Geneva, on payment of 20 Swiss francs.	Jan. 2
*Guisborough Proposed New Hospital	
*Competitions when "warned" or vetoed R.I.B.A. are starred.	

Leeds Smoke Abatement Scheme.

The Leeds Improvement Committee approved a scheme to erect nearly 100 all-electric houses on various Corporation land in connection with the smoke abatement campaign. The City Engineer has been instructed to prepare the plans.



PERSEUS ON PEGASUS SLAYING MEDUSA.



by permission of the Museum of Fine Arts, Boston.

ONE OF THE RELIEFS.

New Mural Decorations by Sargent in the Museum of Fine Arts, Boston.

ARCHITECTURAL COMPETITIONS

PROFESSIONAL OPINION.

We published last week the views of a number of architects on the question of architectural competitions. Some further opinions are now given.

Mr. Cyril Farey said that, in his opinion, the conditions of architectural competitions should be as elastic as possible. If they were too rigid, the tendency was to produce designs that were all more or less alike. He thought that there ought to be a clause in competition conditions to say whether or not the assessor was going to stand by them inflexibly or whether any latitude would be allowed to competitors. Hitherto, he had preferred the jury system to the single assessor, but recent experience had rather shaken his confidence in it. A weakness of the jury system was the possibility of members "bargaining" with one another over any points at issue, whereas the single assessor, having no one to fall back upon, and being under the necessity of making his own decisions, was apt to take his duties very seriously. Mr. Farey thought that more of the younger men ought to be allowed to have a chance in limited competitions. There were many young men, whose work was known and who might be given a chance. The R.I.B.A. would know of such men and would have confidence in recommending them as capable architects. Referring to the costing of competitions, Mr. Farey said it would be a decided improvement if competitions could all be put upon a uniform basis—to say, for instance, that a building should contain so many cubic feet rather than that it should cost so much. Competitors often produced an elaborate design and gave a ridiculous price per



HOUSES OF PARLIAMENT.—East Front, South Water Towers, north side of north tower above Terrace: Detail of Anston stone shaft, showing fracture along horizontal plane.

foot cube. It would be far better to say that the building must contain so many cubic feet and give a price to work to. Competitions should provide for a minimum number of drawings.

We have received the following comments from a correspondent:—

Messrs. A. W. S. and K. M. B. Cross's suggestion for a revival of the Competition Reform Society is (he says) peculiarly unhelpful. The Society was wound up because the Competitions Committee took on its work and acted on its principles. The R.I.B.A. can now speak for the whole profession in its control of competitions, and it is for the general body of members to make any reforms in the system that really commend themselves to the majority. An outside and independent body would have no authority, would only represent a section of opinion, and would produce confusion of thought and action. The Court of Appeal is an old suggestion which, our correspondent believes, has never commended itself to the majority of competing architects. It would probably result, he thinks, in a discussion of practically every important award. And what about the promoters? Would they agree to submit awards to this Court? If they were permitted to appeal to the Court it would cut at the root of the Institute's work of many years in insisting on promoters accepting the awards of professional assessors. If they were not permitted, it would be an obvious injustice that they (the parties chiefly concerned) should be the only persons with no right of appeal. As to the appointment of assessors, Messrs. Cross speak as though all the appointments were made by the R.I.B.A. This is quite a mistake. Most assessors are not appointed either directly or indirectly by the R.I.B.A. In the Manchester case, for instance, the R.I.B.A. had nothing to do with the appointment. The suggestion that the selection of the assessors should be made by the Council of the R.I.B.A. is, our correspondent thinks, an unworkable one. Such selection would have to be made by a Council of over fifty members meeting once a month in Conduit-street. Nomination of assessors has to be done promptly and it has to be done by a responsible person who has very adequate means of finding out who possess the right qualifications for particular appointments. A large and floating Council has not got the necessary knowledge and cannot frankly discuss the delicate personal questions that inevitably arise in the selection of assessors. Messrs. Cross say that "under the present method of appoint-

ment one was often confronted with the anomaly of an assessor who had never designed a building of the type required judging the designs submitted by men who were specialists." So from this being often the case, can they (in our correspondent's opinion) give one example of an assessor appointed by the P.R.I.B.A. in the five years in which this was so? Prof. Richardson disagrees with Messrs. Cross as to the merits of the jury system. His suggestion for selection for limited competitions is (in our correspondent's opinion) beside the mark. Do you imagine that they are selected by the R.I.B.A.? On the contrary, they are practically always selected by the promoters and the R.I.B.A. knows nothing about it unless an announcement is made in the Press. Does he suppose that the R.I.B.A. made a "rota" list, as he suggests promoters, bank managers, boards, and so on, would come to the R.I.B.A. and ask for names from the list? It is quite unlikely that they would do anything of the sort. It appears, as a matter of fact, to invite architects with whose works they are personally acquainted and it would be impracticable, even if it were reasonable, to prevent them from doing so.

Bermondsey Slum Problem.

It is stated that 4,000 families in Bermondsey are willing to move out to a "satellite" town should this be established outside London. Three conferences have recently been held in the borough of Bermondsey, with local manufacturers, religious organisations, and social workers, in order to discuss the policy of building cottages instead of rehousing by means of flats, and particularly the proposed tenement flats.



HOUSES OF PARLIAMENT.—Central Tower: View of crocketed Anston stone finial to flying buttress on west side of tower, showing effect of development of number of vents assisted by action of sulphur acids.



HOUSES OF PARLIAMENT.—West Front, facing Palace Yard, above colonnade: Showing cleavage of broken Anston stone pendants due to development of a vent.

THE HOUSES OF PARLIAMENT

CONDITION AND REPAIR OF STONEMWORK

the following facts concerning the condition of the stonework of the Houses of Parliament proposed methods of repair are extracted from Sir Frank Baines's recent report on the subject to Members of Parliament:—

It must be clearly stated (says the report) that the general structural condition of the buildings, and its foundationing, &c., are quite secure. Sir Charles Barry's specification for the buildings described the quality of the stone, but left it to the competing contractors to make surveys of the quarries, upon which to base their estimates. Had any systematic inspection of the stone been undertaken on the architect's behalf, either at the quarry or at the site, this arrangement would probably have led to endless disputes. Three Commissioners, including the architect, made an extended tour of quarries, and they reported that they had satisfied themselves of the existence of an abundance of stone of excellent quality. In actual fact, the difficulties afterwards experienced showed that it was impossible to obtain stone of sufficient quantity, of good bed, or of satisfactory quality. When Bolsover Moor Quarry was opened, for example, it was found to be unfit to produce stone required. The beds were thin and irregular; and, in fact, very little, if any, stone from this quarry was used for the buildings. Stone of somewhat similar composition was obtained at Sykes' Quarry, at Anston, Yorkshire, which was afterwards used for the work; but one difficulty was found in getting stone of the required size; as a consequence stone was afterwards supplied from a quarry at Mansfield, 15 miles away. Here, again, stone of the required size could not be obtained in satisfactory blocks, and as to size or quality. Finally, the order was given to fall back on the Anston quarries.

The first of the Anston quarries opened up, namely, the Northfield Quarry, was worked for twelve months, and quarrying was transferred to the South Side Quarry. One of the Commissioners appointed to consider this matter agreed that some of the stone sent up for building should have been rejected; but he held that good stone might have been sent instead of bad. He admitted that when he visited the quarry he found stone in active use in certain of the beds of the quarry that were being worked for the Houses of Parliament. Quarrying was apparently left to piece-work, at a competitive price per foot cube; and advice given before the 1861 Committee indicated that the stone was taken as it came in the quarry, without selection, and that there was no one installed there to lay down any reliable standard of quality. Price and quality of working determined the matter as the contractors were concerned, and very little stone was rejected.

Generally, the evidence given before the Committee shows an entire absence of any consideration for the selection of stone; it is that nearly every error and omission was made with regard to the method of obtaining the stone; and that not only was the best possible kind of stone selected, but that much actually used was perhaps the worst and most perishable of its kind. The elements for the getting of the stone, and the lack of supervision, allowed of the arrival at Westminster and the entry into the work of building of stone, good, bad or indifferent, all came to hand. The surprising fact is that among the several stones upon which the contractors were invited to tender in the Third Contract in 1840, is Darley Dale, the most durable sandstones of this

stone selected was a magnesium limestone, i.e., chemical combination of lime and magnesia; this stone has certain inherent qualities quite apart from its general defect of being most subject to decay as a result of atmospheric attack.

The report of the Committee of 1861,

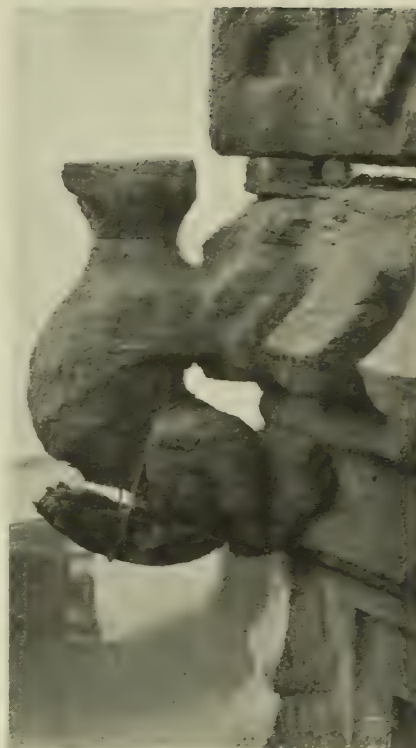
appointed to inquire into the decay of the stone in the new Palace of Westminster, is the only account we have of the decay that occurred before that date. The Committee stated that decay would appear to have begun seven years after the commencement of the work, and that it was not solely attributable to the stone not being placed upon its natural bed; that the decay was mainly on plain surfaces and not on the elaborately wrought portions. The Committee make no reference to the evidence of Mr. Wardle, namely, the "venty" defect of the stone, but merely refer to surface decay. The suggestion that decay is worst upon plain surfaces is not in accordance with the facts in evidence to-day.

Certain stone preservatives were tried as a result of the Committee's deliberations, and Sir Charles Barry selected six processes, of which some record is left; but the opinion was expressed that no evidence had been given to the Committee of 1861 to cause them to believe that decay had been arrested or prevented by any of the methods of preservation applied. A Sub-Committee of Chemists was formed to consider the matter, which they did at some length; but they had no important recommendation to make as regards overcoming the chemico-physical decay of the stone, nor did they raise any question as regards the primary defects of the magnesium limestone.

Any system of repair must guarantee:—(a) That the general architectural design of the building shall not be altered. (b) That the character of the elaborate decorative detail, and its intricate Gothic ornament, should be essentially preserved. (c) That materials for repair and renewal must harmonise with the existing stone. (d) That such materials should be more durable, less liable to attack by atmospheric acid impurity, and free from the natural and inherent faults of cleavage, lamination, &c. (e) That the faulty methods of construction in the existing building should be eliminated as far as possible.

The recommendation to be made is to use one of the Derbyshire sandstones for repair and renewal of the defective magnesium limestone; this has the support of Mr. J. Allen Howe, of the Geological Museum. This stone is geologically a close-grained micaceous grit, one of the very best of the sandstones quarried for building and other purposes, from the millstone grit formation, which, together with other carboniferous formations, form the wide mountainous range stretching from Derbyshire to the Cheviots. From its chemical, physical and aesthetic qualities, such a stone is admirably adapted for architectural, engineering and sculptural work. It has great strength, density and impermeability, and has even been exported to Canada and the United States in the form of millstones for grinding wood pulp in paper-making. Such stones are subject to excessive internal stresses, while revolving at roughly 450 revolutions per minute. The stone is one of the few that can resist these stresses.

It has a pleasant, homogeneous colour, crisp, clean texture, freedom from vents, faults, blotches or streakiness. It contains 96.40 per cent. of pure silica, and only 0.36 per cent. of carbonate of lime. Its moisture content and voids are as low as 1.94 per cent., the rest of its constituents being iron and alumina. There is no carbonate of magnesium in the stone; the mica content is not excessive, and is present as diffused, minute spangles thoroughly disseminated through the body of the stone. So free is it from liability to acid attack, that solid blocks of this stone are cut and used for storing strong sulphuric acid. Its crushing strength varies between 644 tons and 695 tons per sq. ft. of area. Buildings erected of this stone in London are found to be free of decay. Buildings in the provinces, such as St. George's Hall, Liverpool, erected in 1840, are found to be in perfect condition, and would not appear to have suffered from any observed effect of



HOUSES OF PARLIAMENT.—East Front, north Central Water Tower, N.E. Turret, base of cupola: Showing disintegration of large fragment of stone from lower part of grotesque figure, due chiefly to action of sulphur acids. Illustration shows effect of tremendous pressure set up by oxidation of iron cross bars bedded in joint at base of cupola.

atmospheric attack in the whole period of their exposure.

The stone is much harder to work than Anston, but by experiment it has been ascertained that the stone can be worked satisfactorily into the Gothic detail of the Houses of Parliament.

A return is quoted in official documents to the effect that the Houses of Parliament cost, up to the time of 1860, an amount of £2,198,000. After that date certain additional work was done, such as the erection of the Colonnade in New Palace Yard (where Portland stone was used instead of Anston) and other work to St. Stephen's Crypt, &c. The total cost could scarcely have been less than 2½ millions, although the original estimate was a sum of £814,984. An attempt has been made to arrive at a figure of cost of such a building erected to-day, and after appraisements have been made in respect of the difference in hours of labour and wages of operatives (which were, respectively, ten hours a day, and 6d. to 6½d. per hour for masons), a figure of over twelve millions sterling is arrived at, which is considered to be a reasonable estimate of the cost of the building if provided at date.

The question of the estimate for the repairs is an extremely difficult one, and depends upon the ultimate decisions which will be arrived at with regard to the renewal of all details in exact particular. Such a cost of repair would be approximately 8 per cent. of the estimated cost of the provision of the whole of the buildings at the present time; and as this cost will, in all probability, have to be spread over an extended period of years, say, from twelve to fifteen years, this would mean that for the next twelve to fifteen years approximately ½ per cent. of the present day value of the building would require to be expended each year on the preservation and repair of the external fabric, and at the end of that repair the life of the building will be certainly equal to that of a new building erected at date.

THE ARCHITECTURAL ASSOCIATION

MR. H. S. GOODHART-RENDEL, F.R.I.B.A. (President), occupied the chair at a general meeting of the Architectural Association, at Bedford-square, on Monday.

Before the proceedings of the evening a vote of condolence to H.M. the King and members of the Royal Family was passed in silence.

The Treasurer (Mr. Gilbert Jenkins) then presented the accounts for the session 1924-5, which showed a satisfactory financial balance. The Association had, in fact, been able to pay £400 off their Debentures in addition to the usual £500.

New Members.

The President announced three nominations for membership, and the following were elected members:—

C. H. Brightiff.
T. F. Strubington.
J. B. Bayly.
H. B. Chisholm.
Miss B. Rowlands.
R. B. Riviere.
D. W. Rawnsley.
Miss E. E. Comber.
R. A. Hernu.
H. S. Chen.
G. E. Bowden.
R. D. Scott.
R. de Winton Aldridge.
Miss B. J. Read.
H. W. Berry.
M. H. Egan.
L. D. Harris.
Miss N. Aitor.
C. C. Pither.
H. M. Ross.
D. Booth.
D. M. Duggan.
E. G. S. Elliott.
C. J. Burlison.
A. R. Twentyman.
E. H. S. Souster.

S. W. Hinxman.
L. Beck, Junr.
L. S. Gilbert.
A. R. Branchley.
D. D. S. Stokes.
Miss M. F. Archer.
H. E. W. Spurr.
G. R. Beveridge.
Miss B. A. Blades.
J. Macgregor.
A. Murphy.
D. H. M. Carter.
H. A. Crossley.
R. F. R. Day.
D. R. Llewellyn.
G. M. Kingsford.
H. J. Ashwell.
P. Fielding-Ould.
Miss M. I. Spencer.
H. E. B. Cavanagh.
A. S. Pilickowski.
D. G. Cutler.
T. H. Peddie.
H. Ellis.
C. S. M. Davidson.

The A.A. Excursion to Sweden and Denmark.

MR. MANNING ROBERTSON then gave an address on the A.A. Excursion to Sweden and Denmark in the summer of this year, illustrating the buildings to which he referred with lantern slides made from photographs taken by Mr. F. R. Yerbury, Secretary to the Association.

In his opening remarks, the lecturer said in the first place he thought it should be mentioned that the success of the visit was due in a very large measure to the spadework that had been silently and unostentatiously put in by Mr. Yerbury. The Danes and the Swedes were alike in that they were both exceedingly cheery and hospitable peoples, but he thought they all realised that their more than cordial reception in both countries must have been due at least as much to friendship with Mr. Yerbury as to their own *beaux yeux*.

He hoped the visit might be the forerunner of a more active interchange of thought between Scandinavia and themselves than had hitherto existed, and that architects and others, when they were making plans for foreign travel, would include Denmark and Sweden in their programmes, not forgetting that, if they were bad sailors, they could get there overland through Holland and Hamburg.

His third point concerned the Town Hall at Stockholm, for that building, which was only opened in 1922, in size, position, and importance must take precedence of anything else they had seen. He wanted to warn people against forming any judgments of this building from photographs, or from second-hand impressions—they must see it for themselves. It was easy to criticise it, and the criticisms sometimes reminded one of the man who stood before a masterpiece of painting and found fault with the drawing, the colour, and the details, and asked what was beautiful about these—the answer was, "The beauty is in the picture." In the Stockholm Town Hall there was, to his mind, no doubt whatever that they had an art creation that ranked with the greatest that the world had ever seen, and that Ragnar Ostberg's monument took its place quite naturally among those peaks that such men as Michel Angelo,

Shakespeare, and Beethoven knew how to erect. That such a phenomenon in any branch of art should occur to-day, under their eyes, was extremely remarkable; but there it was.

The lecturer then traced on a map the route taken by the party, and his interesting comments on the buildings shown in the excellent photographs, must have made many who had refrained from doing so wish they had made the trip. His occasional references to the hospitality accorded by their Swedish and Danish confrères certainly convinced us that they had had a thoroughly enjoyable time.

The lecturer pointed out the resemblance of Scandinavian domestic architecture to much of the work of a similar nature to be found on our own East Coast, and illustrations of Danish housing schemes revealed many of the features to be seen on such schemes as Welwyn and elsewhere. Some blocks of flats also, as the lecturer pointed out, were very like the blocks proposed to be built by the London County Council.

In moving a vote of thanks to the lecturer, Mr. C. H. James said apart from the magnificent Town Hall and Police Court at Stockholm, he was much impressed by the extremely high level of Scandinavian architecture generally. Copenhagen was probably the finest capital city in the world—they apparently had no Regent-street in Copenhagen, where the excellence of the street architecture was quite amazing. It would be an education for any architect or craftsman to spend a few months in Sweden, where not only the architecture but the craftsmanship was of a very high order. Even in hotels, where they did not expect to find the best kind of table and glass ware, the standard was considerably higher than in this country, and even in the cheap restaurants exquisite goblets were provided.

Mr. Fant, a Swedish architect, and Mr. Jacobson, Danish Vice-Consul in London, expressed the appreciation of the Danish and Swedish nations of having had the opportunity of welcoming the party, and expressed the hope that the A.A. might decide to pay another visit to their country in future.

The President said one of the things which particularly struck him after listening to the address—unfortunately he had not been able to accompany the party—was the fact that the people in Sweden and Denmark liked architecture, and there seemed to be nothing in the buildings; that was not there because the people liked it; whereas in London one seldom saw anything which the public cared two straws about. There was a strong traditional feeling running through all the work, and it seemed that the architects did not only what they liked doing themselves, but also what the client liked, and what the people liked. The essence of architecture was to be likeable, and in that sense the Scandinavian people seemed much ahead of the rest of Europe.

The vote of thanks was then put to the meeting and accorded with acclamation.

In the ensuing discussion Mr. P. H. Adams said he had travelled extensively in Scandinavia, and would particularly like to recommend a visit to the Dalecarlia district, in which the Swedish spirit seemed to be more exemplified than in the parts visited by the A.A. party. In Dalecarlia the old Swedish buildings and customs and costumes were still in existence, and the whole atmosphere was one of pre-Dickensian times. Properly to understand the people one ought to read the literature of the country, and he recommended a study of the work of the first Swedish novelist, Selma Lagerlof, excellent translations of whose works could be obtained.

Mr. W. A. monier, Mr. E. J. Lutyens, and Mr. Cecil Smith also took part in the discussion, to which the lecturer briefly replied.

During the evening a hearty vote of thanks was passed to the Danish and Swedish architects and others who had made the visit so enjoyable.



HOUSES OF PARLIAMENT.—Central Tower: V crocketed Anston stone finial to flying buttress east side of Tower, looking north. Fracture vents and clay bed.

VENICE IN THE MAKING

SIR BANISTER FLETCHER, in a recent lecture at the Central School of Arts and Crafts on the great city of the Adriatic which he said, Londoners, with certain necessary variations, might without undue pride appropriate to themselves. Like Venice, our city was born, dependent for centuries on its sea. But besides the sea we had the river, "water was the chief town planner of and gave her the finest curved street in the world," the same might be said of the Thames as it swept round from Blackfriars Bridge to Westminster. "Earth hath not anything to show more fair," was the poet's feeling when he crossed Westminster Bridge in the early morning. Venice introduced the horizontal line of a sea site; we had done that in Somerset House and the new County Council House, and were doing the same in a hundred rising buildings. But there was one difference. While the Doges "tore down buildings" to make a great piazza, a frame for the glowing picture of the facade of St. Mark's, we allowed our own St. Mark's to be built on a far finer and more commanding site than any Venice could show, to be enclosed within towering warehouses, which robbed it of much of its grandeur. Venetian architecture was set free by the sea from military so while other cities had walls, bastions, gates of stone, sea-girt Venice was free to develop as fancy led her, and thus the lovely della Carta was a very different thing from a grim gatehouse flanked by towers and protected by a portcullis. Thus, the only use that Sanaovino could find for his developed Renaissance Loggetta, was as a vestibule to the soaring Campanile; while the architects Lombardi, Buonaiuti and Savio lavished their work on the Procuratie Vecchie and on churches voted by the Venetian government. The beautiful old library of St. Mark's has been declared to be "the crowning triumph of Venetian art."

ADING CONTENTS.

ANGER OF A STEREOTYPED TRAINING . . .	763
AL NEWS	766
ITION NEWS	766
ECTURAL COMPETITIONS	768
S OF PARLIAMENT	769
CHITECTURAL ASSOCIATION	770
SPONDENCE	772
SECTION	778
ECTS AND BUILDERS' INQUIRY	780
RAU	781
BUILDING TRADE	781
EEK IN PARLIAMENT	782
WORKS, ROADS AND TRANSPORT	783
RESS	786
ACTS, COMPETITIONS, &C.	788
ED NEW BUILDINGS AND OTHER	792
KS	794
OTTISH BUILDER	794
RS	794

LLUSTRATIONS

St. Martin's House, St. Martin's-le-Grand.
 The building is now in course of erection on the General Post Office site, with frontages to St. Martin's-le-Grand, Gresham-street, and Cheapside; it is being built by the St. Martin's-le-Grand Property Company, and will, when completed, be available for letting as shops, offices and showrooms. The building covers a site of 21,800 superficial feet. The accommodation comprises lower ground floor, ground floor, and upper floors, all available for offices and showrooms, with shops to main frontages on the ground floor. The upper floors are all well lighted and are served by four staircases with lifts and two goods hoists. The construction throughout is of fire-resisting materials and the building is being erected under the Steel Frame

Act, with Portland stone fronts to St. Martin's-le-Grand and Gresham-street. The architects are Messrs. Gunton & Gunton, F.F.R.I.B.A., and the general contractors are Messrs. Rice & Son, of Stockwell-road, S.W.9. The consulting engineers are Messrs. S. H. White & Son, and the structural steelwork is being carried out by Messrs. Redpath Brown & Co., Ltd.

New Premises for the Westminster Bank, Ltd., Cheapside.

This building now being completed, occupies a position at the south end of the old Post Office site at the junction of Cheapside, St. Martin's-le-Grand and Newgate-street. The lower portion of the building is to be occupied by the bank, and the upper floors, which are well lighted, will be available for offices. The architects are Messrs. Gunton & Gunton, F.F.R.I.B.A., and the general contractors are Messrs. Prestige & Co., Ltd. The principal sub contractors are—Steel construction, Moreland, Hayne & Co.; fireproof flooring, stair construction, wall tiling, marble and terrazzo pavings, Diespeker & Co., Ltd.; sanitary fittings, W. N. Froy & Sons, Ltd.; heating and ventilation, Benham & Sons, Ltd.; carving, Farmer, Brindley & Co.; iron staircases, Safety Tread Syndicate, Ltd.; fibrous plaster, Plastering, Ltd.; lifts, Penrose Lifts, Ltd.; electrical work, Francis Polden & Co., Ltd.

Cheapside Land Development Co., Ltd.

The building now being erected on the old General Post Office site between Messrs. Courtauld's new building and the new premises of the Westminster Bank is being built by the Cheapside Land Development Co., Ltd., of 3 and 4, Lothbury, E.C., and will shortly be available for letting as shops, offices and showrooms. The building covers a site of 21,800 superficial feet, and has its main entrance in St. Martin's-le-Grand and two other entrances, all with stairs and lifts, on the Foster-lane front.

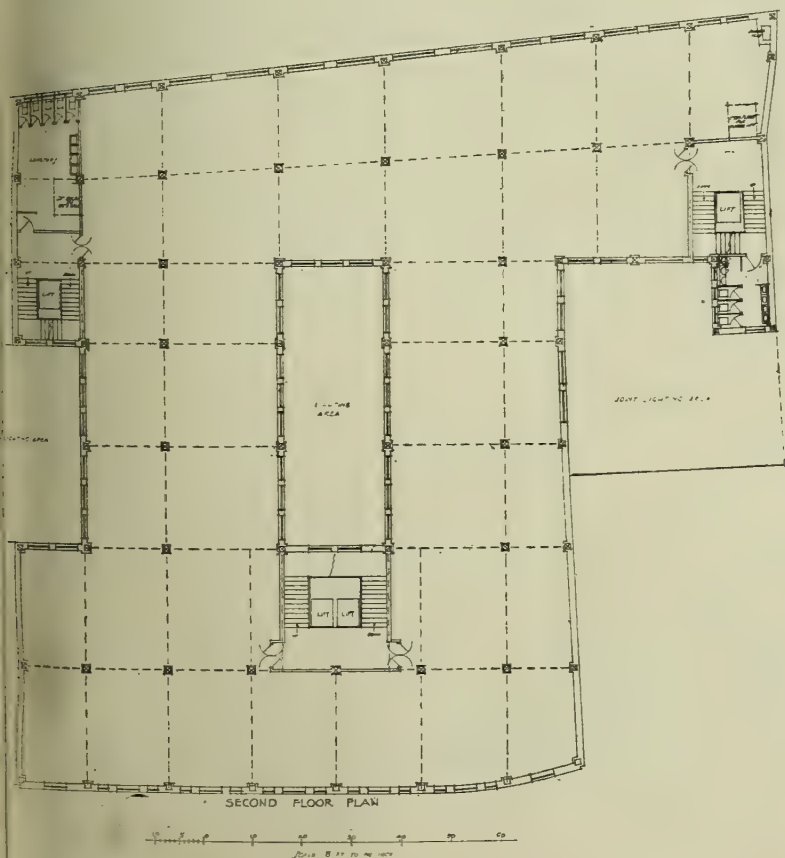
The principal frontage, to be over 80 ft. high, is to St. Martin's-le-Grand, where it will be faced with Portland stone. The accommodation comprises lower ground floor, partly for offices and partly for warehouse purposes; ground floor, with main entrance leading to the spacious hall, which, set in the middle of the frontage, is flanked by shops on either side. The whole of the ground floor, with the exception of the shops, is available for offices or showrooms, and the same applies to the six upper floors; these are well lighted and are served by three staircases, four lifts and two goods hoists. The construction throughout is of fire-resisting materials, the frame of the building being of steel, with brick and stone walls and hollow tile floors. The architects are Messrs. Gunton & Gunton, F.F.R.I.B.A., and the general contractors Messrs. Arthur Vigor, Ltd. The consulting engineers are Messrs. S. H. White & Son. The principal sub-contractors are—Steel construction, Redpath Brown & Co., Ltd.; heating and ventilation, Rosser & Russell, Ltd.; electrical work, Francis Polden & Co., Ltd.; floor construction, Caxton Floors, Ltd.; well-sinking and water supply, Le Grand Sutcliffe & Gell, Ltd.; metal windows, Henry Hope & Sons, Ltd.; marble, terrazzo and tiling, H. T. Jenkins & Son; ornamental metal work and stone carving, H. H. Martyn & Co., Ltd.; lifts, Waygood-Otis, Ltd.; sanitary fittings, Mellows & Co., Ltd.

New Offices and Showrooms of the Gas Light and Coke Company.

The Gas Light and Coke Company have recently opened a showroom, district office, fitters' depot, and stores, at the corner of Seven Sisters-road and Hornsey-road, where the public may find a large selection of lighting fittings and shades; gas cooking appliances of all descriptions; gas fires suited to every style of furnishing and decoration; gas geysers and hot-water circulators; gas-heated wash coppers; gas-heated irons; and numerous other domestic and industrial labour-saving appliances. A feature of the establishment is a public lecture room in which practical lectures and demonstrations in economical gas cookery are given by members of the Company's staff. The architect responsible for the design and arrangement of the new building is Mr. H. Austen Hall, F.R.I.B.A., while the decoration and furnishing of the showrooms have been carried out by Mr. W. J. Tapper, F.R.I.B.A. Messrs. Dove Bros., of Islington, were the contractors.

New Wing, Hospital of St. John and St. Elizabeth.

The newly-erected "Tetley Wing" at this hospital, which is in Grove End-road, London, contains a complete operation suite comprising the following:—1, Operation Theatre; 2, Anaesthetic Room; 3, Sterilising Room; 4, Wash-up Room; 5, Surgeons' Disrobing-room; 6, Surgeons' Dressing-room; 7, Nurses' Dressing-room; 8, Store. The operation theatre has a terrazzo floor and walls finished with Keene's cement and enamel painted. The warming is by means of hot-water swing radiators supplemented by electric heating. Ventilation is provided by an electric fan which propels the air in from outside through a gauge filter to the back of the swing radiators and an exhaust fan fixed on the roof. By this means the air of the theatre can be completely changed five times in the hour. The only fittings in the theatre are the instrument case, which is made of nickel-plated metal with glass doors and vitrolite shelves, two lavatory basins for the surgeons, one for the nurses, a sink for taking drippings from the taps of the water sterilisers, which are fixed in the adjoining room, a rail for towels, clips for small bowls, and a vitrolite shelf for gloves, lotions, &c. The light over the table is the "Scalytic" lamp. This consists of a 100-watt electric lamp enclosed within a dioptric lens mounted in the centre of an inverted metal saucer, around the rim of which are a number of silvered reflectors fixed at an angle in such a way as to throw an inverted cone of light



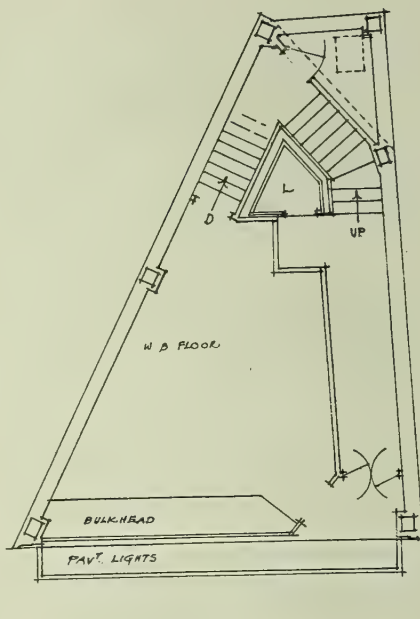
Second Floor Plan, Proposed New Premises, St. Martin's-le-Grand.

MESSRS. GUNTON & GUNTON, F.F.R.I.B.A., Architects.

concentrated on the table. The bottom of the fitting is closed by a screen made of specially toughened glass which can be removed for cleaning. General lighting is provided for by ordinary pendants, and in addition there are two plugs for power current for use with radiators, and a plug for attaching to the diathermic apparatus.

The anaesthetic room is entered from the corridor by folding doors, and communicates with the theatre by a sliding door. The large vertical window is fitted with a dark blind, which runs in grooves at sides and bottom. A sink and lavatory basin are provided and a cupboard for storing the necessary apparatus used. This room is intended to be used when required for minor operations. The sterilising room is next to the theatre and communicates by a swing door. Here are the hot and cold water sterilisers, saline water apparatus, and the instrument and glove sterilisers. All the above are heated by electricity. The bowl steriliser is heated by gas. Under the instrument and glove sterilisers is fitted a cupboard with vitrolite shelves and top.

The wash-up room.—In this room are four sinks—one for instruments, one for towels, one for bowls, and one for mackintoshes, each with its proper draining boards. There is also a large gas-heated steriliser for dressings, and a cupboard for linen, and various other things required for use in the theatre. The surgeon's disrobing room is a small space partitioned off from the corridor with a door leading directly into the theatre, and one into the corridor. In this room is a sink with cold water supply, and in this sink the surgeons deposit their gloves (overalls and other things on the floor) before going into the dressing-room. The dressing-room is fitted with lockers for the various members of the staff, a table, a fixed writing desk for the record of operations, and attached is a lavatory, a shower-bath, and a w.c. The nurses' dressing-room is provided with two wash basins, and a large cupboard for overalls, &c. The store is provided with a cupboard, and with racks for the dressings. The building was designed by Messrs. Young & Hall, with whom Mr. Binns, F.S.I., the surveyor to the hospital, was associated as joint architect. The



Ground Floor Plan, New Premises of the Westminster Bank, Cheapside, E.C.

MESSRS. GUNTON & GUNTON, F.F.R.I.B.A.,
Architects.

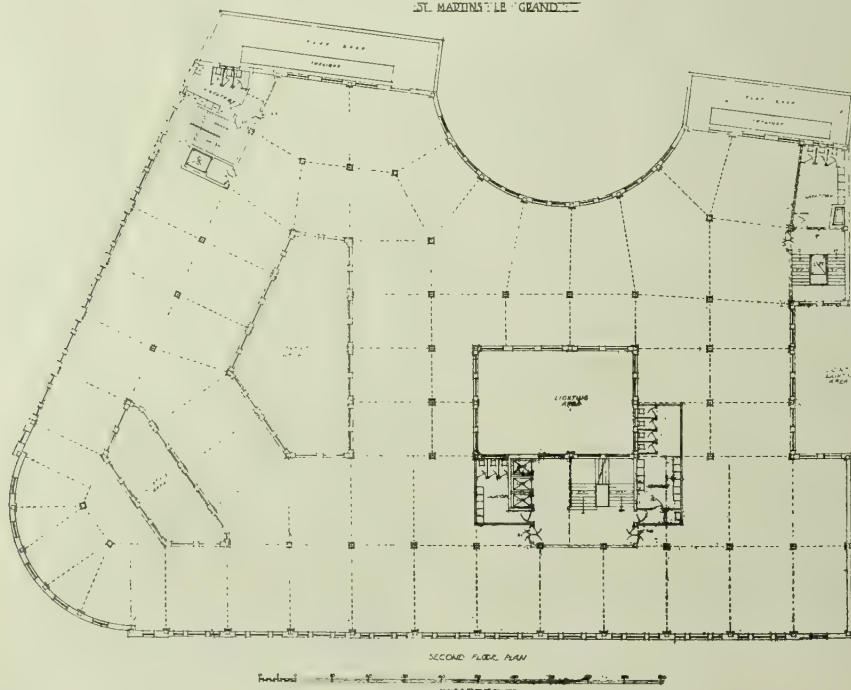
general contractors were Messrs. James Carmichael (Contractors), Ltd., and the following were sub-contractors:—Plumbing and drainage, Dent & Hellyer; heating, hot water, and sterilising work, J. Slater, Ltd.; electric lighting and power work, Girdlestone & Co., Ltd.; terrazzo paving, Burke & Co.

Branch Bank, Henley.

The photograph which we reproduce in this issue was on view in the recent exhibition of the Architecture Club. The architects are Messrs. Whinney, Son & Austen Hall.

ST. MARTIN'S HOUSE.

ST. MARTIN'S LE GRAND



Second Floor Plan, St. Martin's House, St. Martin's-le-Grand, E.C.

MESSRS. GUNTON & GUNTON, F.F.R.I.B.A., Architects.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the views of correspondents, who will oblige us if they will state their views as briefly as possible.]

Waterloo Bridge.

SIR,—Your editorial comment fails to do justice to the point raised in Mr. Davidson's letter to Sir Reginald Blomfield, in his letter to *The Times*, was surely criticising the work of a fellow-architect. He was criticising and severely criticising Sir Edwin Lutyens's Report, and your letter was not merely an expression of opinion on a matter of public importance. Few have heard or read his remarks at the opening of the R.I.B.A. can have read his letter in *The Times* without surprise at an action so entirely contradicted sentiments so recently expressed. "WATERLOO BRIDGE."

[We can only repeat that Sir Reginald's objection was to architects criticising in the Press the executed work of their professional colleagues.—ED.]

St. Paul's Cathedral.

SIR,—The advice given by Mr. A. Henry Stott in his letter to *The Builder* of November 19, is original and valuable; but the cost of demolition and rebuilding of the Cathedral would be very great. Is it possible to imagine that Wren would have set to work to build a fabric without first working out the weaknesses, and strains that would be required to be provided for, especially as he was a mathematician? Another thing to be taken into account, as regards the settlements in the building, besides the unsound site, is "gravitation" during the course of time.

ANDREW SOU.

"The Association of Architects and Surveyors"

SIR,—The "recently-established Association of Architects and Surveyors" to which I referred in my letter to you of October 19, was the Association of Architects, Surveyors and Technical Assistants. I do not suppose anyone confused the two bodies, but it may be well to put the fact on record.

HARRY BARNES.

Chairman of the R.I.B.A. Registration Committee

The Trade of Art.

SIR,—I have read the letter of the Chairman of the R.I.B.A.'s Registration Committee published in your issue of the 23rd ult., and it is to me a surprise to find it so full of criticism of this body of persons that takes upon itself to talk about and advise about and report about architecture, on matters architectural? are they that disport themselves in such an infallible manner? Do I ask a question (Well, perhaps not.)

The R.I.B.A. has been of inestimable service to the good old commercial Britain, having as it has more than has any other body of persons, to the architecture from a mere art to a fine art, and is it, then, surprising when, in pursuing this policy, there are those who gaze upon registration, perceiving therein at least the consummation of a tradesman's ambition. Is it surprising? (Well, perhaps not.)

And let us stroll in the recently enhanced fashionable shopping centres of London, admire the genius by the outward manifestation of its busy-being, namely, by that of "Futurism" compilation. The scene is such that it fails to uplift me. Everywhere, almost everywhere, is such a wealth of squandered opportunity, startling unrevelation and effete (quite apart from the difficult and hence unsolved problem of the glass shop frontage) I am buoyed within myself to reflect that although in the fullness of time one may engage upon architecture, it ever remains engaged upon architecture.

But what has this to do with the Registration? I have strayed from the point! (Well, perhaps not.)

London.

M. MacTAG.



GENERAL OFFICE.

New Offices and Showrooms of the Gas Light & Coke Co., Islington.

MR. H. AUSTEN HALL, F.R.I.B.A., Architect; MR. W. J. TAPPER, F.R.I.B.A., Architect for the Decoration and Furnishing.



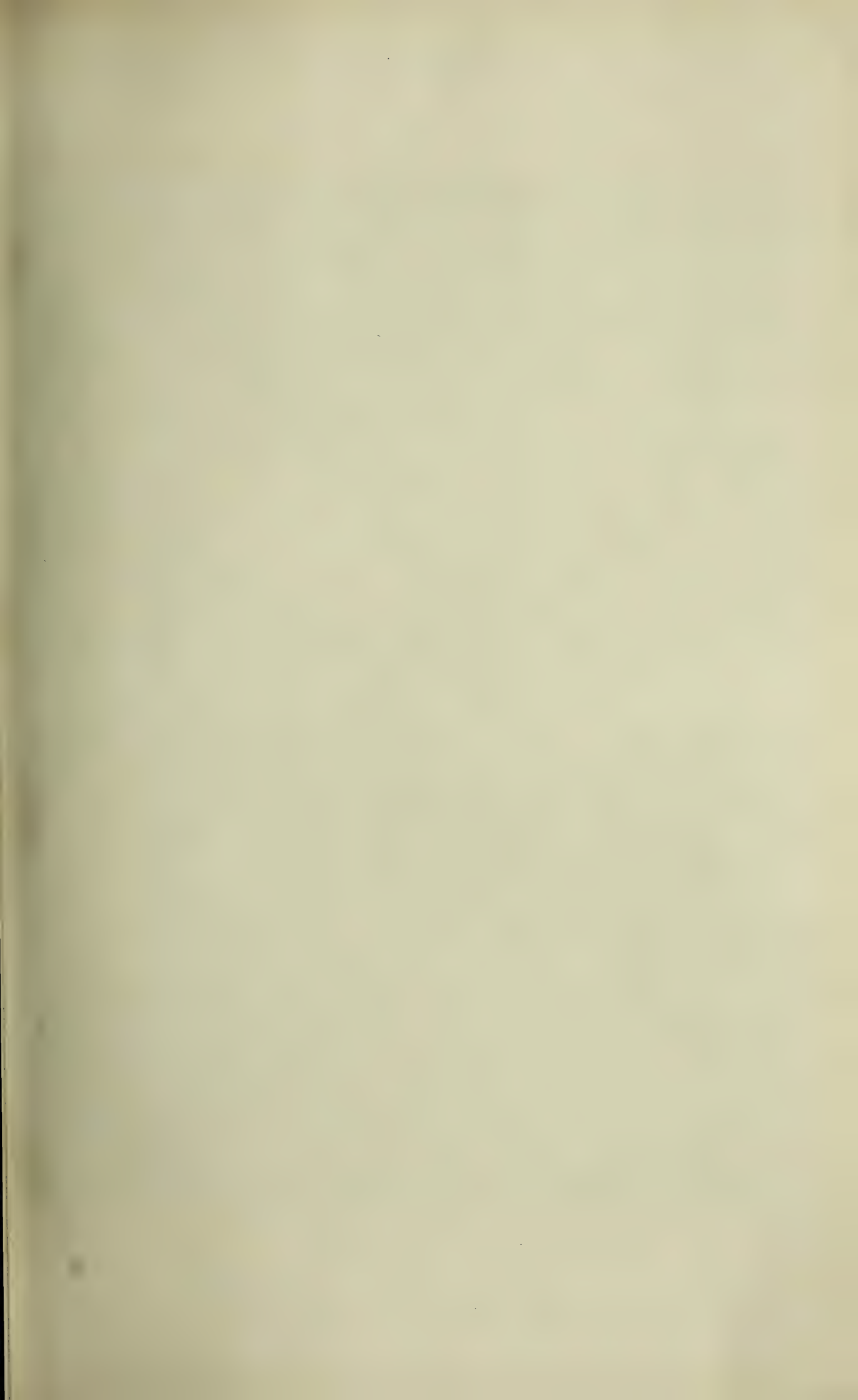
VIEW LOOKING INTO SHOWROOM FROM ENTRANCE HALL.



THE SHOWROOM LOUNGE.

New Offices and Showrooms for the Gas Light & Coke Co., Islington.

MR. H. AUSTEN HALL, F.R.I.B.A., Architect; MR. W. J. TAPPER, F.R.I.B.A., Architect for the Decoration and Furnishing.

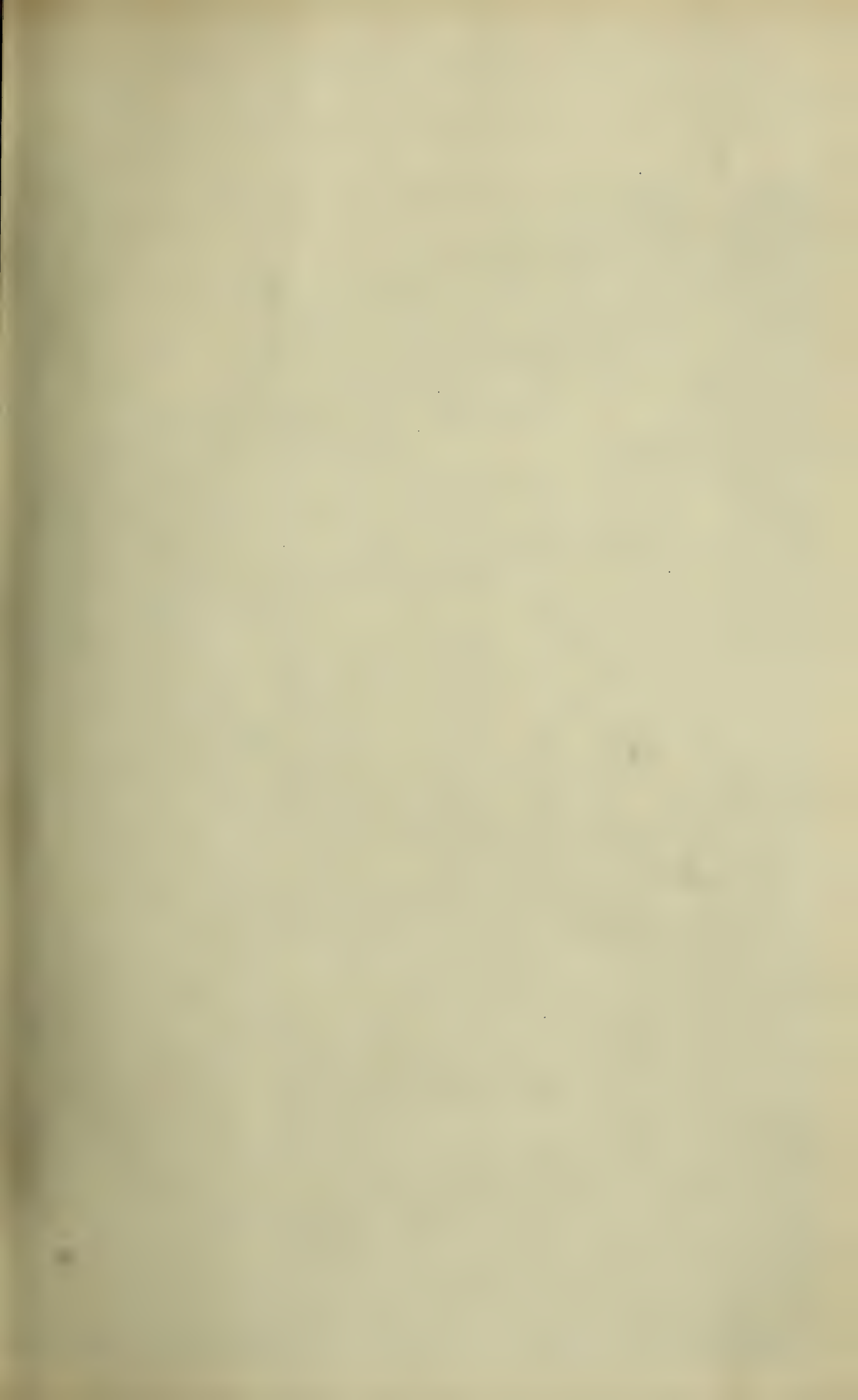




CASHIER'S OFFICE AND SHOWROOM LOUNGE.

New Offices and Showrooms for the Gas Light & Coke Co., Islington.

MR. H. AUSTEN HALL, F.R.I.B.A., Architect; MR. W. J. TAPPER, F.R.I.B.A., Architect for the Decoration and Furnishing.





WESTMINSTER BANK, LIMITED, CHEAPSIDE, E.C., NEW BUILDING AND PREMISES ADJOINING.

MESSRS. GUNTON & GUNTON, F.F.R.I.B.A., ARCHITECTS.



NEW PREMISES, ST. MARTIN'S-LE-GRAND, E.C. MESSRS. GUNTON & GUNTON, FF.R.L.B.A., ARCHITECTS.



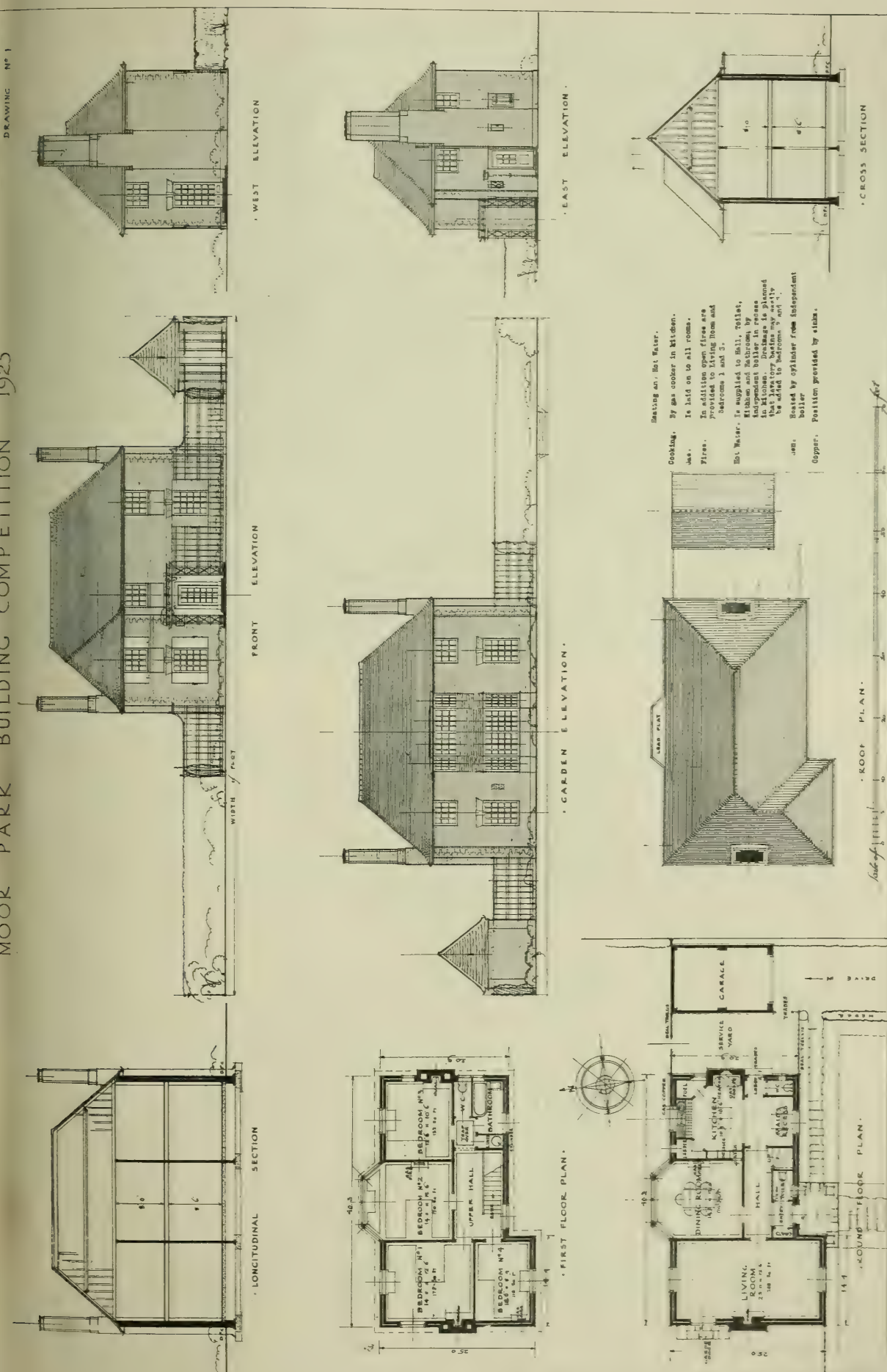
ST. MARTIN'S HOUSE, ST. MARTIN'S





Branch Office of the Midland Bank, Henley.

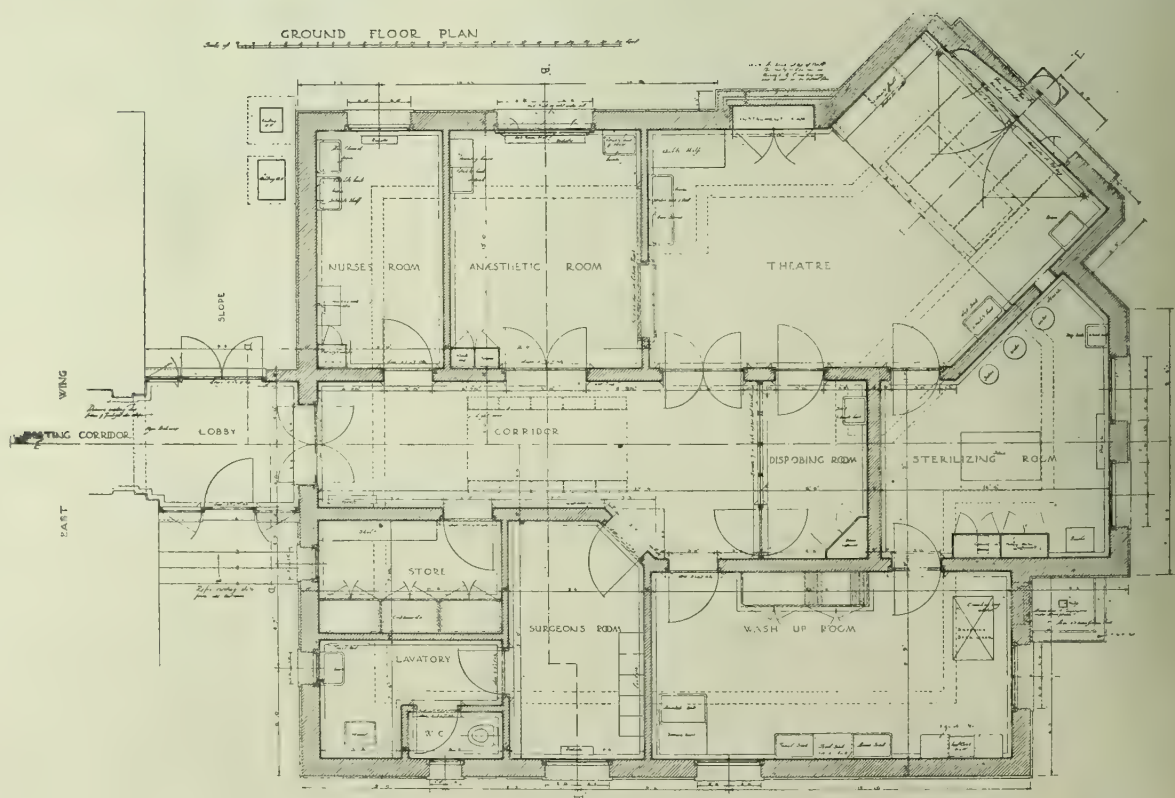
MESSRS. WHINNEY, SON, & AUSTEN HALL, Architects.



Heating an. Hot Water.
Cooking. By gas cooker in kitchen.
Use. Is laid on to all rooms.
Fires. In addition open fires are provided to living room and bedrooms 1 and 2.
Hot Water. Is supplied to Hall, Toilet, Kitchen and Bathrooms by independent boiler in recessed space under stairs. It is arranged that laundry basin may easily be added to bedroom 3 and 4.
Boiler. Boated by cylinder from independent boiler.
Copper. Position provided by sink.

Moor Park Building Competition : First Prelimined Design.

Mr. P. D. HERWORTH, F.R.I.B.A., Architect.



Hospital of St. John and St. Elizabeth, Grove End-road, St. John's Wood : New Operating Theatre.

MESSRS. YOUNG & HALL, F.F.R.I.B.A., and MR. BINNS, F.S.I., Joint Architects.



VESTIBULE, SHOWING DEDICATION TABLET.



THE OPERATING THEATRE.

Hospital of St. John and St. Elizabeth, Grove End-road, St. John's Wood.

MESSRS. YOUNG & HALL, FF.R.I.B.A., and MR. BINNS, F.S.I., Joint Architects.

LEGAL SECTION

NOTES ON CURRENT CASES

Workmen's Compensation—Bankruptcy.

SECTION 5 of the Workmen's Compensation Act, 1906, contains provisions intended to secure the workman where the employer becomes bankrupt or makes a composition with his creditors and, if the employer is a company, has commenced to be wound up. To such cases the amending Act of 1923 in section 19 has added the case where a receiver has been appointed on behalf of the holders of any debentures secured by a floating charge or possession is taken by or on behalf of those debenture holders of any property comprised in or subject to the charge. The scheme of the Act is that where the employer has entered into a contract with insurers then on the bankruptcy, winding-up, etc., the rights of the employer against insurers in respect of any liability under the Workmen's Compensation Acts shall be transferred to and vested in the workman and "upon such transfer the insurers shall have the same rights and remedies and be subject to the same liabilities as if they were the employer, so however that the insurers shall not be under any greater liability to the workman than they would have been to the employer."

By section 5 subsection (2) of the Act of 1906, if the liability of the insurers to the workman is less than the liability of the employer to the workman, the workman may prove for the balance in the bankruptcy, &c. Where there is no contract of insurance made by the employer, then by subsection (3) certain preferences and priorities are given to the workman in the bankruptcy, &c. This subsection has been redrafted in the amending Act of 1923 (see the First Schedule to that Act), and under the amending Act the preference is no longer limited, as under the principal Act, to £100; but it has been held that the amending Act has no retrospective action to cases where the winding-up proceedings commenced before the amending Act came into operation—that is, January 1, 1924 (*Clemmons Aluminium Company, The Builder*, December 12, 1924; 41 T.L.R. 138; *Snowdown Colliery, Ltd.*, 1925, *Weekly Notes*, 64).

The case we are about to refer to, *Pailin v. Northern Employers Mutual Indemnity Company, Ltd.* (1925, 2 K.B. 73), did not turn upon the amending Act as it was treated as under the principal Act, but the question decided was, what is "a contract of insurance" within the meaning of the section? and we are confining our observations to the facts relevant to that point.

The accident had occurred in February 1913, the workman then being under age. On October 21, 1921, a receiver had been appointed on the application of debenture holders of the Colliery Co., the employers in this case, a case only falling within the Amending Act when it came in force January 1, 1924, but no point arises as to this.

The Colliery Company were members of the Indemnity Company, but the articles of association of that company provided a different system of indemnity for what were termed "Extraordinary Accidents" and "Ordinary Accidents"; the former were accidents resulting in death, and these were borne by an "Extraordinary Accident Fund" formed by calls on all members of that class, each assured paying a premium to be relieved of greater liability; but the "ordinary accidents," of which the accident in this case was one, were paid out of an "Ordinary Accident Fund," formed in the first instance by calls on each member, but as to which an account was kept for each member credited with his calls but debited with the sums paid for his accidents, and when a debit was shown a special call was made on that member to make up the deficiency.

In March, 1921, when the workman had attained 21, the compensation amounted to a

weekly sum with war additions of 35s. a week, and this was paid by the Indemnity Company to the workman on behalf of the employing Colliery Company; but in August, 1921, the Colliery Company had fallen into arrears in their contributions to the Indemnity Company, and by a resolution their right to further protection was cancelled and the payments to the workman ceased on September 18, 1921.

The claim in this case was a claim by the workman against the Indemnity Company for compensation due at 35s. a week from that date.

Various points arose on the appeal to the Court of Appeal, the first being whether under the articles regulating the "ordinary accidents" there was any insurance at all in the proper sense of the term, and the Court held that this was not insurance proper; no indemnity was provided by the members generally against any such compensation, but the compensation had to be really provided exclusively by the member whose workman suffered the accident, an account being kept as against that member which he could be called upon to keep in funds. Lord Justice Scrutton tersely summed up the point thus: "The insurer is an indemnified agent not an indemnifying principal." The "extraordinary accident scheme" was a scheme of insurance in the proper sense of the term, as there the assured paid a premium to be relieved of greater liability, the losses being paid out of a fund formed by calls on members of the class, but this case did not fall under that scheme.

The effect of the decision can be summed up in a few words of Lord Justice Scrutton: "For the reason (1) that as regards compensation for ordinary accidents there is here no insurance but only payment by the Company as agents for employers who must indemnify them" (this is the first point explained above); "(2) that if there is assurance the liability of the employers has been effectively terminated, and, therefore, the workman can recover nothing; (3) that anyhow the insurance company would be protected by set-off; in my opinion the appeal succeeds, and judgment must be entered for the insurance company with costs here and below."

This third reason refers to subsection (1), the latter words of which provide that on transfer to the workman of the rights of the employers as against insurers, the insurers shall have the same rights and remedies, and be subject to the same liabilities, as if they were the employer; so however, that the insurers shall not be under any greater liability to the workman than they would have been to the employer; but it was only Lord Justice Scrutton apparently who alluded to this right of set-off. In the case under consideration not only had the liability of the Insurance Company been terminated, but the account of the employer was in debit; therefore, the Court held the workman could claim nothing from the Indemnity Company.

It is to be noted that this disposed of the case so far as the claim transferred to the workman under section 5 subsection (1) of the principal Act, but that would not deprive him of the priority provided by subsection (3) in the bankruptcy, etc., as amended by section 19 of the amending Act in a case falling within the amending Act, but the circumstances here—a receiver appointed by resolution of debenture holders—only came within the terms of the latter Act, and, although in this case it was not decided whether that Act applied to cases where the receiver was appointed before the amending Act came into force, this has now been decided in the negative in the two cases we referred to at the early part of this article, *Clemmons Aluminium Co. (ubi sup)* and *Snowdown Colliery Co., Ltd. (ubi sup)*.

Water Supply, "Private Dwelling House."

In the recent case, *Northern Theatres Company v. Schillito* (1925, 2 K.B. 101), the Court of Appeal had to consider some complex questions arising under a private Act which governed the water supply of the Halifax Corporation. The appellants were the owners of two theatres within the borough, which had been duly assessed and rated to the consolidated rate of the borough, and water was supplied for domestic purposes, the charges being calculated upon the gross estimated rentals.

The question really turned upon section 62 of the Halifax Improvement Act, 1853, which provided, "The Corporation shall at the request of the owner or occupier of any private dwelling house or part of a private dwelling house, any street within the borough in which the water main of the Corporation from time to time is laid, or on the application of any person who, under the provisions of this Act, is entitled to demand a supply of water within the borough for domestic purposes, furnish to such owner or occupier, or other person, a sufficient supply of water for domestic purposes at rates not exceeding the rates in this Act specified." The rates were specified by section 62 as modified by local Acts and Provisional Orders, but nothing turned upon the actual charges.

The appellants contended that the Corporation was not entitled to charge these theatres where there was not even a resident caretaker on the same basis as for water supplied for domestic purposes to a private dwelling house, for at these theatres the consumption of water was far less, while the rating and assessment was higher. The main difficulty in the case was to give any meaning to the two branches of section 59, divided thus (a) "at the request of the owner or occupier of any private dwelling house . . . within the borough; or (b) on the application of any person who, under the provisions of the Act, is entitled to demand a supply of water within the borough for domestic purposes." No section in the Act itself appears to refer to this second category of persons, and the only suggestion that could be made was that as the Waterworks Clauses Act, 1847, was incorporated in the private Act, this latter provision referred to cases falling within sections 44 and 53 of the Waterworks Clauses Act.

Section 44 requires the undertakers to lay down communication pipes and supply water to "dwelling houses" of less than £10 rate value in certain conditions; whilst section 53, which again uses the expression "dwelling house," enables owners who have themselves laid down the communication pipes to require a supply of water. If these sections were incorporated in the private Act, it will be seen imported the words "dwelling house" into the Act as distinguished from the words "private dwelling house," the expression used in section 59.

The majority of the Court held that the *Bristol Guardians v. Bristol Waterworks Company* (1912, 1 Ch. 846; *The Builder*, April 26, 1912) was a strong authority against using the words in a more general language of an incorporation of general clauses Act for the purposes of enlarging the narrower and more definite scope of subject matter of a particular incorporation private Act, but that even if this Halifax Act were so interpreted a theatre did not fall within the ordinary meaning of the words "dwelling house."

A good deal of confusion has arisen in deciding what is meant by a "private dwelling house" or a "dwelling house" under the Water Act, partly because of the different wording of various Acts and partly from obiter dicta delivered in these cases.

In *Cooke v. New River Company* (1908, 38 Division 56) there were such expressions of judicial opinion that anything—for instance a factory—might be a dwelling house in which

was required for domestic purposes, but that there being considered was not the case that under consideration here, and the were frankly *obiter*.

Patents, Ltd., v. Metropolitan Water (1912, A.C. 24; *The Builder*, November 1) was also considered by the Court of in the case under consideration, but was dismissed because the Act in that case the expression "house," not "dwelling

as contended that if the general Act was to the private Act it would render the part of section 59 superfluous, but Lord Scrutton, who adopted that view, pointed at the first part applied to "private dwelling houses," whilst, if the second part persons brought in by the Waterworks Act, 1847, it applied to owners of "dwelling houses" which may be dwelling though not "private dwelling houses." In the cases, *Liskeard Union v. Liskeard Works Co.* (1881, 7 Q.B.D. 505), a case of house, and *South West Suburban Water v. St. Marylebone Union* (1904, 2 K.B. 104; *The Builder*, June 18, 1904), a case of house, were instanced.

As we have said, the different wording of the private and other Acts makes it impossible to say with certainty how one decision upon another, but in this case it is certainly going to have it laid down by the Court of that a theatre where no one resides on premises is not a "dwelling house."

As a result of the decision was that the action could not charge the theatres at rates claimed, but the theatres could not supply of water as of right but only by consent under section 63 of the private

Divisional Court, on the authority of *Bridge Water Company v. Wilts County Council* (1909, 1 K.B. 824), had held that there was implied agreement to pay for the water used on the basis claimed; but the Court of Appeal, apart from the fact that this view had been argued before the justices and the facts found by them would not enable this to be done, distinguished that case from the present case on the ground that there the question was who was liable to pay the local education authority or the school teachers, and no question arose as to the basis on which the payment was to be made.

Options to Purchase.

We note that the case *Batchelor v. Murphy* (1925, 1 Ch. 220), which we noted in detail in issue of June 26, 1925, has been carried to the House of Lords, where the judgment delivered by the majority of the Court of Appeal has been affirmed. It will be sufficient to inform our readers that this was not the original case of an option to purchase contained in a lease which cannot be exercised if the lease be extended (see *Sherwood v. The Mayor of London*, 1924, 2 Ch. 440; *The Builder*, July 25, 1924), but it was an agreement releasing the tenant from a lease, and accepting other terms in their place on a new lease for the term of the unexpired residue of the original lease on the same conditions in all respects "as if the original lease save for a difference in the term." The Majority of the Court of Appeal had held that this case was distinguishable from *Leeds v. Blith*, where a lease had been extended for a longer term, in which case it has been held that the provisions regulating the relationship of landlord and tenant continue to apply, and not an option to purchase which is a collateral agreement (see *Sherwood v. The Mayor of London*, *supra*), for here there was an express contract to grant a new lease on the same terms in all respects as the original lease would include the option. The House of Lords, without calling upon counsel for the defendants affirmed this decision, but pointed out that it was not a case turning upon any principle of law, but upon the particular terms used in the document executed by the parties in reference to the transaction, and to execute a new lease for the un-

expired term of the old lease "on the same terms and conditions in all respects" as the old lease. The House of Lords agreed that an option to purchase is a collateral right forming no part of the demise, but under this particular document that collateral right was included. The decision, therefore, in no way affects the principles of law on this subject, but turns exclusively on the terms of the particular agreement comprised in the document drawn up in this case.

LAW REPORTS

A Painter's Compensation.—Father and Son Trading at the Same Address.

In the Shoreditch County Court, before Judge Cluer, an applicant, Alfred Mahoney, of 38, Rippoth-road, Bow, E., a painter, asked for an award under the Workmen's Compensation Act against James Connolly, of 47, Bandon-road, Victoria Park, E., a builder and contractor. According to the claim the applicant was doing some painting work in Bethnal Green-road, and when getting off a board on to the ground the safety barrier gave way, and he fell into the basement and sustained a sprained ankle and a contusion of the leg.

Mr. Samuel Duncan said, on behalf of the applicant, no compensation had been paid at all. The father, the respondent, said that the applicant was not in his employ but in that of his son, who was carrying on a painting and decorator's business, the businesses being at the same address. Mr. Duncan asked leave to amend the son's name, but Judge Cluer refused.

Judge Cluer said he would award no costs in the present action, but the applicant would be entitled to go on against the son at some future time. Costs of the day would not be allowed, as the father had allowed an action to proceed against him, when he knew it was his son's affair. He quite agreed that, as head of the household, he was justified in coming to Court, but he could have easily handed it over to his son. The action would proceed at some future date, when the necessary notices had been served on the party, and in this case he would find for the respondent with no costs.

An Architect's Fees.

At Bristol Assize, Mrs. Elsie Nora Leete, the widow of Sidney T. Leete, an architect, of Weston-super-Mare, brought an action against Mr. E. M. Trevor, a draper of the same town, for the recovery of £160 10s. for fees alleged to be due in regard to plans for a bungalow.

Mr. E. H. C. Wethered, who appeared for the plaintiff, said that Mr. Leete died on March 19, 1924, and his widow brought that action as administratrix of the estate. In 1922 Mr. Trevor approached Mr. Leete and asked him to act as architect, and he agreed to do so. In September of the same year Mr. Leete surveyed the site and submitted plans to Mr. Trevor. A quantity surveyor was appointed, Mr. Frank Wilkins, of Bristol, tendered for £7,500, and Mr. Leete was paid £50 on account, which sum had been deducted from the claim. Mr. Leete became ill in 1923, and died. In January, 1924, plaintiff saw Mr. Trevor in regard to the plans, and he then said that he had decided to abandon the idea.

A counter claim was set up for £325 for loss of profit owing to work for conversion of flats not having been completed within a given time. Plaintiff knew nothing about any plans for the conversion of flats for defendant.

Mr. Du Parc, for the defendant, contended that what had happened was that Mr. Leete, after a conversation with Mr. Trevor on the subject of a reasonably priced house, embarked on a grandiose scheme in the hope of getting Mr. Trevor to accept it, in which case he would get larger fees.

Defendant, giving evidence, said he gave instructions for a house to cost between £2,000 and £2,500. Later he asked Mr. Leete how much the house as planned would cost, and was

told between £3,200 and £3,500. Witness said he could not go on with it.

Mrs. Maud Mary Trevor, wife of defendant, having given evidence, judgment was given for plaintiff for £110 10s., with costs, the counter-claim being dismissed.

Architect's Action for Fees.

IN this case, tried in the King's Bench Division, before Mr. Justice Branson, the plaintiffs, Messrs. Thos. Denham Atkinson and Chas. Wm. Long, architects, of Trumpington-street, Cambridge, brought the action against the Wellbrook Sanitary Laundry Co., Ltd., to recover professional fees they claimed to be due for services rendered.

Mr. Le Quesne, K.C., for the plaintiffs, said they carried on business in London and Cambridge, and the dispute arose on a claim made by the plaintiffs for work done for the defendants by Mr. Long. Mr. Long was employed by the defendants, who were negotiating to make some alterations in their laundry premises, which were not large enough to cope with a growing business. The defendants declined to pay or admit any liability to Mr. Long, and their case, according to the pleadings, was that they stipulated with Mr. Long that he must draw his plans in such a way that the building construction must cost a maximum of £5,000. After the work was done tenders were asked for, and the result was that the lowest received was from a firm in Cambridge for £7,300. Now the defendants said that Mr. Long was not to receive any fees at all. The plaintiffs said that no such terms were passed on to them at all, and that they never undertook to prepare plans for the limit of £5,000, and that the plans were so varied and so added to in the course of discussions that the defendants were aware that the work could not be carried through at a maximum of £5,000. Mr. Long was consulted by the defendants in March, 1923, but before that they had also consulted one or two other people, and particularly a Mr. Barry Neame, the manager of a large London laundry, who made a report and a rough sketch of what he suggested should be done to enlarge the defendants' laundry. Mr. Long's instructions were, in fact, to consider this report and sketch and base his plans on them, and from those two Mr. Long started to prepare his plans and took a great deal of trouble with them, as well as advising the directors of the company on the details of his proposed scheme. Despite this he advised defendants that the variations and additions would come to something over £6,000, but after further consultations this sum was reduced to about £5,250. When the tender came in after submission to builders of the quantity surveyor's estimates, the lowest tender received was £7,300. The defendants then abandoned their scheme and repudiated the contract with the plaintiffs in respect of the work done.

Mr. Long, F.R.I.B.A., gave evidence in support of counsel's statement. He said his claim was based on the scale of the Institute charges.

Mr. G. Nicholson, a quantity surveyor, of Chancery-lane, London, also gave evidence as to the figures prepared by him.

This being the plaintiffs' case, the secretary and also the directors of the defendant company gave evidence to the effect that the instructions were that the alterations were not to exceed £5,000.

Mr. Justice Branson gave judgment for the plaintiffs for £398 13s., with costs, stating that he was satisfied that the defendants knew about the extra cost on the variations and modifications made. He also dismissed with costs a counterclaim by the defendants for the fees paid to the quantity surveyor.

New King's Lynn Bridge.

The new ferro-concrete bridge at King's Lynn has been completed, at a cost of £30,000. It spans the River Ouse at a point where a length of 500 ft. is necessary in order to cross the harbour of the port of King's Lynn.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting?—ED.

Roads.

[REPLY TO "CONTRACTOR," NOVEMBER 20.]

SIR,—If the road referred to is a highway and repairable by "the inhabitants at large," as appears from the particulars given by "Contractor," then, in general, the liability to repair rests with the local authority, and that liability cannot be avoided by any agreement or arrangement entered into with "Contractor." Although the local authority, acting as surveyor of highways, was not liable for compensation had damage accrued to a person due to the subsidence, yet, in filling in the hollow and rolling it with a steam roller, the local authority was merely carrying out its statutory duty and, as above stated, this could not be avoided by the agreement with "Contractor." Whether the local authority can recover the cost depends on the nature of the agreement. If the agreement was that "Contractor" was to carry out the work himself, as and where required, then it does appear that he should have been given the opportunity of doing the work; and, failing that, that the local authority could not recover, since the agreement was broken. But on the information given, it is more than probable that the local authority did not contract out of what it was bound by statute to perform, and can recover from "Contractor," on the agreement, usually made in such cases, for what appears to be a small charge for the work done. C. L.

SIR,—It seems obvious that the Council has broken the contract by making good the road-work which they had asked the querist to do. Before paying the bill of 12s. 6d. demanded, querist should get it in writing that he will not be responsible for any further maintenance and that the contract for one year be annulled. He will then know where he stands. If they (the Council) objects, other steps can be taken. G. W. H.

SIR,—Under most authorities, roads and sewers that are public property are most zealously guarded, and all work thereto is carried out by the staff of the authority. I have recently connected a private sewer to a housing scheme to the public sewer, and the procedure was, in every way, similar to that I have met elsewhere, viz., we carried out all work up to the street boundary, and the public authority carried on under the street and connected to the public sewer, charging us with the cost thereof. In the case quoted by your correspondent, it appears that the authority allowed a precedent of a private person carrying out the work upon the public street, and it might be presumed that the maintenance thereof might be carried out by the same means to the approval of the authority. In this case, the action of the council seems to have been a little high-handed, but I should imagine that in the opinion of the surveyor the trench had settled sufficiently to allow of finally surfacing the road over same, and that the use of the steam roller was the necessary final touch. If this assumption is correct, "Contractor" has had the job done in probably the cheapest and best way possible, and I suggest he should swallow his sense of technical injury and cheerfully pay up his twelve-and-sixpence. BREADTH.

Aggregate.

SIR,—Can you inform me what is meant by 6 to 1 concrete; should it be a mix of, say, 1:2:4 or 1:3:6? A specification states:—"The concrete shall be composed of one part cement and six parts aggregate unless otherwise specified, determined by actual struck measures to be provided by the contractor. The aggregate shall consist of well-washed, clean, broken stone, brick, or material of an approved quality and strength, free from all injurious materials,

and capable of passing through a 2 in. ring for concrete or 6 in. thick, and 1½ in. ring for concrete over 4 in. thick. Any aggregate used must be capable of bearing a crushing test of 500 tons per square foot. The aggregate shall include a sufficient quantity of small and fine chippings and sand, to reduce the voids caused by the coarser materials to a minimum, gauged by water-expulsion test."

Is there anything in the foregoing specification to support the contractor's contention that the coarse aggregate only should be taken into consideration in the calculation of the required amount of cement, observing that six parts aggregate will be taken as the basis? G. E. S.

[A "6 to 1 concrete" is a concrete made up of 6 parts of aggregate to 1 part of cement, and is a method of specifying proportions which should never be used. There are many published tables of proportions necessary to produce given strengths, and it is always safer to specify the exact proportions of coarse and fine materials. "Aggregate" is a much-abused word, and although it literally means the whole of the contents of a concrete with the exception of the cement, it is frequently used to refer to the coarse material only. The proper way to specify concrete is to state the exact proportions of coarse and fine material of which the aggregate is to be composed; thus, a 4:2:1 mix means four parts of coarse material, two parts of fine material, and one part of cement. To leave it to the contractor to use what proportion of the finer material he thinks fit is inviting trouble unless the integrity of the builder is beyond reproach. From some figures given in our correspondent's letter it appears that in this instance the contractor has used 4.88 parts of coarse material and 2.44 parts of fine material to 1.22 parts of cement, and this should give a sufficiently strong mixture for most purposes provided the aggregate were properly graded. We are also told that the contractor "contents that the proportion of cement required for the foregoing mix is calculated in relation to the coarse material only," but we fail to see how this contention can hold good, as (a) if cement were calculated to fill all the voids in the coarse material a very much greater proportion would be required, (b) if fine material is included there must obviously be sufficient cement to coat all the particles. Our correspondent's letter is not quite clear on some points, but it does emphasise the necessity for the careful drafting of specifications; a clear statement of the quantities of fine and coarse material would have avoided the whole trouble.—ED.]

Making Partition Soundproof.

SIR,—Can any reader advise how to render soundproof the partition and floor herewith described? Kitchen 9 ft. square, 8 ft. ceiling (lath and plaster); bedroom over, of same dimensions. Bedroom floor 7-8 in. boards on 4½ in. by 2 in. joists. W.c. 5 ft. 6 in. by 2 ft. 6 in. recently formed in corner of bedroom by partition and door extending to ceiling. Partition 3 in. by 2 in. wood framing with ½ in. T. and G. each side. P. trap screwed directly to floor boards. All sounds from the w.c. are not only heard very distinctly in what remains of the bedroom, but also in the kitchen below. AJAX.

Destroying Beetles.

SIR,—Can any of your readers suggest a method of destroying beetles? A new building which has been erected against old portions of servants' quarters is troubled on occasions by these insects. Borax employed on the skirtings temporarily improves matters, but does not eliminate the nuisance. W. B.

Pickling Paint off Woodwork.

[REPLY TO "OLD DEAL," NOVEMBER 20.]

Most of the high-class paint manufacturers who advertise in *The Builder* would supply querist with a paint solvent that would not do the slightest harm to the most delicate mould-

ings. I have used these preparations in big class work with good results for twenty years. Do not use a burning-off lamp on any account. G. W. H.

Condensation.

[REPLY TO H. W. FINN, NOVEMBER 20.]

If cooking is done on gas-stoves, which may cause steam, why not have zinc hoods over them? Then take a vent-pipe from same into the outside air, similar to those used on geysers. Alternatively, why not build an electric extract fan in the wall with vent shafts over the cooking apparatus? G. W. H.

SIR,—Either strip the walls and coat with lime plaster, which is sufficiently porous to cope with the condensation, or, if there is a domestic hot-water apparatus and conditions are favourable, re-arrange the runs to allow of a pipe running around the walls of the rooms concerned. Condensation troubles are not confined to winter, which makes it advisable to use a system employed all the year round, and central heating, which is closed down during half the year. WARMTH.

Hospital Windows.

The names of firms who supply a special glass that allows the ultra-violet rays to penetrate have been sent direct to the correspondent who asked for this information in our last issue.

TOWN PLANNING AND ITS ADVANTAGES TO BUILDERS

IN the course of an address on "Town Planning," at the Rotherham Rotary Club recently, Mr. F. Marsden, city engineer and surveyor of Bradford, said that town planning was one of the subjects which would have to be dealt with by municipalities throughout the country before long, if they had not already started. He was quite convinced that if Rotherham people got to know what town planning meant they would hail it with delight. It was like all new subjects—rather a bogey to good many people who did not really understand it.

When the first Town-Planning Act was introduced, said Mr. Marsden, there were people who opposed it, fearing that all land was going to be confiscated; but, as a matter of fact, there had been no confiscation. It simply enabled the municipality to use a lot of the land in a much better way than before. It provided that certain areas should be set apart for houses, with ten or not more than twelve to the acre, other parts for the acre, others six and others eight to the acre, according to the best interests of the town. The fact that the Act provided that some estates could have four houses to the acre was, he contended, one of the best safeguards that a town had. If a man put up a house and spent money on making it nice, he would have no fear of his neighbour putting a bone factory next door or across the street. In Bradford they were having very little trouble either with landowners, property owners, builders, in regard to town-planning regulations. He knew no case in Bradford where a builder had said the regulations hampered him in building or selling his houses. It was uncommon thing during the industrial era for houses to be built at the rate of 70 to the acre. Now, the maximum that could be built on an average was twelve, or at most fifteen. It was proved conclusively that an artisan living under town-planning conditions reduced his sickness rate to half, and reduced his death rate to less than half.

If a builder took three or four acres of land he could develop it on town-planning lines at less cost than by the old method. Speculative builders and others were dedicating, free of cost, tens of thousands of square yards for the widening of important streets in Bradford, because of the advantages they were finding under town planning.

THE BUILDING TRADE

HINTS TO BUILDERS

By J. H. BARNES, F.I.O.B.

EXCAVATOR.

There are many methods of dealing with the excavation required for the foundation of an any building, and no definite rule can be ed to suit all jobs. In the case of a some- small building contract the amount of ation required would probably be but a quantity, and the cheapest way of dealing this would be to back the cart right up to excavated material, so that the spoil could be d directly into the cart without a further . This course may necessitate the laying of a temporary sleeper road from the highway, as, although there may be hing of a roadway in existence on the site, raffic of tip-carts would seriously damage ad and cause ruts and make it difficult for port.

It is not possible to get a cart in a position nient for loading in the manner described . It may be necessary to leave the cart or in the nearest position on the adjoining ay and convey the material from the site e cart either by barrow or basket, which- s the more convenient for the job in ques- . Where barrows are used it should be in mind that it is very much easier work e navy if the runs can be fixed somewhat e down grade.

sketing may be necessary where the ial has to be excavated below the ground- . By this method the earth is placed into basket and carried to the cart and the ial deposited therein. Although this may somewhat expensive method of dealing the work, it is probable that it may be er than to deal with the material by g, i.e., by throwing the excavated material e series of platforms until it reaches the d level, there to be conveyed by wheel- w or basket. Under such circumstances asketing may be less expensive, as it would numerous handlings of the material.

In the case of a job of a somewhat larger area, a tirely different method may be required. ere is a considerable amount of existing rty around the site and such buildings o be underpinned, it may be advan- us to carry out such underpinning opera- first, leaving the "dumping" to be ated afterwards. Sometimes it may be able to sink a trench all round the site so the foundations for the retaining or outer can be put in, and when this work is com- the "dumping" or general excavation e attacked. A third method would be rt the "dumping" or general excavation nd leave an embankment around the sur- ing buildings as an abutment; the under- ng could then be done by driving headings the bottom depth so that the old buildings e picked up on the new levels. This l probably be the cheapest way of handling roblem.

haps the cheapest way of dealing with the port of the excavated material would be to the cart or other means of transport right e the excavated face and fill the material ly into the cart. If the site is to be sunk over depth than the public highway it will ecessary to lay in a temporary timber road ave chain horses to assist with the tip carts e help for the other means of transport, se of the gradual steepening of the gradient a would be necessary if the site was being ated to a considerable depth.

Other usual method is for a timber staging e built and a locomotive steam crane led to run on rails so that the excavated rial can be let fall or thrown into skips and ips run on a bogey on steel rails to within adius of the crane and hoisted and tipped e means of transport. This is a fairly e and very efficient method of dealing with

excavation, and it should be borne in mind that the cost will largely depend upon the number of loads which can be hoisted by the crane per day. Such a crane usually lifts a skip containing about $\frac{1}{2}$ yard loose earth, and two such skipfuls would be needed for the ordinary cart. On a fairly easy job it would be possible to hoist about 160 to 200 lifts per day, or more if the means of transport are available. It is often a great convenience on a job of this kind to have one or two $\frac{1}{2}$ -yard skips, which can be let down the narrow trenches and so save unnecessary handling of material.

One of the difficulties in dealing with exca- vation in towns is that several carts are neded to keep the job going and the crane employed, and should any little delay occur on the road the carts may all arrive at the job at the same time and would be rather more than the crane could cope with for a short period, and after- wards the engine would have little or nothing to do. The general experience is that the crane is overwhelmed with work in the morning and has little or nothing to do in the afternoon. It is therefore "up to" the builder to see that such periods are utilised for the taking in of bricks and other materials, and arrangements must be made so that other materials being delivered to the job do not hinder the transport of the excavated material.

In using the kind of crane indicated above, care should be taken not to lower the jib to a greater angle than 45 degs., as, if the jib is allowed to go down to a lower level than this, the leverage of the laden skip may overturn the crane. The crane makers issue a chart showing the weights the machine will lift when the jib is at different angles. The steam locomotive crane of the type indicated above would need cleaning out periodically, and Saturday afternoon is usually considered a convenient time for such work, at the standard rate of pay for such duties. While such a crane is in use it should be insured against mechanical breakdown, boiler explosion, toppling over, and third party risks.

On jobs where the excavated material has to be spread and levelled over the site where directed, this may necessitate either wheeling or carting the material and depositing as near as possible to the required position, and from this to be spread and levelled as required. If the general building materials are stacked on such deposited spoil, the made-up ground will hardly need ramming or consolidating after- wards. It will be found that a fairly wide wheel to the wheelbarrow, say $1\frac{1}{2}$ in., will give better results than the use of a barrow with a narrow wheel.

Where the earth or material arising from the excavation has to be carted away, the builder should be particularly careful to see that the carts take their full load. This is a somewhat obvious point to make, but it is essential that the supervision of this department should never be relaxed. Where the spoil arising from exca- vation has to be carted away, it is usual for the firm employed to do the cartage to find also the dump or shoot, and t.e will usually include the cost of this in the price of carting away.

In the centre of London and large towns it is very difficult to find a place where it is possible to dump rubbish on the ground, and such positions are only found at some distance from the centre of the city, which would mean that the number of journeys a carman would do in the day would be very few because of the distance to be travelled. In most cases it will be cheaper to cart the rubbish and dispose of it by tipping into a barge alongside the Thames or one of the canals, in which case the lightermen usually arrange for an inclusive charge for the barging of rubbish and depositing the spoil where they may find it needed, usually some low-lying ground.

Wherever barges are concerned they will be subject to time and tide. It may happen in such cases when the barge does not arrive, through stress of weather or other cause, in time to receive the rubbish, the "shoot" may be temporarily closed, and consequently the job would be considerably delayed because the cartage contractors, having no dump for their rubbish, would seek work elsewhere. If the carts do not arrive to clear the rubbish, though only for one day, other work must be found for the men on the job, even if it is unremunerative. These little difficulties are bound to occur, and it is usually advisable wherever possible to keep a little work in hand for such emergencies, so that the men may be usefully employed—breaking up old foundations, &c.

If the site is covered with turf and vegetable soil the former may be sold, and the vegetable soil may find a cheaper market than the ordinary demolition stuff. At any rate, it is worth trying to secure a reduction in the cartage bill by this means. Some contracts may endeavour to indicate the nature of the soil which may be expected to be met with during excavation, and where rock is known to exist it should be definitely stated.

It is not unusual for trial holes to be dug on the site so that everyone concerned may have some idea of the sort of ground which may be met with, and if a trial hole shows that there is any considerable quantity of sand at the position which the hole is dug the builder may be tempted to allow something as a credit for this material from his tender, but he should bear in mind that it is not usual for anyone to guarantee that the trial hole exactly discloses the kind of ground to be met with over the whole site. It is not unusual for a trial hole to be dug and disclose sand nearly the whole way down, and when the job comes to be executed the builder may find that by some lucky or unlucky chance the trial was sunk on the only spot on the site containing sand. Even if sand is found on the site, it is not quite an unmixed blessing, as there is rarely any room for storage on the job, and the foreman is handicapped by the presence of a large amount of material he is unable to use for the time being.

Care should be taken to see that the dimen- sions for the excavation are very carefully taken as, if too much earth is excavated, a corre- spondingly larger quantity of material will be required to fill the void caused by the formation of the trench.

FOUNDATIONS.

It is necessary for a good foundation to be provided to all buildings of a permanent character. The ordinary building contract in London does not place upon the builder the responsibility for making a decision with regard to the suitability of sub-soils for foundations, the duty usually being cast upon the architect to obtain the approval of the District Surveyor; but it is well for the young builder to have some idea of the suitability of various soils to carry foundations, and of the rough-and-ready methods usually employed to test them.

When the bottom of the trench or foundation is reached, the sub-soil may be tested by driving a crowbar into the ground and working it round with a circular motion; if the sub-soil "shatters" or disintegrates, it will show a loose soil and probably "made-up" ground. A similar experiment may be tried in the case of wet clay. By driving in a crowbar and working it round, one can see to what extent the moisture has soaked into the clay. If the building is erected and a great load is super- imposed at some point on wet or soft clay, the pressure may cause the sub-soil either to squeeze out or consolidate, and perhaps some local cause may result in the drying out of the moisture in the clay and tend to cause settle- ments in the building. Soft sand can be tested by a similar experiment. Where really hard

ballast exists it will be found difficult to drive a crowbar into it, and such a sub-soil will probably give a most suitable foundation.

If the excavation is carried right down to the London clay this will be found to be very hard and stiff, so much so that it is very difficult to get a pickaxe into it. The top surface can be shaved off in thin slices with a shovel. Such a sub-soil would probably give the best weight-carrying foundation to be found in the London district.

In the nature of things, it is impossible to state definitely what weight the different soils will carry. The following are the weights which are generally considered the maximum which should be placed on the different soils:—

	Per sq. foot.
Made up ground	1 ton.
Soft clay.....	2 tons.
Loam or firm and dry clay ...	3 „
Very firm gravel or hard clay ..	4 „

It should be remembered that in many districts in London, large areas have been excavated and sand dug out, as at Hackney and Hammer-smith, and large areas have been excavated for brick clay at Highbury and Hoxton, and the excavations have been filled in sometimes to a depth of nearly 30 ft. with loose rubbish. In dealing with a building on a site of this kind, the only satisfactory plan is to excavate through the "made up" ground on to the virgin soil. Within the area of what is defined as the City, a large district was at one time covered by the Moorfields Marsh, and it will be necessary to sink right through this mud to obtain a firm foundation on the ballast and clay below.

It is somewhat difficult to indicate the class of building which may come within the category of the weights indicated above, and which could be safely supported on the various foundations; but the class of building usually found in the average dwelling house may weigh from one to one-and-a-half tons per foot super on the foundations. Buildings of the warehouse class may exert a pressure of two to three tons per foot super., but it is obvious that the type of building and the number of stories it contains will determine the weight on the footings. In every instance, the actual weight going on the foundations should be properly calculated. In excavating for trenches it is often found that there are some pot holes or poor soil which should be taken out to render the concrete foundations complete.

Where the building is to be erected either on the river bank or on what used to be the bed of an old river, such as is found near the Thames, it is sometimes advisable to arrange for a trial boring to be made to determine exactly the particulars of the strata underlying some important part of the proposed building. This can be done by the usual method of boring for an artesian well, and the record can be kept of the core as it is drawn to the surface. By this means some fair indication is obtained as to how far it is necessary to go to get a reasonably good foundation. In some instances it will be considered too expensive to go to the full depth required, and then the architect and engineer must devise some method of distributing the loads to secure a satisfactory result, probably by a concrete raft or grillage.

Where the drain or sewer is below the level of the foundation, the soil will show up fairly dry, but if the foundation is sunk to a level below the sewer, dampness is usually met with, particularly in the water-holding soils.

It is customary and usual to provide horizontal and vertical damp courses to the buildings in cases of this kind, although should any slight settlement occur it would very likely break the waterproofing and allow moisture to percolate through into the buildings. The foundations should be carried to such a depth as to be unaffected by weather. All foundations should be laid horizontally and any variation required in the depths at various points should be arranged by steps and not by slopes.

When a site has been excavated ready to receive foundations, the concrete should be filled in as quickly as ever possible, as it is not advisable to let rain soak into the subsoil, otherwise

that which was hard, dry clay may very soon become soft and wet and less efficient for weight carrying. In some instances, where the excavations for foundations have been completed and instructions have not been received for laying in concrete, the builder has been instructed to cover over the base for foundation with tarpaulins and divert watercourses to keep the wet out of the ground, but this is not a usual practice.

All excavation for foundations should be continued until a general or common subsoil is reached. For instance, when the excavation has been taken down to a specified depth, the ground exposed may differ at various points in the same trench, and made-up ground, loose sand and clay may successively be met with. In such cases, it is advisable to continue excavation all over the trench until one general kind of soil is reached.

THE WEEK IN PARLIAMENT

Houses under Erection.

Mr. N. Chamberlain informed Mr. T. Thomson that on the 1st inst. the numbers of houses in course of erection in schemes under the Housing Acts of 1923 and 1924 were 40,526 by local authorities, and 33,031 by private enterprise. The total number of houses in schemes sanctioned under these Acts, completed or in course of erection, were 140,781 by local authorities, and 187,833 by private enterprise.

The Unemployed.

Sir Arthur Steel-Maitland, Minister of Labour, informed Mr. T. Williams that on October 26 the number of insured workpeople in the building trade of Great Britain recorded as unemployed was 69,392, classified as follows:—

Carpenters, 2,864; bricklayers, 911; masons, 781; slaters, 193; plasterers, 22; painters, 18,230; plumbers, 1,521; labourers, 24,377; and other workers in the building trade, 20,313.

"Steel" Houses.

Mr. N. Chamberlain informed Mr. A. Greenwood that the following table gave the number of houses (including those to be erected for demonstration purposes), of the different types referred to which had been approved and the number of local authorities to which approval had been given in England and Wales:—

Type.	Houses.	Authorities.
Dennis-Wild ..	1,356	21
Telford	266	33
Weir.....	23	12
Atholl	50	25

The Quality of Bricks.

Brigadier-General Brooke asked the Minister if he could state the cost of manufacturing chalk bricks and ordinary bricks; whether the former could be manufactured at any chalk quarry by unskilled labour; whether any experiments had been carried out in this country in connection with the use of the former material for building houses; and the result?

Mr. N. Chamberlain said that the kinds of bricks and the cost of manufacture varied too much for any general comparison to be made.

British Materials.

Mr. Harmsworth asked the Minister of Health whether, in all cases in which bricks or steel were to be used for the erection of houses under the Housing Acts, he would require as a condition of the granting of subsidies for such houses that only British bricks and British steel should be used, having regard to the amount of unemployment existing in these two industries?

Sir K. Wood, who replied, said that Section 10 of the Housing Act, 1924, provided that, in approving proposals for the construction of houses, the Minister of Health should not impose any conditions which would prevent the materials required being purchased in the cheapest market at home or abroad. The Government had, however, urged local authorities to arrange that all contracts for or incidental to works carried out by them should, in the absence of special circumstances, be placed in this country.

Shortage of Plasterers.

Mr. Penny asked the Minister of Health whether he would consider, in view of the shortage of bricklayers and plasterers, the desirability of devising, in conjunction with the trade union concerned, some scheme in localities where the housing problem was most acute, whereby men in receipt of unemployment benefit for a period in excess of, say, two or three months, would be required to take a course of instruction to qualify them as bricklayers and plasterers, at the same time stipulate that all houses receiving a State subsidy must employ a certain percentage of these trainees?

Mr. N. Chamberlain said he would submit the suggestion to the Building Industry Committee.

Slum Clearances.

Mr. Albery asked the Minister whether an inquiry had been held into the suggested erection of 10-story flats in connection with slum clearance schemes?

Mr. N. Chamberlain said he had set up no sub-committee as the hon. member had in mind. Two or three local authorities, however, were contemplating the erection as an experiment of blocks of 10-story flats in connection with slum clearance schemes, and he was giving careful consideration to this question in all its aspects.

The Position in Rural Areas.

Mr. Foot Mitchell asked what steps were being taken to meet the housing shortage in agricultural districts?

Mr. N. Chamberlain said he regretted that figures were not available showing the number of new houses which had been erected in agricultural districts and are occupied by farm labourers. Increased financial assistance was authorised by the Housing Act of 1924 for houses erected in agricultural parishes, and far 135 Rural District Councils had submitted schemes for the erection of 3,072 houses in such parishes. Of these 555 had been completed, 9 were under construction, and 508 had not been definitely arranged for but not started.

Smoke Abatement.

Mr. N. Chamberlain informed Sir W. de Freyne that he hoped to introduce a Smoke Abatement Bill next Session.

Schemes Refused.

Mr. Forrest asked the Minister the number of instances in which he had refused to sanction housing schemes submitted by local authorities.

Mr. N. Chamberlain said he had in a number of instances been unable to approve schemes submitted by local authorities where the price appeared to be unreasonably high, and in other instances he had advised local authorities to limit their immediate building programme to such number of houses as could be built with available labour and materials at an early date.

The Epstein Panel.

Mr. Locker Lampson, replying to a number of questions, said the design for the Epstein panel submitted to the Office of Works by the Hudson Memorial Committee, which, it was assumed, represented the views of the subscribers to the memorial. The First Commissioner was satisfied that there was a general desire for removal of the panel.

Use of Bricks.

Mr. Kelly asked the Prime Minister whether he had received a resolution from the National Building and Engineering Brick Federation protesting against the embargo by the Ministry of Health on the use of bricks, in view of the heavy capital expenditure made by brickmakers at the direct request of the Government during the last few years, with the object of maintaining increasing output?

Sir K. Wood said that the communication had been received from the Federation to permit of the maximum amount of building work being undertaken. The Minister was encouraging local authorities, where there was a shortage of bricklayers and substitution of other methods of construction was possible, to adopt alternative methods of construction for public buildings.

PUBLIC WORKS, ROADS AND TRANSPORT CONGRESS

ns exhibition, which closed on Thursday, fully noticed in our last issue. We now extracts from two of the more important papers read this week. We shall publish next papers on "Road Corrugation," "Strengthening of Bridges," "Regional Planning and Road Development," and "Modern Methods of Housing."

The Uses of Electricity.

Speaking on this subject, Mr. R. Hardie, C.E., divided his remarks under two headings: The uses of electricity for (a) lighting and (b) institutional purposes.

He said that a supply of electricity was or would in the immediate future be available, at every hamlet, at least to every community of any size, at prices which brought electricity within the reach of even the poorest. Therefore there was no justification for other than electric lighting being introduced in any new dwelling house, no matter how small.

In our Colonies; on the Continent, all over America, electric lighting was fast becoming universal, not only in every class of house, office, workshop and factory, but in the lighting of all urban highways.

He mentioned a few typical electric housing schemes in various parts of the country which within the past few years demonstrated the practicability of this design of house. We have the actual bulk experience of those who have occupied these houses. Glasgow had 800 electric houses nearing completion. Over 200 had been in occupation for over a year, and the tenants spoke very highly of them. In addition to having electric light throughout, they were provided with the following equipment:—An electric cooker for eight persons, a sink, a large-size oven, a grill and boiler, with the addition of a three-pint boiling electric kettle; an electric wash; and a plug for electric iron. In several instances they had installed, at the consumers' expense, immersers in the storage cylinder, to get hot water on occasions when the coal was out of use. Heating plugs were provided in all rooms except the bathroom and kitchen, although in many cases the tenant had to have plugs fitted in these additional rooms at his own expense, and electric fires were provided. There was no hire charge for the use of this equipment, and the Electricity Department undertook the maintenance of all electrical heating and cooking apparatus in the house without charge to the Housing Department or tenant. The Electricity Department took advantage of the electricity tariff, and the actual returns showed the average weekly bill for electricity in a three-apartment house 3s.; in a four-apartment house 3s. 6d.; in a five-apartment house 4s. 6d. These figures would seem to show that electric service had nothing to be compared to the score of cost of the older methods of lighting, heating and cooking, and there was in addition to be put to the credit side the undoubted advantages of cleanliness, more healthy living conditions, saving of labour and space of flue. The general impression was that a coal fire was the best under any circumstances. Careful observation showed that where a fire was required for a period up to three hours, the electric was as cheap.

The abolition of the chimneyhead would be a great gain; as it could not be regarded as a better than an eyesore. Each room was heated by means of a grating near the ceiling leading into a ventilating shaft.

The Director of Housing estimated that the cost effected in building construction due to the elimination of fireplaces and chimneyheads was in a three-apartment house £10s., and in a four-apartment house £34, to cover the cost of the whole elec-

trical equipment. At Leicester, Gateshead-on-Tyne, Woolwich, and other places, large numbers of similar houses were in being, and without exception they were being operated with satisfaction to the tenants. To-day the provision of electricity supply to any new housing estate was the only necessary item of expenditure for lighting, heating and cooking. No alternative service was called for.

Mr. Hardie then gave the costs of various systems of wiring, of which we will quote but one: For a five-apartment house with eight lights, 1.5 amp. socket, ten switches, 4.15 amp. sockets, 7/20 circuit to cooker and wash boiler, the cost was £11 6s. These prices were for the wiring installed in screwed steel tubing, concealed behind plaster and plain lighting pendants—lamps were not included. In every public building within the jurisdiction of the Glasgow Corporation electric lighting was the rule: these include municipal buildings, art galleries, city hospitals, public halls, libraries, workhouses and lodging houses. The main heating of these buildings was done by central heating systems, but they have, however, some hundreds of electric fires scattered throughout private rooms, offices, etc., in these buildings, where additional local heat was required, and they have numerous special heating installations. Electric heaters of a new type, indestructible, fireproof, and with other virtues, would be fixed on walls, and thermostatic control adopted.

Ultra-violet treatment installations were in use in hospitals, clinics and infirmaries.

At Poplar electricity had superseded in turn coal and gas for heating weekly 4,000 gallons of water at the public baths, heating these competitors at every point. In time all streets would be lit by electric lamps; the expenditure could probably be recovered in a short time in reduced policing costs. And when this was done, if pillars were required, let us adopt lamp standards having some pretensions to design. We stood in need of an awakening of civic pride which would ensure that our thoroughfares were made more attractive. Nowadays the engineer of an electricity undertaking had many points of contact with his brother officials. He was to-day in a position to advise on a growing variety of problems which hitherto the public might have considered out of his range. The electrical industry had long since divested itself of swaddling clothes, and sought opportunity to make good its claims, satisfied that performance would justify these.

Use of Tar for Roadways.

This paper was read by Mr. T. Glover, C.B.E., M.Inst.C.E., and Mr. A. E. Collins, M.Inst.C.E., on behalf of the Institution of Gas Engineers, whose members are responsible for producing a large proportion of the raw material from which the prepared tar for road dressing and road crust construction is derived. Tarred road surfaces were a success, and the practice of dressing roads with suitably prepared tar (followed by the application of stone chippings in sufficient quantity to form a compact wearing layer), had resulted in the abolition of dust on the highways, and it had, until recently, been available to the road engineer for keeping the majority of road surfaces in a usable condition.

In seeking to allay dust by the use of tar, the penetrating quality of the oils in the tar had a distinct attraction for the road engineer, who was then dealing almost entirely with water-bound roads. The adhesive resinous part of the tar, however, was found to have considerable protective qualities in preventing the attrition of the aggregate forming the road crust, and a demand soon arose for a quality of tar having a higher percentage of the adhesive resins and a lower percentage of the

volatile parts of the tar, which was found to be of great value as a binding agent for surface dressing and in the tarring of aggregates for tarmacadam work. Broken iron slag or stone roads laid as tarmacadam were probably the most economical surfaces for modern traffic. Successful construction in these materials demanded the selection of suitable tar and dry aggregate and heating the tar to the desired temperature. The aggregate should not be graded but must consist of all sizes, from the largest to the smallest intended to be used, in correct proportions, to give the densest mixture. Upon a good foundation a coating of tarmacadam 4 in. thick rolled down to 3 in. was sufficient, and the writers had never found it advantageous to lay thicker coatings. Except where it was feared mud would work up into the wearing coat during construction, the writers had found no advantage in two-coat work, but on the other hand the 3 in. finished thickness in one coat was more easily laid and has been known to give better results than two-coat work. Suitable stone should be tough, so as to resist the shocks from the traffic, it should have a good resistance to the wear caused by the grinding action of the wheels, and should break with a rough, angular fracture. The selection of tar which complied with the Roads Department Specification for tar No. 2 should be based on securing the maximum amount of adhesive and setting properties, in line with the nature of the aggregate to be used, and the conditions under which the tarmacadam was manufactured. Climatic conditions, too, must be taken into consideration, and it should not be difficult to adopt a summer and winter specification for the tar used in the manufacture of tarmacadam and its application for the respective seasons. Such specifications would also take into consideration, to achieve the best results, the heat values of the stone and tar in the manufacturing operation, and the important factor as to whether the material was for laying immediately or not for some considerable time after its manufacture. The application of the tarred aggregate to the road should be made on an approved, well-drained foundation, with all ruts and depressions made up and levelled off by rolling. Each course of material should be laid to the desired thickness and separately rolled before the next course was laid. The consolidation of the material was best done by a roller at least 10 tons in weight. Careful rolling was very important in order to obtain a good shape to the road, and was generally carried out by commencing at one edge of the road and progressing to the centre, the roller travelling parallel with the centre line of the road. It was found advisable in most cases to apply a sealing coat of tar to the surface of the road, with a light dressing of stone chippings, sufficiently rolled to bed the dressing in the seal coat. Approved practice in the construction of tarmacadam roads was responsible for a non-skid surface, combined with lasting and durable wearing properties to withstand the heaviest traffic.

For grouting or penetration macadam, any of the kinds of stone that were used for the ordinary macadam were suitable, and this stone in predetermined sizes was laid on a substantial and unyielding foundation to a desired thickness and dry-rolled. The selection of a highly viscous tar with maximum adhesive and setting properties was essential, and its application made to the rolled stone at a temperature between 250° and 300° F., either by hand or pressure. The road was then immediately covered with a dusting of 3-in. screenings, and well rolled with at least a 15-ton roller. Good results were obtained from year to year in many towns with tar supplied direct from the gasworks, which had simply been dehydrated in a simple form of plant. For large-scale operations road engineers would draw their supplies from distilleries dealing with large quantities in well-devised plant. Such distillers had scientific staffs who kept the process or preparation under supervision to ensure careful standardisation.

THE DECORATOR'S EXHIBITION AT MANCHESTER

We published in our last issue a notice of this exhibition, which opened in Manchester last week and closes to-morrow (Saturday). The opening ceremony was performed by Lord Stanley of Alderley, who referred to the scheme for creating a young artistic race of artisans. The art of decoration was again coming into its own. There were peaks of artistic feeling right throughout history, and he thought the present rise began with this century and had been going on ever since. The work of the young apprentices which was exhibited was most commendable. These young men had been fully trained through an extensive course and had brought their work to the final test, i.e., the general public. In declaring the exhibition open, he expressed the wish that it might carry on the traditions formed during twenty-five years by the National Federation of Master Painters and Decorators of England and Wales.

The Lord Mayor of Manchester (Councillor Miles E. Mitchell), who presided, said he was especially glad to come to that ceremony on account of his desire to encourage the system of training of apprentices. He was especially interested in the housing question and wished to see more trained craftsmen in order that more unskilled labour might be utilised. There was, he said, a lack of appreciation of the highest forms of craftsmanship, and he was very hopeful of being able to raise the ideals of the younger generation through the medium of the craft-training apprenticeship committee in the town. This exhibition would do much to encourage this.

A vote of thanks to Lord Stanley was proposed by the Mayor of Oldham and seconded by Mr. Jas. E. Butterworth (President of the National Federation of Master Painters and Decorators of England and Wales).

A vote of thanks to the Lord Mayor was proposed by Mr. David Green, of Hull, and seconded by Mr. Cameron, the President of the Manchester section of the Association of Painters and Decorators.

Training of Boys for the Painting and Decorating Trades.

The training scheme referred to by Lord Stanley and others has been arranged in consultation and with the co-operation of the Manchester Joint Education Committee of Masters and Operatives in the Painting and Decorative Industry. It provides an opportunity for placing boys in business with security of employment and at a remunerative wage until they reach maturity. The course takes three years and begins approximately at fourteen years of age. The parents undertake that the pupils will complete the course and enter the trade. The subjects include general education, drawing and design, craftsmanship in mixing and using of distemper and oil paint, use of varnishes and enamels, trimming and hanging of papers, use of plant and scaffolding, sign-writing, graining and marbling, stencilling and lining, and the theory and use of colour. Suitable candidates are found situations provided they enter into an apprenticeship until they are twenty-one and attend evening classes in the meantime.

National Society for the Preservation of Property.

A special open meeting, arranged to coincide with the Decorators' Exhibition, was held by this Society in the Milton Hall, Manchester, on November 18th.

The Right Hon. C. A. M'Curdy, P.C., K.C., said that the object of this Society was to increase the use of paint. We had the largest market at our very doors, and we could find new and profitable customers here. He emphasised the fact that in the U.S.A. the amount of goods bought was three times as great as here, and wages were from 200 to 300 per cent. higher. He would not say that we were actually declining, but for a period of twenty-five years we had ceased to improve our buying power. Such societies as this would

help to teach people to spend money on an economical proposition. Not only would the manufacturer and the consumer benefit from an increased use of paint and varnish: the way was being shown to other trades to follow suit in this scheme of co-operative effort.

Colonel Willey, President of the Federation of British Industries, said that the Society, by encouraging the increased use of paint and varnish, were benefiting the nation at large. The various trades would require to organise within themselves, and on a national basis. Each trade must be strong in itself, as short time was a most uneconomical proposition. There must be collective thinking followed by collective action. The U.S.A. had created a super-salesmanship in order to create a desire amongst the public to buy products useful to themselves and to the nation. He wished the Society to stress the purchase of British-made paint, and in regard to standardisation he referred to the fact that in America this began with the paint and varnish trade.

In the absence of Mr. F. W. Goodenough, Mr. W. A. Mason, the General Manager of the British Commercial Gas Association, gave an outline of the successful results they had obtained from collective advertising. He pointed out a number of difficulties which had been overcome and gave a useful and practical address to those about to launch this scheme on behalf of the paint and varnish trade.

Mr. Geoffrey le M. Mander, of the firm of Mander Bros., said that it was necessary for all sections of the trade to combine. They were not advocating the use of any one brand or the patronage of any one manufacturer, merchant or decorator. The Society was formed to assist the whole trade and to increase the use of paint and varnish amongst the public. They were there to endeavour to impress the public that their products would preserve their property and be well worth the small cost involved. Each member was asked for the sum of 2s. per year per painter employee. The Society had only been in existence three months, but already a fair membership had been attained. He wished to emphasise the fact that there was to be no attempt to encourage the public to do their own decoration; they regarded it as a skilled trade. One of the objects set was the doubling of the turnover of the trade by 1928, and to this end various efforts were proposed, amongst which might be mentioned: (1) an endeavour to influence municipal bodies; local government boards and town councils to pay greater attention to the protection of property; (2) an effort to develop individual publicity and local co-operative efforts; (3) an endeavour to spread the painting business more equally over the whole twelve months of the year and to eliminate the depression in the winter season.

CHALK WALLING

VARIOUS schemes of chalk walling for houses have been considered during the past two years by the Government's Building Research Board that investigates methods of construction under the Department of Scientific and Industrial Research. A system devised by Mr. T. G. Davidson, F.R.I.B.A., embodies shuttering which enables the chalk to be rammed tightly together and so form a permanent and waterproof wall. The mixture is chalk concrete. No scaffolding is required. The shuttering normally set up to an 18 in. wall is filled in with chalk and cement, and the mixture is pure chalk of a 1:1 ratio. Experience shows that if the chalk is well mixed and rammed no plastering inside the building is required, thus making it unnecessary to call upon this depleted arm of the building trade. The chalk conglomerate walls are 1 ft. 10½ in. on the ground floor and slope off inwards to 18 in. wide from the first floor upwards. The exterior wall is generally coated with a good washable distemper. A building erected not far from London shows no deterioration after five years' exposure. During the first three months it was possible to nail and screw direct to the wall, but afterwards the chalk became harder.

NEW BUILDINGS IN LONDON.

Barking.—Mr. C. J. Dawson, F.R.Clock House Chambers, Barking, is to plan for new buildings at the generating to cost about £5,000.

Battersea.—Mr. Edgar S. Under F.R.I.B.A., 3, Queen-street, Cheapside has prepared plans for the building of flats and stores in Elcho-street, S.W.11.

Bride-lane.—The premises at Nos. 22, 24, Bride-lane, E.C.4, have been pulled to make way for a large restaurant and building. Plans and building work are the supervision of the Construction Department Messrs. J. Lyons & Co., Ltd., Cadby Hall.

Charing Cross-road.—Extensive alterations and improvements are being made to the pavement upon which it is proposed to expend £50,000. Messrs. Phillips' Lamps will part of building. Messrs. F. Taperell & architects, 3, Gower-street, W.C.1.

Copenhagen-street.—The "Golden public house in Copenhagen-street, N.1, to be rebuilt by the owners, Messrs. Whitt Co., Ltd., brewers, Chiswell-street, E.C.1.

Croydon.—A site at the junction of L road and Beatrice-avenue has been purchased for the building of public baths by the Council.

Downham.—Negotiations for the purchase of the site on the Downham Housing Estate, The Bromley B.C. have now been completed. The architect is Mr. H. O. Ellis, F.R.C.S. (Messrs. Herbert O. Ellis & Clarke).

Drury-lane.—A new office building is erected at a cost of about £20,000. F. G. Minter, Ltd., Ferry Works, Putney contractors. Messrs. Emden, Egan & architects, 7, Garrick-street, W.C.2.

Dulwich.—Nine shops with nine storeys and flat above are to be erected in L lane, S.E., to plans prepared by Mr. G. T. Forrest, F.R.I.B.A., architect, County S.E.1.

Ealing.—It is proposed to build a new Hall in conjunction with the Ealing W Church. Mr. A. E. Lambert, F.R.C.S. architect, 28, Park-row, Nottingham.

Edmonton.—Edmonton Borough Education Committee are to build an elementary school at Bush Hill Park, N., providing accommodation for 500 children, assembly hall, hall, centres, &c. Messrs. Talbot Brown & architects, Burystead-place, Wellingborough.

Finsbury-square.—A new office building Maypole House—is to be erected in Finsbury-square, Wilson-street and Christopher E.C.2. Foundations are being laid by Messrs. Prestige & Co., Ltd., Cambridge Wharf, London. Architect, on instruction: from Messrs. Maypole Dairy Co., Ltd.

Fleet-street.—The site is now practically cleared for the erection of new offices for the Glasgow Evening News. Fleet-street, E.C.4. A building of six storeys has been designed by Messrs. Percy Tubb & Duncan, 30, John-street, Bedford-row, W.C.1.

Friern Barnet.—A housing scheme for 100 houses is to be carried out to the plans of Mr. F. P. Kindell, surveyor, Friern Barnet.

Fulham.—A block of flats is to be built in Wyfold-road, at a cost of £18,396. Messrs. Perry Bros., Uxbridge-road, Ealing, architects.

Great Portland-street.—The Metropolitan Railway Co. are to acquire Nos. 1, 2, and 3, Great Portland-street, and No. 211, Great Portland-street, to enable them to reconstruct and extend their local station. Plans by Mr. C. W. C. architect to the Company, Baker-street S.W.2.

Hornsey.—The cost of the proposed building in Rokesley-avenue, to be built by the B.C. Council, is estimated at £40,000. Mr. H. Pegg, F.R.I.B.A., architect, 35, Paria street, Westminster, S.W.1.

rd.—Plans have been prepared by Mr. Franklyn Murrell, A.R.I.B.A., 35, Bedford-W.C.1, for a new Baptist church in Ilford—Mr. A. E. Symes, Carpenter's-road, Ford, E.15, builder.

ington.—A number of houses are being in Drayton Gardens, S.W., by Messrs. Ilmott & Sons (Hornsey), Ltd., 40, Tottenham, N.8. Mr. F. E. Williams, architect, Henrietta-street, Strand, W.C.

gate Hill.—Messrs. W. Hill & Sons, Ltd., of Westminster, S.W., have purchased a site which are to be opened as a restaurant and cafe.

ylebone.—The St. Marylebone Grammar School, Marylebone-road, N.W.1, is to be sold at a cost of £44,250, to accommodate a school. Mr. G. Topham Forrest, F.R.I.B.A., 10, County Hall, S.E.1.

urgate.—Extensive alterations including the building of an additional story, are being made to the premises at the corner of Moorgate and Mothbury, E.C.2, for Messrs. The Caledonian Insurance Co., Ltd. Messrs. Howell J. Mans, Ltd., builders, 11, Bermondsey-street, S.E.1. Messrs. A. Blomfield & Driver, architects, Grocers' Hall, Princes-street, E.C.2.

h Deptford.—New premises are being built in Evelyn-street as part of a scheme costing £75,000. Messrs. Wylie & Lockhead, 15, Buchanan-street, Glasgow, contractors. A. W. S. & K. M. B. Cross, 45-46, New street, W.1, architects. Messrs. Rault & Co., quantity surveyors, 17, Southampton-W.C.1.

rd-street.—A site in Cork-street, W.1, has been cleared of old buildings to make way for a block of residential flats to be designed by J. Richardson & Gill, architects, 41, Abchurch-lane, W.C.

ant-street.—Plans for the rebuilding of Nos. 60-62, Regent-street, W.1, covering an area of about 60 ft., have been prepared by H. Smith, 17, Basinghall-street, E.C.2, architect.

erhithe.—New premises are being erected at the works of Messrs. H. J. Enthoven & Co., in Rotherhithe-street, S.E., at Nos. 464 to 468. Messrs. J. Moir Kennard & Sons, architects, 3, Railway Approach, London Bridge, S.E.1.

tesbury-avenue.—The site known as 158-160, Shaftesbury-avenue, and 9, 10, 11, 12 and 13, Earle-street, W.1, is being acquired by Frank Curzon, theatre manager, as a site for a new theatre.

ey-street.—The governors of the St. Saviour's and St. Saviour's Grammar School are negotiating for a piece of land in Tooley-street, adjoining the school upon which they propose to build new class-rooms and an art school, at a cost of £9,600.

ent-square.—A new hall is to be added to the premises of the Royal Horticultural Society, occupying an area of over 20,000 sq. ft. Plans are being prepared by Messrs. Easton & Roberts, 3, Bedford-square, W.C.1.

worth.—The Salvation Army are raising funds for the purpose of building a new mission hall, at Draper-street, S.E.1. Plans will be prepared by their own architect, at 101, Victoria-street, E.C.4.

ndsworth.—Revised estimates totalling £100,000, have been prepared for the erection of houses on the Furzedown site and 40 houses on the Southfields estate, by the Wandsworth Housing Corporation, by their architects, Messrs. G. T. & H. B. Eaton, 7, Lawrence Pountney-hill, Cannon-W.C.4.

mbly.—A housing estate of about 12 acres on Stanley-avenue is to be laid out by Mr. J. C. Mans, 96, Victoria-street, S.W.1, who proposes to build about 100 houses, at 19 to the acre.

stminster.—Messrs. Henry Boyer, Paddington, W.2, have cleared the site in Marshall-street, S.W.1, where it is proposed to rebuild public baths. Plans have been prepared by the City Architect, whose architectural assistant is Mr. A. B. Conder, F.R.I.B.A., 42, Park, W.8.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	Carpenters. Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bedford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Birkenhead	1/9	1/9	1/8 1/2	1/9	1/9	1/9	1/8 1/2	1/4
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bournemouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Brentwood	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1 1/2
Brighton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bury	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Burton-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Cambridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chatham	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Chelmsford	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Colchester	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Crew	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
E. Glam. (Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Eastbourne	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Folkestone	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/1 1/2
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Grantham	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Grays	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/3 1/2
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Great Yarmouth	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Guildford	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hartlepool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hastings	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/1 1/2
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Ipswich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Lancaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leamington Spa	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Lichfield	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Liverpool	1/9	1/9	1/8 1/2	1/9	1/9	1/9	1/8 1/2	1/4
Llanelli	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
London { 12 m. radius	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/4 1/2
London { 12-15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Maidstone	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Newport, Mon.	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Northampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Norwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Nottingham	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Oakham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Oldham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Oxford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Rochester	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Rugby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
St. Albans	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Scarborough	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/2 1/2
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Shrewsbury	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Southend-on-Sea	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Southfields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stoke-on-Trent	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Stroud	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Swansea	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Swindon	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Taunton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Torquay	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Tunbridge Wells	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Wakefield	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Walsall	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Wigan	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Windsor	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Worcester	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2

(For rates of wages in the Building Trade in Scotland, see page 792.)

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, &c.

*NOVEMBER 27. — **Walthamstow.** — **TIMBER-FRAMED STRUCTURE ON CONCRETE.**—Proposed nursery school, a timber-framed structure on concrete foundations, to be erected on the Low Hall-lane site, Markhouse-road, for the Education Committee. H. Prosser, architect, 263, High-street, Walthamstow, E. 17. Deposit £1 1s.

NOVEMBER 30. — **Chelmsford.** — **COTTAGES.**—Six pairs of cottages at Deadman's-lane, Writtle, together with the reconstruction of a length of new road and the required drainage and excavation for a water main, for the R.D.C. J. Dewhurst, Engineer and Surveyor, Council Offices, Waterloo-lane.

NOVEMBER 30. — **Glasgow.** — **ALTERATIONS.**—Extensions and alterations to heating system at garage, Buchan-street, for the E.C. J. Clark, Director of Education, 129, Bath-street, Glasgow. Deposit £1 1s.

NOVEMBER 30. — **Glasgow.** — **PAINTING.**—New bowling and golf pavilion in Alexandra Park, for the T.C. J. Lindsay, Town Clerk.

NOVEMBER 30. — **Knaresborough.** — **HEATING.**—For (1) heating of science block, and (2) erection of boiler house at the Secondary school, for the West Riding E.C. The Education Department, County Hall, Wakefield.

NOVEMBER 30. — **Normanton.** — **REPAIRS.**—For (a) painting sixteen houses in Dalefield-avenue, (b) construction of urinal, and (c) electric wiring for twelve houses in Snyderdale-road, for the U.D.C. W. F. Copp, surveyor.

NOVEMBER 30. — **Peterborough.** — **EXTENSION.**—Of the electricity works, for the C.B. H. A. Nevill, Engineer and Manager.

NOVEMBER 30. — **Sheffield.** — **PLUMBING.**—Plumbers' and glaziers' work required for general repairs, for the E.C. P. Sharp, Director of Education.

NOVEMBER 30. — **Wandsworth.** — **SWIMMING BATH, &c.**—Erection of a new swimming bath and appurtenant buildings in connection therewith, at Streatham High-road, S.W. 15, for the Borough Council. Ernest J. Elford, Borough Surveyor, 215, Balham High-road, S.W. 17. Deposit £2 2s.

DECEMBER 1. — **Barnsley.** — **WARDS.**—New wards for women and children, at the Beckett Hospital, for the Committee. Chas. F. Moxon, architect, Regent-street South.

DECEMBER 1. — **Cardiff.** — **WALL.**—Building a wall at City Lodge, for the B.G. R. Stephenson, Clerk, Union Offices, 11, Park-place.

DECEMBER 1. — **Henley.** — **COTTAGES.**—Six cottages non-parlour type, and six cottages parlour type, on the Watlington-Britwell-road, for the R.D.C. E. V. Ives, Hillside, Vicarage-road.

*DECEMBER 2. — **Bermondsey.** — **REDECORATION.**—Internal redecoration to the married couples quarters at the Ladywell Institution, Ladywell-road, Lewisham, S.E., for the Guardians. Henry H. Reeve, clerk (at office), 283, Tooley-street, S.E. 1.

*DECEMBER 2. — **Hendon.** — **ENTRANCE AND GATE OFFICE.**—New entrance and gate office at Colindale Hospital, Colindale-avenue, for the M.A.B. Office of the Board, Victoria-embankment, E.C. 4. Deposit £1.

DECEMBER 2. — **Hornchurch.** — **FENCING.**—Erection of about 1,014 ft. run of oak fencing at the Cottage Homes, for the Guardians of the Poor of the Parish of St. Leonard's, Shoreditch. F. Danby Smith, F.R.I.B.A., Parliament Mansions, Victoria-street, S.W. 1.

DECEMBER 2. — **London.** — **ALTERATIONS.**—Alterations to the bakehouse at St. Leonard's House, Kingsland-road, for the Guardians of the Poor of the Parish Church of St. Leonard. F. Danby Smith, F.R.I.B.A., Parliament Mansions, Victoria-street, S.W. 1. Deposit £2.

DECEMBER 2. — **Rochford.** — **HOUSES.**—Erection of workmen's dwelling-houses at Thundersley and Rayleigh, for the R.D.C. A. C. Madge, Surveyor to the Council, Rayleigh. Deposit £1 1s. for each block of houses.

DECEMBER 2. — **Thedwastre.** — **COTTAGES.**—Six cottages at Walsham-le-Willows, for the R.D.C. Hunt & Coates, architects, 51A, Abbeygate-street, Bury St. Edmund's.

DECEMBER 3. — **Hanwell.** — **PAINTING, &c.**—To the Central London District School, Greenford-avenue, Hanwell, W. 7, for the Managers. G. P. Morrell, Clerk to the Managers.

DECEMBER 3. — **Redruth.** — **REDECORATING.**—For (1) the interior of the Chapel buildings, (2) the interior of the Memorial Hall buildings, (3) the interior of the Sunday school buildings, at the Wesley Chapel, for the Trustees. Rev. C. F. Atherton.

DECEMBER 3. — **Stockton-on-Tees.** — **ADDITIONS.**—Extensions and additions to the Oxbridge-lane cemetery, for the T.C. J. F. Wakeford, Borough Engineer. Deposit £1 1s.

DECEMBER 3. — **Williamstown.** — **IMPROVEMENTS.**—At Farm (Williamstown, co. Galway), National School, for the managers. Rev. P. J. Madden, manager, Williamstown, co. Galway.

DECEMBER 4. — **Aberdeen.** — **COTTAGES.**—Six blocks of double cottages on the farm of Cairntack, Belhelvie, adjoining the Rocks of Balmedie Quarry at Old Village of Belhelvie, and two cottages on the ground at Erlick, Skene, near Broadstrait, for the D.C. of the C.C. Alex. Clark, District Clerk, 7, Bon-Accord-square, Aberdeen.

DECEMBER 4. — **Avonmouth.** — **POST OFFICE, &c.**—Erection of a Post Office and Telephone Exchange, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, London, S.W. 1. Deposit £1 1s. (cheques payable to the Commissioners).

DECEMBER 4. — **Cork.** — **RESTORATION.**—Of St. Luke's ex-R.I.C. Barracks, for the Commissioners of Public Works. J. J. Healy, Secretary, Oifig Oibreach Publi, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

DECEMBER 4. — **Glasgow.** — **ALTERATIONS.**—Alterations and extension to the Mount Blow home, Dalnair, for the T.C. J. Lindsay, Town Clerk.

DECEMBER 4. — **Hemel Hempstead.** — **MATERNITY WARD BLOCK.**—Erection of a one-story Maternity Ward Block for 10 beds, for the Governors of the West Herts Hospital. Robt. L. Butterfield, Clerk to the Hospital, West Herts Hospital.

DECEMBER 4. — **Howth.** — **RECONSTRUCTION.**—Reconstruction and adaptation of the Coast Guard Station, Co. Dublin, for the Commissioners of Public Works, J. J. Healy, Secretary, Oifig Oibreach Publi, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

DECEMBER 4. — **Leenane.** — **SCHOOL.**—Erection and furnishing of Leenane (proposed) National School, co. Galway, for the Commissioners of Public Works, J. J. Healy, Secretary, Oifig Oibreach Publi, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

DECEMBER 4. — **Manchester.** — **PAINTING.**—Inside and outside painting required at the Union Offices, Cheetham Hill-road, for the B.G. E. Hargreaves, Superintendent of Works.

DECEMBER 4. — **Woolley.** — **ADDITIONS.**—To Woolley Sanatorium, also the erection of a house for the Medical Superintendent, for the C.C. J. A. Bean, County Surveyor, Moot Hall, Newcastle-on-Tyne. Deposit £1 1s.

DECEMBER 4. — **Yeovil.** — **HOUSES.**—Eight houses at Montacute, eight houses at Rimpleton, eight houses at Tintinhull, for the R.D.C. Petter & Warren, F.R.I.B.A., "Old Sarum."

DECEMBER 5. — **Barry.** — **BUILDING.**—Small church building, on a site at the corner of Park-road and Porth-y-Castell, Barry Garden Suburb, for the Christian Fellowship. T. Alwyn Lloyd, F.R.I.B.A., 6, Cathedral-road, Cardiff. Deposit £3 3s.

DECEMBER 5. — **Glamorgan.** — **REPAIRS.**—For (1) Cadroxton Police Station, new roof to cells, painting, &c. (2) Tonypandy Police Station, additions, &c. (3) Taff's Well Police Station, internal and external painting, &c. (4) Blaenclydach Police Station, internal and external painting, &c. (5) Cynonville Police Cottage, internal and external painting, &c. (6) Maesteg Police Station, electric light installation. (7) Pontycymmer Police Station, electric light installation. (8) Caerau Police Station, electric light installation, for the C.C. T. Mansel Franklin, Clerk of the County Council, Glamorgan County Hall, Cardiff.

DECEMBER 5. — **Moorhouse.** — **RESLATING.**—The Empire Theatre, near Pontefract. W. T. Lynam, architect and surveyor, Hemsworth, near Pontefract.

*DECEMBER 5. — **Peterborough.** — **DWELLINGS.**—Erection of dwellings for the working classes in various districts, for the R.D.C. G. A. Penwill, 22, Narrow-street, Peterborough, architect to the Council.

DECEMBER 5. — **Staines.** — **HOUSES.**—Erection of 52 houses of varying type upon their Worple-road building estate, for the U.D.C. E. J. Barrett, Assoc. M.Inst.C.E., Engineer and Surveyor, Town Hall, Deposit £2 2s.

DECEMBER 7. — **Belfast.** — **REPOINTING.**—Chimney at Purdy's Fever Hospital, for the C.B. R. Meyer, Town Clerk.

DECEMBER 7. — **Brighton.** — **REBUILDING.**—Nos. 164 and 165, Western-road, for the County Borough of Brighton. David Edwards, M.Inst.C.E., F.S.I., Borough Engineer and Surveyor, Town Hall, Brighton. Deposit £2 2s.

DECEMBER 7. — **Friern Barnet.** — **HOUSES.**—Erection of 100 houses, for the U.D.C. F. P. Kiodeil, A.M.Inst.C.E., Engineer and Surveyor, Council Offices, The Priory, Friern Barnet-road. Deposit £2.

*DECEMBER 7. — **Gloucestershire.** — **EXTENSIONS.**—Erection of extensions to the Institution at the Standish House Tuberculosis Institution. Vernon S. Barnes, L.R.I.B.A., 1, King-street Parade, Stroud. Deposit £2 2s.

DECEMBER 7. — **Halifax.** — **LIBRARY.**—For (a) branch library at Skiroat Green, and (b) the extension of the Technical College, for the C.B. W. H. Ostler, Secretary to the E.C. Deposit £1 1s. each.

*DECEMBER 7. — **Margate.** — **CLEANING.**—For the interior cleaning of a portion of the Wanstead House School, Margate, Kent, for the L.C.C. The Architect to the Council, The County Hall, Westminster Bridge, S.E. 1.

DECEMBER 7. — **Sandbach.** — **COTTAGES.**—Twelve non-parlour-type cottages on the Council's Housing site in Hassall-road, for the U.D.C. J. R. Price, architect.

DECEMBER 7. — **Shoreham-by-Sea.** — **COTTAGES.**—Eight cottages in Gordon-road, for the U.D.C. Town Surveyor.

DECEMBER 7. — **Skegness.** — **BATHING P. ORCHESTRAL PLAZA.**—Erection of a bathing dressing-boxes, bungalows, pump and administrative block, &c., and an orchard promenade, refreshment room, shelter enclosures, the whole of the constructional work reinforced concrete, for the U.D.C. R. H. Engineer and Surveyor, Council Offices. Deposit £2.

DECEMBER 7. — **Southport.** — **ENGINE.**—Erection of a brick engine-house and of connection therewith at the Bickerstaff station, for the Southport, Birkdale and Wirgin Water Board. C. Burton Ede, Assoc. M. Engineer and Manager, 14, Portland-street, Deposit £2.

DECEMBER 8. — **Barking.** — **SCHOOL DINING.**—Erection of a dining hall at the Abbey Farm, Essex C.C. Education Committee. Contract, Springfield Old Court, Chelmsford. £1 1s. to County Accountant.

DECEMBER 8. — **Bushey.** — **BUILDING.**—Dressing accommodation at the Open-Air Bath, King George Recreation Grounds U.D.C. E. E. Ryder, surveyor.

DECEMBER 8. — **Epsom.** — **HOUSES.**—For (1) Heath, (20) Tadworth, (20) Cheam, (30) for the R.D.C. Surveyors.

DECEMBER 8. — **Gosforth.** — **ADDITIONS.**—Regent Pit depot, and also to the Council for the U.D.C. Geo. Nelson, engineer and surveyor.

DECEMBER 8. — **Heaton.** — **Newcastle-upon-Tyne.**—Two secondary schools for 500 boys girls respectively, for the Newcastle-upon-Tyne. George Connell & Son, quantity surveyor, Buildings, 25, New Bridge-street, Newcastle-upon-Tyne. Deposit £5.

DECEMBER 8. — **London.** — **ROOFING WORK.**—moving the present roof and erecting a new and other works to Block E at the Bethlem Hospital, for the Guardians. C. Faulkner, Clerk, Administrative Offices, Bishopsgate. Deposit £3 3s.

DECEMBER 8. — **Royston.** — **COTTAGES.**—Eight cottages (eight blocks), on the Briary-lane site U.D.C. Naish & Mitchell, A.R.I.B.A., 7, street, Buty St. Edmund's. Deposit £3 3s.

DECEMBER 8. — **Swansea.** — **Erection of new** ment rooms, beach shelter, promenade, &c., at Slade Bay, Langland, for the Swansea C.B. Morgan, A.R.I.B.A., Borough Architect, 3, place, Swansea. Deposit £3 3s.

DECEMBER 8. — **Rotherham.** — **LAVATORY.**—Additional lavatory accommodation at the Municipal School for Girls, Middle-lane, for the C.B. Engineer.

DECEMBER 8. — **Totnes.** — **Erection of a** Post Office, for the H.M. Office of Works, King Street, S.W. 1. Deposit £1 1s. (Cheques payable to the Commissioners).

DECEMBER 9. — **Hammersmith.** — **WORK MATERIALS.**—Work and materials required for the erection of a combined transformer sub-station at Shepherd's Bush Green, W. 12, for the Metropolitan Borough Council. R. Hampton, Clerk, Engineer and Surveyor, Town Hall, Doyes-street, W. 12. Deposit £1 1s.

DECEMBER 9. — **Manchester.** — **TELEPHONE CHANGE.**—Erection of a telephone exchange at the Exchange, for the H.M. Office of Works, Charles-street, S.W. 1. Deposit £1 1s. (payable to the Commissioners).

DECEMBER 9. — **Sheffield.** — **BUILDING.**—For Mary Council School, Manor-estate, proposed accommodation (hutments) and erection of conveniences; and (2) Maud Maxfield School Easthill, proposed additional class-room accommodation, for the E.C. F. E. P. Edwards, F.C.I. Architect. Deposit £1.

DECEMBER 10. — **Dunstable.** — **STATION.**—T pumping station, laying 223 yds. of 15 in. pipe below Cantley Oval and laying 35 yds. of 15 in. enclosed in sheath pipe on concrete under and laying 234 yds. of 9 in. pipe sewer, for W. Crabtree, surveyor, Nether Hall.

DECEMBER 10. — **Harrow.** — **For the** erecting press building at H.M. Stationery Office, Branch, H.M. Office of Works, King Charles London, S.W. 1. Deposit £1 1s. (Cheques payable to the Commissioners.)

DECEMBER 10. — **Hendon.** — **ADDITIONS.**—to the sewage disposal works at Cannon's-lane comprising the construction of screening (detritus) tanks, seven settlement tanks, 12 diameter filter beds with rotary distributors, two humus tanks, including all necessary pipework and fittings, for the R.D.C. H. W. Rackham and surveyor. Deposit £3 3s.

*DECEMBER 10. — **Newton Abbot.** — **BOOKING.**—Construction of a new booking hall and by Newton Abbot, for the Directors of the Great Western Railway Co. Engineer at this Station, bet. hours of 10 a.m. and 4 p.m. Deposit £2 2s.

DECEMBER 10. — **Fenance.** — **HOUSES.**—houses and the construction of sewer on site G.W.R. engine sheds, for the G.W.R. Housing T. Alwyn Lloyd, F.R.I.B.A., and B. C. L.R.I.B.A., associated architects, New Inn (St. Austell). Deposit £2 2s.

DECEMBER 11. — **Barking.** — **SCHOOL.**—of a central school for 640 children in Wigdens, within the district, for the Education Committee, Clock House Chambers, Barking. £5 5s.

DECEMBER 11. — **Leyton.** — **SCHOOL.**—Erection of the Knotts Green Special School, for the U.D.C. John H. Jacques, L.R.I.B.A., 61, W. lane, Stratford, E. 15. Deposit £2.

*DECEMBER 11. — **Scarborough.** — **HOUSE.**—Erection of 24 in six blocks, on Hindwell-road, B.C. Harry W. Smith, A.M.I.C.E., Borough Town Hall.

DECEMBER 12.—**Sheffield**.—**ARTIFICERS WORKS**.—Billsborough Barracks, for the Royal Engineers. J. A. F. S. Hill, C.R.E., West Riding Area 13, Wenlock-terrace, York.

DECEMBER 14.—**Barnf**.—**ELECTRICITY**.—Trades, lighting steel and electrical work, required in connection with the erection of the Town Hall, for the J. E. Adamson, L.R.I.B.A., 56, Victoria-street, York. Deposit £2 2s.

DECEMBER 14.—**Barnf**.—**HOUSES**.—One block of flats at the Burgh housing site, for the T.C. Alex. E. Town Clerk.

DECEMBER 14.—**Edinburgh**.—**HOUSES**.—Brick, concrete or other approved alternative at Lochend-road two-apartment tenement houses, for the T.C. Corporation of Housing, City Chambers, 329, High-street. Deposit £2 2s.

DECEMBER 14.—**Horsham**.—**VARIOUS WORKS**.—Executing certain works in connection with the extension and drainage of Roffey Cemetery, for the Roffey District Joint Committee. A. Newbery, Clerk of Committee, 1, Cheneil Villas, Ruspur-road, Ham, Sussex. Deposit £1 1s.

DECEMBER 14.—**Manchester**.—**COTTAGES**.—Three of semi-detached cottages at Middlebrook, near Roch, for the T.C. Secretary, Waterworks Offices. Deposit £2 2s.

DECEMBER 14.—**Reigate**.—**HOUSES**.—Erection of pairs of parlour houses on the Reigate Lodge estate, and one block of three non-parlour houses in Church-road, South-Park, for the T.C. Alfred Smith, Clerk, Municipal Buildings, Reigate. Deposit £2 2s.

DECEMBER 14.—**Staines**.—**DECORATIONS**.—Decorations, in connection with their houses at Ashford, etc., Harmondsworth, Hanworth and Stanwell, for the R.D.C. B. A. Hogarth, Clerk to the Council, 11, Office, Stanwell-road, Ashford, Middlesex.

DECEMBER 14.—**Whitstable**.—**COTTAGES**.—Twelve cottages on the south side of Hamilton-road, for the J. B. Baker, Clerk to the Council.

DECEMBER 15.—**Blackrock**.—**HOUSES**.—Eight, one-houses at Grotto-avenue, Booterstown, for the J. J. Robinson, architect, 8, Merriem-square, Dublin.

DECEMBER 15.—**Dublin**.—**REPAIRS**.—Conversion of sundry in the Governor-General's demesne into one for the Garda Siochana and for wall enclosing station, for the Commissioners of Public Works. Healy, Secretary, Office of Public Works, Baile Claihi, Dublin. Deposit £1.

DECEMBER 15.—**Durham**.—**SCHOOL WORK**.—(a) General builder's work in connection with alterations and improvements at Forest-of-Teessdale School, and (b) additions and alterations, for E.C. F. Willey, F.R.I.B.A., F.S.I., 34, Old Durham.

DECEMBER 15.—**Dublin**.—**RECONSTRUCTION**.—Of central block (section C) of the General Post Office, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Claihi. Deposit £5 5s.

DECEMBER 15.—**Greenwich**.—**BUILDING**.—To be used for coal-washing plant, &c., at H.M. Fuel Station. Contracts Branch, H.M.O.W., Charles-street, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners.)

DECEMBER 15.—**West Bromwich**.—**HOUSES**.—206 houses on Charlemont estate, for the T.C. Wicks, architects, 5, Bennett's-hill, Birmingham. Deposit £2 2s.

DECEMBER 15.—**Worthing**.—**CONVENIENCES**.—Erection of conveniences at Selden Lawns, Worthing, for the Corporation. Borough Surveyor, Municipal Buildings, Tudor Lodge. Deposit £1 1s.

DECEMBER 15.—**York**.—**HOUSES**.—Erection of 406 type houses (50 with three bedrooms and 56 two bedrooms) on the Tang Hall estate, No. 2, roads of construction designed to give rapid construction and completion are invited. F. W. Spurr, Engineer, Guildhall, York.

DECEMBER 16.—**Hove**.—**SORTING OFFICE**.—To be used for the Commissioners of His Majesty's Office works. The Contracts Branch, H.M.O.W., King's-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

DECEMBER 16.—**Tiverton**.—**HOUSES**.—Erection of non-parlour houses (in blocks of six) at Council Mans, for the T.C. A. M. Kinnison, Borough Surveyor, Town Hall. Deposit £1 1s.

DECEMBER 17.—**Manchester**.—**TELEPHONE EXCHANGE**.—At Moss Side. Contracts Branch, H.M.O.W., Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

DECEMBER 18.—**Nuneaton**.—**HOUSES**.—Erection of 2 Stockingford, for the B.C. H. N. Jepson, R.B.A., Queen's Buildings. Deposit £2 2s.

DECEMBER 19.—**Chester**.—**NEW SCHOOL BUILDING**.—At Calday Grade Grammar School, West for the C.C. H. Beswick, F.R.I.B.A., County Architect, Newgate-street. Deposit £2 2s.

DECEMBER 21.—**Poplar**.—**HOUSES**.—Erection of houses and 40 flats on a site in Gleggall-road, for the Borough Council. Harley Heckford, C.E., Borough Surveyor, Council Offices. Deposit £3 3s.

DECEMBER 22.—**Eastbourne**.—**HEATING AND LIGHTING**.—Addition to Nurses' Home, &c.; hot water heating and supply, electric lighting installation new infirmary block, for the Guardians of the Burne Union. F. G. Cooke, L.R.I.B.A., 2, Hyde-park, Eastbourne. Deposit £3.

DECEMBER 22.—**Nottingham**.—**HEATING**.—Steam apparatus in the Nurses' Home at the City Hospital, Mapperley Hill, for the T.C. T. J. R. Egan, consulting engineer, 17, Victoria-street, Leicester, S.W.1. Deposit £2 2s.

DECEMBER 22.—**Sutton-in-Norwood**.—**COTTAGES**.—Erection of 45 cottages at Montague-road. The sites are divided into 16 blocks and contractors tender for one or more blocks. J. B. Thomson, M.Inst.C.E., Engineer and Surveyor, Town Hall, Sutton.

DECEMBER 25.—**Birmingham**.—**HOUSES**.—Erection of 125 non-parlour two-bedroomed houses on Morcom-road Green, for the Public Works and Town-Planning Committee of the City. Herbert H. Humphries, M.Inst.C.E., City Engineer, The Council House, Birmingham. Deposit £1 1s.

★ DECEMBER 27.—**Folkestone**.—**PAVILION**.—Erection of a cricket pavilion at the Sports Ground, Cheriton-road, for the Corporation. A. E. Nichols, M.Inst.C.E., Borough Engineer, 11, Church-street, Folkestone. Deposit £5 5s.

★ DECEMBER 31.—**Ipswich**.—**HOUSES**.—Designs for the erection of houses suitable for the working classes in Samford, for the R.D.C. A. J. Haward, Clerk to the Council, 5, Queen-street.

JANUARY 18, 1926.—**Bakewell**.—**ADDITIONS**.—Isolation hospital, on Monyash-road, for the Haddon District Hospital Committee. Chas. Flint, L.R.I.B.A., The Quadrant, Buxton. Deposit £2 2s.

★ NO DATE.—**Birmingham**.—**FLAT DWELLINGS AND HOUSES**.—Erection of (1) flat dwellings; (2) 38 parlour and 356 non-parlour houses, for the Public Works and Town-Planning Committee. Herbert H. Humphries, M.Inst.C.E., City Engineer and Surveyor, The Council House, Birmingham. Deposit £1 1s. in each case.

NO DATE.—**Buchhaven and Methil**.—**TRADES**.—Excavator and brickwork, joiner, plumber, slater, plaster and painter works of new houses to be erected, for the T.C. T. L. Brown, C.E., Burgh Engineer.

NO DATE.—**King's Lynn**.—**ADDITIONS**.—Alterations and additions to East Winch Hall, near King's Lynn. L. F. Eagleton, architect and surveyor, King-street.

NO DATE.—**Llangollen**.—**HOUSES**.—Fifteen houses at the Glanrafon site, for the U.D.C. E. Lovatt, surveyor. Deposit £1 1s.

★ NO DATE.—**Nelson**.—**HOUSES**.—Scheme "F." 50 or 100 houses, non-parlour type, all to be built as pair blocks, in connection with Marsden Park housing scheme, for the Housing Committee of the Borough. J. H. Baldwin, Town Clerk, Town Hall. Deposit £2 2s. (by cheque) for each trade specification.

NO DATE.—**Pontefract**.—**CIVIL ENGINEERING**.—Excavator, bricklayer, mason, reinforced concrete construction, constructional steelwork, carpenter, joiner, slater, plumber, plasterer, electrical installation, painter and decorator for a cinema in Ropergate. Hustler & Taylor, architects and surveyors, Pontefract. Deposit £2 2s.

NO DATE.—**Rotherham**.—**EXTENSION**.—Extensions and alterations to tramways depot, for the C.B. Borough Engineer.

★ NO DATE.—**Worthing**.—**BUILDING WORK**.—Erection of a dining hall, kitchen, &c., at Prince Albert Convalescent Home. Singer, Hyde & Son, architects, 8, Heene-terrace, Worthing.

MATERIALS, etc.

NOVEMBER 30.—**Boston**.—**GRANITE**.—500 tons of 2 in. broken granite, for the T.C. G. E. Clarke, Borough Engineer and Surveyor.

DECEMBER 4.—**Alderden**.—**MATERIALS**.—Cast iron, lead and tin pipes, timber, paint and glass, fireclay pipes and traps, bricks, Portland cement, for the T.C. J. Gordon, Burgh Surveyor.

DECEMBER 5.—**Kent**.—**MATERIALS**.—Guernsey, Jersey, or Alderney granite, Cleve Hill basalt, Leicestershire granites, Penlee, St. Keverne, or other Cornish granites, Northumberland whinstone, Penmaenmawr or other Welsh granites, Quenast or Lessines, quartzite, Norway granite, granite chippings, broken blast furnace slag, selected clinker, tarred macadam, surface picked or grubbed flints, Kent rag, local stone, Kent rag chippings, bitumen, dehydrated or refined tar, and other surface dressing material, for the C.C. H. T. Chapman, County Surveyor, St. Peter-street, Maidstone.

DECEMBER 8.—**Dublin**.—**MATERIALS**.—Timber, iron castings, paints, stone paving sets and chippings, Portland cement, slate, structural steel and wrought iron, &c., for the Port and Docks Board. E. H. Bailey, Secretary, Westmoreland-street.

DECEMBER 9.—**Belfast**.—**MATERIALS**.—Paints and oils, timber, Portland cement, iron castings, plumbing work, for the District Water Commissioners. W. I. Quinn, Secretary, Water Office.

DECEMBER 9.—**Buxton**.—**MATERIALS**.—Paving setts, flags, kerbs, &c., Derbyshire basalt macadam, tarred slag, tarred limestone, chippings, and lump lime, Portland cement, earthenware pipes, castings (street ironwork), paints, varnishes, &c., for the T.C. F. Langley, Borough Engineer.

DECEMBER 10.—**Dublin**.—**MATERIALS**.—Portland cement, fire bricks, paints, steel plates, &c., for the Great Southern Railway (Ireland) Co. C. E. Riley, Secretary, Kingsbridge Terminus.

ENGINEERING, IRON AND STEEL.

NOVEMBER 30.—**Glenarm**.—**WIDENING**.—Glenarm bridge in reinforced concrete, for the Antrim C.C. County Surveyor, County Courthouse, Belfast.

NOVEMBER 30.—**Little Glenham**.—**CULVERT**.—Reinforced concrete culvert to replace the existing brick culvert at Little Glenham, on the Wickham Market-Saxmundham main road, for the East Sussex C.C. W. Jervis, County Surveyor, County Hall, Ipswich.

DECEMBER 2.—**Pottersbury**.—**BUILDING**.—For (1) provision and erection of an elevated tank or reservoir with an approx. capacity of 10,000 gallons, with other works on site; (2) provision and erection of a 16 ft. wind engine and 50 ft. steel tower, with pump, auxiliary petrol engine, shed, with other works on site, and (3) provision and laying 900 lin. yds. of 3 in. and 2 in. cast iron pipes, washouts, stand pipes and appurtenant works, for the R.D.C. R. Brown, consulting engineer, 4, Princes Mansions, 70, Victoria-street, Westminster, S.W.

DECEMBER 5.—**Thistleton**.—**RECONSTRUCTION**.—Of bridge on the road between Thistleton and Elswick, Rydale, for the Lancashire C.C. W. H. Schofield, county surveyor and bridgemaster, County Offices, Preston.

DECEMBER 7.—**Nelson**.—**RESERVOIR**.—Reinforced concrete covered reservoir to contain five million gallons, at Ridgaling, for the T.C. J. A. Rodwell, Water Engineer, Every-street. Deposit £5.

DECEMBER 8.—**Manchester**.—**TRACK**.—Supply and delivery of permanent way special track work, for the T.C. H. Mattinson, General Manager and Chief Engineer, Corporation Tramways, 55, Piccadilly. Deposit £1 1s.

DECEMBER 11.—**Sheffield**.—**WIDENING**.—Reconstruction and widening of bridge over the Sheffield and Tinsley Canal at Shirland-lane, near Attercliffe-road, for the T.C. E. Partington, Improvement Surveyor. Deposit £3 3s.

DECEMBER 21.—**Portadown**.—**SEWER**.—Reinforced concrete engine shed, coal bank, &c., for the G.N.R. (Ireland). J. B. Stephens, Secretary, Amiens-street, Station, Dublin. Deposit £2 2s.

JANUARY 5, 1926.—**Westport**.—**SHED**.—Extension of 100 ft. to the transit shed at Westport quay, for the Harbour Commissioners. T. P. Flanagan, B.E., Castlebar.

ROAD, SEWERAGE, AND WATER WORKS.

NOVEMBER 30.—**Barnes**.—**MAKING-UP**.—Part of Bicester-road, The Close, and passage at rear of 151 to 171, Lower Richmond-road, for the U.D.C. G. Bruce Tomes, Surveyor to the Council, The Council House, High-street, Mortlake, S.W.14.

NOVEMBER 30.—**Barnsley**.—**MAKING-UP**.—Part of Longcar-lane and Westbourne-grove, for the C.B. Borough Engineer, Fairfield House.

NOVEMBER 30.—**Bedwas**.—**MAKING-UP**.—Of St. Mary-street and an accommodation road, for the Trustees of the estate of Joseph Davies, deceased. W. A. Griffiths, L.R.I.B.A., architect and surveyor, Pontllanfraith, Mon. Deposit £2 2s.

NOVEMBER 30.—**Caerphilly**.—**SEWER**.—100 lin. yds. of 6 in. stoneware sewer at Llanbradach, for the U.D.C. T. H. Richards, surveyor. Deposit £1 1s.

NOVEMBER 30.—**Cardiff**.—**ROADS**.—Re-making roads and adjustment of drains at the Headquarters' Children's Homes, Ely, for the B.G. Willmott & Smith, architects, 4, Park-place. Deposit £2 2s.

NOVEMBER 30.—**Fareham**.—**PAVING**.—Providing and laying upon reinforced concrete bed, wood-block paving approximately 1,900 super yds., for the U.D.C. W. Butler, surveyor.

NOVEMBER 30.—**Margate**.—**KERBING**.—Forming, metalling, and kerbing the roads on the Dane Valley estate and the supply and laying of sewers, water mains, hydrants, &c., for the T.C. Borough Engineer, 13, Grosvenor-place.

NOVEMBER 30.—**Sculcoates**.—**WIDENING**.—Widening and improvement works at Sutton, on the Ings-road, for the R.D.C. B. Hinchliffe, engineer, 4, Parliament-street, Hull.

NOVEMBER 30.—**Tadcaster**.—**DRAINAGE**.—Surface-water drainage and tar macadamising, flagging, &c. of the following streets: Robinson-street, back Robinson-street, three cross streets connecting the above-mentioned back street with Robinson-street, and three cross streets connecting Robinson-street with Back-lane, for the R.D.C. H. V. Slayton, surveyor, Bridge-street, Castleford. Deposit £1 1s.

NOVEMBER 30.—**Watford**.—**MAKING-UP**.—Oxhey-road, the Avenue (Part 2), Princes-avenue, Bucks-avenue, and Sherwoods-road, for the T.C. W. W. Newman, Borough Engineer. Deposit £2 2s.

DECEMBER 1.—**Coalville**.—**SEWERS**.—Sewers and manholes, and water and gas mains on the Coalville housing site, situate between Belvoir-road and Forest-road, for the U.D.C. McCarthy, Collings & Co., architects, Central Chambers. Deposit £2 2s.

DECEMBER 1.—**Ealing**.—**IMPROVEMENTS**.—For (1) Gunnersbury-lane (south side) for a length of 1,220 ft.; (2) Pope's-lane (north side) for a length of 1,800 ft., for the B.C. W. R. Hicks, Borough Engineer. Deposit £1 1s. each.

DECEMBER 1.—**Hemsworth**.—**SEWAGE WORK**.—Laying of 2,800 yds. of 12 in. and 425 yds. of 9 in. pipe sewer, &c., and the construction of a new sewage disposal works in the parishes of Upton and North Elmsall, in the Council's area, for the R.D.C. W. T. Lynam, engineer, Market-street, Cross-hill, Hemsworth. Deposit £2 2s.

DECEMBER 2.—**Aberdeen**.—**PIPES**.—Laying of about 2½ miles of 9 and 7 in. cast-iron pipes, for the T.C. George Mitchell, Water Engineer, Water Engineer's Office. Deposit £2.

DECEMBER 2.—**Wembley**.—**MAKING-UP**.—Of Beatrice-avenue and Walrod-avenue, for the U.D.C. R. W. Chapman, Engineer and Surveyor. Deposit £1 1s. each.

DECEMBER 3.—**Lambeth**.—**FOOTPATHS AND ROADWAYS**.—Works in connection with forming new footpaths and roadways, &c., in making up Herne Hill-road, for the B.C. Osmond Catlin, M.Inst.C.E., Borough Engineer, Town Hall, Brixton-hill, S.W.2. Deposit £2 2s.

DECEMBER 3.—**Slough**.—**ROAD**.—For (1) widening of Montem-road, Slough; (2) new road and sewers on housing site, for the U.D.C. A. Bromly, surveyor. Deposit £1 1s.

DECEMBER 3.—**Southend-on-Sea**.—**MAKING-UP**.—Fairfax-drive, Westbourne-grove, Westminster-drive, for the C.B. R. H. Dyer, Borough Engineer and Surveyor. Deposit £2 each.

DECEMBER 3.—**Sutherland**.—**WORKS**.—Construction of timber breakwater on the sea front, for the T.C. J. S. Hurst, Borough surveyor.

DECEMBER 4.—**Antrim**.—**IMPROVEMENTS**.—Road improvements at Lisalinchy, for the C.C. D. Megan, County Surveyor, County Courthouse, Drumlin-road, Belfast.



DECEMBER 4.—Sollom.—ROAD.—By-pass road at Sollom, on the Preston-Liverpool main road, for the Lancashire C.C. W. H. Schofield, A.M.I.C.E., county surveyor, County Offices, Preston.

DECEMBER 5.—Durham.—ROADS.—Construction of roads and sewers, &c., at Bearpark (approximately 500 yds. 1 in. road), Ushaw Moor (200 yds. 1 in.), Framwellgate Moor (150 yds. 1 in.), for the R.D.C. J. N. Adams, architect, 40, Saddler-street. Deposit £2 2s.

DECEMBER 7.—Barnes.—MAKING-UP.—Forming, metalling, draining and making-up the road from the Cemetery-drive to Kings Ride Gate, Richmond Park, for the U.D.C. G. Bruce Tomes, engineer and surveyor, High-street, Mortlake, S.W.14.

DECEMBER 7.—Friern Barnet.—ROADS.—New roads 320 yards lin. in length, comprising approximately 650 cubic yards excavation and filling and formation of carriageway with hardcore and Hertfordshire flints 1,700 yards super. in area, and of gravel footways 850 yards super. in area, for the U.D.C. F. P. Kindell, Engineer and Surveyor. Deposit £2.

DECEMBER 7.—Hastlemere.—EXTENSIONS.—For (1) 222 yds. lin. of 4 in. diameter cast iron pipe water main, together with sluice valve, hydrant, &c., at Petworth-road; (2) 782 yds. lin. of 4 in. diameter and 1,442 yds. lin. of 3 in. diameter cast iron pipe water main, together with hydrants, sluice valves, house connections, &c., on the Half Moon estate; (3) 680 yds. lin. 3 in. diameter cast iron pipe water main, together with hydrants, sluice valves, &c., at Graywood-road; and (4) 140 yds. lin. 3 in. diameter cast iron pipe water main, together with hydrants, sluice valves, &c., at Bunch-lane, for the U.D.C. C. A. Best, surveyor to the Council. Deposit £1 1s.

DECEMBER 7.—Letchworth.—MAKING-UP.—Of Campers-road, 247 lin. yds.; Campers-avenue, 100 lin. yds.; Burnell-rise, 173 lin. yds.; Burnell-walk, 83 lin. yds.; Sollershot East, 438 lin. yds.; South-view, 165 lin. yds.; Shott-lane, 290 lin. yds., and for the laying of surface water sewers as under:—Shott-lane, 194 lin. yds.; Ridge-avenue, 144 lin. yds., for the U.D.C. G. T. Hill, engineer and surveyor. Deposit £2 2s.

DECEMBER 7.—Penge.—IMPROVEMENTS.—For (a) approximately 535 super yds. Durax paving, with 8-10 centimetres Scandinavian granite setts laid complete on Anerley Hill; (b) approximately 2,774 super yds. of road reconstruction with 6 in. reinforced concrete, surfaced with 1½ in. asphalt in Parish-lane, Penge, for the U.D.C. H. W. Longdin, surveyor, Town Hall, Anerley, S.E.20. Deposit £1 1s. each.

DECEMBER 7.—Tadcaster.—PIPES.—Supplying and laying approximately 1,000 yds. of cast-iron water pipes, with valves, hydrants, &c., complete, at the Allerton-Bwywater and Mickfield housing sites, for the R.D.C. E. Thackray, Water Inspector, Station-road, Kippax, near Leeds.

DECEMBER 9.—Carshalton.—IMPROVEMENTS.—Street improvement and widening at Westmead-road and Mill-lane, for the U.D.C. W. Willis Gale, surveyor. Deposit £2.

DECEMBER 11.—Derbyshire.—WIDENING.—Widening of the Derby-Alfreton main road between Coxbench Hall and Holbrook Level Crossing, a length of about 430 yds., for the C.C. J. W. Horton, County Surveyor, St. Mary's Gate, Derby. Deposit £3 3s.

DECEMBER 14.—Chipping Sodbury.—DRAINAGE.—Reconstruction of drainage systems and sanitary conveniences at the undermentioned sites, viz.: Frampton Cottrell, The Common site; Frampton Cottrell, Woodend site; Westerleigh, May's Hill site; Winterbourne, Watley's End site, for the R.D.C. W. H. Williams, Sanitary Inspector.

DECEMBER 14.—Chipping Sodbury.—REPAIRS.—Renovation and repair of the sewerage works at Wickwar, for the R.D.C. W. H. Williams, Sanitary Inspector.

DECEMBER 15.—West Riding.—ASPHALTING.—Tar asphaltting to playgrounds at (1) Adwick-le-Street Park Council school; (2) Darton Council school, for the E.C. Education Department, County Hall, Wakefield.

NO DATE.—Hemsworth.—MAIN.—Construction and laying of a 12 in. water main, commencing at or near Hoyle Mill, Barnsley, and terminating at the "Three Horse Shoes" Inn, Brierley, for the Water Committee. W. T. Lynam, surveyor, 26, Rotherham-road, Hemsworth, near Pontefract.

Competitions.

(See Competition News page 763.)

Auction Sales, Tenders, etc.

NOVEMBER 30.—Camberwell.—Vervard & Yates will sell, by order of Messrs. Hichison & Co., Ltd., at Wells-street, the valuable stock-in-trade of building materials, dealers, iron and metal merchants. Auctioneers, 365, Norwood-road, S.E.27.

NOVEMBER 30.—Hayes, Middlesex.—F. H. Clark will sell on site formerly occupied by National Filling Factory, Hayes, new and second-hand timber and miscellaneous building materials. Auctioneers, Railway Wharf, Wandsworth, S.W.18.

DECEMBER 1.—Crawley, Surrey.—H. W. Smith & Moon will sell, under a deed of assignment re J. Martin Stredwick, by order of the Trustee, at Lowfield Heath, stock, plant and machinery of a builder and English timber merchant, building ironmongery and brassworks, nails, patents, &c. Auctioneers, 6, Great James'-street, Bedford-row, London, W.C.1.

DECEMBER 2.—Kent.—Vervard & Yates will sell at Mr. Readhead's Farm, Mount Culver, Fooks Cray, useful timber and building material. Auctioneers, 365, Norwood-road, S.E.27.

DECEMBER 2.—Wembley, Middlesex.—E. & S. Smith will sell on the premises, by order of Commissioners for Nigeria, Wembley Exhibition, Nigeria pavilion. Auctioneers, 68, Great Queen-street, Kingsway, W.C.

*** DECEMBER 3.—Wembley, Middlesex.**—Richard J. Steel will sell, by order of Mr. J. E. Pinder, a large quantity of new and second-hand timber, including doors, frames and glazed sashes, refreshment boxes, bolts, nuts, and numerous other items. Auctioneer, 2, Plough-terrace, South Ealing, W.5.

DECEMBER 3.—London, E.C.4.—Farebrother, Ellis & Co. will sell at the London Auction Mart, 155, Queen Victoria-street, E.C.4, the property known as Gidea Hall grounds, Romford Golf Club, houses, plots, 277 acres. Auctioneers, 155, Queen Victoria-street, E.C.4.

DECEMBER 8.—Elstree, Herts.—Hampton & Sons will sell at the St. James's Estate Rooms, 20, St. James's-square, S.W.1, freehold building estate at Deacon's Hill, Elstree, comprising 36 acres; vacant possession of whole. Auctioneers, as above.

*** DECEMBER 8 AND 9.—Evesham.**—E. G. Righton & Son will sell at Swan-lane, the stock-in-trade of a plumber and painter, including two motor lorries. Auctioneers, Evesham.

*** DECEMBER 9.—Beddington.**—C. E. Clark will sell, without reserve, at Beddington House, prime timber and builders' effects. Auctioneers, Beddington House, near Croydon.

DECEMBER 9.—Rolleston, Staffs.—Henry Butcher & Co. will sell, without reserve, at Rolleston Hall, fixtures, fittings and fittings of the mansion, including gas engine and dynamo. Auctioneers, 63 and 64, Chancery-lane, London, W.C.2.

*** DECEMBER 15.—Bromley.**—Knight, Frank & Rutley will sell, by direction of Captain Maurice Trouton and W. H. Hasland, Esq., at the Royal Bell Hotel, "The Rookery," a freehold residential property, together with buildings and two cottages, about 84 acres. Auctioneers, 20, Hanover-square, W.1.

Public Appointments.

NOVEMBER 30.—Greenford, Middlesex.—TOWN-PLANNING EXPERTS.—Required to quote an inclusive fee for preparing and carrying through a town-planning scheme for the parishes of Great Greenford and Perivale. A. Lloyd Jones, Clerk, New Broadway Chambers, Ealing, W.5.

NOVEMBER 30.—Sheffield.—City Architect, not more than 50 years of age, required by the City Council. E. Hart, Town Clerk, Town Hall, Sheffield.

*** DECEMBER 1.—Chichester.**—Clerk of Works required in connection with the erection of contract of 44 houses. Town Clerk, endorsed "Clerk of Works."

DECEMBER 1.—West Ham.—Estimating and General Assistant in Works Department to assist the Works Manager, required by the Corporation. Borough Engineer, Town Hall, West Ham, E. (on receipt of a stamped addressed foolscap envelope).

*** DECEMBER 5.—Wolverhampton.**—Borough Engineer and Surveyor and Director of Housing required by the County Borough Council. F. E. Warbreck Howell, Town Clerk, Town Hall, Wolverhampton.

*** DECEMBER 7.—Clapham.**—Vacancies for visiting teachers at the L.C.C. School of Building, Ferndale-road. Education Officer T.1 (A), The County Hall, Westminster Bridge, S.E.1 (stamped addressed foolscap envelope necessary).

*** DECEMBER 7.—Mansfield.**—Architectural Assistant required by the Education Committee. J. S. Robinson, Town Clerk's Office, White Hart-street.

*** DECEMBER 7.—Wakefield.**—Assistant Taker-off required by the West Riding C.C. Quantity Surveyor. Louis J. Newton, L.R.I.B.A., County Hall (Quantity Surveyor's Department).

DECEMBER 12.—Walsanton.—Clerk of Works required by the Staffordshire Education Committee in connection with the erection of a secondary school. Architect, County Education Offices, Stafford.

DECEMBER 15.—Durham.—Assistant Quantity Surveyor required by the County Council in their Architectural Department. Director of Education, Shire Hall.

*** NO DATE.—London.**—Architectural Assistant required by the Architect's Department of L.C.C. The Architect to the Council, The County Hall, Westminster Bridge, S.E.1.

*** NO DATE.—London.**—PLUMBING INSTRUCTOR.—Practical plumbing additional senior instructor required at once for evening class. J. W. Bispham, Principal, Borough Polytechnic Institute, Borough-road, London, S.E.1.

*** NO DATE.—Sud-n.**—Foreman of Works required by the Sudan Government Railways. The Controller, Sudan Government, Wellington House, Buckingham Gate, S.W.1, marking envelope "Foreman of Works."

"Double Gilding."

The Master Sign Makers' Association has addressed a letter to the Royal Institute of British Architects, the Architectural Association, and the Royal Institute of the Architects of Ireland, in which attention is called to the term "double gilded," which, it is stated, is frequently used in specifications for the gilding of outside work and wood letter signs. Double gilding in oil, it is pointed out, is neither advisable nor practical, the fact of coating with oil size to take a second gilding rendering the first gilding useless. The correct specification is "Gilded with best English manufactured gold-leaf of double the regular substance assaying not less than 23 carat in standard," or "Gilded with pure English manufactured gold-leaf (free from alloy) of double the regular substance," according to circumstances.

PROPOSED NEW BUILDINGS & OTHER WORK

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building or taking the responsibility of commencing before plans are finally approved by the authorities, "proposed" works at the publication have been actually commenced. Abbreviations: T.C. for Town Council; for Urban District Council; R.D.C. for District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Association; and M.W.B. for Metropolitan Board.

ARMSLEY (YORKS).—The Housing Committee U.D.C. propose to invite tenders for erection of two houses.

ARNOLD.—The M.H. has sanctioned the grant for another 50 houses to be erected in the U.D.C.

AS-POUR.—An inquiry has been held into the action of the U.D.C. to borrow £36,000 for sewerage and sewage disposal.

AT ERSTONE.—The D.C. has received permission from the M.H. confirming the order made by the Council for the compulsory purchase of four gardens on which it is proposed to erect about 100 houses for the accommodation of the tenants who are to be dispossessed by the operation of the slum clearance scheme.

AT YK.—The Kildare C.C. has approved plans for reconstruction of the Courthouse.

BANGOR.—The U.D.C. is applying for sanction to borrow £15,000 for housing purposes.

BARNMOUTH.—The M.H. has approved the scheme of the U.D.C. for a sea defence scheme, providing £10,000. The Council decided to proceed with the scheme, and application will be made to the Ministry to sanction the borrowing of £10,000.

BASINGSTOKE.—The Hampshire E.C. has acquired a site for the erection of a new grammar school.

BEAULIEU.—The Hampshire E.C. has prepared a scheme for remodelling the elementary school, estimated cost of £2,500.

BENTON.—The L.C.C. recommend that, subject to the approval of the M.H., the site at Benton be let to J. Kay & B. Cole for the erection of a cinematograph hall and shop premises.

BELFAST.—The C.B. has applied to the Ministry for Home Affairs for Northern Ireland for sanction to borrow £70,000 for road reconstruction and street widening works; £2,850 (supplemental) for road reconstruction and street widening works in Holywood; and £12,000 for the rearrangement of the City grounds.

BEXLEY.—The U.D.C. has reported that the Construction Co., Ltd., of 82, Victoria-street, Bexley, has informed them that they contemplate building seventy-eight houses on the Hollies Estate.

BILLINGHAM.—The U.D.C. are asking the D.C.C. to widen the three bridges on the main road between Billingham and Norton.

BIRMINGHAM.—Messrs. Barclays Bank, Ltd., have bought the site at the corner of Lyndon-road, Station-road, Stechford. Plans for a new building have been prepared by Messrs. Peacock & B. architects, 83, Colmore-row.

BINGLEY.—The Highways Committee of the D.C. propose to carry out a scheme in Harris-street comprising the erection of garages and workshops, estimated cost of £3,250, for which application for sanction to borrow is being made to the M.H.

BLACKALL.—Final plans are being prepared by Durham E.C. for the erection of an elementary school.

BLAYDON.—The Blaydon, Ryton and Whitley Joint Hospital Board is to erect a new isolation hospital at an approximate cost of £24,000.

BLIWORTH.—Notts County E.C. has prepared for the erection of an elementary school, at a cost of £22,000.

BLOFIELD.—The R.D.C. has decided to erect 8 houses. The houses are to be erected as follows: Aisle 10, Blofield 10, Burlingham St. Peter 2, Canby Freethorpe 4, Halvergate 4, Hassingham 2, Lipp 4, Lingwood 6, Great Plumstead 2, Reedham 8, St. Andrew 20, Tunstall 2, Upton-with-Fishley 8, Walsham 2.

BOURNEMOUTH.—Messrs. Bobby & Co., of Manchester, are to considerably extend their branch office. Plans have been prepared by Messrs. Reynolds Tomlins, Granville Chambers.

BRANSON.—A large site is to be acquired by the Colliery by the Durham C.E.C. for the erection of an elementary school.

BRENTFORD.—The Surveyor has prepared a plan for laying out part of the Carville Hall Park for a housing scheme. Sanction is to be sought for a loan of £10,000 for various building works at Boston Manor Park site in New Brentford to be obtained for the erection of a public convenience.

BRISTOL.—The Corporation has obtained the sanction of the M.H. to raise over £2,250,000 for various objects, some of which will provide work for unemployed.

BURY.—The M.H. has approved of the scheme submitted by the T.C. for the re-housing of people who will be displaced by the big street improvement scheme.

* See also our List of Contracts, Competitions, etc.

STERNAW (YORKS.).—A new church institute is erected adjoining the Parish Church, for which necessary funds are now being raised.

PORTMAN.—A recommendation has been submitted to the Lancashire E.C. for the erection of a school at the Carnforth North-road school, to erect a new junior school.

SPRATTON.—The U.D.C. endorsed the resolution of the conference held in support of the proposed bridge over the Severn at Beachley.

ST. ALBAN.—A public utility society has been formed in connection with the Coomblands Estates, Ltd., for the erection of four hundred houses, near Addlestone.

ST. ANDREW.—The owners of the Chessington Place propose the erection of several houses.

ST. ANDREW.—The R.D.C. are proposing to build houses at Morton and twelve at Wessington.

ST. ANDREW.—A new £8,000 Wesleyan church is to be built.

ST. ANDREW.—The M.H. has held an inquiry into the Tending R.D.C.'s application for sanction to borrow a sum of £5,000 for the purpose of sewerage and sewage disposal for the parish of Little.

ST. ANDREW.—The U.D.C. is to apply to the M.H. for sanction to borrow £22,050 for the proposed widening and improvement of Holland-road.

ST. ANDREW.—A site has been acquired by the Hamp-E.C. for the erection of an elementary school.

ST. ANDREW.—The M.H. has held an inquiry into an application of the Council for sanction to borrow £48 for the purposes of sewerage and sewage disposal.

ST. ANDREW.—The Essex E.C. recommend the erection of school No. 7 at a cost of £29,000.

ST. ANDREW.—The Manchester and Salford Housing Committee have approved the erection of 100 Connaught Houses at Plas Moreander are to be erected by the addition of new two-story buildings.

ST. ANDREW.—The Housing Committee recommended the erection of 2,639 square yards and on the Osmaston Estate.

ST. ANDREW.—Another school is to be provided on the site of the L.C.O. Accommodation is to be provided for 2,300 children.

ST. ANDREW.—The Corporation Housing Committee is offering a tentative offer for the erection of small flats in blocks of six or eight, at £262 10s. per house, housing tenants displaced by the Crabble Hill improvement scheme. The Borough Engineer has been asked to prepare plans for an enlargement of the site on Granville-gardens. The E.C. are considering the provision of a cookery centre, in St. James's, at a cost of £1,350. A site for an elementary school is to be obtained in Astor-avenue. The Borough Engineer is to prepare a report as to the erection of workshops for the tramways department.

ST. ANDREW.—A new factory is to be erected on the site of the old factory.

ST. ANDREW.—The Whickham U.D.C. has obtained sanction from the M.H. to borrow the sum of £26,000 for the erection of 64 flats at Dunston, and also the site of 70 houses at Whickham.

ST. ANDREW.—A committee of the Durham C.C. are considering the question of the provision of an institution for the county for mental defectives.

ST. ANDREW.—Christ Church is to have a new £500 parish school.

ST. ANDREW.—The M.H. has held an inquiry into the application of the R.D.C. to undertake works of sewerage at a cost of £40,000.

ST. ANDREW.—The plans of the new schools to be erected have been passed by the West Riding E.C. Schools are to be erected, an elementary school to accommodate 500 children and a middle school to accommodate 520 children.

ST. ANDREW.—The U.D.C. has recommended that application be made to the M.H. for permission to erect the housing scheme adopted last August, by which the number of houses to be built by private enterprise from 240 to 324, and, further, that the site of Mr. G. H. Fletcher for 40 houses to be erected on the site of the old factory.

ST. ANDREW.—The Fentley Brick & Tile Co., Ltd., are planning to erect fourteen houses at Fentley Hill.

ST. ANDREW.—The U.D.C. have agreed to a scheme of extensions at the Hornsey, Finchley and Wood Joint Hospital, at a cost of £28,500. Tenders are invited for the construction of a domestic centre at Alberty-street school.

ST. ANDREW.—A site at Bell Green has been acquired by the Warwickshire E.C. for the erection of a school for 250 children, at a cost of £11,000.

ST. ANDREW.—Surrey E.C. are negotiating for a site for a secondary school.

ST. ANDREW.—A proposal to convert the Infirmary, at Hill, into County Council offices is estimated at £6,000.

ST. ANDREW.—The Housing Director has prepared the plans of the housing site at Govanhill. A site at Govanhill is being leased to the Church Extension Society of the Presbytery of Glasgow for the erection of a church. The Baths Committee are obtaining a site at the Plantation for the erection of public houses. Revised schedules have been prepared in connection with the proposed extensions and alterations at Mount Blow House. A site has been obtained at the site of the old factory for the erection of a convenience. The Housing Committee has promised £1,625 towards the site for a new bandstand and enclosure in Tollcross.

ST. ANDREW.—The City Engineer is to prepare plans for a new site in South Portland-street, Gorbals. The City Engineer has promised £19,223, one-half of which is to be used for widening and reconstructing the Maryhill bridge.

ST. ANDREW.—Surrey E.C. has now arranged for the purchase of a site at Holloway Hill for the erection of a secondary school.

ST. ANDREW.—Plans for 40 houses and for the lay-out of roads off Oldfield-lane at the rear of the Birk-club House have been approved by the Council's Land Buildings Committee. An amended plan for the lay-out of a portion of the Greenford Hall and the erection of 32 houses has also been

approved.—The proposed extensions of the Council offices will cost £1,008. A housing scheme, providing for the erection of 168 houses to be let, was submitted by the Plans and Buildings Committee of the Council for approval.

GULF PORT.—The B.E. has approved sketch plans for extensions at the Grammar School, estimated to cost £17,725.

HAMPSTON.—Lord Montagu of Beaulieu is asking the C.C. to provide cottages for 37 police constables who are now in lodgings.

HARROGATE.—The M.H. has sanctioned the borrowing of over £2,000 for the provision of a children's pool in Harrogate Valley Gardens.

HATTON.—The Warwickshire E.C. are to obtain a site for a school.

HESTON AND ISLEWORTH.—The U.D.C. passed plans: Eedle & Meyers, hotel, Great West-road, Osterley; R. T. Warren, 24 houses, Vicarage Farm-lane, Heston.

HIGH SPEN.—The Durham E.C. has prepared plans for remodelling the elementary school.

JARROW.—Consideration is being given to a scheme to develop Jarrow Slake, by the construction of new docks and wharves.

KEIGHLEY.—The Corporation Housing Committee recommended that application be made to the M.H. for sanction to borrow £37,000 for the erection of seventy houses on the Broomhill estate—£18,42 for 38 scullery-houses, and £18,577 for 32 parlour houses. The Council are also proposing to purchase fifteen acres of land at West-lane for the purpose of providing housing accommodation.

KENT.—The C.C. recommend application being made for sanctions to loans: £100 for partition and ventilation, Aldington School; £1,000 for teacher's house, Dunton Green School; £500, instruction room, Lenham Practical Instruction Centre; £1,120, general improvements, Murston School; £550, new class-room, H.C., Ripple School; £2,050, purchase of site, Bexley Heath Junior and Infants' Council School, and purchase of site Bexley-Welling proposed Junior School; £712, for the erection of a cottage on the Warren-street small holding at Lenham.

KEYSHAM.—Messrs. J. S. Fry & Sons, Ltd., propose to erect twenty-four houses on the Somerdale estate.

KINGSTON.—Surrey C.C. has voted £3,000 for various improvements at the County Hall.

LEITCH WORTH.—A dental clinic is to be provided by the Herts E.C. at Norton Way, at a cost of £1,600.

LINCOLN.—The B.G. has approved of plans for the erection of a new vagrants' ward, at an estimated cost of £3,000.

LONDON (BATTERSEA).—The M.H. are to hold an inquiry on December 4 into the application of the B.C. to borrow £4,899 for the erection of public sanitary conveniences in Battersea Bridge-road. The Council has approved detailed estimates for erecting the proposed new tuberculosis dispensary and maternity centre in Latchmere-road, at a cost of £11,763.

LONDON (FULHAM).—The M.H. has approved an order of the L.C.C. for the compulsory acquisition for housing purposes of a site of nearly two acres in Peterborough-road.

LONDON (HACKNEY).—The B.C. passed plans: W. N. Wright, factory premises on land between 26 and 28, Grove-lane, Stamford-hill; R. Maskall & Sons, factory at Messrs. Herve's premises, 34, Bentley-road.

LONDON (HORTON).—The L.C.C. are to erect a hostel for nurses at Horton Asylum, at a cost of £23,000.

LONDON (ISLINGTON).—An elementary school for 600 children is to be erected by the L.C.C. in Twyford-street, at a cost of £25,000.

LONDON (LEWISHAM).—The B.C. passed plans: Fisher, Sutton & Co., 20 houses in McLean-road and

20 houses in Parbury-road; W. F. Ball & Sons, eight houses, Manor-park; A. V. Booker, sports pavilion, Beckenham-lane.

LONDON (ST. PANCRAS).—The managers have prepared a scheme for rebuilding the St. Aloysius Roman Catholic school. Accommodation is to be provided for 300 children.

LONDON (STREATHAM).—Estimates are to be prepared by the Surrey C.C. for widening the Streatham-road railway bridge.

LONDON (WALWORTH).—A new £1,296 handicraft centre is to be built for the L.C.C. in Sayer-street.

LUWERTON.—Plans are being prepared by the Durham E.C. for the erection of an elementary school.

MANCHESTER.—The T.C. are to make application to the M.H. for sanction to the borrowing of £51,500 for the erection of 108 houses on the Bull Farm estate, and for £12,000 for subsidy grants to private builders.

MARS HEN.—Additional land is to be acquired by the Durham E.C. for the site of the proposed elementary school.

MARSTON GREEN.—A new school is to be built by the Warwickshire E.C., at a cost of £6,000, accommodation being provided for 150 children.

MERTON.—The Council has prepared a scheme for further improvements on the Kingston main road, which will cost £40,000, and are negotiating with the Surrey C.C. and the Ministry of Transport regarding grants.

MITCHEM.—The B.E. has approved of the sketch plans of the Surrey E.C. for the erection of a secondary school for girls, at a cost of £32,450. Plans are to be prepared for extensions at the Merton Rutlish school.

NAVAN.—The Meath C.C. propose to spend £2,000 on completing the reconstruction of the County Hospital.

NEWCASTLE.—The Corporation Housing Committee has approved a plan submitted by the City Architect for the erection of 14 shops on the High Heaton housing estate, at an estimated cost of £16,600.

NEWFIELD.—A site has been acquired by the Durham E.C. for the erection of an elementary school.

NEWMARKET.—The R.D.C. has received sanction from the M.H. to erect 200 houses within the next two years.

NEW MILTON.—The Hampshire C.C. has purchased a site at Old Milton-road, for the erection of a police station.

NEWPORT (MON).—Plans for the rebuilding of the St. Michael's Mixed School have been received from the Managers of the R.C., and have been forwarded to the B.E. for approval. The T.C. is to make application to the M.H. for sanction to borrow the sum of £4,500 for providing public sanitary conveniences in Cardiff-road. The Borough Electrical Engineer is to make alterations at the boiler house, at a cost of £375. Plans passed: Cardiff-road, 12 houses, for T. J. Hill.

NEW SEAHAM.—Preliminary plans for an elementary school are being prepared by the Durham E.C.

NORTHAMPTON.—New works are to be built in Kingsthorpe-road by A. Bell & Co., Ltd., tile manufacturers. The builders are A. Glenn & Sons, Northampton, the architects being W. & E. Hunt, F.R.I.B.A., 30, Norfolk-street, Strand, W.C.

NORTH WICH.—The R.D.C. has acquired a site for the erection of a tuberculosis pavilion.

OXTE.—Surrey E.C. has instructed the County Architect to prepare plans for a secondary school to be erected at Blue House-lane.

PARK PREWITT.—The Hampshire C.C. has voted £1,300 for extensions at the laundry at the Mental Hospital.

PLYMOUTH.—The Housing Committee has approved the erection by the G.W. Ry. Co. of 86 houses at Beechfield.

POLESWORTH.—The Warwickshire E.C. are considering the advisability of erecting a central school.

PORCUPES.—The Hampshire E.C. has obtained sanction to borrow £5,700 for the enlargement of the elementary school.

PRESTON.—A scheme is on foot for the erection of a proposed new municipal hall.

REIGATE.—Approval has been given by the B.E. to sketch plans for extensions at the Reigate Grammar School.

RIPLEY.—Guildford R.D.C. are to reconstruct the Abbey Stream bridge, on the Ripley-Sheerwater road, at a cost of £2,700.

ROTHERWELL.—West Riding E.C. are to obtain a site on the Ring-road for an elementary school.

SACRISTEN.—Amended plans have been prepared by the Durham E.C. for the enlargement of the elementary school.

ST. THOMAS.—The M.H. has approved the proposal of the R.D.C. to proceed with the erection of 88 houses.

SALFORD.—The Corporation proposes to build swimming baths, slipper baths, and a public washhouse on a site in Hodge-lane. The M.H. has held an inquiry into an application for sanction to borrow £49,824 for the purpose.

SEAHAM.—On behalf of the Durham C.C. Mr. W. Milburn, architect, of Sunderland, has prepared plans and estimates for adapting Seaham Hall and Earl's House Buildings for the purposes of sanatoria, &c., and the plans are to be submitted to the M.H. for approval.

SEGEFIELD.—The R.D.C. has received sanction from the M.H. to borrow £7,200 for the erection of houses.

SOLI HULL.—The Warwickshire E.C. are to prepare a scheme for a secondary school for 200 scholars, at a cost of about £30,000.

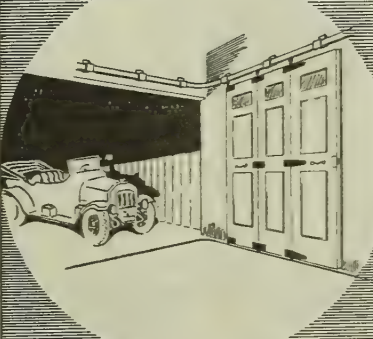
SOUTH END-ON-SEA.—It is proposed to build a pier and music pavilion, restaurant, &c., at Westcliff by the Chalkwell Hall Estate Co., for which plans have been prepared by P. Howard, 51, High-street.

SOUTH KILN.—Allotment holders are being asked to surrender land behind the town hall in connection with the proposed extension of the town hall. In connection with the proposed new school of art, the Borough Engineer has now been instructed to prepare plans for a brick building. A further hundred houses are to be subsidised. The Corporation has passed

THE "HENDERSON" SYSTEM

SLIDING DOOR GEAR

FOR FACTORIES, GARAGES, SCHOOLS, ETC..



"TANGENT JUNIOR" FOR LIGHT DOORS.

"TANGENT SENIOR" FOR HEAVY DOORS.

WRITE FOR BOUND CATALOGUE B.24 TO:-

P.C. HENDERSON, LIMITED.

BARKING, ESSEX. PHONE. EAST HAM 282.

plans by F. W. Newby architect, for Henderson Bros., for the lay-out for 104 houses at Harton Moor; and by H. Hill architect, for J. T. Armstrong, for thirty-six houses off Harton-lane.—J. H. Morton & Son are to erect, for the Rev. Cecil Booth, a mission church in King George-road.

STANLEY.—The U.D.C. has received intimation that the Public Works Board has agreed to make an advance of £62,500 for the erection of 120 additional houses at South Stanley.

STANDROPE.—Plans for an elementary school have been prepared by the Durham E.C.

STOCKTON.—The Stockton and Thornaby Hospital Committee has decided to erect a venereal diseases clinic in the hospital grounds, at a cost of £3,150.

STRATFORD-ON-AVON.—A secondary school for 150 is to be erected by the Warwickshire E.C., at a cost of about £22,500.

SUNDERLAND.—The C.B. is to apply to the M.H. for sanction to borrow £62,008 for the erection of 136 houses.

SUTTON.—The Southern Railway Co. has approved of the plans of the Surrey C.C. for the proposed bridge over the railway.

SUTTON COLDFIELD.—Compulsory powers are being sought by the Warwick E.C. for the purchase of the Beeches estate required for the proposed High School.

SWALWELL.—The Durham E.C. are negotiating for a site for an elementary school.

TJORNLEY.—The Durham E.C. has prepared plans for remodelling the Colliery school.

TYNEMOUTH.—The Borough Engineer has been instructed to prepare a lay-out plan of the Hospital Field at Balkwell.—A scheme for further privy conversions, at a cost of £23,275, has been prepared.—The M.H. are to be pressed to give approval of the plans for the Infectious Diseases Hospital at Moorpark.—A site at the Nook is to be obtained for the erection of a convenience.—The Borough Engineer is to prepare designs for railings to enclose the War Memorial.—The Housing Committee are negotiating for 11 acres at Cullercoats for a housing scheme.—The Housing Architect is to submit schemes for houses on the southern section of the Balkwell estate.

USWORTH.—A site for the erection of an elementary school has been acquired by the Durham E.C.

UXBRI GE.—The U.D.C. propose to arrange with Mr. W. L. Carr, of Northwood, to prepare a general development plan for the whole of the district, and a statutory town plan for the undeveloped portion of the district. A further 25 houses are to be subsidised.

WALLINGTON.—Surrey C.C. has asked the County Engineer to prepare estimates for the widening of the railway bridge at Manor-road, Wallington.—Surrey E.C. has decided to fence the site for a secondary school at a cost of £750.

WALLOP.—A site is being purchased by the Hampshire E.C. for the erection of an elementary school.

WALTON (YORKS).—The L.M.S.R. Co. are about to commence the widening of their bridge over Low Town.

WANTSWORTH.—The L.C.C. recommend the borrowing by the B.C. of £94,800 for housing.

WEAL STONE.—The M.H. is to hold an inquiry into the Council's application for a loan of £900 for the erection of a public convenience and ambulance station in Peel-road.

WE NESPITE.—The Staffordshire C.C. has decided to contribute to the Wednesfield U.D.C. £1,000 for the reconstruction of Wards Bridge and Castle Bridge over the Birmingham Canal.

WEST AUCKLAND.—Preliminary plans for an elementary school are being prepared by the Durham E.C.

WHITEMOOR.—The L.N.E.R. are to carry out considerable improvements at their locomotive depot at Whitemoor. The whole scheme will cost £43,000.

WIMBORNE.—The B.E. has approved the plans of the Surrey E.C. for the erection of a county school for girls, the estimated cost being £22,000.

WIND ESTER.—Building repairs are to be undertaken by the Hampshire C.C. at the Castle Hill Offices, at a cost of £400.

WOKING.—The U.D.C. are considering the question of the erection of a new fire station.

WOLVERHAMPTON.—A M.H. inquiry has been held into the application by the Corporation for an order for the compulsory acquisition of land at the Low Hill housing estate.

FIRE.

KEW.—Damage amounting to £15,000 was caused by a fire which destroyed the buildings of the New Brentford fruit and vegetable market.

Roads.

Sir Henry Maybury, chairman of the Organising Committee, speaking at a recent luncheon held in connection with the Public Works, Roads and Transport Congress and Exhibition, now being held at the Agricultural Hall, said that some idea of the magnitude of local government might be gleaned from the facts that £40,000,000 is spent annually on roads, £14,600,000 on housing and town-planning, and £32,000,000 on public health, the total annual expenditure for all services being over £350,000,000. He drew attention also to the rapidly increasing number of delegates: there are now 1,315 representing 720 authorities. Questioned as to the danger of road surfaces, Sir Henry said that besides modern traffic conditions contributing to make roads slippery we had in the past tried to get too fine a surface; in future it would be more mosaic-like in character. The white line for the guidance of traffic was being experimented with with a view to making it comparatively per-

manent by incorporating a white composition in the road material. The testing of the methods suggested was under the supervision of the county engineer of Middlesex, Mr. A. Dryland, M.Inst.C.E., whose report would be circulated to local authorities in order to make all markings uniform.

Obituary.

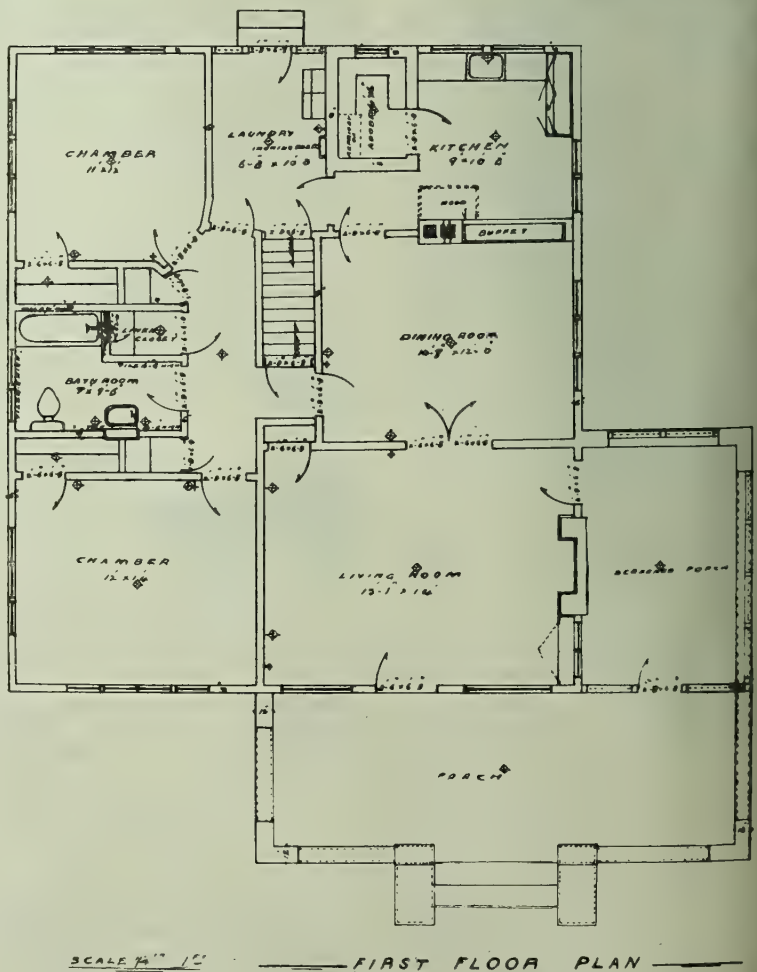
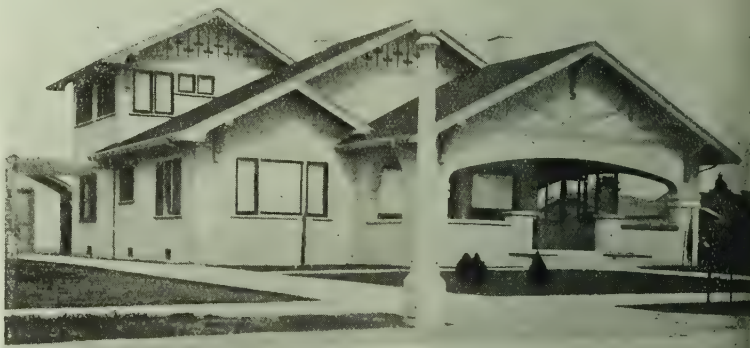
The death has occurred of Mr. James Hudson, retired builder and contractor, of 18, Featherstone-street, Roker, Sunderland.

Cattle Sale Ring.

A new cattle sale ring at Blackmoor Gate, North Devon, has been built from the designs of Messrs. Friend & Kelly, L.R.I.B.A., architects and surveyors, of Barnstaple. Accommodation is provided in iron pens for 2,500 sheep and 160 cattle, and the 70 ft. auction ring and entire area is paved with stone and grouted with cement.

CALIFORNIAN BUNGALOW

This bungalow has been erected in the town of Riverside, California, U.S.A. The front faces the south, and the bedrooms are on the west side, so as to get the ocean winds from the west in the afternoon and evening. The large living room on the second floor has seventeen windows, making this a cool room for sleeping. The garage has large openings for the ventilation of rooms on the first floor, which are kept cooler than is possible in flat-roofed houses. The screened porch is protected in the day from the sun by heavy roller awnings. The adobe cooler is made of sun dried bricks. The walls are 8 in. thick and are plastered on both sides; the floor is of concrete. The house is heated in the winter time by a hot-air furnace in the cellar, where also is the hot-water heater. Hardwood floors are provided throughout and the walls are Tiffany painted in coats of oil paint. Mr. Andrew Morrison, Riverside, California, was the architect.



A Bungalow in Riverside, California. MR. ANDREW MORRISON, Architect.

PRICES CURRENT OF MATERIALS

[owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by Inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.	£ s. d.
Best Blue	4 3 6
Pressed Staffs	9 5 0
Do. Bullnose	9 15 0
Blue Wire Cuts	7 5 0
Stourbridge Fire Brick	8 11 0
3 in.	10 3 0
D'ble Str'teh's	30 0 0
D'ble Headers	27 0 0
One Side and two ends.	31 0 0
Two Sides and one End.	32 0 0
Splays and Squints	29 10 0

Second Quality, £1 per 1,000 less than best. Cream buff, 12 extra over white. Other colours, Hard 12s. 10s. extra over white.

BREEZE CONCRETE SLABS.

Delivered London.	s. d.	3 in. per yd. super	s. d.
per yd. super	1 11	4 in. per yd. super	2 9
in.	2 4	4 in.	3 6

times Ballast 10 6 per yd.

Sand 13 9

Washed Sand 14 6

Shingle for Ferro-concrete 12 9

Broken Brick 11 6

Breeze 7 6

Portland Cement, British Standard Specification, Test #2 18 0 to £3 3 6

Is. alongside at Vauxhall in 80-ton lots.

per ton extra on above 4 8 0

er Cement (Waterproof) 8 15 0

ian Cement 5 15 0

uo's Cement, White 5 10 0

ter, Coarse, Pink 3 0 0

White 3 12 6

Fine 5 12 0

ite, Coarse 3 9 0

Finish 3 17 0

Y Stone Lime 2 11 9

lk Lime 2 11 9

Ground Blue Lias Lime 2 4 6

ite Chippings 1 12 0

R.—Sacks are charged 1s. 9d. each and credited 5s. 6d. if returned in good condition within three months carr. pd.

urbridge Fireclay in s'cks 35s. 0d. per ton at rly. dp.

STONE.

Delivered in railway trucks at s. d.

Vorbourne Park, Paddington, G.W.R., or south Lambeth, G.W.R., per ft. cube. 2 9½

do. delivered in railway trucks at Nine Elms, L. & S.W.R., per ft. cube. 2 11½

LAND STONE—

rown Whitbed, in random blocks of 20 ft. average, delivered in railway trucks at Nine Elms, L. & S.W.R., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube. 4 4

o. do. delivered on road wagons at above stations, per ft. cube. 4 5

ite based, 3d. per ft. cube extra.

ORE.—1d. per ft. cube extra for every foot over 20 ft. average, and ¼d. beyond 30 ft.

TON-WOOD STONE—

livered at any Goods Station, London. s. d.

andom blocks, up to 10 ft. cube. P. ft. cb. 7 0

dom blocks from 10 ft. and over 27 0

two sides. 32 0

n three or four sides. 32 0

R STONE, BLUE—Robin Hood Quality. Delivered at any Goods Station, London. s. d.

sawn two sides landings to sizes (under ft. super.) Per ft. super 5 6

rubbed two sides, ditto. 6 0

sawn two sides slabs (random sizes) 2 3½

to 2½ in. sawn one side slabs 1 6½

b. to 2 in. ditto, ditto. 1 4

TO YORK—

Delivered at any Goods Station, London.

led random blocks. Per ft. cube 6 3

sawn two sides landing to sizes (under ft. super.) Per ft. super 5 1½

rubbed two sides, ditto. 6 1½

sawn two sides slabs (random sizes) 2 10

ditto ditto 2 1½

self-faced random flags. Per yd. super 9 0

ARTIFICIAL STONE.

ered in London Area in full van loads, per ft. —Plain, 8s. 6d.; Moulded, 9s. 6d. Cills, 10s. 0d.

WOOD.

GOOD BUILDING DEAL.

per stan.	Inches.	per stan.
11. 28 0	3 x 6	221 0
9. 25 0	3 x 11	25 0
8. 24 0	2 x 11	25 0
7. 23 0	3 x 9	24 0
6. 22 0	2½ x 9	22 0
5. 21 0	2 x 4½	22 0
4. 20 0	3 x 4	22 0

PLANED BOARDS.

11. 27 0	1 x 9	226 0
----------	-------	-------

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
1½	20/-	1½	31/-
1	22/-	1	34/-
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.	Inches.	per sq.
1½	25/-	1½	16/6
1	31/-	1	19/-
1½	34/-	1	24/-

BATTENS.

Inches.	s. d.
¾ x 2	2 6 per 100 ft.

SAWN LATHS.

Per bundle 0 2 4

1" AND UP THICK.

Dry Austrian Wainscoat, per ft. cube 0 16 0 to 0 18 0

Dry American and/or Japanese Figured Oak, ft. cube 0 15 0 to —

Dry American and/or Japanese Plain Oak, ft. cube 0 11 0 to 0 13 0

Dry sq. edged Honduras Mahogany, ft. cube 0 16 0 to 0 18 0

Dry Log cut Honduras Mahogany, ft. cube 0 18 0 to 1 1 0

Dry Cuba Mahogany, ft. cube 1 4 0 to 1 10 0

Dry Teak, ft. cube 0 13 0 to 0 15 0

Dry American Whitewood, ft. cube 0 11 0 to 0 14 0

Best Scotch glue, per cwt. 4 10 0 to —

Liquid Glue, per cwt. 4 7 0 to 5 10 0

SLATES.

First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

24 by 12	37 12 6	18 by 10	21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

Best machine-made tiles from Broseley or Staffordshire district 5 12 6

Ditto hand-made ditto 5 17 6

Ornamental ditto 6 2 6

Hip and valley tiles {Hand-made 0 9 6
Machine-made 0 9 0

METALS.

JOISTS, GIRDEES, &c., TO LONDON STATION, PER TON—

R.S. Joists, cut and fitted	12 10 0
Plain Compound Girders	14 10 0
Stanchions	16 10 0
In Roof Work	19 10 0

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	12 0 0	½ in. to 1 in.	10 15 0
1 in.	11 0 0	1 in. to 2½ in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS.

(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward if sent from London Stocks.)

Black Gas	60 %	50 %	60 %
Galvanised Gas	45 %	40 %	50 %
Blue Water	55 %	45 %	55 %
Galvanised Water	38½ %	35 %	45 %
Red Steam	50 %	40 %	50 %
Galvanised Steam	32½ %	30 %	40 %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Nozzles.	Stop Ends.
3 in.	1/2½	1½d.	3½d.
3½ in.	1/4	1/3½	3½d.
4 in.	1/5	1/2½	3½d.
4½ in.	1/6½	1/4	4½d.
5 in.	1/9½	1/5½	5½d.

O.G. GUTTERS.

3 in.	1/7	1/3½	3½d.
3½ in.	1/7	1/3½	3½d.
4 in.	1/8½	1/4	3½d.
4½ in.	1/10½	1/6½	4½d.
5 in.	2/3	1/9½	5½d.

RAIN-WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in. plain	1/9½	1/2½	1/8½
2½ in.	1/11½	1/4	2/0½
3 in.	2/4½	1/8	2/6
3½ in.	2/10	2/-	2/10½
4 in.	3/3	2/4½	3/6

L.C.C. COATED SOIL PIPES—London Prices, ex Works.

Per yd. in 6 fts. plain	2 11	2 3	2 9
2½ in.	3 5	2 6	3 5
3 in.	4 1	2 9	4 0½
3½ in.	4 5½	3 5	4 8½
4 in.	4 11½	3 9½	5 5½

L.C.C. COATED DRAIN PIPES—London Prices ex Works.

3 in. per yd. in 9 ft. lengths	4 3	5 9	7 8
4 in.	6 3	6 11	9 6
5 in.	7 10	12 0	16 3
6 in.	9 6	15 0	20 9

Gasken for jointing, 38/6 per cwt.

IRON—

Common Bars 13 10 0 to 14 10 0

Staffordshire Crown Bars—good merchant quality 14 5 0 .. 15 5 0

Staffordshire "Marked"

Bars	16 10 0	18 10 0
Mild Steel Bars	11 0 0	12 0 0
Steel Bars, Ferro-Concrete quality, basis price	11 0 0	12 0 0
Hoop iron, basis price	16 0 0	17 0 0
Galvanised	31 0 0	32 0 0

Soft Steel Sheets, Black—

Ordinary sizes to 20 g.	13 10 0	14 10 0
" " 24 g.	14 10 0	15 10 0
" " 26 g.	16 10 0	17 10 0

Sheets Flat Best Soft Steel, C.R. & C.A. quality—

Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	19 10 0	21 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g.	21 10 0	22 10 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 24 g.	23 10 0	25 10 0
Ordinary sizes, 6 ft. by 9 ft. to 20 g.	18 10 0	19 10 0
Ordinary sizes, 6 ft. by 9 ft. to 22 g. and 24 g.	19 0 0	20 0 0
Ordinary sizes, 6 ft. by 9 ft. to 26 g.	22 0 0	23 0 0

Sheets Galvanised Flat, Best quality—

Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker.	22 10 0	23 10 0
Best Soft Steel Sheets, 22 g. and 24 g.	24 10 0	26 10 0
Best Soft Steel Sheets, 26 g.	26 0 0	27 0 0
Cut Nails, 3 in. to 6 in. (Under 3 in. usual trade extras.)	19 10 0	21 0 0

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)

LEAD—Sheet, English, 4 lb. and up.	48 10 0
Pipe in coils	50 0 0
Soil Pipe	52 0 0
Comp. Pipe	53 0 0

NOTE.—Country delivery, 30s. per ton extra; lots under 3 cwt., 3s. per cwt. extra, and over 3 cwt. and under 5 cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.

Old lead, ex London area, at Mills per ton 33 10 0

Do., ex country, carriage forward per ton 34 10 0

COPPER.

Seamless Copper tubes (basis)..... per lb.	1 1½
Strong sheet.....	2 3
Thin.....	2 4
Copper nails.....	2 3
Copper wire.....	2 4

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COOKS FOR IRON.

1½ in.	3 in.	1 in.	1½ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN COCKS AND UNIONS.

1½ in.	3 in.	1 in.	1½ in.	1½ in.	2 in.
41/6	62*	92/-	174/-	300/-	688/- per doz.

NEW RIVER PATTERN SCREW DOWN MAIN FERRULES.

39/6	60/-	116/6	per doz.
------	------	-------	----------

CAPS AND SCREWS.

1½ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- per doz.

DOUBLE NUT BOILER SCREWS.

1 in.	3 in.	1 in.	1½ in.	1½ in.	2 in.
7/6	11/-	17/-	29/-	36/-	63/- per doz.

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES, S.F.

1½ in.	2 in.	1 in.	1½ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per doz.

DRAWN LEAD P. & S. TAPS WITH BRASS CLEANING SCREW.

1½ in.	1½ in.	2 in.	3 in.
8 lbs. P. traps ..	33/-	41/-	56/- 101/- per doz.
8 lbs. S. traps ..	35/-	45/-	66/- 126/- per doz.

TIN—English Ingots, 2/9 per lb. SOLDER—Plumbers' 1/2, Timmen's 1/5, Blowpipe 1/6 per lb.

PAINTS, &c.

Raw Linseed Oil, in pipes per gallon	0 3 6
" " in barrels.....	0 3 8
Boiled " in drums.....	0 3 11
" " in barrels.....	0 3 11
" " in drums.....	0 4 2
Turpentine in barrels.....	0 6 6
" in drums (10 gall.).....	0 6 8
Genuine Ground English White Lead, per ton (In not less than 5 cwt. casks.)	58 15 0

GENUINE WHITE LEAD PAINT—

"Father Thames," "Nine Elms," "Park," "Suprenac," "St. Paul's," "Spedol," "Polacco," and other best brands (in 14 lb. tins) not less than 5 cwt. lots..... per ton delivered	79 15 0
Red Lead, Dry (packages extra)..... per ton	55 10 0
Best Linseed Oil Putty..... per cwt	0 15 0
Flitcol.....	0 15 6
Size. XD Quality..... fkn.	0 3 6

Continued on next page.

*The information given on this page has been specially compiled for THE BUILDER and is copyright. Our aim in this list is to give, as far as possible, the average prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (contd.)**GLASS.****ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.**

	Per Ft.		Per Ft.
15 oz. fourths ... 3½d.		32 oz. fourths ... 8d.	
15 " thirds ... 4½d.		32 " thirds ... 9½d.	
21 " fourths ... 4d.		Obscured Sheet, 15 oz. ... 4d.	
21 " thirds ... 5½d.		21 " ... 5½d.	
26 " fourths ... 5d.		Fluted 15oz. 6½d., 21oz. 9½d.	
26 " thirds ... 7½d.		En'led 15oz. 5½d., 21oz. 7½d.	

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
1 Rolled plate ... 4½d.	
1 Rough rolled ... 5½d.	
1 Rough rolled ... 5½d.	
1 Figured Rolled, Baltic, Oceanic, Arctic, Stip- polyte, and small and large Flemish White ... 6½d.	
1 Ditto, tinted ... 9d.	
1 Rolled Sheet ... 6d.	
1 White Rolled Cathedral ... 5½d.	
1 Tinted do. ... 7½d.	

Cast Plate is same price as rough rolled.

VARNISHES, &c.

	Per Gallon.
Oak Varnish ... Outside	0 14 0
Fine ditto ... ditto	0 16 0
Fine Copal ... ditto	0 18 0
Pale Copal ... ditto	1 0 0
Pale Copal Carriage ... ditto	1 4 0
Best ditto ... ditto	1 12 0
Floor Varnish ... Inside	0 18 0
Fine Pale Paper ... ditto	0 18 0
Fine Copal Cabinet ... ditto	1 2 6
Fine Copal Flatting ... ditto	1 0 6
Hard Drying Oak ... ditto	0 18 0
Fine Copal Varnish ... ditto	0 19 0
Pale ditto ... ditto	1 0 0
Best ditto ... ditto	1 2 0
Best Japan Gold Size ... ditto	0 12 6
Best Black Japan ... ditto	0 10 6
Oak and Mahogany Stain (water) ... ditto	0 12 0
Brunswick Black ... ditto	0 7 6
Berlin Black ... ditto	0 14 6
Knotting (patent) ... ditto	1 5 0
French and Brush Polish ... ditto	0 17 0
Liquid Dryers in Terebine ... ditto	0 9 0
Cuirass Black Enamel ... ditto	0 7 0

Aberdeen.—BUILDING.—A scheme for the erection of 129 dwelling houses—86 additional houses in connection with the Corporation's scheme of housebuilding at Torry, to cost £41,294, and 43 for private builders, at a cost of £30,700—is to be carried out. The Plans Committee has passed plans for 153 new buildings and alterations, to cost altogether £96,655.

THE SCOTTISH BUILDER

SCOTTISH HOUSING: SPECIAL FORMS OF CON- STRUCTION

In their circular of October 3, on this subject, the Scottish Board of Health stated that they would announce for the information of local authorities the names and addresses of firms whose make of house had been approved for the purposes of the additional subsidy. The Board have now had under consideration the various applications received, and particulars of the firms approved have been issued. There are: Corolite Construction, Ltd., 12-13, Henrietta-street, London, W.C. 2 (poured concrete house); Cowiesons, Ltd., 3, Charles-street, St. Rollox, Glasgow (timber and steel house); Jas. Jones & Sons, Ltd., Larbert Sawmills, Larbert (timber house); and G. & J. Weir, Ltd., Housing Factory, Cardonald, Glasgow (timber and steel house).

The approved firms have in each case stated that they will be in a position to comply with the condition laid down in the circular of October 3 that not more than 10 per cent. of the labour employed in the production and erection of the houses will be skilled building trades labour, and with the further condition requiring them to complete all houses ordered from them at the rate of 1,000 houses per year from a date to be fixed by the Board, regard being had to the dates at which the sites may be made available. The implementing of these conditions is precedent to the granting of the additional subsidy of £40 per house, and accordingly it is essential that they should be embodied in the contract to be entered into between the local authority and the producer of the particular make or makes of houses selected by them. For the information of the local authority, there is appended to a circular just issued excerpt from the letters of approval by the Board to the various manufacturers embodying the conditions of approval. The local authority should in all contracts they may make take the contractors bound to implement these conditions. The Board have made it clear to the approved firms that, if these conditions are

not implemented, the local authority will not be entitled to the additional subsidy of £40, and the local authority will, no doubt, take the firms bound to reduce their contract price £40 per house in the event of either of the conditions not being observed. The form of contract should be so drawn as to make provision for this.

As stated in the circular of October 3, the special offer of £40 per house is to apply only in respect of 4,000 houses, and unless orders obtained for not less than 1,000 houses of an approved make, and the full 4,000 houses requisitioned now by local authorities, the Government reserve the right to reconsider the situation. Further, in view of the pressing need for expediting the provision of additional housing in Scotland, the Government wish to emphasize the desirability of taking the fullest advantage of the facilities possessed by each of the approved firms, and accordingly the distribution of the local authorities' orders among those firms will be the subject of special consideration by the Government when the local authority requirements are made known. The local authority should now proceed to consider whether they propose to take advantage, and if so, to what extent, of the special subsidy. From the list of firms given, they may make their selection of the make or makes of houses they propose to adopt and the numbers of each they propose to proceed with. The last date for the local authorities submitting the form of application referred to has been extended to December 14.

NEW BUILDINGS IN SCOTLAND

Dunbar.—EXTENSION.—The Town Council has approved of a scheme for the extension of the gas works, subject to the Ministry of Labour giving an unemployment grant. The scheme involves an outlay of about £10,000.

Glasgow.—HALL.—The sub-committee of Kelvin Hall has decided, in view of the great expense (about £40,000), to be incurred in heating and lighting a building with a 200 ft. span, together with the cost of maintenance to continue consideration of the matter, and in the meantime, they have asked the Engineer to prepare another lay-out plan for a new hall with a central span of less than 200 ft.

Stirling.—INFIRMARY.—The cost of the infirmary is estimated from £70,000 to £80,000. A suitable site of 15 acres has been purchased at Braehead for the sum of £5,200. Plans are being prepared to give accommodation for 100 beds. They show two wards of two stories for surgical cases, one ward of two stories for medical cases, a children's ward, and a maternity home.

Dunbar.—HOUSES.—The Board of Health has approved of plans for 20 houses at the Boroedale.

Housing Progress in Scotland.

The following figures show the progress that has been made in State-aided housing schemes in Scotland to October 31, 1925:—

	Under Construction	Completed
1919 Act	25,135	40,000
Private Subsidy Houses	2,324	3,250
Slum Clearance Schemes	1,895	5,670
1923 Act	4,999	5,670
1924 Act (Local Authority Scheme)	286	3,450
Total	34,639	12,790

Of the total number of houses completed under construction under the 1923 Act, 3,100 are by the Local Authorities and 7,483 by private enterprise.

BUILDING TRADE WAGES IN SCOTLAND.*

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters, Joiners.	Plas-terers.	Slat-ers.	Plum-b-ers.	Painters.	Labourers—Masons', Bricklayers', Plasterers'.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/7	10½d. to 1/1
Airdrie	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	1/2½ to 1/3	1/1½
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3
Blairgowrie	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/7
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Coatbridge	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3 to 1/3½
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dumfries	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dunburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/4 to 1/3½
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½
Hawick	1/7	1/7	1/7	1/7-1/7½	1/7	1/7	1/7	1/2½
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½
Inverness	1/5	—	1/5	1/4	1/5	1/5	1/4	1/1 to 1/2
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3½
Kirkcaldy	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3½
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/1-
Lanark	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/0 to 1/3
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3½
Perth	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/3
Stirling	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/3½
Stirlingshire	—	—	—	—	—	—	—	—
(Eastern District)	1/8-1/10	1/8-1/10	1/8	1/9	1/7	1/8	1/6½	1/3½
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 73

TRADE NEWS

We understand that Messrs. William Shepherd & Sons, Ltd., of Milkstone, Rochdale, have just completed the making up of Royal-parade and Channel View-road with their asphaltic slag for the Eastbourne Corporation.

With reference to the paragraph in our issue of November 13, as to Atholl steel houses, the roofing of all these houses in London and the provinces is being carried out by Messrs. E. Parkinson (London), Ltd., of Tottenham.

Tangyes, Ltd., Cornwall Works, Birmingham, state that they have available for loan (free of charge) to engineering lecturers and technical instructors, a large selection of lantern slides of their manufactures, comprising gas engines and suction gas producers, oil engines, steam and power pumps, hydraulic machinery, machine tools, &c.; also an assortment of slides of historical interest dealing with these subjects. A number of papers dealing with their different classes of machinery are also available for loan, to assist lecturers in preparing their own papers. A list will be sent free on application.

A Floor Covering.

The qualities of Triolin floor-covering material, state the makers, embrace those of hard wear and good appearance; it is dust-proof, spark-proof, damp-proof, and—not being porous—impervious to water and damp. It is unaffected by acids and has, we understand, been tested under the most trying conditions in lavatories. Its composition is the same throughout, and owing to this it is non-fading; it can be obtained in rich art shades and mottled and granite effects. The material is laid in lengths, the method of fitting being such that the joints become almost homogeneous and the appearance that of a jointless floor. Although the application of Triolin to the uses of the theatre is of comparatively recent origin, it is laid at the New Gallery Cinema, Regent-street; the Picture House, Granby-street, Leicester; the Picture House, Sauchiehall-street, Glasgow; the Picture House, Ward's-end, Halifax; and the Palladium, High-road, Wood Green, N. 22.

Newcastle Builders' Association.

At the recent annual meeting of the Newcastle Building Trades' Employers' Association, Mr. G. Clements was elected President; Mr. G. V. Scott, Vice-President; Mr. J. R. Rutherford, Hon. Treasurer; and Mr. A. Smith, Secretary.

Builders' Estates.

Mr. A. Corah, builder and contractor, of Loughborough, has left net estate of £18,116.

Mr. J. A. Gill-Knight, Surveyor of the Hackney Borough Council, 8, Narbonne-avenue, Clapham, has left net estate of £3,071.

New Silk Factory at Liverpool.

The British Enka Company has agreed with the vendors of the Aintree Aircraft Factory to purchase that site for their new silk factory. A large number of workers will be required, for it is anticipated that ultimately about 3,000 will be employed in the new-factory.

Liverpool Improvement Scheme.

The chairman of Liverpool's Markets Committee, Mr. W. Kelly, suggests the building of a large central public hall over St. John's Market, also the removal of the wholesale fish market from Great Charlotte-street, in order to pave the way for an extension of the central shopping area of the city.

A New Rustless Steel.

Dr. W. H. Hadfield, head of the Brown Firth Research Laboratory, Sheffield, has stated that a rustless steel possessing exceptional properties has been placed on the market. It has entirely different characteristics from former chromium steel, and can be worked either hot or cold. It completely resists the action of sea water and also the action of nitric acid and the acid in foodstuffs.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes accepted. † Denotes provisionally accepted.

‡ Denotes recommended for acceptance.

§ Denotes accepted subject to modification.

BALLYTIVNAN.—Plumbing and sanitation work at farm house, for the Sligo Mental Hospital:—

O'Hara & Co.	£116 3 6
P. J. Healy & Co.	117 15 0
Messrs. Galloway.	113 0 0
*J. Langan, Sligo.	110 10 0

BANAGHER.—Houses, for the Offaly Board of Health:—

*P. Hogan, Banagher.	each £315
----------------------	-----------

BIRKENHEAD.—Female pavilion at the Poor Law Institution, Chatterbridge, for the Wirrill Union. Messrs. Finchett, Lancaster & Archer, architects, 13, Houghton-street, Southport:—

*W. Fleming & Co., Neston.

BRAINTREE.—For (a) Twelve houses at Stisted; (b) six at Blackmore-end, Wethersfield; (c) eight at Wethersfield; (d) eight at Terling; (e) eight at Rayne; (f) six at Titchingfield, for the R.D.C. Mr. E. O. Wheeler, Housing Surveyor, 71, Rayne-road:—

*Jepp & Berry—	40 houses.
(a)	£4,320
(b)	2,343
(c) Little Bradfords, Bocking.	2,960
(e)	2,916
(f)	2,220

*Chas. Smith & Sons—

(d) Terling 2,995

BREDHURST.—Adaptations and repairs to farm buildings, at Abbots Court Farm, for the Kent C.C.:—

*J. King, Maidstone. £201 16

BROOKWOOD.—Heating improvements at Mental Hospital, for the Surrey C.C.:—

*W. G. Cannon & Sons, Ltd., South-wark. £4,822

BUXTON.—Alterations and extensions to the "Cat and Fiddle," for F. Robinson, Ltd., Unicorn Brewery, Stockport. Mr. C. Flint, architect:—

*S. L. Williamson & Son, Ltd., New Mills.

CHORLEY.—Ten houses at Coppull, for the R.D.C. Mr. Cotterill, engineer and surveyor:—

*A. Darbyshire & Co.

*A. Gray.

COLNE.—For (1) Plumbers' and glaziers' work; (2) plasterers' work on houses, for the T.C. Borough engineer:—

(1) W. Cragg, H. Crabtree Wormwell, W. Varley & Sons.

(2) H. Howarth.

(All of Colne.)

COOLOGUE.—Cottages for the Offaly Board of Health:—

*P. Hogan, Banagher. £279

DERBY.—Foundations for the 250 Thorncliffe houses, for the C.B.:—

†"F.C." Construction Co., Ltd. £6,000

DERBY.—For (a) Ten pairs of houses on the Newdigate-street site, and (b) a pair on the Hawthorn-street site, for the C.B.:—

(a)†R. Clayborn.

(b)†T. H. Beeson.

DERBY.—Houses, for the C.B.:—

	Per pair.
†Ford & Weston, Ltd. (20 pairs).	£923
†Perks & Son (38 pairs).	923
†S. Gee & Sons (50 pairs).	923

DUBLIN.—Tenders accepted by the Commissioners of Public Works, for October:—

Ardrahan ex-R.I.C. Barracks, Co. Galway—Restoration—

*C. Griffin, Gort.

Carrigaholt ex-R.I.C. Barracks, Co. Clare—Restoration—

*M. Barry, Kiltrush.

Carron ex-R.I.C. Barracks, Co. Clare—Restoration—

*Maher & Sons, Skebreedia, Belharbour, Co. Clare.

Glenamaddy ex-R.I.C. Barracks, Co. Galway—Restoration—

*M. Hussey & P. Keaveny, Stoolpark, Glenamaddy.

Glencolumbkille ex-R.I.C. Barracks, Co. Donegal—Restoration—

*J. W. Cunningham, Carrick, Co. Donegal.

Kilbrittan ex-R.I.C. Barracks, Cork—Restoration—

*J. O'Leary, Donoughmore, Co. Cork.

Listowel ex-R.I.C. Barracks, Co. Kerry—Restoration—

*P. Holly & Son, Tarbert, Co. Kerry.

Oola ex-R.I.C. Barracks, Co. Limerick—Restoration—

*McCaffrey & Carroll, Dromkeen, Co. Limerick.

Robertstown ex-R.I.C. Barracks, Co. Kildare—Restoration—

*P. Sheridan, Newbridge, Co. Kildare.

Tullow ex-R.I.C. Barracks, Co. Carlow—Restoration—

*R. C. Williamson, Abbey Quay, Ennisceorthy.

Oylegate Garda Stochana Station, Co. Wexford—Erection of station—

*J. Bolger, Ballyvoordane, Blackwater, Ennisceorthy.

Ballyfarna National School, Co. Mayo—Extension School—

*W. F. Henaghan, Louisburg, Co. Mayo.

Bruckless National School, Co. Donegal—Extension School—

*D. Dorrian, Mountcharles, Co. Donegal.

Garafine National School Co., Donegal—Erection of Furnace—

*D. Brien, Glensaskehy, Loughrea.

St. Canice's National School, Co. Kilkenny—Erection of School—

*S. Lalor, Kilkenny.

DUNGANNON.—Shelters, for the U.D.C.:—

*Messrs. Mayne. £200

DUNMOW.—Houses, for the R.D.C. Mr. Pumbley, sanitary surveyor, New-street:—

Twelve houses at Dunmow—

*T. A. Goodey, Dunmow. £4,728

Six houses at Dunmow—

*T. A. Goodey, Dunmow. 2,454

Two houses at St. Easton—

*T. A. Goodey, Dunmow. 869

Two houses at Barnston—

*T. A. Goodey, Dunmow. 836

Six houses at Stebbing—

*F. W. Bush, Stebbing. 2,558

Two houses at Bardfield Saling—

*— Pring, Bardfield Saling. 850

DURHAM.—Improvements to heating apparatus electric lighting, &c., at the Girls' County school, the Durham C.C.:—

†R. Southern, Dipton. £169 2 6

DURHAM.—Repairs at Sundial House Farm, the C.C.:—

*T. Coates, Durham. £643 10

DURHAM.—Repairs at The Larches, Durham, the C.C.:—

Geo. Gradon & Son, Durham. £259 8 4

T. Coates, Durham. 234 17 0

*C. W. Gibson & Bros., Durham. 186 0 0

ELLISTOWN.—Enlargement of the Council school for the Leicestershire C.C. Mr. E. G. Fowler, architect and surveyor:—

F. Mason, Kirby Muxloe. £1,808 9 6

H. Chapman, Son, Markfield. 1,739 0 0

Griffin Bros., Hugglescote. 1,575 0 0

Orton & Co., Coalville. 1,549 10 0

*W. Moss & Son, Coalville. 1,498 10 0

EPSOM.—Secondary school for girls, for the S.W. E.C.:—

*Cropley Bros., Ltd., Epsom. £35,712

EXMOUTH.—Eight houses and a sewage filter works, at Littleham, for the U.D.C. Mr. S. Hutton, engineer, surveyor, and architect:—

*D. Ratcliffe, Exmouth. £3,290

EXMOUTH.—Thirty-four non- and sixteen parlour type houses in Marpool Park, for the U.D.C. Mr. Hutton, engineer and surveyor:—

*Harris Bros., Exmouth. £21,000

FAREHAM, HANTS.—Alterations at 61, West street, for Mr. G. W. Corbin. Mr. G. E. Smith, architect, Southsea:—

A. E. Porter & Sons, Portsmouth. £695

John Lay & Co., Portsmouth. 693

Tanner Bros., Southsea. 673

Jno. Croad. 659

*P. J. Davis & Sons. 645

FINCHLEY.—Assembly hall at Albert-street School for the E.C.:—

Compton Bros., Finchley. £1,770 12 9

†Stevens & Sons, Muswell-hill. 1,687 0 0

FORRES.—Church, for Mr. J. M. Portier, M. Willis, architect, Elgin:—

Builder—*D. Ross.

Glazier & d. Painter—*A. Macdonald.

Carpenters—*A. & R. Dunbar.

GLASGOW.—Painting work on the extension the Dalmarock power station, for the T.C.:—

*A. Gardner, jun. £692 12 5†

GLASGOW.—Brick, &c., work for Bellefield Sanatorium, for the T.C.:—

†W. Taylor & Son (Glasgow), Ltd. £23,515 15 7

HASWELL.—Electric light installation in the boys' and infants' departments of the Council school for the Durham C.C.:—

†Simm & Richardson, Newcastle-on-Tyne. £1,844 7

HOLYWOOD.—Works at County Sanatorium, the Durham C.C.:—

New Piggeries—

*Waldumar Bungalow Co., Wolsingham. £461 14

Extension of Staff Quarters—

*T. Lee & Sons, Westgate. 277 10

HULL.—For (a) 18 houses and shop in Hesselrope (b) 24 houses in Victoria-avenue, and (c) 13 houses Westbourne-avenue:—

(a) *J. & S. Williamson.

(b) *H. Johnson & Son.

(c) *H. Sanderson.

HULL.—Extension at tram depot, for the T.C.:—

*Kettlewell, Son, & Co., Ltd. £17,592

KEIGHLEY.—Twenty-one houses in Kirby-street and Hyde-street:—

*H. V. Robinson, Ltd.

WAKEFIELD.—Sixteen houses at Crigglestone, for the R.D.C. Messrs. Massie & Holdsworth, architects, Wood-street.

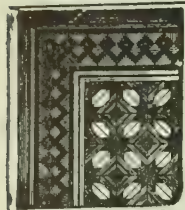
Brickwork—
*J. Marshall & Son £4,116 11 0

Joiners—
*Wilkinson Bros. & Barraclough 2,306 18 0

Plasterer—
*W. Lockwood 714 0 0

Plumber—
*J. Woodhead 910 12 11

Slater—
*J. S. Atkinson 474 5 7



PARQUET & WOOD-BLOCK FLOORING
supplied & fixed complete.
Post or Phone (Park 1885)
details of requirements to
TURPIN'S PARQUET FLOORING CO.,
25, NOTTING HILL GATE
LONDON, W.11.

School & Hospital Stoves

MAKERS OF
WRIGHT'S IMPROVED and also SHORLAND PATENT
WARM AIR VENTILATING PATTERNS.

GEO. WRIGHT, (LONDON) LIMITED
18, Newman St., Oxford St., London, W.1
Barton Weir Works, Rotherham.

J. GLIKSTEN & SON

LIMITED

Specialities in

**SEASONED
HARDWOODS**

MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.

REGISTERED OFFICE AND WHARF

**CARPENTERS RD.
STRATFORD
LONDON E.15**

Telephone:
EAST 3771
(5 lines)

Telegrams
GLIKSTEN 'PHONE
LONDON

WAYLAND.—Ten houses in pairs in the parishes of Merton, Thompson (two pairs), Tottington, and Caston, for the R.D.C. :—

Rice & Sons, West Runton £5,210 0
H. C. Tofts, Hingham 4,695 0
Pearson Bros., Diss 4,191 12
W. Peeke-Vout & Son, Watton 4,250 0
S. Tennant & Sons, Watton 4,250 0
*E. J. Smith, Bunwell 4,200 0

WELLS - NEXT - THE - SEA (NORFOLK).—Ten pairs of parlour-type houses, for the U.D.C. Mr. T. Inglis Goldie, architect, Stiffkey :—

W. J. Pratt, Heacham £10,058 0
Bullen & Son, Cromer 9,625 0
Rice & Sons, Runton 9,082 10
W. Hinson, Wells 9,000 0
W. J. Palmer, Aylsham 8,780 0
*Fisher & Sons, Fakenham 8,460 0
(Architect's estimate, £8,350.)

WELWYN.—Thirty-eight houses on the London-road housing site, for the R.D.C. Mr. H. G. Cherry, architect, 7, Buckingham-street, Adelphi, W.C. 2 :—

John Ray, Letchworth £21,500
G. W. Blow, Welwyn 20,944
Wilmott & Sons, Hitchin 19,722
Simms, Son & Cooke, Nottingham 19,342
Bennet Bros., Letchworth 19,300
Arthur Carter, Luton 18,950

WEST CORNFORTH.—New mixed Council school, for the Durham C.C. :—

†G. W. Lazenby & Co., Ltd., Ferryhill.

WILLINGTON.—Additional classroom, heating chamber, latrines, &c., at the Infants' Council school, for the Durham C.C. :—

†Walton Bros., Crook £1,683

WINGATE.—Re-slating the roof, &c., re-lining the flue, &c., and formation of porch, &c., at the Council school, for the Durham C.C. :—

†T. Coates, Durham £454 3 11

WITTERSHAM.—Village hall, for the Wittersham Village Hall Committee. Mr. A. H. Burtenshaw, architect, High-street, Tenterden :—

W. Harbrow, Ltd., London £1,530
R. Weeks & Sons, Tenterden 1,460
Body & Co., Wittersham 1,450
W. P. Woodgate, High Halden 1,438
H. Payne, Wittersham 1,230
*Ellis Bros., Rye 1,200

WOLVERHAMPTON.—Catholic parish hall at Mary Hill, for the Rev. J. Drinkwater. Mr. G. B. Cox, architect, Colmore-row, Birmingham :—

*J. Jaclean Coven.

J. J. ETRIDGE, J^r.
SLATING AND TILING
SLATE MERCHANTS
CONTRACTORS.

Inspections and Reports made on
OLD OR FAULTY ROOFS
in any part of the country.

Telephone; Bishopsgate 1944/5. or write,
Bethnal Green Slate Works,
BETHNAL GREEN. LONDON. E.

BEST SEASONED

OAK FLOORING

AUSTRIAN
RUSSIAN
JAPANESE

PREPARATION TO ANY SECTION
CAN BE UNDERTAKEN AT ONCE

SYDNEY PRIDAY & SONS

WAINSCOT OAK MERCHANTS (EST. 1888)

Phone
CLISSOLD
6254
(2 lines)

OAK WHARF
RAVENSDALE ROAD
LONDON. N.16.

FITZPATRICK & SONS

MASONS & PAVIORS

Secondhand and Redressed (equal to new)
Granite Setts and Kerb.

York Paving, Crazy Paving, Rockery Stairs,
Granite Spur Stones made to order.

Granite Chippings and Tarmacadam
Granolithic and Setts Paving.

WRITE, PHONE or CALL :—

**455, OLD FORD ROAD
BOW LONDON, E.3.**

Phone : EAST 4808.

HIGH-CLASS

FLOORING

of every description in
WOOD BLOCKS. PARQUET
SEASONED T. & G. WAINSCOT
TEAK AND MAPLE
FACTORY AND ROADWAY PAVING

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASANT
WANDSWORTH, S.W.18.
(Phones : Putney 1700 & 1701)

OUR
CISTERNS,
TANKS, and
CYLINDERS



ARE
BRANDED
"SUN"
BRAND.

TELEPHONE :

(Wandsworth 1700 & 1701)

Chief Offices : 352 to 364, EUSTON ROAD, LONDON, N.W.1.

THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

XIX.—No. 4,322

DECEMBER 4, 1925

LAYMEN AND THE NEW ARCHITECTURE

HISTORY proves that there have been periodic cycles of art movements in the past, but the causes or influences are not so easily determined. Of recent years there is evidence that some movement is in the architectural world. It may be a reaction; it may be the effect of any number of causes, but the fact remains that it is a sign in our social development. The number of books written for laymen upon architecture may either be mistaken or the effect of the general movement, but whichever way we look at it, we can safely say that no opportunities of educating the public have been neglected by those who are called to teach.

A new book of Mr. Manning Robertson* is addressed directly to the layman, with a view to enlisting his interest, and co-operation in our architectural future." So far as we can see, on the flood tide of an architectural revival, and on that account alone its influence should be great. Many methods of interesting the public in architecture have been suggested from time to time, but as a generalisation we might safely reduce them to two classes of thought. Either we attempt to teach the layman architecture or we rail at the structure of society. The author is interested in the layman in architecture, and win his contention rather than to heap scorn upon him for his lack of efficiency in creating the ugly mass of buildings which is the material side of our civilisation. It is a point which is distinctly flattering to the layman, and this spirit in the author undoubtedly adds to the difficulty of his task.

Throughout all through the book that in attempting to educate the layman in architecture the author loses no opportunity in making it clear that it is an education designed to lead him to employ the services of an architect. Here again we note the author's confidence in the layman:—he does not wish him to appreciate, not to become his own architect. The layman is led by a study of architecture to realise the value of his ignorance, and the inference is that henceforward that his house is designed and built by an architect. The author is quite frankly that we are a little sceptical about the results, but any method of raising the standard of architecture is to be commended. We may regard decent architecture as a social duty; nevertheless, we realise that a working knowledge of good architecture must lead to a fuller enjoyment of it.

Observations seem to us to be necessary, in face of the warning that the architectural profession is anxious to have State registration. Whether this will simply mean that a man cannot call himself an architect, while buildings continue to be built without architects, we are unable to say. We agree that "State registration would prevent a man from had not an architect's training and qualifications as such," but if the cobbler can still build his own shoe, it is to be seen the safeguard. In the short outline of the registration we seem to detect a distinction without a difference.

on and the New Architecture." By Manning Robertson, F.R.A.S. (London: John Murray.) 12s. net.

It is a fairly safe axiom that a book on architecture will appeal to the architect if it appeals to the layman, although it by no means follows that the layman will appreciate a book which appeals particularly to architects. It is high praise to say that architects will agree, in the main, with the doctrines, theories, and technical questions raised in this book. Here and there some slight gaps appear to us in the philosophical attitude towards architecture and life, but they are matters for pedants to argue upon. The first chapter on "The Four Circles of Receptivity," is a closely-reasoned philosophical paper developing the analogy between music and architecture. From the layman's point of view the value of the philosophy is a little doubtful, and we have a fear that the author runs the risk of confusing the issue at the very beginning. He is in reality upon much safer ground when he comes to close grips with his subject and writes: "If the following chapters appear at times to drop to an everyday level, it is through the author's conviction that architecture cannot play its proper part in the world until it is brought into relationship with everyday people and common needs and is co-ordinated with them." A complaint of a somewhat similar nature might be levelled against the chapter on Gothic architecture in relation to the modern conception of religion. The mediæval association of Gothic architecture with modern theories upon religion is a connotation which is open to question, and is likely to be objected to by some readers. The whole subject is difficult to argue upon, but it is beyond all doubt that everybody does not experience the same reaction from the religious expressions of Classic or Gothic churches. We raise the point merely because we fear that the layman, in the process of absorbing architectural knowledge, may feel he is being tried a little too far.

The author deals with many controversial subjects throughout the book in a robust common-sense manner which we admire, and the point we raise is the one exception where we are inclined to question the inclusion of a subject, even if we are in general agreement with his conclusions. Upon all the many constructional and domestic problems which come under the wide scope of architecture, and upon the various social questions which affect architecture, we find a well-balanced judgment and sound conclusions. As a reformer the author displays precisely those qualities of diplomacy and "practical idealism" which the idealist so often lacks. In many respects, the spate of misdirected and uncontrolled idealism which we have experienced during recent years constitutes one of the great dangers to the country. This book imparts a steadying influence upon so many of these matters which the layman is apt to get out of perspective, and every reader will feel this influence while he is broadening his understanding and conception of architecture.

We close with an elegant extract which in itself is ample justification of the need for this book: "It is melancholy to note that when the inhabitants of a town in these islands discover a district of peculiar beauty in the neighbourhood of a town and decide to build their houses and live there, the first thing they do is to spoil it." The book is well illustrated with photographs, many of them representing architectural forms full of suggestion and power. The author deserves the thanks of the architectural profession for a stimulating work which ought to be read by everyone.

NOTES.

Develop- ment of Oxford.

THE new Mayor of Oxford, the Rev. John Carter, has accepted the help of an advisory committee of architects on the question of the future development of the city. The three architects originally nominated by the President of the R.I.B.A., Mr. Guy Dawber, were Dr. Raymond Unwin, Chief Architect to the Ministry of Health, Mr. Edward Warren, a member of a well-known Oxford family, and Mr. H. S. Rogers, President of the Berks, Bucks and Oxon Society of Architects. The Minister of Health has, however, declined to give permission to Dr. Unwin to serve as he may have to advise on plans that may be submitted by Oxford, and accordingly there has been nominated in his place Mr. F. M. Elgood, F.R.I.B.A., a Past President of the Town-Planning Institute and Housing Commissioner under Dr. Addison at the Ministry of Health. It is expected that the Mayor will accept this nomination.

Royal Commission on Ancient Monuments.

THE report of the Royal Commission on Ancient and Historical Monuments, now issued as a Parliamentary Paper, is full of interest, and gives particulars of the inquiries in regard to ancient monuments in West London, not including Westminster Abbey. Descriptions of the monuments are given, and it is stated that no important monument dating from the earliest

times to the year 1714 has been omitted. One realises how wide is the ground covered when reference is made to buildings in Hampstead and Wandsworth, among the many examples scheduled. The many injuries to ancient buildings during the period of the Gothic Revival has led to a strong reaction, and the desire to preserve those buildings which remain to us is one worthy of all support. We know, however, that the preservation of the old may become something of a fetish, and in the case of ancient glass this is often the case. A too exclusive dwelling on the past tends to depreciation of the present in some minds more prone to archaeological inquiry than creative appreciation, and it may divert us from the

larger issues involved. The free approach in dealing with modern monuments free from the point of view of experience, is as important as preservation of ancient monuments, and this does not always embrace at the time.

Regional Town- Planning: Manchester and District.

THE Manchester district Joint Town Planning Advisory Committee at its fifth annual meeting considered a draft report on a scheme of development for the Region of the Committee. The Advisory Committee is represented by 96 local authorities and the region it covers an area with



Town Hall, Fordwich.



Thesis Design by MR. T. T. WILLS (Fifth-year Student, Liverpool University School of Architecture).

cent to a radius of 15 miles from the centre of the City of Manchester. The approximate population of the region is 90,000 persons, area 1,020 square miles, and assessable value nearly £1,000,000. The report deals in particular with existing and proposed road communications throughout the region, allocation in broad outline of portions of the region for various major uses, such as industrial, residential, and recreational, and of historic interest within the region, mining areas, public utility services, and general notes on town planning.

Statutory Town-Planning Schemes. THE main recommendation of the Advisory Committee, as contained in the report, is that for the purpose of giving effect to statutory town-planning schemes providing for the enforcement of the various proposals carried out of the various proposals of the Committee, the various local authorities concerned should apportion the region into suitable areas and within each such area should themselves establish a Statutory Joint Committee under the Town Planning Act, 1925, and authorise such a Committee to proceed with the preparation of a statutory town-planning scheme to give effect to the proposals of the Advisory Committee. The report, when published, will contain a series of maps, diagrams, &c., illustrating the proposals of the Advisory Committee and main features of the region which is stated to constitute as a whole the most highly developed commercial and industrial area of its size in the country. The report calls attention to the necessity, in the interests of health, industry, and commerce, of the region being developed on co-ordinate lines as suggested by the Advisory Committee, and that all local authorities concerned are urged not to delay in promoting statutory schemes. It is intended that the report on the regional scheme, together with various maps, shall be published in the New Year.

Housing Restrictions. THE present record number of houses built during the year ended September 30 last is raising in official quarters numerous questions affecting the future of municipal and private housing in this country. The total number built during the year was 159,476, of which 85 were built without any subsidy at all. It is hoped, should the rate of progress continue to increase, to bring the Restriction Acts to an end earlier than was expected. Other possibilities are being considered. Is the programme laid down by the Wheatley Act of last year under which it is hoped to build 2,500,000 houses by the year 1935 being carried out? The number of houses built in 1925 was 90,000, but the year ended September 30, 1926, have been built with the State subsidy. Thus it can be seen that the essential condition of the Government proposals for the maintenance of output has been fulfilled.

filled. "Another condition," writes a correspondent, "no doubt skilfully inserted in the Act by the Treasury, has, however, been overlooked. The contributions from the Exchequer are dependent on the cost of the houses being reasonable. But Sir Kingsley Wood stated in the House of Commons last week that the average prices of houses let by local authorities last month were £447 as compared with £436 on June 1, £440 on January 1 last. Approximately it may be estimated that building before the war cost 5d. per cubic foot; that had increased by 1923 to 1s. 3d.; last year to 1s. 4d.; and this autumn in certain districts to 1s. 9d. per cubic foot. There are expert advisers of the Government who declare that if the present subsidies were discontinued, the cost of building would fall by at least the amount that is now being taken out of public funds."

The Lily Maid. THIS interesting figure is one of the recent works by Mr. Gilbert Bayes, and is intended as a garden ornament or fountain. It is executed in glazed

terra-cotta, the flesh portions having a matt surface, the remainder a bright glaze. The hair is blue with warm intervals, the remainder of the colour scheme being in green and blue-green, with the exception of the water lilies, which are white, and a few yellow flowers. The waves at the base are in blue. The height of the figure is 26 inches.

National Housing and Town-Planning Council. WE regret to note that, as a result of a nervous breakdown, Mr. H. R. Aldridge has been obliged to resign the Secretaryship of the National Housing and Town-Planning Council. Mr. Aldridge has done much valuable and disinterested work in connection with the housing and town-planning movement, and it will be widely regretted that his exertions should have been attended by such unhappy consequences to himself. We are sure that our readers will join us in hoping that Mr. Aldridge may be quickly restored to health, and that at some time in the near future he may be able to renew active participation in the work with which his name has become so closely identified.



The Lily Maid. MR. GILBERT BAYES, Sculptor.

GENERAL NEWS

Professional Announcement.

Mr. E. B. Webber, A.R.I.B.A., has changed his address from No. 8 to No. 2, New-square, W.C.1.

Church, Bellingham.

Built at a cost of £10,500, from designs of Sir Charles Nicholson, the Church of St. Dunstan's, Bellingham, was opened recently.

Leicester Electricity Extensions.

The Leicester City Council propose to spend £314,000 on extensions to main services, substations and a new turbo-generator.

Bentley Priory.

Bentley Priory, Stanmore, an historic mansion of seventy bedrooms, has been provisionally sold to the Air Ministry for use as administrative offices.

Proposed Manchester Stadium.

The Town Council propose to erect a modern stadium in Kirkmanhulme-lane. The contractors appointed are Messrs. T. G. Simpson, of London.

Proposed Aberdeen Barracks.

New barracks for the Gordon Highlanders are to be built on a fifty-four acre site near Aberdeen, at a cost of £150,000. There will be accommodation for 800 men.

Welsh University Extensions.

Extensions are to be made to the buildings of the University of South Wales and Monmouthshire, in Cathays Park, at a cost of £150,000. The architect is Mr. W. D. Caröe, of 3, Great College-street, Westminster, S.W. 1.

Proposed Thames Tunnel.

Local authorities on the Thames side are to hold a conference at the House of Commons to consider ways of advancing the proposal for a lower Thames tunnel and a new connecting railway.

Liverpool Smoke Abatement Scheme.

Liverpool Corporation have decided to erect 250 all-electric houses on their Walton Club-moor estate. These will be specially constructed without flues and chimney-pots, and other means of ventilation will be adopted.

Ancient Monuments.

The ninth interim report of the Royal Commission on the Ancient and Historical Monuments and Constructions of England has just been published, price 3s. The Commission recommend a list of monuments in London as "especially worthy of preservation."

A.A.S.T.A. Smoking Concert.

The annual Bohemian Smoking Concert of the Association of Architects', Surveyors' and Technical Assistants was held recently at Carr's Restaurant, Strand, in aid of the Architects' Benevolent Fund. Mr. F. Fiander Etchells

(President of the Association) occupied chair. The talent and versatility of the artistes employed ensured complete success, everyone present spent a very happy and able evening.

Obituary.

We regret to record the death, on November 25, at the age of seventy-seven, of Walter Stuckey Paul, A.R.I.B.A., head firm of Messrs. W. S. Paul & James, architects of Bristol.

COMPETITION NEWS

Competitions Open.

Particulars published in "The Builder."

- | | |
|--|----------|
| Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply parties., 35, Old Queen-street, S.W.1 | April 24 |
| New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool | Aug. 7 |
| Houses for Smaller Middle-Classes and Intellectual Workers. Held under auspices of International Federation of Building and Public Works. Prizes: 1st, 500 dollars; 2nd, 300 dollars; 3rd, 200 dollars. Write to Director-General of the International Federation, 17, Avenue Carnot, Paris | Oct. 30 |
| Art Gallery and Museum, Birkenhead. Limited to competitors practising within 20 miles of Birkenhead since January 1, 1923. Premiums: £250, £175, £100. Sir Robert Lorimer, A.R.A., assessor. £2 2s. deposit. Apply Curator, Central Public Library, Birkenhead | Oct. 16 |
| Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London | Aug. 14 |
| Royal National Eisteddfod of Wales, Swansea, Competitions: (1) National Parliament House of Wales (Prize, £100); (2) Street Facade to a Large Store (Prize, £25); (3) Set of Measured Drawings of Architecture (Prize, £25). Apply for programme to publishers, Messrs. Morgan & Higgs, Heathfield-street, Swansea (1s. 2d. post paid). Mr. Arthur Keen, F.R.I.B.A., Assessor | Nov. 6 |
| Incorporated Architects in Scotland: (1) Rowand Anderson Medal and £100; City Art Gallery and Museum; (2) Rutland Prize (£50) for Study of Materials and Construction; (3) Prize (£10 to £15) for 3rd year Students in Scotland; (4) Maintenance Scholarship, £50 per annum for 3 years. Apply Secretary of the Incorporation, 15, Rutland-square, Edinburgh | Nov. 6 |
| Plan for construction of Conference Hall, for League of Nations, Geneva. International Competition, Sir John Burnet being British representative on Jury of Assessors. 100,000 Swiss francs to be divided among architects submitting best plans. Programmes with R.I.B.A., 9, Conduit-street, where intending competitors should apply. Single copies from Secretary-General, League of Nations, Geneva, on payment of 20 Swiss francs. | Jan. 2 |

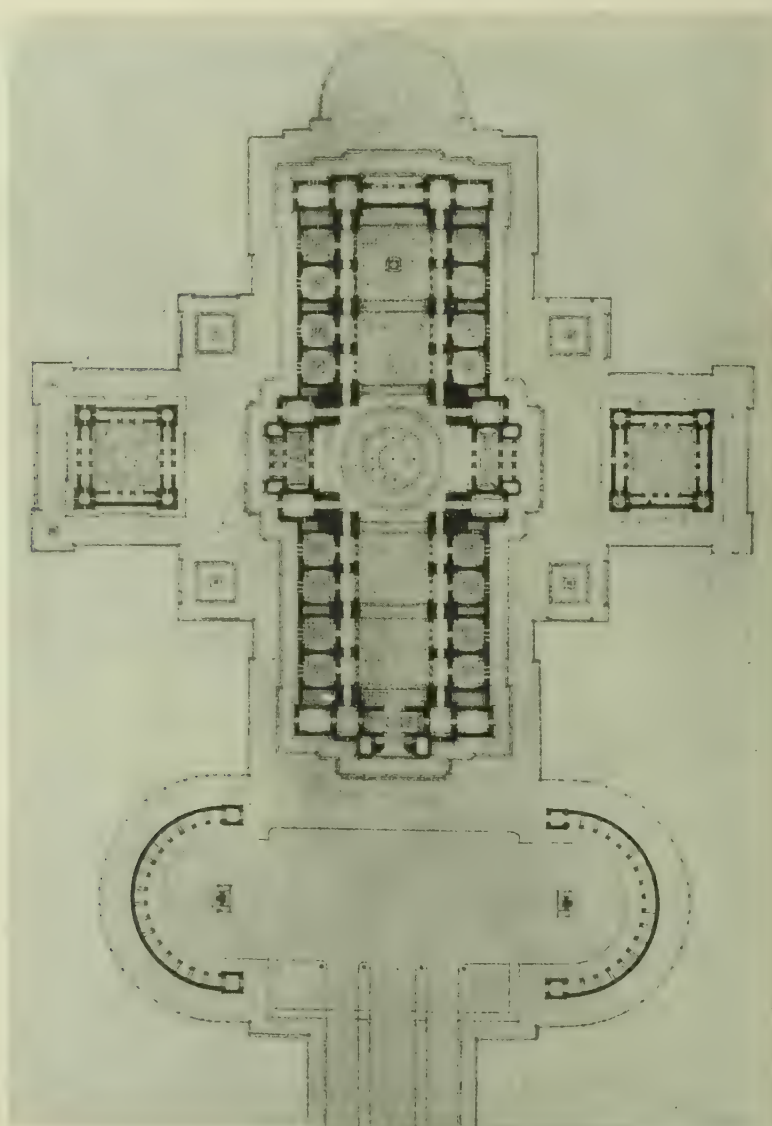
* Competitions when "warned" or vetoed R.I.B.A. are starred.

Infectious Diseases Hospital, Balby.

A competition is to be held shortly by Public Health Committee of the Don Town Council, for a new Infectious Diseases Hospital, to be built at Balby. Mr. Milburn, of Sunderland, has been appointed assessor.

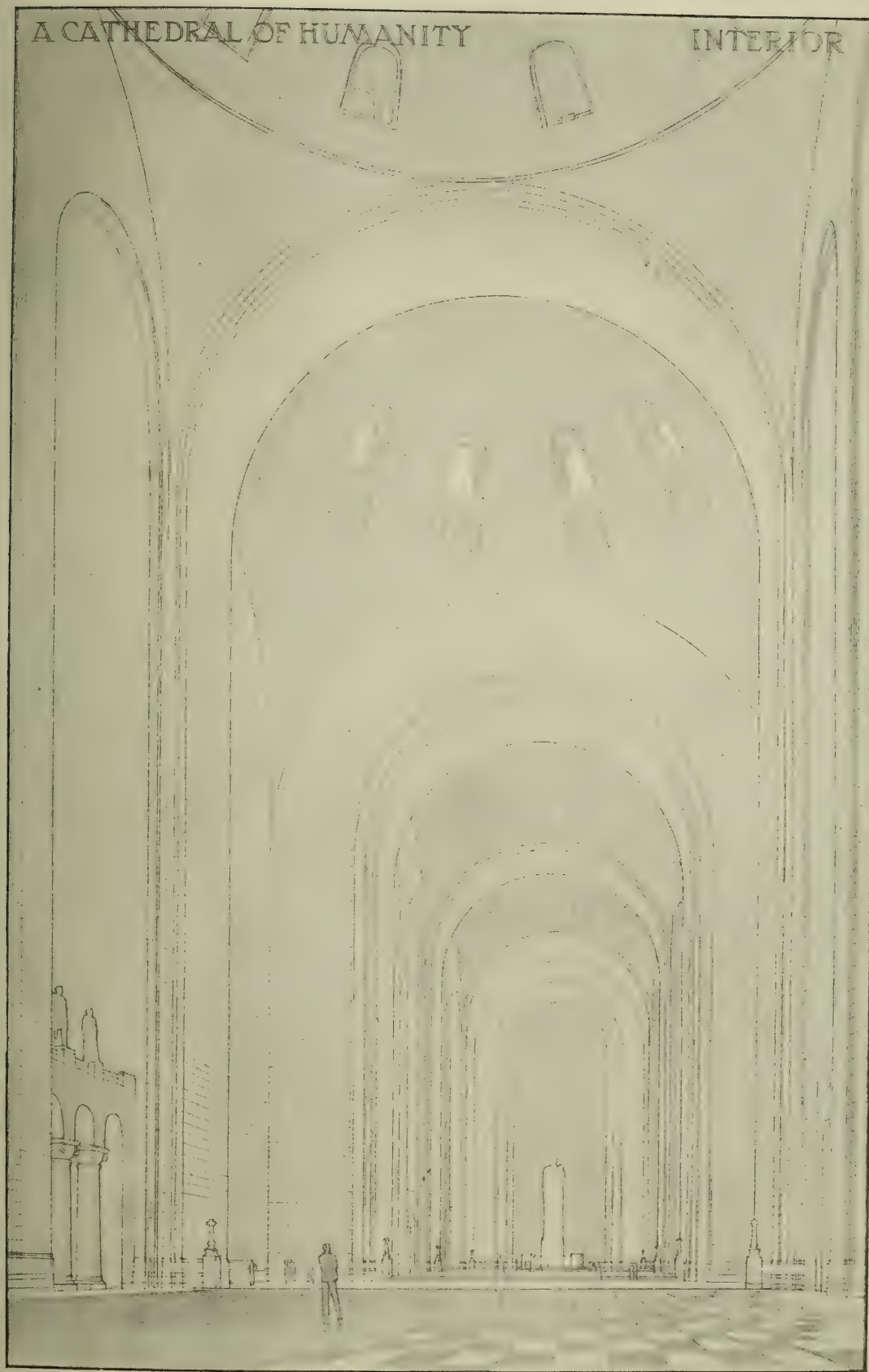
Blackpool Memorial Clock Tower.

The President of the R.I.B.A. has nominated Mr. E. Bertram Kirby, O.B.E., F.R.I.B.A. assessor in this competition.



A Cathedral of Humanity: Plan.

Thesis Design by MR. T. T. WILLS (Fifth-year Student, Liverpool University School of Architecture).



Thesis Design by MR. T. T. WILLS (Fifth-Year Student, Liverpool University School of Architecture).

CORRESPONDENCE

Architectural Competitions.

SIR,—With regard to the editorial note respecting architectural competitions in last week's issue of your journal, in which you say "we should like further information in reference to the remarks, in the case of the Manchester Competition, given by one of our correspondents in our last issue that the Institute issued a statement that no action could be taken because it would cut at the basis of the competition system," we beg to say that this information emanated from the Institute and that we had every reason to believe that it was authoritative. A. W. S. & K. M. B. Cross.

The Rima Controversy.

SIR,—May I congratulate you on your fair comment in regard to the Rima controversy—which is welcome in the midst of so much that is unfair? I would like also to point out that the whole problem of public monuments ought to come up for public consideration—before a committee and in the form of an inquiry—should the problem be settled by general public taste, by local bodies, or by experts? The way in which commissions are given to artists for public works of art needs revision.

AMELIA DEFRIES.

Moor Park Building Competition.

SIR,—I know nothing about this competition beyond the publication of the "first premiated" house in last week's *Builder*, and as to that I congratulate Mr. P. D. Hepworth on the admirable character of this design, particularly for his educational treatment, which is eminently suitable and artistically restrained. Once I made the mistake of locating the w.c. in a similar position, but in my plan the entrance vestibule was much more airy and capacious. In any case, such a situation is objectionable. A visitor might arrive and perhaps some chance caller not be taken into one of the sitting rooms. The w.c. in use, there is no escape for the user, and the discharge of the flushing adds to this difficulty, which is bound to arise; while, in the absence of a ventilated lobby, which sanitary experts wisely insist on, unavoidable odours must occur. Besides, the by-laws would oblige the use of a ventilated upcast pipe in a conspicuous place near this entrance door and carried up beyond the eaves. The servants' w.c., in this selected plan, is open to the same objection; and upstairs the w.c. door is needlessly conspicuous from the "upper hall." This fault, which is not merely a matter of sentiment, could have been obviated by turning the bath room round about and putting the w.c. by the side of the linen cupboard to the east end, and so keeping the soil drain away from the tradesmen's entrance. I note that the word "Toilet" is written on the ground plan—(although a closet pan is drawn there)—but the rise in the staircase seems inadequate to allow an adult to use compatibly a wash hand-basin as an alternative. Perhaps the trellis of the porch may account for the omission of the window to this "lavatory," and I have no wish to be hypercritical; indeed, my purpose is to point out the first-named detail which my own experience taught me to avoid as detrimental to the family amenities of a comfortable dwelling.

F.R.I.B.A.

Welsh Dam Disaster.

At the resumed inquest, held at Conway, on the eleven victims of the dam disaster at Dolgarrog, evidence was given to show that the burst was due to the escape of water underneath the foundations. After technical evidence had been given on various points, the coroner, addressing the jury, stated that it was clear that, at the point of the breach, there was no foundation. The persons responsible in the first place were the builders of the dam, but the engineers were responsible for seeing that the work was properly done. There had been gross, even criminal, neglect on the part of somebody, but they could not trace who was responsible at this distance of time.

SOCIETIES AND INSTITUTIONS

THE R.I.B.A.

(Henry Jarvis) Ex-Service Scholarships.

IMMEDIATELY after the Armistice the R.I.B.A. Council initiated a scheme for assisting ex-Service men who were students of architecture by the grant of scholarships at the leading schools of architecture. The working of this scheme has now been completed, and the results can be finally estimated. The ex-Service scholars have been drawn from no less than ten schools of architecture in England, Scotland and Wales, thirty-five students have received financial help in obtaining their professional training, and a total sum of £2,500 has been distributed in this way.

The following table contains full particulars of the working of the scheme:—

School.	1920.	1921.	1922.	1923.	1924.	Total No. of Students.
School of Architecture, Architectural Association..	£100	£75	£75	£30	£150	7
School of Architecture, University of Liverpool ..	100	100	75	50	125	6
School of Architecture, University of London ..	—	100	100	100	75	4
School of Architecture, The Victoria University, Manchester ..	50	50	50	50	50	3
Glasgow School of Architecture ..	—	50	50	50	50	3
School of Architecture, Edinburgh College of Art ..	—	50	50	50	50	4
Leeds School of Architecture ..	—	50	—	25	50	3
Robert Gordon's College, Aberdeen ..	—	50	50	50	50	2
The Technical College, Cardiff ..	50	50	50	50	—	2
School of Architecture, University of Cambridge ..	—	50	—	—	—	1
Total ..	—	—	—	—	—	35

Scholarships at Exempted Schools of Architecture.

We have received from the R.I.B.A. a list of the scholarships available at Exempted Schools of Architecture. Copies of this list may be obtained at the R.I.B.A., 9, Conduit-street, W.

Diploma in Town Planning.

Mr. John Malcolm Dossor, F.R.I.B.A., has passed this Examination, and has been granted an R.I.B.A. Diploma in Town Planning.

BRISTOL SOCIETY OF ARCHITECTS.

At the second sessional meeting of the Bristol Society of Architects, held in the studios of the Royal West of England Academy on November 20, Mr. F. R. Yerbury, Hon. A.R.I.B.A., delivered a lecture on "Modern Architecture in Scandinavia," illustrated with lantern-slides from his own photographs. Mr. R. C. James, F.R.I.B.A., presided. The lecturer showed several views of old buildings in both Denmark and Sweden for the purpose of indicating the general character of the old work, which formed the traditional inspiration for the modern movement in design. He mentioned, on passing to the more modern styles, that Denmark could show some of the best work in Europe. Numerous views of buildings in Copenhagen—including the new police courts completed about two years ago—were shown.

Swedish architecture was treated in a similar way, pictures of some of the exhibits at the Gothenburg Exhibition (1923) being shown. Mr. Yerbury remarked upon the great amount of architectural sculpture to be found in Sweden, and said he thought more attention was paid there to that department than in England. Views were shown of the Town Hall at Stockholm, by Ragnar Ostberg, completed about three years ago, and described by the lecturer as possibly the finest building in the modern architecture of the world.

LEICESTER COLLEGE OF ARTS AND CRAFTS.

The Leicester College of Arts and Crafts is holding an exhibition of students' work in two parts, one in the College, showing general work done during last session, and the other in the City of Leicester Art Gallery, showing work done during the vacation.

The Department of Architecture is represented

by the prize drawings of the Leicestershire Society of Architects, consisting of a set of measured drawings of Weekley Northants, together with some good made on the spot by Mr. J. E. Potter. The same student exhibits his travelling studies, drawings showing evidence of the historical architecture and including excellent sketches of English Gothic work. W. K. J. Harrod shows a set of measured drawings of St. Mary's Home, Leicester, well rendered.

The local prize drawings for design and construction comprise a design for the quarters of a County Territorial Association. This is by Mr. J. E. Potter, the drawings including diagrams and calculations of the construction together with a water-colour perspective. The drawings show the method of cultivating draughtsmanship practised in the Department and some examples of elementary design by first and second year students.

In the Department of Building Crafts some interesting woodwork, particularly cabinet making, a bedstead, music cabinet, and an occasional table in mahogany being examples of good, simple furniture.

The exhibition of vacation work includes a series of sketches of architectural subjects. Mr. J. E. Potter, the travelling student of the Society, who visited Belgium and the Netherlands, shows other architectural sketches of interest. Mr. W. E. Marston.

COLLEGE OF ESTATE MANAGEMENT.

The first of two lectures on "Town Planning" was delivered by Mr. Raymond Dossor, F.R.I.B.A., at the College of Estate Management recently. After describing the aims of the Town-Planning Act, the lecturer dealt at some length with the effect of town-planning schemes upon land values, particular with the effects of the restriction of building density imposed by such schemes. He showed that a high density entails a relatively high cost of roadmaking and sewers, and a considerable loss of frontage at intersections, so that where land was cheap it did not pay even a small landowner to develop with too high a density. The lecturer especially the case when the ground was steeply sloping, for the more open development of the roads to be planned to suit the conditions with a considerable saving in depth of cut. In the case of the large landowner a factor to be borne in mind was that if the land was not high more land would become available from an agricultural to building value, a number of houses required was fixed, and rate of increase of population. His land as a whole would therefore yield a higher income. Where the land was divided into many owners the same was true of the owners collectively, although a few individuals might suffer damage. In respect of land reserved for open spaces, he pointed out that the value was not lost but removed to neighbouring land, which possibly would not be built upon, all if such open spaces had not been reserved, and in any case must benefit by the presence of such spaces.

NORTH STAFFORDSHIRE A.A.

The first of a series of lectures by the architects, inaugurated by the North Staffordshire Architectural Association, has been given in the New Council Chamber, Hanley, by Topham Forrest, F.R.I.B.A., Architect, L.C.C. The subject of his lecture was "Development in the United States of America."

STREET ARCHITECTURE.—X

By V. M. CHRISTY.

MOORGATE AND BEYOND.

THE impression produced by the present Moorgate is that it is a street of experiment. Recently have the name-plates been altered from Moorgate-street to Moorgate, plain and simple, which is the more ancient name, retaining much topographical history. In fact, Moorgate has been street for less than a couple of hundred years. In the mid-eighteenth century it was being planned, and the end of the century saw George Dance, junior, laying out Finsbury-square, where the trim severity of the sides of tall houses is so gracefully tempered by the swinging curves and stucco reliefs of the north side, where Moorgate joins the square. The value of land here when this was a newly-enclosed residential district was very different from what it was in the time of Edward II, when the fen or moorfield stretching from the wall of the city . . . to Fensbury and to Holy Well . . . all letten for four marks the year." In 1415 the blithespirited mayor "caused the wall of the city to be broken towards the said moor, and the postern called Moregate, for the ease of the citizens to walk that way upon causeys towards Iseldon and Hoxton." How fine a day pleasure to 'walk on causeys' over the moor to Islington! Even to-day there is an exhilarating sense of adventure, a feeling of being on a ramble in the country, if, on a sunny day, one passes beyond Moorgate, beckoned by the budding green or the golden fire upon the stretched branches of the trees at the Artillery Company's headquarters. It is strange how much this military building and its surroundings contribute of a garden-like rural touch to this section of the street. It is interesting, because the Artillery ground, which used to be there in the seventeenth-hundreds, was the successor to the "plain field for archers' foot in," made in 1498 in place of "all the lands which had continued time out of mind out of Moregate." In the moor fields there are "tenter-grounds" too, in the old days, the clothworkers stretched their cloth on tenterhooks, not far from Bethlem Hospital. An air of calm detachment from the bustle and rush of the city of to-day is given to the few score yards by the tree-decked barracks, the Wesley's Chapel, with its quiet open space and the iron gates, where the great preacher's benignly surveys the individual passers. Altogether there is a strangely gripping sense of spacious peace and unhurried sweetness, a little bit of what is now the City-road. To return to Finsbury-square and Moorgate proper. In addition to the more decorative features of the square one notices with pleasure the variety of flower forms in the shallow blind arcades in Dance's tall house fronts. Moreover, the attic dormers peep like half-open eyes over the parapet, belying the rigidly unhumorous and stiff lines of formal windows and doors. The large and rather pretentious modern office buildings at the corner of the square are a little pompous, with their domes and pediments and emphatic stonework. But after all there is a sort of compliment in the fact of their compositeness. It is as though they admitted that only exceptional buildings of to-day can compete in dignity with the simple brickwork of the older parts of the square, and there was no room for it but to perform rather emphatically in stone and steel, if the products of the latter part of this century were to stand without shame beside those of their forerunners. The fact that at present these large newcomers are not to occupy the terminal and corner positions in the square prevents any undue sense of aggressive assertiveness among the older occupants. It is, however, deplorable that the only too prevalent lack of co-operation in street frontage has caused a semi-fragmentation of the unity and happy continuity which should be evident in that more "trimmed" street of the eighteenth-century square. Finally, part of the Adamesque external wall here has been repainted at various times in differing tones of colour. It is, there-

fore, only by persevering analysis of form unaided by colour that one can fully appreciate the pleasing grouping and composition of this block, so carefully designed to present a complete and satisfying whole to the eye of the observer. Of course, the alterations to the ground-floor doorways and windows here and there break the complete harmony and regularity; but because the principal binding lines and the features acting as *foci* are chiefly concentrated on the upper the interruptions on the lower are not so tragic as the indiscriminate painting which produces false values.

From Finsbury-pavement Londonwards, in Moorgate, one comes upon more and more evidence of the experimental character of this stretch of highway. There are some fat, florid, overfed buildings, exuding either retrospective or anticipatory prosperity in their cumbrous decoration. Some unobtrusive, dignified stucco fronts stand between the restless "solid" buildings with coarse experimental detail and the emotionless metallic rigidity of somewhat later experiments. One of these large metallic-character buildings is a very successful experiment in mass composition, but fails to achieve pre-eminence owing to its overloading with experimental decorative features. Not far off is another type. No fussiness this time, but a good straightforward block, given distinction by the bold use of long straight lines of balconies with solid, outspoken balusters. An experiment, this, in direct, telling phrases. Then there is a curious experiment in the mingling of columns, gables and domes. In juxtaposition with a turret surmounted by a dome—a remarkable combination in any case—is a gable whose open front displays four stumpy Doric columns with no very obvious mission. A characteristic experiment of 1908 has curved window bays on plan, and some swags hung here and there, but there is nothing assertive or aggressive about it. It is content to stand serenely among the other experiments, quietly contributing its part to the whole, and displaying its date-label with unassuming self-respect. As unlike this and some other buildings as it could well be is a study in straight lines, a long horizontal stretch of building with a slightly raised central feature, a species of semi-attic, giving a satisfying "full-stop" to the whole rather curt statement. It has a well-defined silhouette in spite of the reliance on long low lines instead of curls and bends. Among the other buildings one notices in mass or in detail in this street is one with an experiment in doorways, or rather in apparent doorways; the entrance to two separate parts is combined under one semi-circular porch-like cavity designed in a manner combining formality and freedom. Remarkable for its entrance, too, is the recently erected experiment in the stucco manner in stone, near London-wall. This is one of the most attractive buildings in the street. It has the dignity of the cream-painted shipping offices without their unimaginativeness, and the straightforwardness of the newest things in the metallic manner without their frigid defensiveness. It is a neat little block, discreetly reticent, sparingly adorned, self-possessed. The entrance has an air of inviting and encouraging the coming-in of those concerned with whatever the business destined to occupy the rooms within. Too often an entrance to office premises repels by its over-pompousness or by its meanness. Neither fault is present here. A building which is an antithesis to the dignified unobtrusiveness of this one soars self-consciously above its fellows, flaunting its small-paned casements. It offends not by its existence as an experimental whole, but by its existence here, even in this street of experiment. Others there are which experiment with the variety of appendages which they can muster on their street front—heads, rolls of stone bank notes, coins of many sizes, and fantasies many and various.

Most recent and most important of all experiments in Moorgate is Britannic House. That is a colossal experiment. It is experimental,

both in mass and in detail. The unaccustomed relative values of the parts making up the vertical composition are a trifle puzzling. In examining each story or order as a unit and in relation to the whole, the uppermost of the three main parts is seen to be the most important; the eye, therefore, does not readily accept the fact that it is at the top, with two other stories of equal value to one another below it. One is more accustomed to find, where the principal part of a composition is placed at the top, that it is the upper of two parts, the lower forming a podium or base of distinctly less importance, or of contrasting character. Here the impressive top portion, with its columns and immense windows, seems a trifle "skied," as if standing on the top of another complete composition, rather than upon a base designed to support it. Another unfamiliar feature is the introduction of severe rectangular openings from some of which a profusion of carved flowers and fruit appears to flow. These rectangular openings give a sternness difficult to reconcile with the exuberance of the other details. There is a certain restlessness, too, which is disturbing in connection with the reposeful poise of the main mass. The partially rusticated surface on the portion otherwise flush-jointed is an experiment provocative of a sensation of indecision, where so many divers interests claim attention. In this second stage, where the emphasised joints occur, the eye does not readily find resting places in its tour over the face of the building. The wealth of fine ornament is a reaction against the cold harshness which characterised experiments of a few years ago.

To appreciate fully the real magnificence of this building, it must be studied from the Finsbury Circus side. Here in the quiet and detachment of the oasis, one can offer the unhesitating admiration which cannot be given so readily in Moorgate, where the building is too much on the top of the observer. Here in the Circus, the splendid sweep of the curved front is seen to be skilfully steadied by the detached pylons and the standing figures of the building itself in such a way that, while the building is intimately related to the circus in that it forms one of its arcs, it is yet a complete independent whole. On the Moorgate side, partly perhaps owing to the atmosphere that seems to characterise the street, it is impossible to appraise it at its real value; it is like the other, an experiment.

But, after all, the whole history of architecture is a series of experiments in mingling the ingredients, stone and wood, brick and steel, with the variable needs of the day, and pouring them molten into the mould of the architect's imagination. Moorgate, the street of experiment, is, therefore, a very typical London office street.

Restoration of Durham Castle.

Progress is being made with the scheme of restoration now proceeding at Durham Castle. The plastering has been removed from the windows, disclosing the original stonework; the outer walls and foundations have been strengthened by the insertion of bronze ties; decaying buttresses have been restored; and it is expected that the western wall will soon be firmly fixed upon concrete foundations.

Incorporation of Architects in Scotland.

We have received the Autumn Quarterly Illustrated of the Incorporation of Architects in Scotland, of 15, Rutland-square, Edinburgh. This issue is a thoroughly interesting one. It contains a biographical sketch of Archibald Simpson, of Aberdeen (1790-1847), who is stated as having done more than any other architect to give character and beauty to his native city. A lecture on "Eighteenth-Century Architecture," by Mr. J. A. Gotch, F.S.A., P.-P.R.I.B.A., to the Glasgow Institute of Architects, is reproduced, together with a paper on "Ideals," by John Watson, jr. Other items include an article on the restoration of St. Andrew's Cathedral, "Architecture and General Education," and "The Students' Vista."

LEADING CONTENTS. PAGE

LAYMEN AND THE NEW ARCHITECTURE....	797
NOTES	798
GENERAL NEWS	800
COMPETITION NEWS	800
STREET ARCHITECTURE—X	803
PHILIP WEBB AND HIS WORK—XI.....	811
ARCHITECTS' AND BUILDERS' INQUIRY	
BUREAU	816
THE BUILDING TRADE	817
THE ORGANISATION OF A BUILDERS'	
BUSINESS	818
PUBLIC WORKS, ROADS AND TRANSPORT	
CONGRESS	819
NEW BUILDINGS IN LONDON	821
CONTRACTS, COMPETITIONS, ETC.....	822
PROPOSED NEW BUILDINGS AND OTHER	
WORKS	826
PATENTS	827
THE SCOTTISH BUILDER.....	829
TENDERS	831

ILLUSTRATIONS

London School of Tropical Medicine and Hygiene.

We publish this week illustrations of one of the five invitation designs (that of Mr. Alan E. Munby) for the Rockefeller School of Tropical Medicine, to be erected in Bloomsbury. (It will be remembered that the design of Mr. Morley Horder was accepted.) The building is to occupy the site bounded by Gower, Keppel and Malet-streets. The conditions required 100,000 sq. ft. in rooms above the basement, and the design shown provides 100,814 sq. ft. on the ground and four upper floors, with the main frontage to Keppel-street and entrances to this and the wing blocks. The buildings enclose a court, 132 ft. by 60 ft. 6 in. at least dimension, and are designed with a view to simplicity in construction (the bays running through from street to street), ready circulation by central corridors, and good natural lighting, which is essential for research work. The ground floor is devoted to administration, a large lecture theatre, conference hall, and a small department of epidemiology and vital statistics; the first floor to the main museum, which occupies the whole of the frontage. The department of physics and applied physiology and the library are placed in a quiet and central position. The second floor accommodates a publication bureau and recreation rooms, and the sanitary administration section in the wings, the frontage being occupied by the upper part of the museum. The third floor comprises the tropical section of the museum and the large department (12,000 sq. ft.) required for medical biology. The top or fourth floor provides for chemistry, biochemistry, and bacteriology, a cinema unit, animal quarters, and caretaker's flat. The basement contains a P.M. theatre, X-ray and photographic rooms, stores, cloakrooms, and heating and ventilating plant. The central court is approached by roadways from both streets under the lecture theatre. An accelerated hot-water system was proposed for heating, and an extract system of ventilation by fans, operating in four vertical shafts. The construction proposed was a steel-framed building, with filler joist floors and brick wall faced in Portland stone. The fittings and engineering services, which are elaborate, involved the submission of a separate set of plans for their elucidation. The cube of the design is 2,555,144 ft.; and the cost of the building and its fittings was estimated at nearly £350,000.

Wyke Manor, Pershore, Worcestershire.

This house replaces an eighteenth-century one of poor design, erected on the site of a much earlier house or half-timber which was destroyed by fire. The plan follows, as far as possible, the outlines of the original house, with an inner courtyard of irregular shape. The building, including the interior panelling, was carried out by Messrs. Bridgeman & Sons, Lichfield; the heating by Messrs. Comyn Ching & Co., Ltd., London; and the electric lighting by Mr. T. A. Savage, Acton. The architect was Mr. Cecil G. Hare.

Loggia and Courtyard, Grosvenor-square.

This attractive enclosure has been built from the designs of Mr. E. Vincent Harris, F.R.I.B.A., at the back of Mr. Courtauld's house, No. 47, Grosvenor-square. The garden wall to Carlos-place is an excellent piece of design in plain brickwork. The general contractors were Messrs. E. H. Burgess, and the following were sub-contractors:—Messrs. Grierson, Ltd., electric light; Messrs. Ames & Finnis, tiling; Messrs. G. Jackson & Sons, Ltd., fibrous plaster work; The Daneshill Brick Co., special bricks; Messrs. Rust's Vitreous Mosaic Co., mosaic work; Messrs. Carter, squash court plaster; and Mr. George Alexander, carving.

A Cathedral of Humanity.

We illustrate this week a thesis design by Mr. T. T. Wills, a fifth-year student of Liverpool University School of Architecture.

New Operating Theatre, Hospital of St. John and St. Elizabeth.

We regret that in connection with the illustration of this operating theatre, published in our issue for November 27, the initials of Mr. H. W. Binns were inadvertently omitted. We are asked to state that Mr. Binns has acted as sole architect in connection with much work at the Hospital, spread over a period of nearly fourteen years.

Building in Cheapside.

We regret that the small plan given at the top of page 772 of our last issue, illustrating a work of Messrs. Gunton & Gunton, F.F.R.I.B.A., was wrongly ascribed. This relates not to the Westminster Bank (the plan of which was not given) but to the small site between the Bank and Messrs. Sweetings' building.

MEETINGS

SATURDAY, December 5.

Building Surveyors' Association.—Quarterly General Meeting. At the School of Technology, Whitworth-street, Manchester. 2.30 p.m.

MONDAY, December 7.

The Society of Engineers.—Mr. H. E. Irving Taylor on "The Growth of the Gothic Church Window." Burlington House, W. 1. 5.30 p.m.

The Institution of Structural Engineers.—(Midland Counties Branch).—Annual Meeting. At the Chamber of Commerce, Birmingham. 7.30 p.m.

WEDNESDAY, December 9.

Liverpool Architectural Society.—Lieut.-Col. H. P. Cart de Lafontaine on "Devastated Regions of France." 13, Harrington-street.

Edinburgh Architectural Association.—Chief Constable Ross on "Traffic Problems in the City." At 15, Rutland-square. 8 p.m.

THURSDAY, December 10.

Society of Antiquaries.—Lieut.-Col. H. F. Bidder on "Recent Excavations at Merton Priory." At Burlington House, W. 1.

Institution of Structural Engineers (Yorkshire Branch).—Mr. E. F. Sargeant on "Concrete Granary at Hull." At the Great Northern Hotel, Leeds. 6.30 p.m.

Architectural Association.—Conversazione. At 34, Bedford-square, W.C. 1.

Southampton Dock Extension.

The plans for the construction of new docks at Southampton by the Southern Railway Company are nearing completion. The scheme will be completed in sections and will occupy several years, the first portion costing £5,000,000. This initial section includes the construction of jetties, capable of accommodating the largest liners afloat, on reclaimed land along the western shore in the direction of Millbrook. The whole scheme will cost over £13,000,000.

ARCHITECT'S CLAIM FOR FEES

IN the County Court, Exeter, recent Mr. Thomas Andrew Andrews, architect and surveyor, Matford-road, Exeter, sued Mr. George Packham, of Rosemullion, Limerick, Cliff, Torquay, and formerly of Hollingdale House, St. James-road, Exeter, to recover £100 in respect of professional services in preparation of plans, specifications, etc., for the conversion of a house into flats.

Mr. F. S. Laskey, counsel for plaintiff, said that Mr. Andrews was consulted by the defendant in August of last year regarding a scheme he had in his mind for the conversion of Hollingdale House into flats. He asked plaintiff what the cost would be, and plaintiff said it was impossible to say accurately, but it would not be less than £700. On the defendant's instructions, plaintiff made a survey of the house, but the scheme was abandoned as it was found to be impracticable, mainly owing to insufficient bedroom accommodation. A much more expensive scheme was adopted and plaintiff was asked to find out what the flats were likely to fetch. He made up figures and found that the probable rent would be £190 a year. He was then asked to prepare plans and get them passed by the City Council, and also requested to prepare bills of quantities and obtain estimates, the defendant naming certain builders from whom tenders were to be invited. The lowest tender was £1,546. Defendant never suggested that time that he was not prepared to expend so large a sum, but he asked plaintiff to prepare the bills of quantities, and plaintiff worked out at £1,512. On January 25 last, defendant wrote that the scheme would be too costly and that the proposed work must be abandoned. He asked plaintiff to make his costs as small as possible, as the scheme had been a loss to him. Plaintiff told him that he had spent over 200 hours on the work, but would not charge him the full scale. It was not until April that it was suggested that plaintiff had exceeded his original commission, and he offered to refer his account to the arbitration of any architect in the city.

Giving evidence, Mr. Andrews said that he charged the full fees his account would have been between £140 and £150, and that on the lowest scale he would have been entitled to £115 or £120.

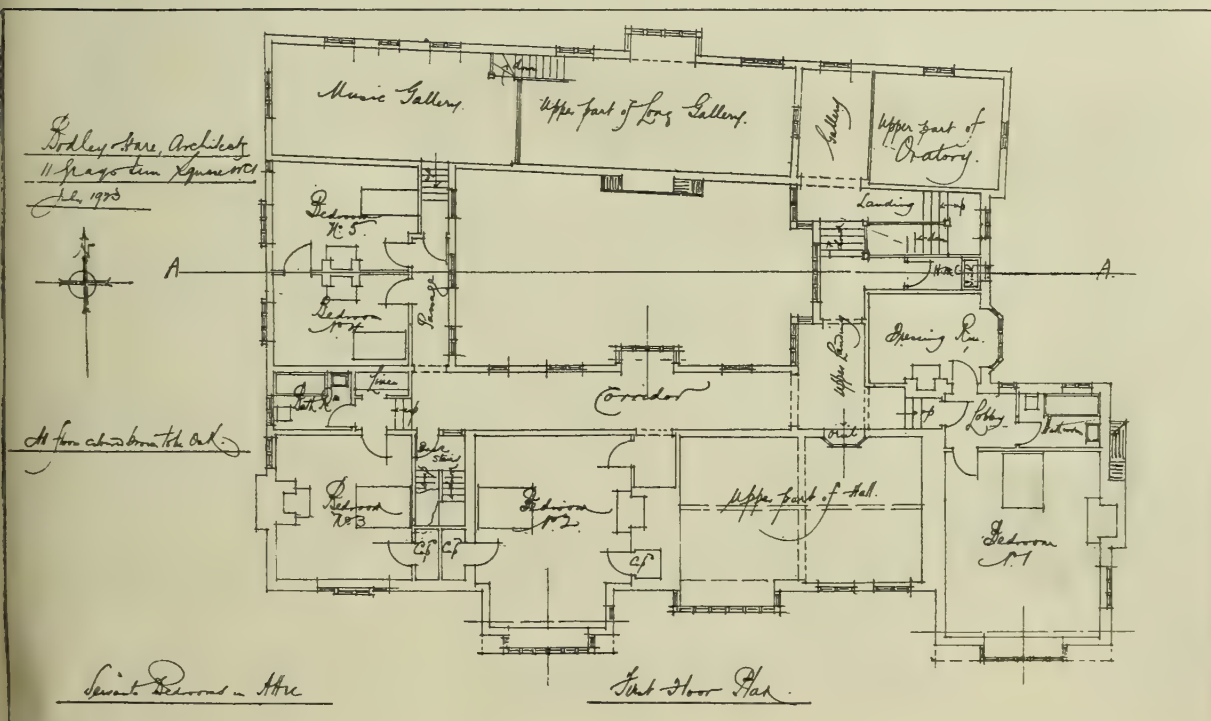
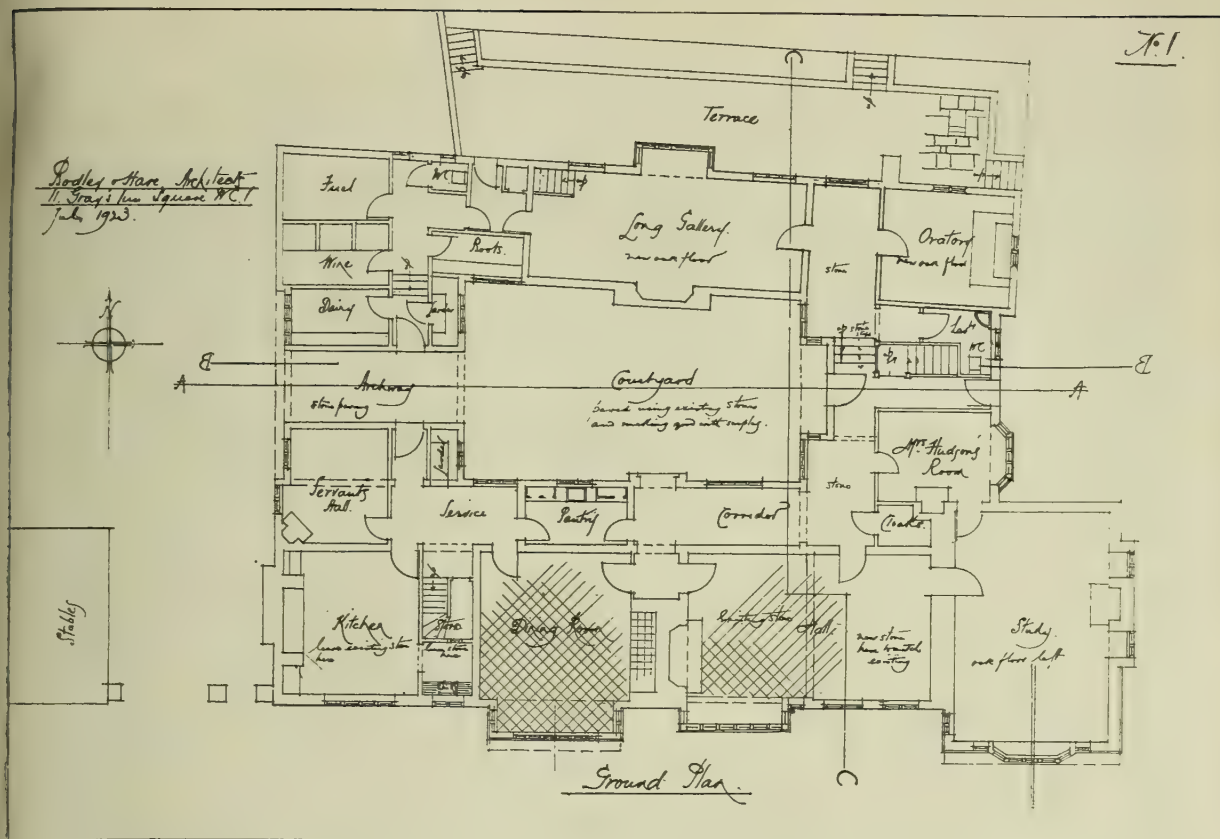
Mr. John Challice, an Exeter architect and honorary secretary of the Devon and Exeter Architectural Society, produced figures indicating that on the work done by plaintiff was entitled to fees amounting to £115 15s.

Defendant told the judge that when he consulted plaintiff he made it plain that he did not spend more than £700, as the house was not worth it and he would not get a remunerative rent from the flats. After the first was abandoned, plaintiff drew two sets of plans as alternative schemes, and recommended one of them. Witness took his advice, thinking the work was going to cost £700 nothing further had been said about the cost. When the tenders came in, witness told plaintiff he could not spend anything over £1,500 and that he must turn down the value of the tenders. He denied instructing plaintiff to make out cost prices.

Mrs. Packham, wife of the defendant, having given similar evidence, the judge found for the plaintiff for the amount claimed, less costs.

Proposed New West-End Library.

The London County Council propose to erect a new public library in Orange-street, Leicester-square, the accommodation to consist of a sub-basement floor, and ground, first, and second floors. The R.I.B.A. is to be invited to submit to the Council the names of three of its members from whom the Council could appoint an architect, a condition being that the architect shall submit plans within three months of the date of appointment.



Wyke Manor, Pershore, Worcestershire : Ground and First Floor Plans.

MR. CECIL G. HARE (MESSRS. BODLEY & HARE), Architect.



Wyke Manor, Pershore, Worcestershire : Main Entrance to Courtyard.

MR CECIL G. HARE (MESSRS. BODLEY & HARE), Architect.



Wyke Manor, Pershore, Worcestershire : The Courtyard;

MR. CECIL G. HARE (MESSRS. BODLEY & HARE), Architect.



MAIN STAIRCASE.



MAIN ENTRANCE.

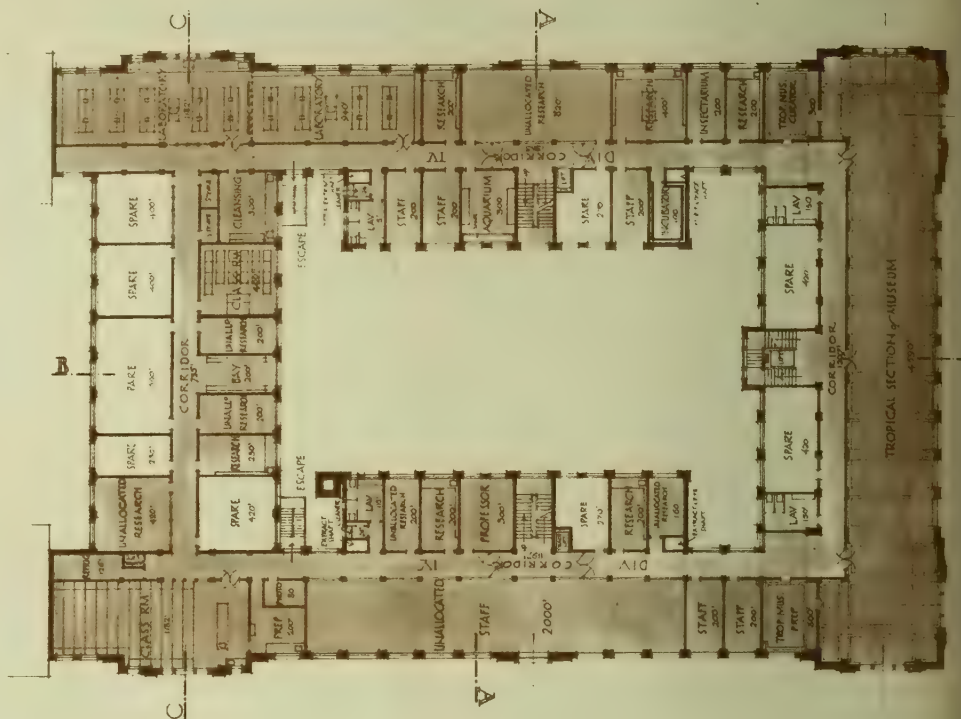
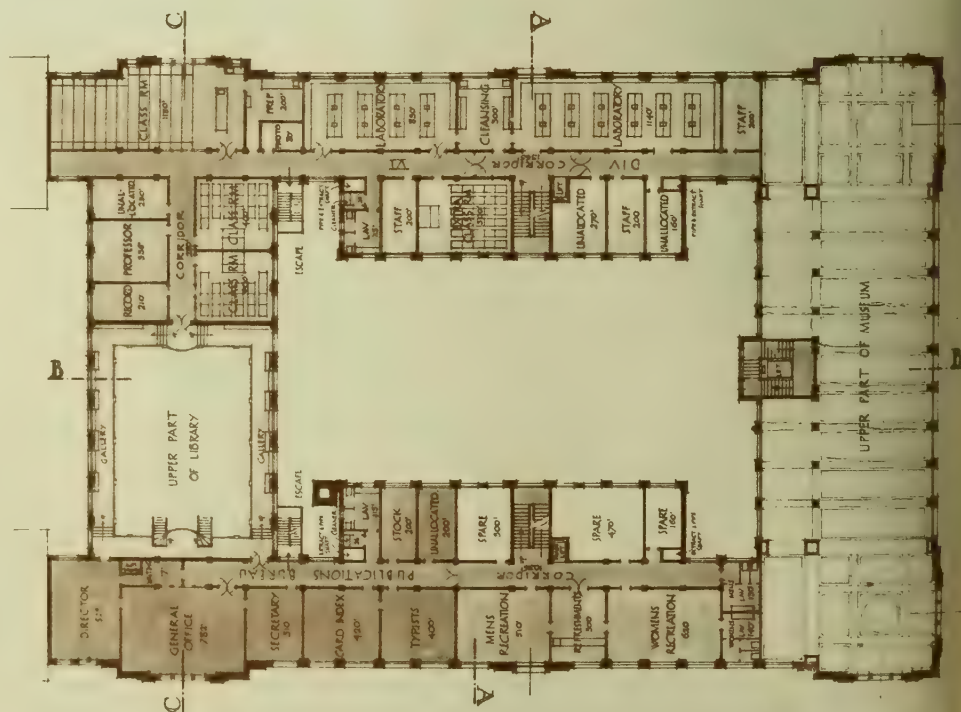
Wyke Manor, Pershore, Worcestershire, Mr. CECIL G. HARE (MESSRS. BODLEY & HARE), Architect.

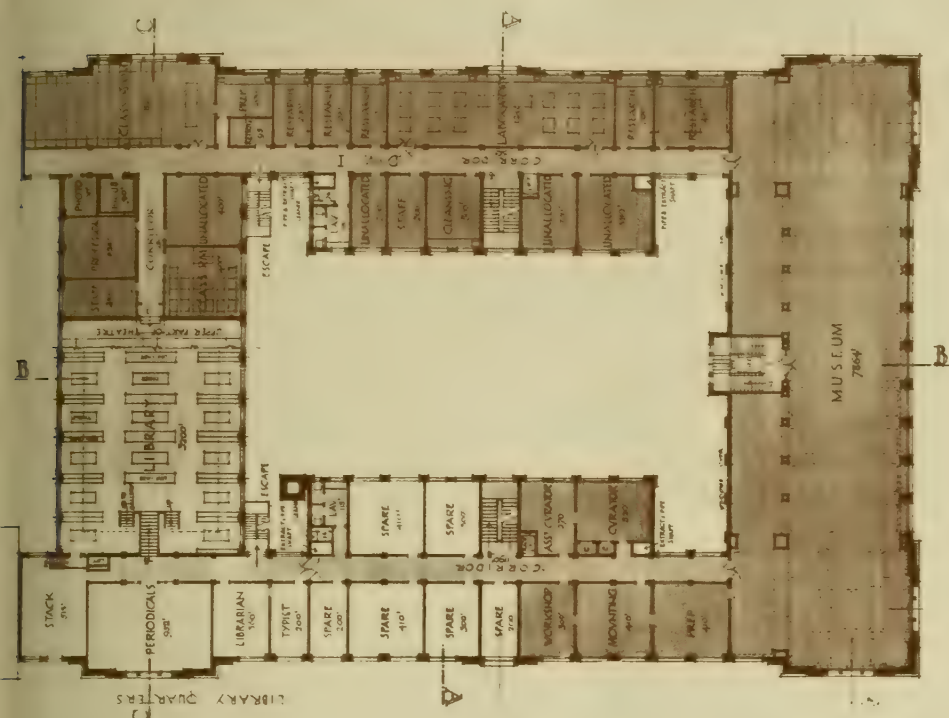




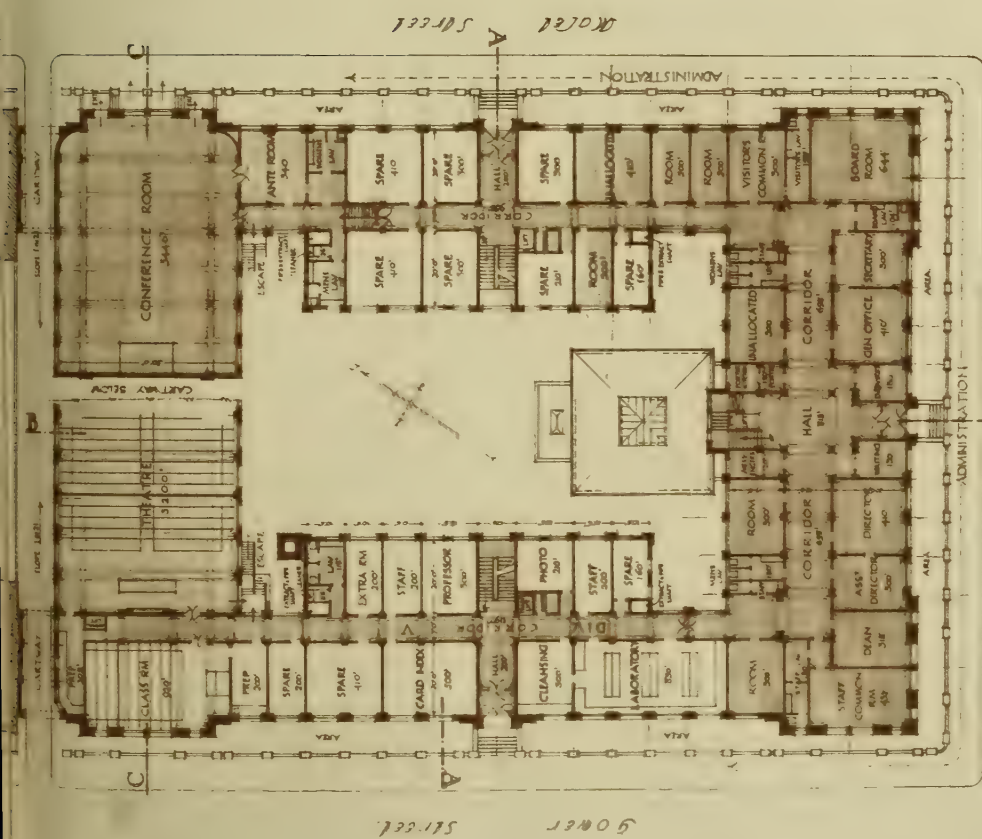
Wyke Manor, Pershore, Worcestershire : Main Front.

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE.

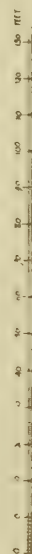




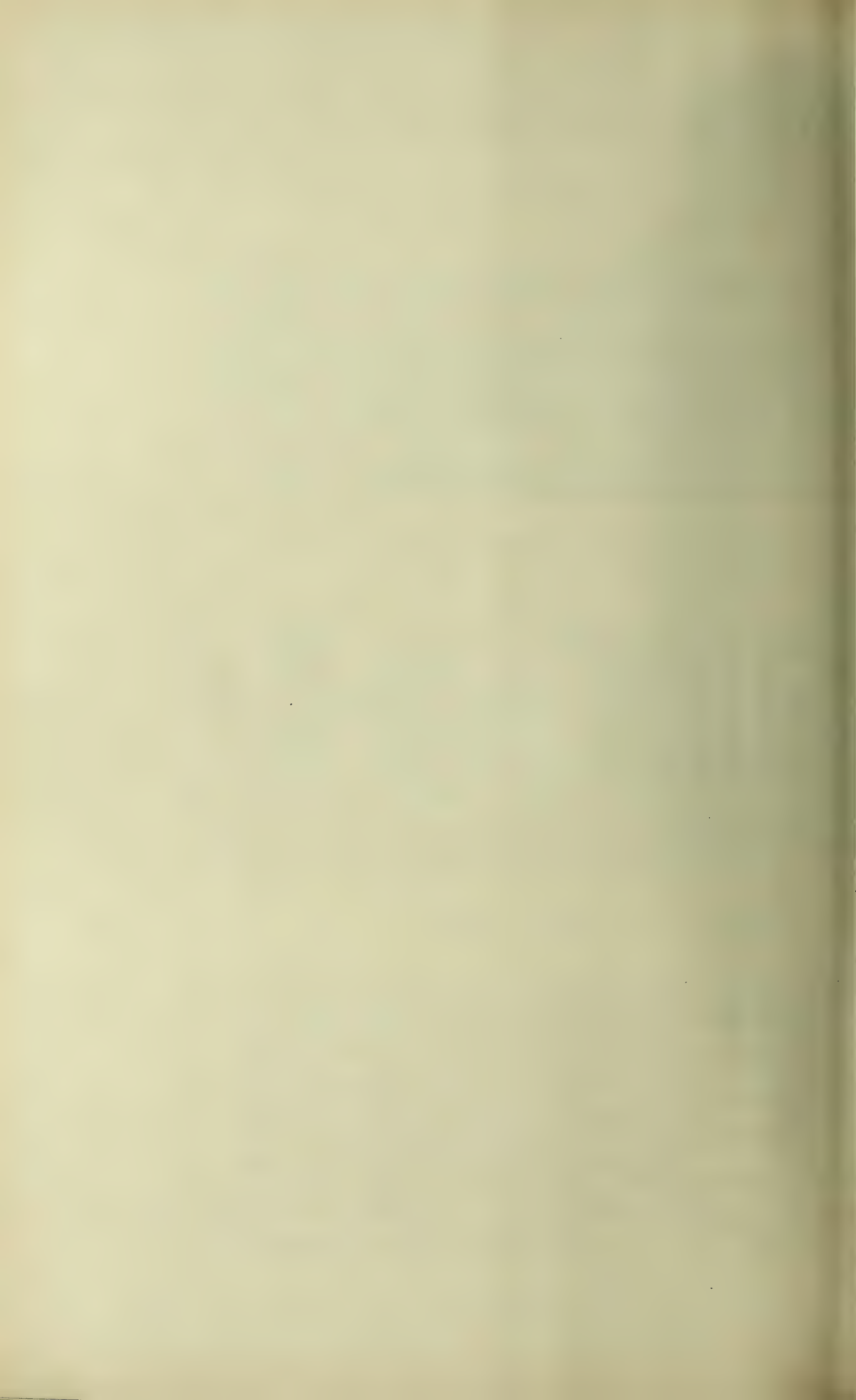
FIRST FLOOR PLAN



132-15 Keppel
GROUND FLOOR PLAN



COMPETITION DESIGN BY MR. A. E. MUNBY, F.R.I.B.A.





Wyke Manor, Pershore, Worcestershire : Garden Front showing Oratory.

MR. CECIL G. HARE (MESSRS. BODLEY & HARE), ARCHITECT.



No. 47, Grosvenor-square, London, W. : Brick Niche in Elevation to Carlos-place.

MR. E. VINCENT HARRIS, F.R.I.B.A., Architect.



Loggia and Courtyard, No. 47, Grosvenor-square, London, W.

MR. E. VINCENT HARRIS, F.R.I.B.A., Architect.

PHILIP WEBB AND HIS WORK.—XI

By W. R. LETHABY.

LATER LONDON DAYS AND HOUSE SEEKING.

CHARLES FAULKNER died February 20, 1892; he had a stroke in October, 1888, and in the interval, so far as possible, Webb visited him every evening. Madox Brown died in 1893, and Boyce followed in 1895. From the beginning of the year 1896, Morris was so ill as to cause great anxiety, and in the summer he was advised to take a voyage as told in his "Life." In his return he wrote to Webb:—

"August 18, 1896.—My dear Fellow, I am back. Please come and see me. I saw Throldmose—big church, terribly restored, but well worth seeing; in fact, as beautiful as can be. It quite touched my hard heart.—Yours affectionately, W.M.

"P.S.—Somewhat better, but hated the voyage; so glad to come home."
On October 6, 1896, Morris was carried in a arm-cart to his grave (the only funeral I have ever seen that did not make me ashamed to have to be buried). This was the beginning of Webb's being unable to keep going in business. "My coat feels thinner," he said; then, with an attempt to change the tone, "Well, a man must expect to die if he will live to over sixty. He is not dead after all. . . . But one would

think I had lost a buttress." When he designed Morris's tomb for Kelmscott, he said, "It seems to me that I've been designing nothing but tombs all my life." The tomb has a coped top like a house roof, and Mr. Cockerell tells me that it was modified from a tomb already in the churchyard; "to follow a local lead and improve upon it was characteristic of Webb." On his design, the grass was exquisitely drawn as a sort of offering to Morris. Burne-Jones wrote to him a little later, asking for notes "for the facts about the life of our beloved Top." Faulkner's sister Kate died in 1898; she had worked for the firm from the early days, painting tiles and doing gesso work; she also designed some excellent wall-papers. She lived in Caroline-place, and Webb kept up the regular afternoon visits after Charles Faulkner's death. In a letter he spoke of "that most excellent of workwomen."*

Webb now began to talk of giving up his Gray's Inn Chambers. "Cannot afford them much longer," he would say; "I must shuffle

* Her sister Lucy (Mrs. Orrinsmith) was the author of a small book on house furnishing, entitled "The Drawing Room."

off this professional coil shortly." He was getting tired and feared some breakdown of strength. During the last years we had several little excursions. "October 4, 1897.—Webb and I went to Chichester to examine the Cathedral for S.P.A.B.; met Cockerell there and had a most stimulating day."

On the last day of July, 1898, we walked into the City, and saw through a chink in the hoarding the destruction proceeding of the crypt of Crosby Hall. Other times, the Temple Church and Westminster Abbey were visited. Standing in the Confessor's Chapel under the apsidal vaults, with the spreading ribs and plank-like lines of the courses between, he said, "Doesn't it look like a great ship?" Again, we went with Cockerell to Richmond, and walked in Petersham Park by the big thorn trees which had been studied by Burne-Jones for the Merlin picture, or was it "The Merciful Knight"?

Mr. C. C. Winnill, another younger friend of the later years, writes: "During the last year that P. W. was in town I often had a walk with him after 5 o'clock; the way was generally down to the river, then into the City, working round to the south-east of St. Paul's; the view from this point interested him, the outline appears distorted. I must have spent hours with him in and around St. Paul's—he cared for the building very much. I remember his calling my attention to the internal stanchions of the windows as being suitable and strong. Anything I know of architecture is due to P. W. I partly knew how favoured I was, but not wholly. . . . You know that it is not easy to end off a Mansard roof; at the gable ends it is almost always awkward. I was out with P. W. near 'Caxtons,' and he drew my attention to a farm building (I think) in which dormers were set at the awkward angles with happy results. It does not look much on a sketch, but one can ring many changes on it."

Another younger man who visited Webb is mentioned in a letter of 1897: "Percy Horne came in last night and told me of his work in Italy last winter; a good sort of fellow."

All through 1899 he was loosening himself from business bonds, and searching for some little house in the country where he might live in peace. In looking about for a country home he thought of Charing, but there were too many stockbrokers about; saying this reminded him of a young man whose talk was of "A friend of mine who is on the Exchange, and Mr. X., a stockbroker." When he spoke of anyone and was asked "Who is he?" the reply was "Oh, a stockbroker."

On March 10, 1899, Webb went to Wales to see if he could find a cottage, but he was put off by the trippers and the towns on the way. "Four big hills and some little ones." The character of the country, however, was very beautiful, and he came back much moved by it.

He visited Wales partly to advise on the repair of two little churches in which his friend Mr. Treherne was interested. Eglwys Cummin and Eglwys Brewys were "as solemn and big as cathedrals," but the right dwelling was not found. "Anyhow, I have washed my feet of architecture in Wales."

Saturday, April 14, 1899.—I looked in at Raymond Buildings to arrange for going out in the afternoon. He made me stay to lunch, opening what he said was his last bottle of Greek wine—"at least forty years old." "Such body!" "Such soul!" said he, "like stems of dried grapes, like cedar pencils, like the Forests of Lebanon, like the Parthenon." A floating film reminded him of being with Browning who saw the "beeswing" in some Port. We went to Westminster Abbey and on to South Kensington Museum Library.

House seeking comes so near every one of us, and Webb's letters about it are so pleasant that they may be quoted at some length, especially as they introduce us to another group of his younger friends. Ernest Gimson and Sidney Barnsley had been neighbours in Gray's Inn who had left London some years earlier to make a living home in the country.

To Ernest Gimson, April 10, 1899:—
"My dear Gimson,—That dragoman of friends; the interpreter of all wants; Sydney



FIG. 1.—TAPESTRY CARTOON.



FIG. 2.—TAPESTRY CARTOON.

Cockerell, has told me of his visit to Pinbury and of the kindly entertainment he and Emery Walker had from you and the rest of the little colony. He may have told you of my failing in South Wales to find a place of retirement in my old age, and that may have suggested the possibility of finding a sufficient hut, or Diogenes tub near Cirencester. With regard to Cockerell, I need hardly say I am as clay in his hands, so that when he produced a simple sketch of a possible and vacant cottage, with an exclamation amounting to 'there you are'—what was I to say? The limestone of the Cotswolds would, I think, be good seating for my worn bones. . . . If it seemed a possible place I had better come and see it as soon as possible. Perhaps you would add to your thoughtfulness by writing one word as to friend Cockerell's interesting legend; for your knowing the neighbourhood would be my safety against mistake. . . .

"Yours thankfully,

"PHILIP WEBB."

On April 28, 1899, Webb went to Pinbury, but without finding the dwelling he required. He returned "intoxicated with the beauty of the country and drunken with ozone," but disappointed—nothing was found. On August 15, Gimson sent him a photograph of a "cottage between Duntersbourne House and Edgeworth," but wrote again immediately: "None of the rooms are six feet high and all are damp; when we heard of the winter fogs we decided it would not be kind to give you the slightest hope."

To Ernest Gimson, August 18, 1899.

"Dear Gimson,—Having allowed a day for quiet consideration, I now acknowledge your

kindest of letters assisting a poor old fogey to his ante-penultimate home. You send me a view of an enchanting double cottage which promised a perfect vestibule to the eternal silences (as Carlyle would have put it), and yet its ideal attractiveness is but a wile luring to the fatal 'mists.' 'Tis a wise admonition never to buy a horse for a friend—and this may equally apply to finding a cottage for a somewhat exacting old man. . . . My work has been playing the devil with me for the last two years or so, and also for Jack; having been worn down by heat and my irritability, I had to hurry him away to his native heath, whence he writes that he is mending; and adds, 'the gulls are everlastingly interesting and their skirling is, as you say, just like you and me over a drain plan.' It is an interesting form which attaches to the double cottage of your district, built, as they are, in the form of church plan, nave and chancel. The Sanctum Sanctorum would be in the smaller end, where the priestess over her cooking pot would be serving the Lord and Lady in the Nave—for are not the poor the fenders for the rich? I suppose the small freeholder lived in the nave and his henchman in the chancel? . . . There have been times when I purpled up at the thought of your industrious efforts on my behalf. . . ."

To E. G., end of August, 1899:—

"... There is now no doubt that the East hill cottage would have 'done for me' in the modern slang sense. What I have thought in the rough, is this: When I have cleared off my exacting work here I might stay for a week at Cirencester and perhaps find a smallish cottage with a bit of garden in the quietest suburb thereof. . . . Your generosity will unless you draw the line somewhere, lead you to keeping a 'doss house' for all the wastrels of London town. . . . I found, in the part of South Wales I saw, that near the sea the air was relaxing, but at two or three miles inland, at 500 B.M., the air was very bracing; I could eat and walk reasonably well there, whilst here I can do neither. . . . From what I saw and in the short time could understand, I was much impressed with the quality of the fabrics you were turning out; and the work of the prehistoric-looking lathe made me think you could turn a timber leg for that never-dying lame sheep we saw."

On September 28, 1899, he gave provisional notice of terminating his tenancy of the Gray's Inn chambers, adding: "Will you favour me by communicating to the Benchers my thankful sense of the courtesy with which I have been treated by them during the thirty six years of my residence in the Inn."

March 9, 1900:—

"My dear Sidney Barnsley,—Just as I was



FIG. 3.—PENCIL DRAWING.

using my outer door this evening on my way to the post, and for a constitutional, Detmar now mounted the stairs. He walked a piece of the way and told me he had just come from Pinbury, and that a cottage near Cirencester Park gates was to let. Now, I am all fluid, as were, having agreed to leave here at Michaelmas and with no other lodging in view, and we are rooted dislike to househunting. But go must by the time cuckoo tells the same tale. This news by Blow has set me all agog not to miss a chance of finding a decent home on high ground, if only for a year's trial to see how it goes with me. I know that either you or Gimson have the 6 in. ordnance map of your district, and I believe reaching as far as Cirencester; could you, therefore, kindly make me a slip of pencil tracing as to where the said cottage stands, for the 1 in. is too unclearly defined for me to make the situation out? I have two sheets of the 6 in. map, but it only extends to some miles east of Pinbury. Should I be thought to trespass too rudely on your known good nature by asking you on your next visit to Cirencester to have a look at said cottage? If it had not been out as much room in it as that you took me to see at Francombewood corner, that would do well enough for the simple body—but before going to see it personally, I should like to know something about it. This is rather a heavy rain upon friendship, I know, but one cannot go through the world, however self-reliant, without laying oneself out to incur obligation. The place would at all suit, I should much like to be as near to you and yours, and perhaps when I found my country legs once more I might be able to walk as far as Pinbury and back in a day, and you could cheer me up when you are marketing, and take your bread and cheese with me; have already imagined it thus. Perhaps, if the place did not do for me, I might try a year or so on the look out for a better district, for the Cotswolds I would rather have as well as the Barnsleys and the Gimsos. Please give the latter my kindest hail of greeting, and also your brother, and the good women folk. I should have written before now to my old respondent Gimson, but as he has taken to the business of match-making I thought he would rather be free of my fussy-jaw! (do not impute this very innocent jest). To tell you the

truth, the nearer I get to the time when I must leave here, I feel to be glued to my chair. However, once break through the habit and trundling will come easily enough—and that may become a habit. I saw somewhere the other day an aphorism that 'all habits are bad, even good ones.' Your brother's report to the S.P.A.B. the other day on a church, called forth unanimous encomiums from our committee. . . ."

March 13, 1900 :—

" . . . Should I be able to clear off my tiresome work by the end of this month, I shall make the effort to go Sapperton way and make the acquaintance of Mr. and Mrs. Wheelwright. . . . I hope your rooks are as much aware of the season as mine are, for they are cawing delightfully from three nests opposite my window to my heart's content.—Yours always
thickly,
PHILIP WEBB."

Rounton Grange, Northallerton,

April 13, 1900.

" My dear Webb,—Your work ought to be completed by this time. I send this to say Ingleby Hall is in my possession—a very nice house now inhabited by a caretaker and his wife. I implore you to come down, stay there as long as you choose and when you are wishful to see society come over here. I still feel I am in your debt and want you to work it out by letting me pay you a professional fee for your advice. You need do no sums, draw no plans—just tell me what you think.—Yours faithfully,
"LOWTHIAN BELL."

Webb, in replying to his kind old employer, pretended, after thanking him, that he desired to undermine his principles. " Indeed, I believe you quite capable of trying to encompass my moral destruction out of the kindness of your heart."

Mr. Hale White offered to " buy half-an-acre at Uckfield or Buxtead, or some untouched agricultural village, and you could put a cottage on it for which I also would pay, and it would be an investment for me."

To S. B., May 5, 1900 :—

" . . . I have had a communication with a man at Stanton—six miles south of Broadway, about a cottage-farmhouse there, which it was



FIG. 5.—PENCIL DRAWING, FULL SIZE.

thought might suit my needs; but I found it beyond my ways and means as well as inclination—£30 a year rent, sitting and five bedrooms, offices, garden, orchard (and shooting, £15 extra!).

In June, 1900, Webb visited the Cotswolds again, lodging a week at the house of Richard Harrison, a fine man and wheelwright of the old sort. The friends rambled widely about, seeing Daneway, Thurston and Bisley, where the curious churchyard lantern (?) greatly interested him. Asking Mr. Barnsley about this time, he tells me, " The impression I have of Webb's, how perfectly he fitted in with the country; he looked part of it in the same way as a ploughman does when ploughing, and his knowledge of the country, birds, flowers, trees, and everything, was immense, and by that I don't mean book knowledge. (Dear old Gimson was the same.) Webb had a like knowledge of the crafts. I can picture him now sitting in ' Dick's ' yard watching the making of a wagon and telling how it should be done and why; he really did know, and it was not as a clever architect pretends. He was a real countryman in that he appreciated Nature in all her moods and not only when the sun was shining. I remember one afternoon walking to Throgmorton to see the old house with the stone down-spouts when a very heavy thunderstorm came up and Webb quite skipped with delight—he said the air made him feel like a boy. We sheltered in the farm and nothing would coax him till he had seen the dairy. The country people accepted him straight away as one of themselves. Those were happy days. Webb and Gimson still remain part of the dear country, and they didn't see what we have to see in the way of after-war horrors of cheap building!"

Cockerell and I went down with Webb to Worth, in Sussex, on June 30, 1900, to see " Caxtons," a cottage, or rather small farmer's house, belonging to Mr. Wilfrid Blunt.

In July, 1900, he visited Treherne on his boat the *Heron*, for three days. In a letter he speaks of coming down the estuary reaches of the Stour: " I hope that the breezes fill your sails without ruffling G. W.'s [George Wardle's?] plumage." This unwonted holiday must have been for the purpose of prospecting for a cottage.

To Sidney Barnsley, July 8, 1900 :—

" . . . Cockerell carried me to Worth last week, or rather the Saturday before. The place had its attractions, both in the cottage and in the neighbouring forest land, with its wonderful Saxon church, so-called, more astonishing even



FIG. 4.—RAVEN ON SHIELD.



FIG. 6.—PENCIL DRAWING, FULL SIZE.

than that of Bisley. . . . Have been nothing like so well in health since I was with you, partly in that my work has gone badly and partly because I think your highland air suited my ancient constitution. I am going again to Worth sometime in next week to make up my mind as to that place. . . . The wonderful tale I told Wardle of the Bisley well-lantern set him all ablaze archæologically. . . . Walker and Cockerell have entered into the bonds of business, and both look very happy in their honeymoon. Give Mr. and Mrs. Dick my blessing when you see them, and greet all of your households with the kindest wishes from

"Yours very truly,

"PHILIP WEBB."

To A. H. P., August 7, 1900 :—

"Good builders, my good Alfred Powell, do not hang plenteously on the prickly gooseberry bushes of architectural practice. . . . Perhaps it may interest you to know that the convulsions of second childhood are on me, in the quality of a divided mind; for there are still just hopes of the Gimson and Barnsley folk finding that the smallest of steadings, by Tunley Farm, may be had for me; and failing that coveted situation I may get housed in Sussex. But time strides and I ought to be out of this hitherto faithful home by Michaelmas—a problem and I am no mathematician."

August 10, 1900 :—

"My dear Sidney Barnsley (cum the rest of the colony—for I cannot separate you),—You have—all of you—from the oldest in years down to the beard-pulling baby, been so friendly and helpful to me, that Pinbury in all its forms and ways has become a sort of vision of the New Jerusalem, as the peace of Gray's Inn Garden that of the old. . . . I went down again to see Mr. Wilfrid Blunt's cottage at Worth—a mile from Three Bridges—and spent some time in finding out the fors and againsts of it. The little house, little garden, and little orchard, I thought all to the good. The drawbacks were the nearness to London, and the height above sea-level, only 340 feet as against the 600 of Tunley. . . . I could have the place at once and set about exorcising the evil spirits—not ferocious ones—and could hope to get in by the end of the coming October. Tenancy not to be disturbed during life, Rent £15 a year, Landlord to spend £150 on repairs. As some equivalent for such consideration, I receive my landlord as guest for an occasional night or so when he had to come over to look after a bunch of the Arab horse stud at Worth. As I am rather horsily given conversation would be easy; and being semi-Arab in his own habits, dates and well-water would be in the bill of fare. . . . With these inducements to content, I am disappointed, and only half-hearted, for the larger half is in the Cotswolds. . . . I now write to Mr. Blunt in the way of acceptance."

August 31, 1900 :—

" . . . I could not wait all my dear people. None, nor all of you could have been so disappointed as I am that I did not get to the good district of Pinbury, for I was so at large with all of you there . . . and there will be no childish sheepdog and dignified deerhound to welcome me. . . . Alas, and alas! the doctors have had to send Alfred Powell off for a sea voyage for a fortnight or so. . . . Cockerell, the faithful dragoman to friends in difficulty, with his boundless energy, will lift the lame dog me over the stile of flitting; when I hum and ha, he does the thing, and I smile as if the sun had broken through a cloud. Wardle was mightily pleased with your photographs of the Bisley lantern."*

September 26, 1900 :—

" . . . Have I not now the jolly A[nglo] S[axon] doorway of Somerford Keynes in the full flesh of photography? My stars, Master Sidney, is he not a jolly good one, too! It seems to have escaped the claws of the devilish restorer. I wish the devil had left alone my A.S. church at Worth. . . . I have just looked in Murray's Guide to Wilts . . . not so much as noticing Sd. Keynes on the Thames; and this is English thoroughness—in not doing it. I wish St. Dunstan had a good grip of the Editor's nose with his A.S. hot tongs. Oh, yes! I remember that smaller house, Throngham Slade, with its stone gate posts fitted into the low base wall. We went up the lane at the side of the house to look at the back, and were objurgated by the fowls; also I am most glad to have the photos of the stone down-trunk house of many gables. 'Twas a sweet walk we had, and it pleases me you should have jogged my memory, giving it a lasting vibration with the pleasant photographs. I heard from Winmill yesterday telling of his enjoyment of the sea-borne city. I have also received a comfortable letter from Alfred Powell steering in and about the Greek coasts on the way to Smyrna, having spent a day at Constantinople and got a look at St. Sofia. He wrote one of the most enchanting letters of travel I have ever had. I was at my new old country seat yesterday, and there was nothing for it but to strip and relay the tiles of all the roof. . . . Of wood there is plenty close to my back door which can be had at 10s. a cord, which, I gather, is 4 by 4 by 10 ft. The sawing will do me good, as well as winding up the water from the deep well. 'Twill be a good system to cure Gray's Inn home-sickness. London, however,

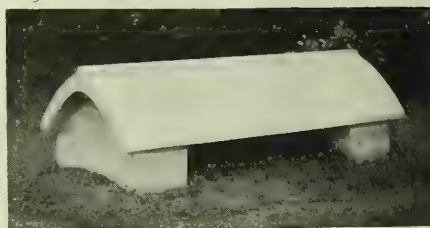


FIG. 7.—TOMB OF WILLIAM MORRIS.

is too big for any other office of life than hiding oneself under a bushel of regular insistent work, and I am not strong enough now to fight my way through the overcrowded streets. What is above them and below is a maze of pipes, cables, wires, &c. Always thought pigeons to be clever on the wing, but that they do not strike the harp strings in the sky is the cause of amazement. With hearty good wishes to the brother and sisterhood and childerhood. . . ."

To A. P. H., October 23, 1900 :—

" . . . My delight was great in getting your cheerful letter from on board ship off the Greek coasts and on your way to Smyrna. It cannot be said when I have had so entertaining a note of travel. You made the famous lands I have

* A little spire like thing with an open stage: 'is it a *Lanterne des Morris*!

never seen fairly dance before my mind's eye. Personally I am in the throes of decided indecision whilst trying to break up camp here for the new dumping ground, where new-old Diogenes tub is lazily having its hood tightened to receive its new tenant at Angl Saxon Worth in Sussex. Having limpet-like stuck so tightly here for so many years it takes a strong oyster-knife to unfasten me."

One memory of this time may be recalled. In reducing his few possessions he seems to have had a dislike of selling them—especially those which had been presents to himself. The Burne-Jones landscape studies were given back to the family. Madox Brown's drawing of others he also gave away. He had decided to present his valuable Kelmscott books to some public body who might be expected to preserve them. Fairfax Murray's copy of Carpaccio's George, which he had commissioned when with the artist in Italy, he sold to the Birmingham Art Gallery; most of his books were also so.

As Webb was leaving I told him he should have for epitaph, "He fought the good fight." "And received a black eye," he replied. "I hope providence will temper the shorn lamb to the prevailing winds."

THE LIGHTING OF PETERBOROUGH CATHEDRAL

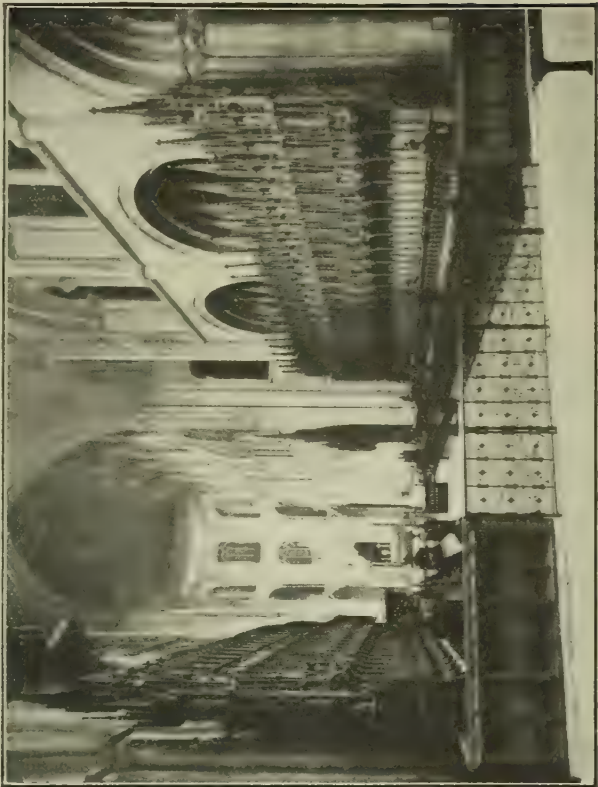
THE new lighting system of Peterborough Cathedral was formally inaugurated on October 1st and has proved completely successful. The effect of the flood lighting substituted for the gas used hitherto is impressive, and entirely keeping with the character and appearance of the Cathedral. Owing to the fact that the lighting units for the most part are situated either side of the clerestory windows, the light is in respect of direction and distribution similar to daylight. Shadows are few, and are of depth and distribution of those cast by the sun. A comparison of the photographs taken by daylight and by the new electric lighting will demonstrate the close similarity which exists between the natural and artificial illumination.

The greater portion of the lighting is effected by units placed on either side of the clerestory windows—so that the artificial light comes from the same direction as the daylight, and the units being placed at a considerable height above the floor, are beyond the normal angle of vision. The units are suitably grouped together, and controlled by contractor switches placed in triforium in the north and south transepts. These contactors in turn are controlled by push button panels placed immediately behind the choir stalls on the south side. The contact panels on the north and south sides respectively are fed from the two sides of a 400 volt, three wire, direct current supply from the Corporation Electricity Works. Each lighting unit consists of a projector comprising three silvered glass mirrors equipped with a 250 watt projector type Mazda gas-filled lamp. The lamp is supported in a porcelain holder mounted on an adjustable bracket, so as to permit of its being correctly focussed. The beams from these projectors are trained diagonally downwards across the cathedral towards the bottom of the piers on the outside of the nave. Beneath the central lantern tower eight special units are mounted near 100 ft. above the floor, each of which is provided with a single silvered glass reflector, and a device to prevent the light "splashing" on the walls in the upper part of the tower. The lighting of the eastern end of the apse, and certain other situations, is effected by Mirolox trough reflectors fixed in a suitable position in the triforium and clerestory.

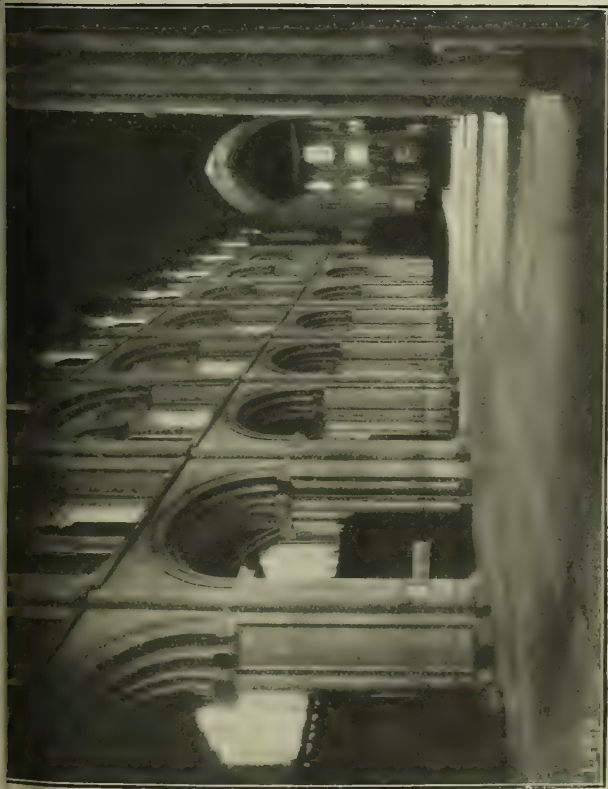
Mr. Nevill, the City Electrical Engineer, and as consultant to the Cathedral authorities; and British Thomson-Houston Co., Ltd., were responsible for the design of the installation and the manufacture of the lighting units and Mazda lamps; and Messrs. Amies & Sons, the local contractors, for wiring and erection of the gear.



CHOIR AND CHANCEL BY DAYLIGHT.



CHOIR AND CHANCEL LIGHTED BY ELECTRICITY.



NAVE FROM WEST END BY DAYLIGHT.



NAVE FROM WEST END LIGHTED BY ELECTRICITY.

The Lighting of Peterborough Cathedral.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting!—ED.

Pickling Paint off Woodwork.

[REPLY TO "OLD DEAL," NOVEMBER 20.]

SIR,—Use a good patent paint remover, such as manufactured by any of the good-class paint manufacturers. If the type chosen is of the alkali kind, wash over the surface with dilute vinegar after using the remover. PATENT.

Size of Radiators.

[REPLY TO "A COMFORT," NOVEMBER 20.]

SIR,—I should advise putting in three 24 in. "Classic" radiators, each of eight sections, one under each window, presuming there are three (which the glass area quoted rather suggests), or otherwise arranged if this assumption is not correct. This should give a surplus of heat, which can be regulated to the best advantage as required. It is usual to calculate for a temperature of 55 deg. if there is an open or gas fire to assist, but this is purely empirical, and will depend very largely upon the arrangement of the room. With the boiler on a level with the radiators served, very careful design of pipe runs and capacity of same is necessary to ensure a good circulation, and this is best arranged on the site by a good expert with an eye on all details concerned. DATA.

Internal Finish to Walls.

[REPLY TO A.H.G.B., NOVEMBER 20.]

SIR,—Your correspondent calls attention to a carelessly worded phrase in my letter under the above head. I am certainly incorrect in stating that no cement will stand in a permanently damp situation, as it is a well-known fact that many tanks are lined with waterproof cement, and many sea-walls and river walls are built of cement concrete. For the internal finish of walls I do not know of any finish that will stand in this condition without bringing with it the evils of condensation, and this I particularly had in mind when making the above loose statement. If there is such a finish, I should be extremely glad to hear of it. WATERPROOF.

Dairy Floors.

[REPLY TO "DAIRIES," OCTOBER 16.]

SIR,—After 20 years of designing and supervising the erection of butter factories, milk factories, cheese factories to the extent of some two million pounds, my experience has taught that no cement floor will stand up for any length of time. In any factory where milk or by-product of milk is treated, I found that nothing but encaustic tiles would answer the purpose—that is, a good bed of concrete, depth as required by sub-foundation, 6 in. by 6 in., encaustic tiles laid on a bed of cement mortar, not weaker than 2 parts sharp sand to 1 part cement, joints of tiles as close as possible, well grouted with neat cement, then the whole treated with 3 coats of fluride of zinc. This proved successful.

JOHN MARSHALL.

Hard Tennis Court.

SIR,—Could a cheap hard tennis court be constructed with 3 in. concrete and $\frac{3}{4}$ in. granolithic? If this may not be suitable for playing upon, what would be the most economical construction?

W. DRAKE.

Making Partition Soundproof.

[REPLY TO "AJAX," NOVEMBER 27.]

SIR,—The floor, partition and ceiling over can be made soundproof by packing the space between the plaster ceiling and the floor boards with bitumen deadening felt on the laths, and then with slag wool or silicate cotton; the same process should be applied to the partitions and the ceiling over the w.c. This method I have used for audition rooms for gramophone testing with good effect.

G. W. H.

SIR,—Your correspondent will probably find that a near enough state of sound insulation will be obtained by taking up floor boards and stripping one side of the partition and filling in all cavities between joists and studs with slag wool plugging, and I should recommend him to try it. If it is possible also to insert a thick felt mat under the w.c. pan this will also assist.

Contract Documents.

SIR,—Where tenders are invited, under an entire contract, for the erection of a building, what documents must the contractor actually have in his possession so that he can prepare his estimate?

T. L. W.

Aggregate.

[REPLY TO "G. E. S.," NOVEMBER 27.]

SIR,—In your interesting reply on this question you state that it is always safer to specify the proportions of fine and coarse materials for concrete. May I beg to differ from you in this matter—at any rate where there is a good clerk of works or a trusted general foreman in charge of the works? I have found that the amount of fine stuff required adequately to fill the interstices of the coarse stuff varies considerably according to the material used, even though the latter is of specified gauge, and this is probably due to the average shape of the parts of the material. As an efficient concrete is that in which the coarse aggregate is just, and only just, rendered compact with the fine, a hard-and-fast specified proportion between the two is actually a handicap and may very well defeat its own object. With regard to the contractor's contention, he appears to mean that a mix of 6-1 concrete will have six measures of coarse stuff alone dry, and that the fine stuff, although measuring alone probably three measures, does no more than fill in the interstices, and the bulk of the aggregate mixed together still measures six measures only and not 6 plus 3. In this I consider he is quite justified under the specification.

"SUPERVISOR."

Destroying Beetles.

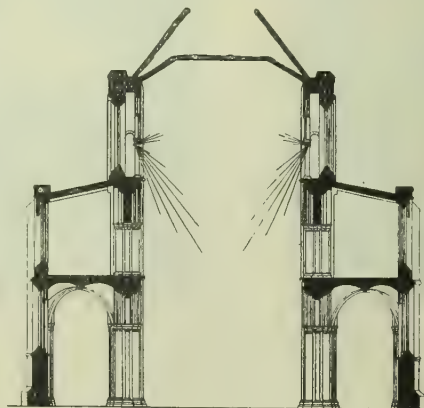
[REPLY TO "W. B.," NOVEMBER 27.]

SIR,—A good spraying under floor boards with a strong solution of formalin will bring the relief required.

"SWATTER."

New Reptile House for Zoo.

The Council of the Zoological Society has decided to proceed with the construction of a new reptile house. It will be placed close to the aquarium, on a site of about 170 ft. by 70 ft. wide, now occupied by the ape house and the summer aviary. Mr. Guy Dawber, P.R.I.B.A., is the architect.



Peterborough Cathedral: Transverse Section through Nave showing arrangement of Lighting Units (See page 815).

THE WEEK IN PARLIAMENT

Scottish Housing Subsidy.

Asked by Mr. T. Kennedy if he had considered the protest of the National Building and Engineering Federation against the promise recently given of an increased subsidy to Scotland on houses of a particular construction; whether an opportunity of Parliamentary discussion would be afforded this session of the finance and other consequences of this increased subsidy; if it was proposed that the increased subsidy should under any circumstances apply to other forms of house construction; and, if not, whether consideration had been given to the effect that this increased subsidy would have on the general building industry. Sir J. Gilmour said that the protest referred to had been considered. An opportunity for Parliamentary discussion would be given when the vote for the Scottish Board of Health is presented. The increased subsidy was proposed for houses of any alternative construction which did not require more than 10 per cent. of skilled building trade labour, and the houses now approved by the Scottish Board of Health were of various types, including concrete, timber, and "steel." This increased subsidy was for a limited number of houses, forming only a small fraction of the Scottish needs, and he was quite unable to see that it would have any prejudicial effect on the general building industry.

Safety of Workmen.

Mr. Scrymgeour asked the Home Secretary whether he would amend the Departmental Draft Regulation under Section 79 of the Factory and Workshop Act, 1901, so as to safeguard the lives of workmen engaged in operations upon buildings other than premises on which machinery was being temporarily used for construction of a building or for the purpose of any addition to the structure of an existing building?

Mr. Locker Lampson said that if the honourable member's suggestion was that the draft Regulations should be extended to cover all building operations, this could not be done without fresh legislation. Under Section 105 of the Act, the power to make Regulations for building operations was limited to the premises specified therein.

Houses Completed.

Mr. N. Chamberlain, Minister of Health, informed Mr. R. Smith that the numbers of houses completed during the year ended September 30 last under each of the Housing Acts was as follows:—

Act of 1919	1,497
Act of 1923	78,409
Act of 1924	12,385
Total	92,291

In addition over 67,000 houses were built during the same period by private enterprise without assistance under the Housing Acts.

Gas Fires.

Mr. N. Chamberlain informed Lady Astor that in a large number of local authorities' housing schemes gas fires had been installed for cooking and heating, which had, of course, resulted in considerable reduction of domestic smoke.

Weight of Steel in Houses.

Mr. Wright asked the Secretary for Scotland the weight of steel used in the construction of each of the four types of houses specially selected for the additional housing subsidy; and what was the weight of steel used in other types of steel houses?

Sir J. Gilmour said that only two of the four makes of houses approved for additional subsidy used steel sheets in their construction. The firms were Messrs. Cowieson and Messrs. Weir, of Glasgow, and the weight of steel sheets per house used by the former was 1 ton 9½ cwt. for the bungalow type, and 1 ton 8½ cwt. for the cottage type; and by the latter, 1 ton 3¼ cwt. for the Blenheim type, 1 ton 4½ cwt. for the Eastwood type, and 1 ton 16 cwt. for the Douglas type.

THE BUILDING TRADE

RATING AND VALUATION BILL. REPORT STAGE.

GOOD many amendments were introduced to the Rating and Valuation Bill on the Report Stage in the House of Commons. Before considering them we may refer to a matter which arose in the course of the debate. Mr. Barker moved for the insertion of a new clause exempting underground sewers from rating, on the ground that this was a hindrance to necessary sanitary measures. The Minister of Health pointed out that the present Bill made no alteration in this practice, but he expressed sympathy with the object of the proposed clause, and said that the case of sewers, both underground and above ground, and also other constructions such as water pipes bringing water from a distance necessary to sanitary additions appeared to deserve attention, and hoped he might be able to amend the Public Health Acts as regards this question at a future date, although he could give no guarantee as to future legislation.

In the present notice we are unable to refer to the discussion on clauses which were not actually amended, as we are confining our observations to actual amendments carried, and the first amendment was in Clause 1, giving the parish council of every parish or group of parishes, and the parish meeting of every parish not under a parish council, power to appoint two persons being local government officers to act as members of the rating authority. Clause 5, which relates to the amendment of rates and which provides that not less than seven days before making any amendment notice of the proposed amendment shall be sent "to the occupier of the hereditament," was amended by substituting for these latter words the words "person liable to be rated."

Clause 6, which relates to the publication of rates, was amended on the motion of the Minister by the insertion of the words "Notice of every rate shall be given by the rating authority within 7 days after the making thereof, and the rate shall not be valid unless notice thereof is duly given in manner for the time being required by law." What the effect of this amendment may be it is impossible to say until the clause is re-drafted, for if the clause stands as it is it becomes law the method of publication prescribed in the clause—notice fixed in some conspicuous place, publication in newspapers and different methods in different areas—could be "notice in manner for the time being required by law."

In Clause 7 an amendment was introduced relieving the rating authority from having to describe the property in the demand note.

In Clause 9 the Minister moved an amendment which was carried by which precepts to be issued by county councils instead of being subject to the section "as from the appointed day" shall not come within it until the valuations are completed in 1929. A further amendment was accepted to meet with the case of lateness on the part of rating authorities providing that where the amount due under a receipt was not paid by the specified date the rating authority might require the rating authority to pay interest at 6 per cent. on the amount overdue.

In Clause 11 an amendment was introduced enabling owners who collect and pay the rates under that clause to claim the 10 per cent. rebate if they pay the amount due within half the period in respect of which the rate is made payable, where the rate is payable in instalments, within half the period in respect of which the instalment is payable, but a more important point was the statement made by the Minister that owner occupiers should be given the benefit of the section, for he had found that where a local authority owned houses, where there was a rebate it was passed on to the tenants, and therefore as the clause stood it gave a pre-

ference to tenants of municipalities which the owner occupier could not claim. Certain amendments were also introduced into Clause 12 sub-clause (2) by the Minister which it is unnecessary to detail here.

In Clause 15 an amendment was introduced declaring that where the rates are in arrear the only persons other than the rated occupier on whom the rating authority can call under the section are the tenant or lodger of the person in arrear. Under Part II of the Bill a most important amendment was carried, on the motion of Major Ruggles-Brise, by a majority of 162, by which in Clause 17 sub-clause (5), which includes in every assessment committee two persons who are commissioners for the general purposes of the Income Tax, the inclusion of these persons was omitted. This marks the last trace of the uniformity idea.

In connection with Clause 21, which leaves the particulars to be inserted in the valuation list to be prescribed, the Minister gave an assurance that among the particulars to be prescribed would be the gross value of a hereditament where there was a gross value, the rateable value, and where the net annual value was different from the rateable value, the net annual value also.

An amendment was made in Clause 22 (Ascertainment of Rateable Value) which is not easy to follow in the report, but apparently words were added which would provide for a class of hereditaments subject to any rate, charge, or assessment made by any commissioners of sewers or like authority in respect of any drainage or other work for the benefit of the hereditament.

A drafting amendment was made in Clause 22 (1) (b) and sub-clause (3) was amended to provide that the net annual value or the rateable value should be calculated to the nearest pound. A drafting amendment was also made in Clause 23.

Possibly the main interest in all the proceedings "on Report" centred on Clause 24 which relates to the rating of machinery, as in Committee it had been promised that this clause should be left to a free vote of the House. There can be no doubt that the clause as framed by the Government is an immense improvement on the very complicated provisions suggested by the Departmental Committee which we noted in our issue April 17, 1925, and then considered far too complicated and meticulous to be incorporated in any Act of Parliament, but it has the advantage of embodying the main principle the Departmental Committee intimated should be acted upon, and it is very probably the best part of the Bill. The amendment to leave out the clause was defeated on the free vote by a majority of 218.

Town Planning.

The second of two lectures on "Town Planning" was given at the College of Estate Management on November 24 by Mr. Raymond Unwin, who emphasised the necessity for a civic survey of the existing conditions of a town before an attempt is made to prepare a scheme for development. He showed how maps may be used to illustrate the information so obtained, and for this purpose gave slides depicting the density of population, disease rates, zoning, time of travel from town centre, and land values. In regard to the traffic problem, he stated that in the last forty years the number of passengers travelling and the number of journeys per head had both increased at a rate far greater than the square of the population; any attempt to reduce travelling by the erection of abnormally high buildings, as in some parts of New York, must result in extreme congestion when such buildings emptied. In London, we required better co-ordination of traffic, a point to which greater attention had been given in the States. The radial roads of a town should not converge upon one focal point, but before entering the built-up area should branch in such a way that congestion at any point might be avoided.

ECCLES HOUSING

At the Manchester Assize Courts, before the Vice Chancellor of the Palatine Chancery Court (Mr. Courthope Wilson, K.C.), the trial has begun of two actions brought by the Eccles Corporation against Wooller and Sons and Thomas Moore and Sons (Eccles), Ltd., who both carry on business as builders at Eccles. Mr. T. Eastham, K.C., and Mr. H. Broadbent appeared for the Corporation and Mr. C. Atkinson, K.C., M.P., and Mr. J. Bennett represented the defendants.

Mr. Eastham (according to a report in the *Manchester Guardian*) said both actions involved the same point and arose out of a scheme for the construction of houses on the Anson Street (now Westwood Park) site at Eccles. Approval was given by the Ministry of Health in the early part of 1920, and tenders were accepted from Messrs. Wooller for 42 houses and from Messrs. Moore for 57 houses and 14 houses, those being the first three lots. A few days later the defendants informed the Town Clerk that they had made errors in pricing out the quantities, and when these had been corrected there would be considerable additions to the amounts of the tenders. Mr. C. H. Adkinson, the Assistant Housing Commissioner for the "C" region (Lancashire and Cheshire), told them that their tenders were too high and must be reduced.

On May 12 an interview took place between representatives of the defendants and Mr. Alfred Jenkins, an assistant surveyor, employed by the Ministry of Health, who suggested that they should pool their plant, take on the whole scheme amounting to 657 houses, and divide the contract. They then offered to do the work at £872 for houses in class "A," and £1,000 for houses in classes "B" and "B4," on the basis of certain modifications of the original quantities, which modifications were embodied in a schedule. Other modifications were suggested by the Housing Commissioner and embodied in a second schedule. According to the plaintiffs it was agreed that the prices should be reduced if these modifications were made, as the work would be done more cheaply. The difference might be £55 per house, possibly more.

On June 23, 1920, two contracts under seal were executed, one with Messrs. Wooller for 329 houses and the other with Messrs. Moore for 328 houses at the prices named, and these contracts stated that the schedules were to be construed as one with the original bills of quantities. Building operations began at the end of June, 1920, and the houses were finished in 1923. In January, 1922, the architect began to make out his monthly assessments for certificates on the basis of the reductions justified by the modifications in the second schedule, and the defendants objected. Their contention was that the prices had been fixed taking into consideration all the modifications.

The plaintiffs' case was that the deed was worded incorrectly and described the schedules as though their sole function was to reduce the amount of work to be done without altering the prices, whereas the second schedule was framed after the prices had been fixed, and was to be construed for the purpose of ascertaining how much less work was to be done and how much less money was to be paid. In these proceedings the Corporation asked the Court to rectify the deeds so as to embody the real agreement; and the defendants counter-claimed in respect of the deductions which they said had been wrongly made. Messrs. Wooller claimed £19,232 for deductions, £1,250 for interest to December 31, 1923, and interest at 1 per cent. above Bank rate from that date. Messrs. Moore claimed £19,255 for deductions, £1,212 for interest to December 31, 1923, and interest at 1 per cent. above Bank rate from that date.

The trial was adjourned to a day to be fixed.

THE ORGANISATION OF A BUILDER'S BUSINESS

In the course of a paper on this subject, given on Monday evening last at the Northern Polytechnic, Mr. Roland B. Chessum compared a builder's business organisation with a genealogical tree. To begin with, the head of the business was called the Chairman of Directors, or principal, or senior partner of a firm. He, with or without a Board of Directors, was the person to whom all information and records ultimately came, through the various sub-divisions, right up from the actual operations. Under him there might be one or two directors who took up certain sections of the work, but there were four important sections which had to be well looked after: (1) General office accountancy and finance; (2) costing, estimating and surveyors' department; (3) general indoor management; (4) general outdoor management. Each of these sections was again comprised of various duties. For example, under item (1) "General office accountancy and finance," the individual in charge had to see that the clerks all had their routine duties clearly set out and carried them out. The work consisted of the general books used in accountancy, the cash book, bought ledger, purchase book, journals, analysis books, the receipt of and checking all invoices and accounts, the arranging for payment of the latter, the receipt of all records from the various jobs, using them in preparing the necessary records and checking the deliveries of materials therefrom; the dealing with the weekly cash, allotting the various sums to be paid on each job, checking the pay rolls, entering up the wages books and many other duties far too numerous to detail minutely in the time at his disposal. There was also the question of correspondence, the proper filling of same, together with copies of all letters sent, and the dealing with the post; the preparation of a monthly statement dealing with certain important necessary data for the consideration of the principals or directors. In the general office routine there was also the occasional necessity of assisting in the preparation of tenders by extending and checking the prices in the bills of quantities.

Dealing with item No. 2, immediately an inquiry for an estimate or bills of quantities had been received, it was necessary to obtain quotations for the current prices of the various materials required for the particular tender which, of course, were all peculiar to the situation of the work which was to be carried out. Unfortunately there was frequently far too short a time given to enable the work to be done without considerable pressure being cast upon the staff in this department in a builder's office. There was also the question of the analytical costing for the various work in the different trades which was being done from time to time, in order that the estimating staff might be fully conversant with the costs of production, and to guide them in their subsequent estimating. Periodically, usually monthly, a statement had to be prepared on each contract showing the value of works executed, and submitted to the architects with the application for a certificate. This was sometimes prepared in conjunction with the quantity surveyor, representing the architect and client, with a member of the builder's staff, or a surveyor employed by the builder, and the total costings, to the equivalent date, were used in comparison with the statements as a further check on the progress of the work in hand.

With regard to item No. 3, General Indoor Management and Buying, these duties devolved on the member of the staff who was responsible for the supervision of the whole of the operations carried on at the contractor's works or depot. The duties in this section consisted of receiving the requisitions for materials or for manufactured goods (such as joinery, masons' work, engineers' work, &c., or other departments), which might be manufactured at the depot, and arranging for their due delivery to the respective works in hand. It was arranged that the requisitions for work to be done in the various departments always came in on distinctive requisition forms, so that they could be passed, after checking with the quantities, to

the foreman or person in charge of the respective departments with the necessary instructions. All other materials were either supplied direct from the merchant or manufacturer, or from stock. The duty of buyer was, therefore, placed with this individual, in order that he might be responsible for the whole of the supplies which were required for the jobs to which the respective requisitions referred. He had also to arrange for the necessary transport either by own lorries or arranging for the hire of others.

Item No. 4, General Outdoor Management, was carried on, according to the amount of contracts in hand, by one or more individuals, who were continuously visiting the various jobs, arranging with the foreman the organisation and procedure of same, generally looking after the management by the foremen on the jobs, and seeing that the necessary foresight was used to ensure the various materials being at hand when required, and the necessary labour being engaged. By thus visiting one job after another, this individual was able to organise the co-ordination of the various contracts, so that plant and materials which were no longer required at a contract and could be removed, were moved direct from one job to another, and thus save the expense of twice handling and taking back to the depot which would otherwise occur.

In each of the departments, as equally with the various contracts, there was a foreman in charge, and where the volume of work involved was of sufficient magnitude, there was a time-keeper and perhaps a deputy-foreman, and in each craft a leading hand or ganger. The foreman, whether in the department or on the job, had to be responsible for recording the time of the men under his supervision, and the proper setting out of the work, the keeping of the records of the materials received in or sent from his department or job, the requisitioning of all materials, plant, &c., that he might require, checking the work as he proceeded, to see that it was being done in accordance with the instructions contained in the contract documents, taking his instructions from the architect or the clerk of the works for any variations that might be desired during the progress of the work, making out all daywork sheets for work that had been done daywork. The same fundamental principle of organisation on the basis of the chart or genealogical tree applied equally in departments or on the jobs as in the office administration. As the general heads of departments or sections at the depot had different members of the staff in groups working under those responsible for the respective sections, the head of which supervised the whole and collected the necessary data and records, so on the jobs or in the departments the foreman at the head of that section had to arrange to group those under him in such order that he could have the assistance of a subordinate, a charge-hand or deputy, who was able to direct, instruct, and control the individual who did the actual work of production.

To give a minute description of all the details of the work in a contractor's business would be impossible on such an occasion as that, and, in fact, would occupy a considerable volume of time, and should be accompanied by diagrams and charts in order to explain it fully to those who were not already familiar with the practice.

There was one thing out of all others that was necessary to success, and that was a love of the job undertaken in life. Whilst at school and at technical classes early determination to learn the "why" in everything one did in connection with one's daily work would be found to be one of the most valuable aids in one's future career. Mr. Chessum advised his hearers to realise that at school the training was only a means to an end. Although the syllabus of the school might not include all methods which were in actual practice in a builder's office, it did include subjects from which useful conclusions might be drawn in the same way as Latin was a help to the acquisition of other languages. He advised them to learn to be master of as many jobs as they could, so that they might be able to control by having the knowledge how to do a job and

how long it should take, and be able to say the never asked a man to do a job that they could not do or had not done themselves.

TOWN PLANNING

THE Minister of Health has addressed a circular letter to county councils, and also to local authorities, on town planning. The chief points of the former are:—

One of the principal objects of town planning is to make provision for new roads and the widenings of existing roads, together with rebuilding or improvement lines, in order to meet the requirements of future traffic, and to reserve the necessary land for this purpose before development or redevelopment takes place while there is still time to do so with economy. To enable this to be done satisfactorily and effectively in the case of projected main roads and main road improvements, it is essential, not only that the County Councils should be consulted, but that they should take an active part in determining the proposals to be included for these purposes in any town planning scheme for areas within the county. It is important, moreover, if road plans for the county are to be prepared to the best advantage, that they should also be connected with neighbouring proposals in adjacent counties or county boroughs, and that there should be co-operation between the respective Councils in order to secure a properly related and satisfactory road system as a whole. For prescribing building or improvement lines along main roads, there is often no readier means at a County Council's disposal than that afforded by collaboration with town planning authorities. County Councils will appreciate in this connection the importance of the earliest consultation between their officials and the Divisional Road Engineers of the Ministry of Transport in planning any projected road improvements. In order that town planning authorities may be enabled to prepare schemes which adequately meet the future needs of the county as well as of their own separate districts, it is important that they should know whether and to what extent the County Councils are prepared to undertake responsibility for suggested improvements on main roads and the construction and maintenance of proposed new roads which by their importance have a fair claim to be "mainlined." Where the proposals to be included in a scheme (after full consultation with the County Council) are wholly or partly for the benefit of the main road system of the county, it is desirable that the County Council should clearly indicate to the town planning authority at the earliest possible moment that they are prepared to undertake responsibility to the extent of the benefit. Where new roads or widenings included in a town planning scheme are proposed to be undertaken at once, or soon after the approval of the scheme, the powers of the County Councils as highway authorities will be sufficient to enable them to make the necessary arrangements for meeting any expenditure which can properly be borne by them. Expenditure on account of claims for compensation, or excess cost of construction at the time of private development, does not often arise, and is not generally serious, where extensive interference with existing buildings is avoided, especially if, as is desirable, the owners concerned are consulted before the plan is settled, and the lines of the roads adjusted so far as reasonably practicable to meet their views. County Councils will, no doubt, consider it right that they should accept responsibility for their share of the expenditure above referred to, when it is incurred for the benefit of the county road system; and the Minister trusts that they will co-operate as far as possible by the use of their powers as highway authorities, and also the powers of sections 3 and 34 of the Public Health Act, 1925, and section 5 of the Roads Improvement Act, 1925. The Minister hopes, therefore, that there will be the closest co-operation between County Councils and any local authorities preparing town planning schemes.

The circular to local authorities may be summarised in the following extracts:—

The Town Planning Regulations already pro-

that County Councils shall be notified of proposals of town planning authorities affecting in county districts at various stages in the preparation of town planning schemes. In view, however, of the close interest of County Councils in town planning schemes, the Minister of Health considers that it will be an advantage that any County Council concerned shall be consulted; their co-operation sought, before town planning proposals are prepared for land either in a county district or in proximity thereto, that, where land within a county district is proposed to be included in any town planning scheme, the County Council should be approached before it is decided what the town planning area shall be. Section 21 of the Town Planning Act, 1925, preserves the operation of schemes, orders and regulations made under any enactments repealed by the Act, but any fresh resolution of local authority deciding to prepare a town planning scheme should now be passed under section 2 of the new Act. It will be observed that the provisions of sub-section (2) of section 10 of the Act (which relate to compensation on account of buildings erected or work done subsequent to the passing of a town planning scheme) are not to affect a purchaser of land as the resolution has been registered, if so required, under any enactment subsequently enacted providing for the registration of local land charges. Provision has now been made for such registration in Part VI (Section 15) of the Land Charges Act, 1925, and a Circular has been addressed to Local Authorities on this subject. It is now incumbent on every local authority or local committee of local authorities, which is preparing a town planning scheme to consider that provision ought to be included for the reservation of land for allotments, after obtaining report from their Allotments Committee. If part of the district of a neighbouring borough or urban district is included in the scheme, the Council of that authority has to be consulted, and they also have to obtain a report from their Allotments Committee. The Minister is to take this opportunity of reminding the Councils of boroughs and urban districts with a population of over 20,000 at the last census that they are required to submit schemes to him before January 1, 1929, for any land in their jurisdiction which is subject to town planning. Councils who are not already preparing schemes for parts of their area for which schemes are required should therefore undertake the necessary preliminary surveys soon, with a view to adopting plans and taking the initial steps to carry them in schemes. Copies of these circulars may be purchased through any bookseller, or directly from H.M. Stationery Office, Adastral House, Kingsway, London, E.C. 4, and all branches.

The Institute of Builders.

The Institute of Builders has just published a brochure setting forth its position in the building industry, its history, constitution, objects and conditions of membership. The aims of the Institute may be summarised as follows:—To promote excellence in the construction of buildings and honourable conduct of business; to develop technical education for the industry by providing lectures for this purpose, by testing the competence of persons in the industry to enter the industry, and by awarding certificates, distinctions, scholarships, prizes, etc.; to encourage and discover inventions for use in the industry; to establish a library to diffuse among members information of interest; to promote sound legislation; to co-operate with other bodies matters affecting the industry; to arrange standard forms of contract; and to encourage the settlement of disputes by arbitration and to nominate arbitrators. Membership is divided into three grades, namely, Fellows, Associates and Licentiates, who are entitled to use the distinguishing letters F.I.O.B., A.I.O.B., and L.I.O.B. respectively. Candidates for membership must proceed by way of Licentiate, for which they must be over nineteen years of age and have passed the Institute's Licentiate examination.

PUBLIC WORKS CONGRESS

We give hereunder our concluding reports of papers read at this Congress, recently held at the Agricultural Hall, Islington.

The Strengthening of Bridges.

This paper was prepared by Mr. C. G. MITCHELL, B.Sc. (Eng.), A.M.Inst.C.E., and Mr. C. S. CHETTER, B.Sc. (Eng.), A.M.Inst.C.E., both of the Roads Department, Ministry of Transport. They said that it was rare that the question of strengthening an existing road bridge arose apart from that of widening. Generally the decision lay between the widening and strengthening of the existing bridge, and its total replacement by a wider and stronger modern bridge. In many cases where the old bridge was of great artistic or historical value it was possible to find an equally convenient site elsewhere upon which an entirely new bridge could be built, leaving the old structure, adequately strengthened, to carry rigorously restricted traffic or to serve as a footway. As an alternative it might be decided to effect substantial widening and strengthening. Sometimes cantilevered footways would meet the case, although this would add to the dead and live load on the old structure. No further widening might then be required. A difficulty sometimes arose where the existing footways were thrown into the carriageway in that the surcharge from wheel loads on the spandrel walls was greatly increased. As a general rule where the existing bridge was narrow and could not be economically strengthened it was far better to demolish it and build a new and wider structure, and this rule should only be broken where the existing bridge was noteworthy for its beauty or antiquity. If the bridge was of no special value, historically or architecturally, the

question became purely one of engineering. It must be decided whether it would be cheaper to strengthen and widen the old bridge, or to build a new one. In this connection maintenance costs should be considered.

Regional Planning and Road Development.

Mr. H. H. HUMPHRIES, M.Inst.C.E., City Engineer and Surveyor of Birmingham, in the course of a paper on this subject, said it was a matter of paramount importance that the planning of extensive areas should be undertaken, extending and co-ordinating the Town Planning Schemes of the various authorities within it. Thus would be produced one comprehensive and coherent scheme for the whole of a region which, owing to its geographical and physical features, had such important matters in common as those above mentioned conjoined to mutual manufacturing, trading and business interests. The requirements for modern arterial roads to cope with the traffic must include provisions to enable it to travel both fast and safely, and they would appear to consist of the planning of the most direct routes, sufficient widths, capacious enough to accommodate all kinds of traffic, special facilities for fast traffic to travel safely, provisions for the safety of crossing traffic and pedestrians, well sign-posted, all mains accommodated under footpaths, easy gradients and good alignment with long curves and specially planned junctions, the road being widened out at curves and at quick junctions, sound, dry foundations and abutments capable of keeping the surface up to its work, a hard wearing waterproof and weather proof and, as far as possible, non-slippery surface with sufficient gradient, and but enough camber to drain properly, banked at curves of less than 1,000 ft. radius, and capable of being easily and economically cleansed, combined economical

COMPARISON OF PRICES OF BUILDING MATERIALS IN NOVEMBER, 1925, WITH CURRENT PRICES.

Material.	Nov. 1925.			Dec. 1.			Rise.	Fall.
	£	s.	d.	£	s.	d.	%	%
Bricks—								
Best Stocks	4	3	6	4	3	6	—	—
Flettons	2	13	3	2	13	3	—	—
Glazed	21	10	0	21	10	0	—	—
Thames Ballast	0	10	6	0	10	6	—	—
Thames Sand	0	14	6	0	14	6	—	—
Shingle (½ in.)	0	12	9	0	12	9	—	—
Portland Cement	2	18	0	2	18	0	—	—
Ground Blue Lias Lime	2	4	6	2	4	6	—	—
Grey Stone Lime	2	11	9	2	11	9	—	—
Bath Stone	0	2	9½	0	2	9½	—	—
Portland Stone	0	4	4	0	4	4	—	—
Good Sound Building Timber—								
4 in. x 11 in.	32	0	0	28	0	0	—	12.50
3 in. x 11 in.	28	0	0	25	0	0	—	10.71
2 in. x 11 in.	28	0	0	25	0	0	—	10.71
3 in. x 9 in.	25	0	0	24	0	0	—	4.00
3 in. x 7 in.	23	0	0	20	0	0	—	13.44
3 in. x 4 in.	23	0	0	22	0	0	—	4.34
Slates—								
24 in. x 12 in.	37	12	6	37	12	6	—	—
22 in. x 12 in.	34	0	0	34	0	0	—	—
20 in. x 10 in.	25	12	6	25	12	6	—	—
16 in. x 10 in.	17	12	6	17	12	6	—	—
16 in. x 8 in.	13	15	0	13	15	0	—	—
R.S. Joists	13	10	0	12	10	0	—	7.41
Iron—								
Common Bars	13	10	0	13	0	0	—	3.70
Mild Steel Bars	11	0	0	10	0	0	—	9.09
Steel Bars	11	0	0	10	0	0	—	9.09
Cut Nails	19	10	0	19	0	0	—	2.56
Sheet Lead	50	10	0	48	10	0	—	3.96
Glass—								
15 oz. Sheet	0	0	3½	0	0	3½	—	—
21 oz. Sheet	0	0	4½	0	0	4½	—	—
26 oz. Sheet	0	0	5½	0	0	5½	—	6.52
Raw Linseed Oil	0	3	8	0	3	8	—	4.35
Turpentine	0	6	8	0	6	4	—	4.88
Ground English White Lead	59	15	0	58	15	0	—	1.67
White Lead Paint	80	15	0	79	15	0	—	1.24
Red Lead	55	10	0	55	10	0	—	0.99

construction and maintenance suitable for the work expected of it, amenities attached to the route to be preserved as far as possible and extended to provide some parkway effects throughout.

Gradients.—The establishment of maximum and minimum gradients for new arterial routes, to be only departed from under exceptional circumstances, was important when the effect upon transport was considered. While a maximum gradient of 1 in 30 was most desirable, special efforts should be made when that was impossible to limit it to 1 in 25. As regards the minimum gradient, nothing less than about 1 in 300 was advisable, for it was important that lengthened saturation of the road surface should be avoided. The Arterial Roads and Main Drainage Committee of the Midland Regional Advisory Council were advising that Council to adopt the following widths of roads in connection with the regional planning:—Main arterial roads and secondary ones of great importance, 120 ft.; secondary arterial roads, 80 ft.; and through communication roads, other than arterial routes, 65 ft.

Modern Methods of House Construction.

Mr. Percy Morris (the City Housing Architect of Wakefield), who delivered this paper, said that the problem with which we were faced was to provide quickly for a considerable proportion of this nation convenient homes of a good standard of construction and design in pleasant surroundings, in particular for those who could not pay what was termed an economic rent. To overcome the immediate difficulty, it would be necessary in most industrial areas throughout the country to adopt other types of construction for dwelling houses. Of the forms and methods of house building now upon the market, probably some form of concrete construction provided the next best solution of the problem. There were, however, many dangers and pitfalls to be avoided, chief amongst which was that relief in one particular trade might result in overloading the work in another trade where the shortage of labour was just as acute. For example, relief in the bricklaying trade might be secured by the adoption of the pier and panel system of concrete construction, but the work required from the plastering trade was increased.

To name a few methods of concrete construction: We had the "in situ" methods, the pier and panel method of "in situ" piers with pre-cast slab panels, pre-cast framing, with pre-cast in-filling, or with "in situ" in-filling. Further, we had methods of construction of steel or wood framing with either a concrete cover or in-filling. It was realised also in practice that for economy in labour, cost and speed of erection, the 4 in. concrete building blocks of a convenient size, built as a continuous cavity wall, were comparable to most of the special systems yet on the market, and was one of the most satisfactory methods of building in concrete on traditional lines. In the manufacture of concrete building blocks on a small scale, it was found that the cost of the considerable manual labour involved made an unfavourable comparison with the cost at which bricks should be procurable. It would be far better that a plant should be put down for the manufacture on a large scale of slabs or blocks on mass production lines for co-operative use in areas where the supply of bricks was not sufficient to keep the procurable bricklayers fully employed; this should result in the production of a satisfactory concrete building material at a price comparable with the price of bricks. Mr. Morris gave some explanatory notes, illustrated by a diagram, of a suitable plant prepared in consultation with Messrs. Winget, Ltd., for the rapid manufacture of concrete slabs and blocks for distribution by either rail or road.

In considering any permanent substitute for the ordinary bedded brick or block wall lined with plaster, there were two definite conditions which must be fulfilled if success was to be secured; (1) The outside coating should be durable, and its durability not dependent on frequent coating, painting, &c.; (2) the inside face should have low conductivity and be sufficiently absorbent to avoid condensation, sufficiently smooth and free from crevices not

to provide harbourage for insects, and sufficiently hard and strong to resist attacks by mice and vermin and breakage by reasonable accident.

Timber framed houses had been erected on the Lupset Estate by the Wakefield Corporation, with the panels fitted with natural stone, having the internal face coated with a thin bituminous compound and a plywood lining divided into panels, with oak cover slips. The oak framing was carried out in English oak and the panels were oolite limestone from Ketton. In further houses, instead of a panelled interior, the plywood lining was prepared with fine butt joints, to which wall paper was applied throughout the houses. A further modification had been made with the external in-filling to the oak framing, the panels being formed of a "re-made" stone composed of the dissevered aggregate and matrix or the original oolitic stone formation, to which has been added a small proportion of Portland cement, forming an impervious stone of pleasing colour and having good insulating qualities.

The "Winget" pier and panel system of construction had been adopted with success, and contracts had already been let for 400 houses on the same estate. The system of construction was briefly as follows: The slabs formed the shuttering for the piers, which were formed of "in situ" concrete, dispensing with timber shuttering. The corner blocks were of a special shape with centre arc holes and channels for the "in situ" concrete, and were laid dry and plumb. To these angle blocks were laid the slabs, whose ends were shaped and rebated to receive slips of asbestos sheeting, 3½ in. wide. These pugging strips served to keep the slabs at the proper distance apart, and, in addition, formed part of the shutter for the poured concrete piers. The top or male edge of the slabs had two shallow recesses to receive the looped ends of wire galvanised ties, which were nailed down to the clinker breeze slabs, thus keeping the slabs up to the pugging pieces. The slabs were laid dry, and as each two or three courses were placed in position, the pier space between the pugging strips was filled in with "in situ" concrete and reinforced. The ends of the slabs were firmly and permanently held, the pier by a locking joint. At the first floor height and at roof height, 3 in. lacing courses of "in situ" concrete with suitable reinforcement were run all round the building, the reinforcement being looped and engaged with the reinforcing rods at each corner of the building. To bridge over the cavity between the outer and inner slabs, strips of asbestos were laid to serve as centering. The external face of the blocks was finished with a one-coat pebble dash roughcast, but the work required to be executed by the plastering trades was increased by this. It was thought that a development of this system of construction would enable the completion of both the external and internal face with a minimum of plasterers' labour. The slabs were manufactured in the same way as before except a three-quarters clean washed sand, or an oolitic sand face was formed in the mould. The construction was similar, except in this case the blocks were bedded. The finished work gave a pleasing appearance, and was strong, durable, and satisfactory.

The "in situ" concrete system of construction provided a method of wall construction which could be carried out by unskilled labour. The shuttering presented the greatest difficulty, both in erection and adaptation, to secure good alignment with plumb angles and the proper filling of concrete under window sills, &c.

Corolite was a form of monolithic poured "in situ" concrete, known and practised in Holland under the names of Korrel-beton. Its characteristic was that voids of comparatively large size were deliberately formed by screening out all material from the aggregate below ½ in. or ¾ in. and using up to about 1 in. of furnace clinker, slag, or other inert porous material in the proportions of 8 parts of aggregate to 1 part of cement with sufficient water to cause even distribution of the cement over all surfaces of the aggregate and leaving no mortar. The mixture was placed evenly and without heavy ramming between specially light shuttering, one story at each pouring, the resultant concrete being extremely porous, up to 40 per

cent. voids. The material was light, weighing 50 lbs. per foot cube, but was sufficiently strong for house building purposes. It was claimed that although the voids were so large the penetration of moisture in the horizontal direction was prevented, and on the outer and inner surfaces of the walls was sealed with a non-moisture holding coat, for example, Portland cement roughcast rendering, the walls were impervious to moisture and almost sound resisting. The reason also made that capillarity was defeated by reason of the relatively large size and frequent occurrence of voids, it being advanced by patentees that moisture could only pass through small pores, in opposition to gravity, and capillary attraction, and that when the voids reached certain size capillarity did not take place; this was the reason why damp courses were omitted in this method. The shuttering used was formed of hollow wooden frames, the inner edges rebated, made of standard width and of a height equal to the full height of the room; for both sides of any wall or partition metal spacers were used to maintain the inner and outer shuttering apart at a distance equal to the thickness of the outer wall of 8 in. the partition of 4 in., as the case might be. The shuttering frames were up the door and window frames were fixed, sheet metal panes were fitted to the rebates mentioned and held by angle irons that were themselves wedged up by a clip that acted in several directions at once. The advantages of light weight, sound proof, and cheap reinforced concrete floors had been obtained in this system by utilising frames of the wall shuttering to support floor shuttering, some, if not all, of which frames were left in until the concrete was capable of carrying its load; the metal pans, however, were removed from the surfaces, outwardly generally about 48 hours after pouring, and were used over and over again, as was every part of the shuttering. This method could be adopted for flat roofs, cheapening the cost by minimising the labour in all trades. No bricklayers, masons, or, when flat roofs were adopted, slaters, were necessary.

The special feature of the Rogers system was the reinforcement, which took the form of sheets of sheet steel stamped to form "wing" or "tangs," four in each square of 6 in., pressed outwards and two inwards. The advantages claimed were strength and economical use inasmuch as concrete could be placed from both sides simultaneously and yet kept distinct, which made it possible to place an impervious gravel rock or other form of weathering concrete on the outside and a porous breeze concrete on the inside to prevent condensation. The tangs of the reinforcement helped to support the concrete, enabling the sliding shuttering to be raised quickly. This system necessitated the erection of a special form of scaffolding to afford facilities for guiding the sliding shuttering. The internal face of the wall was plastered and the external face roughcast in the house erected at Wakefield. The whole of the wall including the shuttering, could be erected by unskilled labour under the control of a skilled carpenter.

In all the systems described, with the exception of different methods of ceilings, ordinary plaster had been the internal finish, but the most serious obstacle to any scheme for quick building was the shortage of labour in the plastering trade. Various substitutes for ceilings had been tried, all of which are generally satisfactory, but as yet nothing better or cheaper had been put on to the market than lime plaster. The most urgent requirement for all types of houses was the perfection of a suitable material having thermal and vermin resisting qualities to take the place of plaster. As there was practically no advantage if this material had to be applied as a plaster in the ordinary way, it followed also that some method of building must be designed to avoid this.

A new form of building had been evolved and developed by Messrs. Foundation Co., Ltd., London. The framework was of pre-cast synthetic stone columns suitably reinforced in one length; these were tied together at the first floor and roof plate level with stout beam

ported upon ledges cast upon and bolted to columns, which, in addition to giving a rigid work, provided supports for the floor and joists. The in-filling to the framework of weather resisting, compressed thin outer inner slabs of Ketton re-constructed stone, a filling between of cellular or ordinary "bitu" concrete poured after the slabs had put into place; this formed the main wall.

Discussion.

FRANK MASON, M.Inst.C.E., F.S.I., President of the Institution of Municipal and City Engineers, and Engineer and Surveyor of Wakefield Rural District Council, presided. The Chairman read a letter from Mr. A. M. (surveyor to the Honiton Rural District Council), who expressed the view that local authorities should first build houses for the poor people, and not attempt the erection of others until they had done this. An A3 house could be built at a cost of £400, including loan and property charges, and let for 10s. per week. This had been done at Honiton Rural District Council. They should build for people with an income of £3 5s. per week, as these could be assisted to have houses under the 1923 Act.

COUNCILLOR T. B. WEL (Wakefield) regretted a paper of such importance was being taken at a stage of the Congress. Housing, he was the channel through which would the other reforms such as town-planning, agreed with Mr. Morris that we must pay attention to the balance of the crafts in the country. We must regard housing as a public duty in the direction of public health and service, instead of in the light of profit and rents. He hoped that as municipal authorities they would utilise their powers under the 1923 Act, and work in the direction of building by brick on mass production lines the help of the apprenticeship system.

MR. F. MARSDEN (city engineer of Bradford) what was included in the net costs of the various methods as stated by Mr. Morris. All Mr. Marsden's experience at Bradford bore Mr. Morris's view that for durability nothing could beat brick-built or brick and stone-built houses. He thought that if one could put up houses on the principles used in most of the patent systems, they could be built just as quickly.

MR. G. FOSTER (Wakefield) agreed that better houses could be built than by brick alone. But other methods must be found which were unobtainable, and Mr. Morris helped his Council to use methods which proved, in the main, very satisfactory.

MR. G. H. S. ERWOOD (Chairman of the Wakefield Housing Committee) agreed that there was nothing to beat brick and stone houses, which he thought were the quickest to build. It was a question of organisation. We must organise the labour in the building trades. The play beds of the country should be controlled, whether through the municipalities or through Parliament: the production of all building materials should be controlled.

MR. A. G. ALINN (Chairman of the Southampton Housing Committee) stated that his Council had had tremendous difficulties in the plastering of brick houses. They had, however, been able to erect concrete houses, so far as appearance went they were quite as good as brick houses. What was more, the Council had been able to employ craftsmen to erect them that they could not have done with building, and to build two houses where they would not have been able to build one with brick.

At the end of the year there would not be a single family with two children in Northampton which would not be in a house to itself. The Council was also going to experiment with concrete houses. As to the cost, for the 1,500 houses the Council had built, this worked out at 10s. per week per £10 of assessment. He urged the authorities to try different methods.

In replying to the discussion, Mr. Morris said the costs referred to by Mr. Marsden included drains, paths, fencing and electric light, but not streets, sewers, or establishment costs.

NEW BUILDINGS IN LONDON.

Acton.—A nurses' home is to be built by the Governors of the Acton District Hospital at Gunnersbury-lane, W.3. Messrs. E. C. P. & H. Monson, architects, Finsbury Pavement House, A. Oargate, E.C.

Blackheath.—New manufacturing premises are being erected for Messrs. Burndebt Wireless, Ltd., Aldine House, Bedford-street, W.C.2. Messrs. Edwards Construction Co., Ltd., 86A, High-street, Eltham, S.E.9, builders. Messrs. Redpath, Brown & Co., Ltd., 3, Laurence Pountney Hill, E.C., 4, steelwork. Messrs. Bishop & Etherington-Smith, architects, 30, Duke-street, St. James's, S.W.1.

Bower-street.—Extensive alterations are to be made to premises in Bower-street, E., recently occupied by Dr. Barnardo's Homes, as a hostel. Messrs. Culpin & Bowers, architects, 27A, Bush-lane, E.C.4.

Camden Town.—Premises in Camden Town High-street, and Kentish Town-road, N.W., are to be compulsorily acquired by the London Electric & Metropolitan District Railway Co.s for enlargement and reconstruction of Camden Town Station.

Catford.—A contract is to be placed shortly for the building of the new church of St. John at Southend Village, S.E., for which plans have been prepared by Sir Charles Nicholson, Bart., 2, New-square, Lincoln's Inn, W.C. The cost is estimated at £35,000.

Charles-street.—Messrs. Imperial Airways, Ltd., Wolsey House, Piccadilly, W.1, propose to build new central offices—to be called Airways House. Building operations have been begun by Messrs. Rice & Son, 15, Stockwell-road, S.W.9, builders. Messrs. Powers & Deane-Ransomes, Ltd., steelwork, Cubitt Town, E.14.

Cheapside.—The Gramophone Co. are to open a new branch showroom, after alterations and putting in of shop fittings.

Chelsea.—The large building at the corner of Cheyne-walk, and Danvers-street, S.W.3, is to be adapted and enlarged to serve the purpose of a hostel for women. Messrs. Wratten & Godfrey, architects, 18, Queen Anne's Gate, S.W.1.

East Ham.—Mr. H. C. Horswill, 183, Green-street, Forest Gate, is the contractor for the new secondary school in Plashet-grove, which is being built by the East Ham B.C., at a cost of £40,000.

Edgware.—Messrs. MacFisheries, Ltd., propose to equip and open a new branch shop in Hale-lane. Plans by Premises Department, Lever House, Blackfriars Bridge, E.C.4.

Fenchurch-street.—The church of St. Katherine Coleman, E.C.3, the site of which has been acquired by Messrs. Lloyd's Register of Shipping, 71, Fenchurch-street, E.C.3, for building purposes, is to be demolished in the near future.

Grays.—Messrs. Brown Bros. (Grays), Ltd., Bridge-road, Grays, are building a large garage and repair shop in Argent-road. Messrs. Heenan & Froude, Ltd., steelwork, Blackfriars House, New Bridge-street, E.C.4. Mr. Harold Cane, architect, 11, Victoria-street, S.W.1.

Great Titchfield-street.—Messrs. Slater & Moberley, A. and F.R.I.B.A., 46, Berners-street, W.1, have prepared plans for the erection of a block of shops and offices. Messrs. Mullins & Lumsden, builders, Gresham Works, South Norwood, S.E.25.

Hackney.—A new factory is to be erected in Bentley-street, E., to the design of Mr. J. W. Codrington, F.R.I.B.A., 14, Bloomfield-avenue, Palmer's Green, N.13. Messrs. R. Maskall & Son, builders, 189, New North-road, N.1.

Hampton.—A new Wesleyan church is to be erected at a cost of about £4,000 to the designs of Mr. George E. Withers, F.R.I.B.A., 50, Cannon-street, E.C.4. Messrs. H. Somerford & Sons, 104, Manor-street, Clapham, S.W.4, builders.

Hart-street.—The four-story building at the

corner of Hart-street and Baxter-street, W.C.1, is to be entirely reconstructed. Mr. H. V. Clogg, builder, 81, Vallance-road, E.1.

High Holborn.—Messrs. Spreckley, Ltd., 21, Phoenix-place, W.C.1, are carrying out alterations to the "Old Crown" public house.

Holborn.—Messrs. Sabey & Son, builders, 100, Great Russell-street, W.C.2, have commenced the gutting of the interior of Embassy House, W.C., prior to its reconstruction, including additional floors.

Huntley-street.—The Royal Ear Hospital are erecting a new hospital on a site at the corner of Huntley-street and Pancras-street, W.C.1, at a cost of about £50,000. Messrs. Higgs & Hill, Ltd., Crown Works, South Lambeth-road, S.W.8, builders. Messrs. Edmund Wimperis & Simpson, architects, 61, South Molton-street, W.1.

King's Cross.—Plans have been approved for the erection of a two-story warehouse in Field-street, N.W.1, for Messrs. Hewitt Bros., printers' engineers. Mr. Max Clarke, F.R.I.B.A., architect, 20, Bedford-row, W.C.1.

Kingston.—Messrs. Jarvis & Richards, architects, 60, Tufton-street, Westminster, S.W., have prepared plans for new premises for the Governing Board of Tiffin Boys' Schools.

Kingston-on-Thames.—Plans are being completed and quantities prepared for the proposed nurses' home at the Institution of the Board of Guardians. Mr. F. Danby Smith, architect, Parliament Mansions, Victoria-street, S.W.1. The cost is £80,000, and 100 beds will be provided.

Lambeth.—The parishioners of St. Matthew's Church, New Kent-road, S.E.1, are raising funds for a restoration scheme. Plans have been prepared by Mr. Martin Travers, F.R.I.B.A., 25, St. Peter's-square.

Mortimer-street.—Early in January the whole of the west wing of the Middlesex Hospital, W.1, containing eight wards, will be closed for rebuilding, this being the first stage of the Hospital's £500,000 scheme. Mr. A. W. Hall, F.R.I.B.A., architect (Messrs. Young & Hall), 17, Southampton-street, W.C.1.

New Oxford-street.—Messrs. J. Lyons & Co.'s construction Department, Cadby Hall, Kensington, W., have demolished the front of the building at Nos. 36, 38, New Oxford-street, W.C., in order to instal new shop and display windows and interior restaurant equipment, it being the intention to re-open the premises as a branch cafe.

Oxford-street.—No. 100, Oxford-street, W.1 is being rebuilt to provide new showrooms and offices for Messrs. F. & C. Osler, Ltd., electric light fittings manufacturers. Messrs. Bovis, Ltd., builders, 43, Upper Berkeley-street, W.1. Messrs. Constantine & Vernon, 82, Mortimer-street, W.1, have designed a building of six floors.

Piccadilly.—The premises at the corner of Piccadilly and Brick-street, long the home of the Isthmian Club, have been acquired by the Green Park Hotel Co., Ltd., and are being rebuilt. The building is being practically gutted, and three stories are being added, and on the ground floor there will be a large restaurant, grill room, and lounge, &c. The work of excavating and underpinning, &c., is being carried out by Messrs. W. H. Lorden & Son, Ltd., contractors, Upper Tooting, S.W.17. Mr. Paul Hoffmann, Capel House, E.C.2, architect.

Regent-street.—The large block of shops and offices at the corner of Regent-street and Glasshouse-street, W.1, are shortly to be pulled down and a modern building erected. Messrs. North, Robin & Wilsdon, F.R.I.B.A., 35-39, Maddox-street, W.1, architects.

Regent-street.—Messrs. William Woodward & Sons, 15, Great James's-street, W.C., have been given sanction by the L.C.C., on behalf of Messrs. Lafayette, at 188-196, Regent-street, W.1, to erect a staff tea-room on the roof of Nos. 55-56, Kingly-street.

St. Pancras.—Financial arrangements are being completed in connection with the erection



of the proposed North-Western Polytechnic Institute. Mr. W. E. Riley, F.R.I.B.A., M.I.C.E. (Messrs. Riley & Glanfield), architect, 6, Raymond Buildings, Gray's Inn, W.C., estimates the cost of the building and equipment at £112,745.

Smith-square.—Good progress is being made with the building of the headquarters of the Transport and General Workers' Union. Messrs. David Colville & Co., Ltd., steelwork, 107, Old Broad-street, E.C.2. Messrs. Troy, contractors, Messrs. Culpin & Bowers, architects, 27A, Bush-ane, E.C.4.

Somers Town.—Plans have been prepared by Mr. A. J. Thomas, architect to the St. Pancras B.C., for new dwelling-houses, &c., on the Somers Town improvement area.

Southampton-row.—Demolition operations are being carried out on the site of the second section of the new headquarters in Southampton-row and Bloomsbury-square, W.C., for Messrs. Liverpool Victoria Friendly Society. Messrs. James Carmichael (Contractors), Ltd., Trinity-road, Wandsworth, S.W. Mr. C. W. Long, F.R.I.B.A., architect, 36, Bloomsbury-square, W.1. A nine-floored building is to be erected.

South Kensington.—A new geological museum is to be built on a site in Exhibition-road, S.W.7, whilst a new whale building is to be added to the Natural History Museum, H.M. Office of Works, architects, Storey's Gate, S.W.1.

Southwark.—The London Electric and Metropolitan District Rly. Co.s are to carry out various improvements at their Elephant and Castle station, S.E.1., including the construction of new subways and elevators, buildings, &c., to plans prepared by their engineers.

Stepney.—Messrs. Josephs, 2, Paul's Bake-house-court, E.C.4, are the architects for the building of a number of additional wards at the London Jewish Hospital, at Stepney Green, E.1.

Stratford.—A new factory is to be built in Shirley-street, E.15, for Messrs. Coombs, Bros. & Sons, Ltd., provision merchants, to plans prepared by Mr. G. N. Kent, Lic.R.I.B.A., 521, Barking-road, E.13.

Surbiton.—An extensive housing scheme is to be carried out at Tolworth. Messrs. Thoroughgood Bros. & Son, contractors, 55, Bond-road, Tolworth, Surbiton, S.W., for 50 houses, at £21,249.

Theobalds-road.—A housing scheme is to be carried out by the Essex County Building Co., Ltd. Messrs. Anthony Fasey & Co., Ltd., builders, Grove Green-yard, Leytonstone, E.11.

Trafalgar-square.—A plot of freehold land in Spring Gardens, S.W.1, is to be sold for building purposes by Messrs. Hampton & Sons, surveyors, 20, St. James's-square, W.1.

Wandsworth.—A new branch Post Office is to be erected on a vacant site at the Garrett-lane and Buckhold-road, S.W., under the supervision of H.M. Office of Works, Storey's Gate, S.W.1.

Watford.—Alterations and additions, including a new electric light installation, are to be made to the Police Station. Mr. A. J. Eldridge, builder, 198, Vicarage-road, Watford.

Welwyn.—Future developments at the Garden City include the lay-out of Central Parkway, along both frontages of which will be erected public buildings, including a cinema, hotel, bank, &c., and houses. Mr. Louis de Soissons, F.R.I.B.A., architect to the Garden City.

Willesden.—Building operations have now started under the additions to the Willesden Hospital in Harlesden-road, N.W.10. Plans for a new ward have been prepared by Messrs. Greenaway & Newberry, F.R.I.B.A., Parliament Mansions, Victoria-street, S.W.1. Messrs. G. Godson & Son, builders, 215, Kilburn-lane, Willesden, W.

Woolwich.—Messrs. Whincop & Channer, architects, 47, Thomas-street, Woolwich, S.E., have prepared plans for new premises at Nightingale Vale, S.E.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	Carpenters. Joiners.	Plas- ters.	Slaters.	Plum- bers.	Painters.	Lab.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barnrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Barry	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Bedford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Birkenhead	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/8½
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Bournemouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Brentwood	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½
Bridgewater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Brighton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Cambridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Colchester	1/8	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Durley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
E. Glam. (Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Eastbourne	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Great Yarmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hartlepool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Ipswich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Lancaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/8½	1/8½
Llanelli	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
London { 12 m. radius	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½
London { 12-15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/9
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Norwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Rugby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/7
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8

(For rates of wages in the Building Trade in Scotland, see page 829.)

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

DECEMBER 7.—**Belfast**.—REPOINTING.—Chimney at Purdysburn Fever Hospital, for the C.B. R. Meyer, Town Clerk.

DECEMBER 7.—**Brecon**.—HEATING.—Heating, steam, and hot-water installation at the new Hospital now in course of erection in Cric-Cochion-road, for the War Memorial Committee. Martin & Martin & W. H. Ward, architects, 106, Colmore-row, Birmingham, Deposit £2.

DECEMBER 7.—**Brighton**.—Rebuilding Nos. 164 and 165, Western-road, for the County Borough of Brighton. David Edwards, M.Inst.C.E., F.S.I., Borough Engineer and Surveyor, Town Hall, Brighton, Deposit £2 2s.

DECEMBER 7.—**Doncaster**.—SCHOOL.—Erection of junior-school Girls' and Infants' School, for the E.C. Sydney Athron, Lic.R.I.B.A., and E. Vincent Wyson, A.R.I.B.A., Dolphin Chambers, Market-place, Doncaster. Deposit £2 2s.

DECEMBER 7.—**Friern Barnet**.—HOUSES.—Erection of 100 houses, for the U.D.C. F. P. Kindell, M.Inst.C.E., Engineer and Surveyor, Council Offices, he Priory, Friern Barnet-road. Deposit £2.

DECEMBER 7.—**Gloucestershire**.—EXTENSIONS.—Erection of extensions to the Institution at the Standish House Tuberculosis Institution. Vernon S. Barnes, R.I.B.A., 1, King-street Parade, Stroud. Deposit £2 2s.

DECEMBER 7.—**Halifax**.—LIBRARY.—For (a) branch library at Skircoat Green, and (b) the extension of the Technical College, for the C.B. W. H. Ostler, Secretary to the E.C. Deposit £1 1s. each.

DECEMBER 7.—**Lund**.—VICARAGE.—New vicarage, and, Clifton, near Preston. A. C. M. Lillie, L.R.I.B.A., architect, Bamber Bridge.

DECEMBER 7.—**Margate**.—CLEANING.—For the exterior cleaning of a portion of the Weststead House School, Margate, Kent, for the L.C.C. The architect to the Council, The County Hall, Westminster ridge, S.E. 1.

DECEMBER 7.—**Ruislip-Northwood**.—COTTAGES.—Erection of 16 cottages at Wiltshire-lane, Eastcote, and 24 at Addison Way, Northwood, for the U.D.C. Clerk to the Council. Deposit £2 2s. for each set.

DECEMBER 7.—**Sandbach**.—COTTAGES.—Twelve non-parlour-type cottages on the Council's Housing site Hassall-road, for the U.D.C. J. R. Price, architect.

DECEMBER 7.—**Shoreham-by-Sea**.—COTTAGES.—Eight cottages in Gordon-road, for the U.D.C. Town Surveyor.

DECEMBER 7.—**Skegness**.—BATHING POOL AND RECREATIONAL PLAZA.—Erection of a bathing pool, dressing-boxes, bungalows, pump and filter-house, administrative block, &c., and an orchestral piazza, rosenade, refreshment room, shelter and conveniences, the whole of the constructional works being in reinforced concrete, for the U.D.C. R. H. Jenkins, Engineer and Surveyor, Council Offices. Deposit £1 1s.

DECEMBER 7.—**Solihull**.—HOUSES.—Non-parlour type houses at Baddesley Clinton—six houses, Rising ridge-road; and Earlswood—12 houses, Reservoir Middle-road, for the R.D.C. Ewen Harper Bros. & Co., architects, Ruskin Chambers, 191, Corporation-street, Birmingham. Deposit £1 1s.

DECEMBER 7.—**Southport**.—ENGINE HOUSE.—Erection of a brick engine-house and other work in connection therewith at the Bickerstaffe pumping station, for the Southport, Birkdale and West Lancashire Water Board. C. Burton Ede, Assoc.M.Inst.C.E., Engineer and Manager, 14, Portland-street, Southport. Deposit £2.

DECEMBER 8.—**Barking**.—SCHOOL DINING HALL.—Erection of a dining hall at the Abbey School, for the Essex C.C. Education Committee. County Architect, Springfield Old Court, Chelmsford. Deposit £1 1s. to County Accountant.

DECEMBER 8.—**Bushey**.—BUILDING.—Additional dressing accommodation at the Open-Air Swimming bath, King George Recreation Grounds, for the D.C. E. E. Ryder, surveyor.

DECEMBER 8.—**Cardiff**.—ALTERATIONS.—Extensions and alterations at the racquets court, Westgate-street, for the E.C. T. Pierson Frank, Education Architect. Deposit £1 1s.

DECEMBER 8.—**Epsom**.—HOUSES.—For (16) Burgh Heath, (20) Tadworth, (20) Cheam, (30) Cobham, for the R.D.C. Surveyors.

DECEMBER 8.—**Gosforth**.—ADDITIONS.—To the agent Pit depot, and also to the Council Chambers, for the U.D.C. Geo. Nelson, engineer and surveyor.

DECEMBER 8.—**Heaton, Newcastle-upon-Tyne**.—SCHOOLS.—Two secondary schools for 500 boys and 500 girls respectively, for the Newcastle-upon-Tyne E.C. Messrs. Connell & Son, quantity surveyors, Trinity Buildings, 25, New Bridge-street, Newcastle-upon-Tyne. Deposit £5.

DECEMBER 8.—**London**.—ROOFING WORK.—Re-roofing the present roof and erecting a new flat roof and other works to Block E at the Bethnal Green Hospital, for the Guardians. C. Faulkner Jones, Clerk, Administrative Offices, Bishop's-road, E.2. Deposit £3 3s.

DECEMBER 8.—**Royston**.—COTTAGES.—Thirty-two cottages (eight blocks), on the Briary-lane site, for the D.C. Naish & Mitchell, A.R.I.B.A., 7, Hatter-reed, Bury St. Edmund's. Deposit £3 3s.

DECEMBER 8.—**Swansea**.—Erection of new refreshment rooms, beach shelter, promenade, &c., at Rother-slade Bay, Langland, for the Swansea C.B. Ernest E. Morgan, A.R.I.B.A., Borough Architect, 3, Prospect-place, Swansea. Deposit £3 3s.

DECEMBER 8.—**Rotherham**.—LAVATORY.—Additional lavatory accommodation at the Municipal High School for Girls, Middle-lane, for the C.B. Borough Engineer.

DECEMBER 8.—**Totnes**.—Erection of a Post Office. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

DECEMBER 8.—**West Derby**.—PAINTING.—Internal painting to rooms, corridors and staircases at the Park-street Relief Office, Melville-place Relief Office, for the B.G. E. B. Bailey, L.R.I.B.A., F.S.I., 9, Cook-street, Liverpool.

DECEMBER 9.—**France and Belgium**.—HEAT-STORES.—Total supply of 15,000 headstones, packed and delivered f.o.r., to be divided into a number of contracts, none of which shall be for less than 100 headstones, for the Imperial War Graves Commission. The Secretary, Works Department, 82, Baker-street, W.1, marked "Headstone Contract 5079/27, before 10 a.m. on above date.

DECEMBER 9.—**Hammersmith**.—WORK AND MATERIALS.—Work and materials required in the erection of a combined transformer sub-station and urinal at Shepherd's Bush Green, W.12, for the Metropolitan Borough Council. E. Hampton Lucas, Borough Engineer and Surveyor, Town Hall. Deposit £2 2s.

DECEMBER 9.—**Manchester**.—TELEPHONE EXCHANGE.—Erection of a telephone exchange at Collyhurst. Contracts Branch, H.M. Office of Works, King Charles-street, S.W.1. Deposit £1 1s. (payable to the Commissioners.)

DECEMBER 9.—**Margate**.—HOUSES.—Erection of 72 non-parlour type on the Dane Valley estate, Cliftonville, for the Housing Committee. E. Brooke, Town Clerk, 13, Grosvenor-place. Deposit £2 2s.

DECEMBER 9.—**Nottingham**.—PAINTING.—Internal cleaning and painting at the following schools: Alfreton-road Council school, Carlton-road Council school, Forster-street Council school, The Mundella and Collygate-road schools, Old Radford Trust school, St. Catharine's temporary school, St. Philip's Trust school, Trent Bridge Council school, for the E.C. A. H. Whipple, Director of Education, South-parade.

DECEMBER 9.—**Rabean**.—SCHOOL.—National school at Rabean, Leix, for the Parochial House, Rabean, Abbey-lea, C. Coyne, P.P., Manager.

DECEMBER 9.—**Sheffield**.—BUILDING.—For (1) Queen Mary Council School, Manor estate, proposed temporary accommodation (hutments) and erection of conveniences; and (2) Maud Maxfield School for Deaf, Easthill, proposed additional class-room accommodation, for the E.C. F. E. P. Edwards, F.R.I.B.A., City Architect. Deposit £1.

DECEMBER 10.—**Doncaster**.—STATION.—Temporary pumping station, laying 223 yds. of 15 in. pipe sewer below Cantley Oval and laying 35 yds. of 15 in. sewer enclosed in sheath pipe on concrete under the railway, and laying 234 yds. of 9 in. pipe sewer, for the R.D.C. W. Crabtree, surveyor, Nether Hall.

DECEMBER 10.—**Glasgow**.—BATHS.—Construction of Shettleston and Tollcross baths, for the T.C. J. Lindsay, Town Clerk.

DECEMBER 10.—**Harrow**.—BUILDING.—Erection of a press building at H.M. Stationery Office. Contracts Branch, H.M. Office of Works, King Charles-street, London. S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

DECEMBER 10.—**Hendon**.—ADDITIONS.—Additions to the sewage disposal works at Cannon-lane, Pinner, comprising the construction of screening chambers, detritus tanks, seven settlement tanks, five 85 ft. diameter filter beds with rotary distributors, and two humus tanks, including all necessary pipes, mains, and fittings, for the R.D.C. H. W. Rackham, engineer and surveyor. Deposit £3 3s.

DECEMBER 10.—**Manchester**.—ADDITIONS.—Alterations and additions to the District Central school, Chorlton-cum-Hardy, for the E.C. P. M. Heath, Town Clerk. Deposit £1 1s.

DECEMBER 10.—**Manchester**.—CONVENIENCES.—Conveniences at Birchfields, Rusholme, for the T.C. City Architect. Deposit £1 1s.

DECEMBER 10.—**Newton Abbot**.—BOOKING HALL.—Construction of a new booking hall and buildings at Newton Abbot, for the Directors of the Great Western Railway Co. Engineer at this Station, between the hours of 10 a.m. and 4 p.m. Deposit £2 2s.

DECEMBER 10.—**Penzance**.—HOUSES.—Twenty houses and the construction of sewer on site adjacent G.W.R. engine sheds, for the G.W.R. Housing Society. T. Alwyn Lloyd, F.R.I.B.A., and B. C. Andrew, L.R.I.B.A., associated architects, New Inn Chambers, St. Austell. Deposit £2 2s.

DECEMBER 10.—**Smallburgh**.—COTTAGES.—Cottages in the following parishes:—Hickling, 2; Horning, 2; Ludham, 2; Paston, 2, for the R.D.C. Fairfax Davies, clerk, North Walsham. Deposit £1 1s.

DECEMBER 11.—**Barking**.—SCHOOL.—Erection of a central school for 640 children in Wilmington-gardens, within the district, for the Education Committee. C. J. Dawson, F.R.I.B.A., Architect to the Committee, Clock House Chambers, Barking. Deposit £5 5s.

DECEMBER 11.—**Caerphilly**.—ELECTRIC.—Wiring for lighting and power of the omnibus garage in Mill-road, for the U.D.C. W. C. B. Hillman, electrical engineer.

DECEMBER 11.—**Dublin**.—PAINTING.—Internal painting work, &c., at 17, Fleet-street, for the C.B. John J. Murphy, Town Clerk.

DECEMBER 11.—**Dunbar**.—HOUSES.—Five blocks of 20 houses, for the T.C. G. Simpson, L.R.I.B.A., architect, 30, Rutland-square, Edinburgh.

DECEMBER 11.—**Halifax**.—EXTENSION.—To the sub-station in Drycough-lane, for the C.B. Borough Engineer, Crossley-street.

DECEMBER 11.—**Leyton**.—SCHOOL.—Erection of the Knolls Green Special School, for the Leyton U.D.C. John H. Jacques, L.R.I.B.A., 61, West Ham-lane, Stratford, E.15. Deposit £2.

DECEMBER 11.—**London**.—ALTERATIONS.—To the seating accommodation at the Chapel of the Bow Institution, 2A, Bow-road, E., for the Guardians of the City of London Union. Albert E. Pridmore, F.R.I.B.A., F.S.I., Architect to the Guardians, 3, Broad-street Buildings, E.C.2.

DECEMBER 11.—**London**.—HEATING.—Accelerated low-pressure hot-water heating, at Maida Vale Telephone Exchange, W, for H.M.O.W. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

DECEMBER 11.—**Scarborough**.—HOUSES.—Erection of 24 in six blocks, on Hinderwell-road, for the B.C. Harry W. Smith, A.M.I.C.E., Borough Engineer, Town Hall.

DECEMBER 11.—**Sunderland**.—ADDITIONS AND ALTERATIONS.—General buildings' work in connection with sanitary arrangements at the Horden Workmen's Social Club, Ltd., Secretary, Eden-street, Horden.

DECEMBER 11.—**West Bromwich**.—ROOF.—Glazed roof over central calorifier house, for the B.G. Edwards & Shaw, consulting engineers, 105, Colmore-row, Birmingham.

DECEMBER 12.—**Doncaster**.—HOUSES.—136 houses on the Woodfield-lane site, for the T.C. R. E. Ford, Housing Surveyor, 3, Priory-place, Doncaster. Deposit £2 2s.

DECEMBER 12.—**Frome**.—HOUSES.—Eight at Kilmersdon; 2, Winstrow; 2, Rudge; 10 Haydon, for the R.D.C. J. Ace Beynon, architect, Nunsey-road.

DECEMBER 12.—**Edinburgh**.—DEMOLITION.—Of old properties at 54C, Grassmarket, and 4-6, Castle Wynd, for the T.C. A. Grierson, Town Clerk.

DECEMBER 12.—**Neuve Chapelle**.—MEMORIAL.—Construction of, to the missing of Indian units, to be erected in the Commune of Richebourg l'Avoue, France. "Neuve Chapelle Indian Memorial," Secretary, Works Department, Imperial War Graves Commission, 82, Baker-street, W.1, before 10 a.m. on above date. Deposit £10 10s.

DECEMBER 12.—**Sheffield**.—ARTIFICERS WORKS.—At Hillsborough Barracks, for the Royal Engineers. Lt.-Col. A. F. S. Hill, C.R.E., West Riding Area N.C., 13, Wenlock-terrace, York.

DECEMBER 12.—**Wakefield**.—ELECTRICITY.—Electric installation at the Central Repair shop at Thornes, Wakefield, for the West Riding C.C. Surveyor, County Hall, Wakefield.

DECEMBER 14.—**Ashford**.—FOUNDATIONS.—For (1) mass concrete engine foundations (approximately 400 cubic yards); (2) concrete cooling pond (approximately 890 square yards); (3) reinforced concrete road (approximately 200 yards run), for the U.D.C. H. Wilson, Electrical Engineer, 11, Bank-street.

DECEMBER 14.—**Banff**.—ELECTRICITY.—Trades, including steel and electrical work, required in connection with the erection of the Town Hall, for the T.C. J. E. Adamson, L.R.I.B.A., 56, Victoria-street, S.W.1. Deposit £2 2s.

DECEMBER 14.—**Banff**.—HOUSES.—One block of houses at the Burgh housing site, for the T.C. Alex. Brodie, Town Clerk.

DECEMBER 14.—**Bootle**.—BUILDINGS.—Buildings in connection with the new refuse disposal works at Pine-grove, for the C.B. Borough Engineer.

DECEMBER 14.—**Chelmsford**.—ADDITIONS.—To Infirmary 11 and female acute block at the Severalls Central Hospital for the Essex C.C. The County Architect, Jno. Stuart, F.R.I.B.A., Springfield, Old Court, Chelmsford. Deposit £1 1s.

DECEMBER 14.—**Colchester**.—ADDITIONS.—At the Essex and Colchester mental hospitals, for the Essex C.C. John Stuart, F.R.I.B.A., County Architect, Springfield Old Court, Chelmsford. Deposit £1 1s.

DECEMBER 14.—**Edinburgh**.—BUILDING.—New X-ray building at Bangour Mental Hospital, for the District Board of Control. J. D. Gibson, surveyor, 60, Frederick-street.

DECEMBER 14.—**Edinburgh**.—HOUSES.—Brick, concrete, or other approved alternative at Lochend-road of 48 two-apartment tenement houses, for the T.C. Director of Housing, City Chambers, 329, High-street. Deposit £2 2s.

DECEMBER 14.—**Gloucester**.—SCHOOL.—Erection of a new elementary school, at Filton, near Bristol, for the E.C. R. S. Phillips, F.R.I.B.A., architect, Shire Hall.

DECEMBER 14.—**Horsham**.—VARIOUS WORKS.—Executing certain works in connection with the extension and drainage of Roffey Cemetery, for the Roffey Burial District Joint Committee. A. Newbery, Clerk to the Committee, 1, Cheneil Villas, Ruspur-road, Horsham, Sussex. Deposit £1 1s.

DECEMBER 14.—**Kent**.—ENLARGEMENT.—Of the Central School at Bexley, Welling, for the C.C. W. H. Robinson, F.R.I.B.A., Room 69, Sessions House, Maidstone. Deposit £2 2s. by cheque, payable to the Kent Education Committee, and crossed "National Provincial Bank, Ltd."

DECEMBER 14.—**Manchester**.—COTTAGES.—Three pairs of semi-detached cottages at Middlebrook, near Horwich, for the T.C. Secretary, Waterworks Offices. Deposit £2 2s.

DECEMBER 14.—**Reigate**.—HOUSES.—Erection of four pairs of parlour houses on the Reigate Lodge estate, and one block of three non-parlour houses in Church-road, South-Park, for the T.C. Alfred Smith, Town Clerk, Municipal Buildings, Reigate. Deposit £3 3s.

DECEMBER 14.—**Staines.**—DECORATIONS.—Decorations, &c., in connection with their houses at Ashford, Bedford, Harmondsworth, Hanworth and Stanwell, for the R.D.C. R. A. Hogarth, Clerk to the Council, Council Office, Stanwell-road, Ashford, Middlesex.

DECEMBER 14.—**Whitstable.**—COTTAGES.—Twelve cottages on the south side of Hamilton-road, for the U.D.C. A. B. Baker, Clerk to the Council.

DECEMBER 15.—**Blackrock.**—HOUSES.—Eight, one-story houses at Grotto-avenue, Booterstown, for the U.D.C. J. J. Robinson, architect, 8, Merrion-square, Dublin.

DECEMBER 15.—**Cowdenbeath.**—HOUSES.—Forty-eight houses at Stevensonsbeath, adjoining Stonhouse-street, for the T.C. C. A. Alexander, Borough Surveyor. Deposit £2 2s.

DECEMBER 15.—**Dublin.**—REPAIRS.—Conversion of the laundry in the Governor-General's demesne into a station for the Garda Siochana and for all enclosing the station, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

DECEMBER 15.—**Durham.**—SCHOOL WORK.—For (a) General builder's work in connection with alterations and improvements at Forest-of-Teesdale Council School, and (b) additions and alterations, for the E.C. F. Willey, F.R.I.B.A., F.S.I., 34, Old Elvet, Durham.

DECEMBER 15.—**Dublin.**—RECONSTRUCTION.—Of the Central block (section C) of the General Post Office, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath. Deposit £5 5s.

DECEMBER 15.—**Greenwich.**—BUILDING.—To be erected for coal-washing plant, &c., at H.M. Fuel Research Station. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 ls. (cheques payable to the Commissioners).

*DECEMBER 15.—**Paddington.**—CONVERSION.—Of old Stationery Stores, Paddington, into stores for the Hotel and Refreshment Rooms Dept. Engineer at this Station, between the hours of 10 a.m. and 4 p.m. Deposit £2 2s.

DECEMBER 15.—**Plymouth.**—PAVILION.—Tea pavilion on the Hoe, for the C.B. J. Wiberley, Borough Engineer and Surveyor. Deposit £2 2s.

DECEMBER 15.—**West Bromwich.**—HOUSES.—156 to 206 houses on Charnelton estate, for the T.C. Harvey & Wicks, architects, 5, Bennett's-hill, Birmingham. Deposit £2 2s.

DECEMBER 15.—**Worthing.**—CONVENIENCES.—Erection of conveniences at Selden Lawns, Worthing, for the Corporation. Borough Surveyor, Municipal Offices, Tudor Lodge. Deposit £1 ls.

DECEMBER 15.—**York.**—HOUSES.—Erection of 406 scullery type houses (350 with three bedrooms and 56 with two bedrooms) on the Tang Hall estate, No. 2. Methods of construction designed to give rapid construction and completion are invited. F. W. Spurr, City Engineer, Guildhall, York.

DECEMBER 16.—**Belfast.**—ALTERATIONS.—Alterations and additions to the Fire Brigade station in Spier's-place, Shankill-road, for the C.B. City Surveyor.

DECEMBER 16.—**Hilton.**—HOSTELS.—Two hostels and subsidiary buildings at Hilton, Killybegs, A. Berden, for the National Committee for the Training of Teachers. J. A. O. Allan, F.R.I.B.A., architect, 25, Union-terrace, Aberdeen.

DECEMBER 16.—**Hove.**—SORTING OFFICE.—To be erected for the Commissioners of His Majesty's Office of Works. The Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 ls. (Cheques payable to the Commissioners.)

*DECEMBER 16.—**Marshfield.**—HOUSES.—Erection and completion of 92 (13 blocks of six flats and 3½ blocks of four cottages). The contracts may be for the works as a whole or separately, each contract including drainage, fencing, asphalt and water supply, for the T.C. Waude Thompson, Assoc.M.Inst.C.E., Borough Engineer, Market-street. Deposit £2 2s.

DECEMBER 16.—**Plymouth.**—WALLS.—Boundary wall and railings at the Astor Playing Field, Embankment-road, for the C.B. J. Wiberley, Borough Engineer and Surveyor.

DECEMBER 16.—**Rochdale.**—CONVENIENCES.—Conveniences and tramway offices in Faulkner-street, for the C.B. Borough Surveyor.

DECEMBER 16.—**Tiverton.**—HOUSES.—Erection of 12 non-parlour houses (in blocks of six) at Council Gardens, for the T.C. A. M. Kinnison, Borough Surveyor, Town Hall. Deposit £1 ls.

*DECEMBER 16.—**Wallingford, Berks.**—HOUSES.—Erection of 20 at Didcot, for the R.D.C. F. H. Floyd, Council's Architect, Market-place.

DECEMBER 17.—**Manchester.**—TELEPHONE EXCHANGE.—At Moss Side. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 ls. (Cheques payable to the Commissioners.)

DECEMBER 18.—**Dublin.**—SUPERSTRUCTURE.—Reconstruction of the Henry-street superstructure (Block B) of the General Post Office, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath. Deposit £5.

DECEMBER 18.—**Nuneaton.**—HOUSES.—Erection of 144 at Stockingford, for the B.C. H. N. Jepson, A.R.I.B.A., Queen's Buildings. Deposit £2 2s.

DECEMBER 19.—**Glaston.**—NEW SCHOOL BUILDINGS.—At Calday Grange Grammar School, West Kirby, for the C.C. H. Beswick, F.R.I.B.A., County Architect, Newgate-street. Deposit £2 2s.

*DECEMBER 19.—**France.**—CEMETERIES.—Construction of 26 in France. Contract 1926 "X" Secretary, Works Department, Imperial War Graves Commission, 82, Baker-street, W.1, before 10 a.m. on above date. Deposit £15 15s.

DECEMBER 21.—**Poplar.**—HOUSES.—Erection of 24 houses and 40 flats on a site in Glengall-road, for the Borough Council. Harley Heckford, M.Inst.C.E., Borough Surveyor, Council Offices. Deposit £3 3s.

DECEMBER 21.—**Rotherham.**—STATION.—Police station and court house, for the West Riding C.C. P. O. Platts, A.R.I.B.A., County Architect, County Hall, Wakefield.

DECEMBER 22.—**Eastbourne.**—HEATING AND LIGHTING.—Additions to Nurses' Home, &c., hot-water, heating, and supply, electric lighting installations at new infirmary block, for the Guardians of the Eastbourne Union. F. G. Cooke, L.R.I.B.A., 2, Hyde-gardens, Eastbourne. Deposit £3.

DECEMBER 22.—**Nottingham.**—HEATING.—Steam heating apparatus in the Nurses' Home at the City Mental Hospital, Mapperley Hill, for the T.C. T. J. R. Kiernan, consulting engineer, 17, Victoria-street, Westminster, S.W.1. Deposit £2 2s.

DECEMBER 22.—**Southall-Norwood.**—COTTAGES.—Erection of 45 cottages at Montague-road. The cottages are divided into 16 blocks and contractors may tender for one or more blocks. J. B. Thomson, Assoc.M.Inst.C.E., Engineer and Surveyor, Town Hall, Southall.

*DECEMBER 22.—**Stonebridge.**—HOUSES.—Erection of 140 on the Brentfield estate, for the Willesden D.C. F. Wilkinson, M.Inst.C.E., Engineer, Town Hall, Dyne-road, Kilburn, N.W.6.

*DECEMBER 22.—**Stafford.**—ALTERATIONS AND ADDITIONS.—To Stafford Employment Exchange. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 ls. (Cheques payable to the Commissioners.)

*DECEMBER 22.—**Teddington.**—POST OFFICE.—To be erected. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 ls. (Cheques payable to the Commissioners.)

DECEMBER 23.—**Aberdeen.**—HOUSES.—HOUSES, &c., at H.M. Coastguard Station, Torry, for H.M.O.W. Architect, H.M. Office of Works, 122, George-street, Edinburgh. Deposit £1 ls.

DECEMBER 25.—**Birmingham.**—HOUSES.—Erection of 125 non-parlour two-bedroomed houses on Moreton-road Green, for the Public Works and Town-Planning Committee of the City. Herbert H. Humphries, M.Inst.C.E., City Engineer, The Council House, Birmingham. Deposit £1 ls.

DECEMBER 25.—**Stapleford.**—HOUSES.—Erection and drainage, &c., of ten pairs of parlour houses, for the R.D.C. G. C. Hardy, architect, 11, Church-street. Deposit £2 2s.

DECEMBER 27.—**Folkestone.**—PAVILION.—Erection of a cricket pavilion at the Sports Ground, Cheriton-road, for the Corporation. A. E. Nichols, M.Inst.C.E., Borough Engineer, 11, Church-street, Folkestone. Deposit £5 5s.

DECEMBER 29.—**Paulton.**—HOSPITAL.—Isolation hospital at Paulton, near Bristol, for the Bath, Clutton, Midson and Norton and Radstock Joint Hospital Committee. A. J. Pictor, F.R.I.B.A., 14, Queen-square, Bath. Deposit £2 2s.

DECEMBER 31.—**Ipswich.**—HOUSES.—Designs for the erection of houses suitable for the working classes in Samford, for the R.D.C. A. J. Haward, Clerk to the Council, 5, Queen-street.

JANUARY 18, 1926.—**Bakewell.**—ADDITIONS.—Isolation hospital, on Monyash-road, for the Haddon District Hospital Committee. Chas. Flint, L.R.I.B.A., The Quadrant, Buxton. Deposit £2 2s.

JANUARY 30.—**Gosforth.**—HOUSES.—84 semi-detached houses on the Coddle site, for the U.D.C. G. Nelson, engineer and surveyor.

NO DATE.—**Cardiff.**—HALL.—Pulling down and rebuilding St. Stephen's Parish Hall, Evelyn-street, Docks, for the Rev. T. H. Pountney. J. B. Fletcher, architect, 21, Dumfries-place.

NO DATE.—**Castleford.**—STORE.—Store, Carlton-street, for F. W. Woolworth & Co., Ltd. Blenkinsopp & Scatchard, A. and L.R.I.B.A., architects and surveyors, Bank-street.

*NO DATE.—**Guildford.**—ALTERATIONS.—Proposed extensive alterations at 39, High-street, Guildford. Timothy White & Co., Ltd., Construction Department, 30, Chandos-street, Portsmouth.

NO DATE.—**Paignton.**—FLATS.—Shop with flats over at Torquay-road, Preston, for the South Devon Farmers, Ltd. B. H. Palmer, L.R.I.B.A., chartered architect, 11, Un-on-street, Newton Abbot.

MATERIALS, etc.

DECEMBER 7.—**Edinburgh.**—MATERIALS.—Whin, sand, gravel, and freestone, for the T.C. Tramways Manager, 2, St. James's-square.

DECEMBER 8.—**Dublin.**—MATERIALS.—Timber, iron castings, paints, stone paving sets and chippings, Portland cement, slate, structural steel and wrought iron, &c., for the Port and Docks Board. E. H. Bailey, Secretary, Westmoreland-street.

DECEMBER 8.—**Manchester.**—PIPES.—1,415 tons of cast-iron pipes, &c. (24 inch to 40 inch diameter), and about 59 tons of welded steel pipes, &c. (24 inch to 40 inch diameter), for the T.C. Secretary, Waterworks Offices.

DECEMBER 9.—**Belfast.**—MATERIALS.—Paints and oils, timber, Portland cement, iron castings, plumbing work, for the District Water Commissioners. W. I. Quinn, Secretary, Water Office.

DECEMBER 9.—**Buxton.**—MATERIALS.—Paving setts, flags, kerbs, &c., Derbyshire basalt macadam, tarred slag, tarred limestone, chippings, and lump lime, Portland cement, earthenware pipes, castings (street ironwork), paints, varnishes, &c., for the T.C. F. Langley, Borough Engineer.

DECEMBER 9.—**London.**—HEADSTONES.—15,000 headstones, for the Imperial War Graves Commission. The Secretary, Works Department, Imperial War Graves Commission, 82, Baker-street, W.1.

DECEMBER 10.—**Dublin.**—MATERIALS.—Portland cement, fire bricks, paints, steel plates, &c., for the Great Southern Railway (Ireland) Co. C. E. Riley, Secretary, Kingsbridge Terminus.

DECEMBER 11.—**London.**—MATERIALS.—For (1) structural steelwork—stripping shop, (2) galvanised fencing pales, and (3) fencing materials, for the South Indian Railway Co. W. B. Reynolds, for the Managing Director, 91, Petty France, S.W.1.

DECEMBER 14.—**Boston.**—SINGLE.—6,000 tons of single, for the R.D.C. A. Borton, 8, Market-place.

DECEMBER 14.—**London.**—MATERIALS.—Builders' materials, &c., for the Woolwich B.G. A. Holder, Clerk, Plumstead High-street, S.E.18.

DECEMBER 16.—**Stockton-on-Tees.**—MATERIALS.—Cement, lead and compo pipe, castings, cast-iron S. and S. pipes, paints, oils, &c., lime, hand-picked (Settle or Buxton and building qualities), wrought-iron tubing (steam quality), for the T.C. W. W. Atley, Engineer and General Manager, Corporation Gas Works.

DECEMBER 21.—**Salford.**—BRICKS.—Retorts, fire bricks, &c., for the C.B. Gas Engineer, Gas Offices, Bloom-street.

JANUARY 2, 1926.—**Bexley.**—MATERIALS.—Tar and other road surfacing proprietary articles, highway materials, best glazed stoneware socketed pipes, and best Portland cement, for the U.D.C. W. T. Howse, surveyor.

ENGINEERING, IRON AND STEEL.

DECEMBER 7.—**Nelson.**—RESERVOIR.—Reinforced concrete covered reservoir to contain five million gallons, at Ridgaling, for the T.C. J. A. Rodwell, Water Engineer, Every-street. Deposit £5.

DECEMBER 8.—**Manchester.**—TRACK.—Supply and delivery of permanent way special track work, for the T.C. H. Mattinson, General Manager and Chief Engineer, Corporation Tramways, 55, Piccadilly. Deposit £1 ls.

DECEMBER 8.—**Monmouth.**—WIDENING.—Widening, strengthening and improving the bridge over the River Ebbw, situated about 1 mile from Newport on the Newport-Cardiff road, for the C.C. S. A. Bennett, County Surveyor, County Hall, Newport, Mon. Deposit £25.

DECEMBER 11.—**Sheffield.**—WIDENING.—Reconstruction and widening of bridge over the Sheffield and Tinsley Canal at Shirland-lane, near Atercliffe-road, for the T.C. E. Partington, Improvement Surveyor. Deposit £3 3s.

DECEMBER 16.—**Swinton.**—TANK.—Construction of new sewage disposal works, comprising detritus pits, screen chamber, storage tank and motor house, Dortmund settling tank, percolating bacterial filter beds, humus tanks, mud drying beds, and other appurtenant works, for the U.D.C. W. H. Radford, & Son, engineers, Albion Chambers, King-street, Nottingham. Deposit £5 5s.

DECEMBER 17.—**Camden.**—RESERVOIR.—Laying of water mains, together with the construction of a mass concrete reservoir, at Mickleton. H. J. White, 119, St. Aldate's, Oxford.

DECEMBER 21.—**Portadown.**—SHED.—Reinforced concrete engine shed, coal bank, &c., for the G.N.R. (Ireland). J. B. Stephens, Secretary, Amiens-street, Station, Dublin. Deposit £2 2s.

JANUARY 5, 1926.—**Westport.**—SHED.—Extension of 100 ft. to the transit shed at Westport quay, for the Harbour Commissioners. T. P. Flanagan, B.E., Castlebar.

JANUARY 13.—**Middleton.**—CULVERT.—Construction of a proposed culvert, 234 ft. in length, over the Wine Brook, at Kirkway, for the T.C. Borough Engineer.

NO DATE.—**Near Whittlesea.**—BRIDGES.—Construction of two steel lattice tie bridges to carry clay wagons over the main railway line adjoining brickworks near Whittlesea, on the Peterborough to March Great Eastern line, for the London Brick Co., and Forders, Ltd. London Brick Co. and Forders, Ltd., Old Fletton, Peterborough.

ROAD, SEWERAGE, AND WATER WORKS.

DECEMBER 7.—**Barnes.**—MAKING-UP.—Forming, metalling, draining and making-up the road from the Cemetery-drive to Kings Ride Gate, Richmond Park, for the U.D.C. G. Bruce Tones, engineer and surveyor, High-street, Mortlake, S.W.14.

DECEMBER 7.—**Bilston.**—PIPES.—Work in connection with the transportation of pipes, valves, fittings, &c., from Wombourn and Etingshall-road stations along the route of the pipe line, for the U.D.C. R. A. Webster, Resident Engineer.

DECEMBER 7.—**Friern Barnet.**—ROADS.—New road 320 yards in length, comprising approximately 650 cubic yards excavation and filling and formation of carriageway with hardcore and Hertfordshire flint, 1,700 yards super. in area, and of gravel footways 850 yards super. in area, for the U.D.C. F. P. Kindell, Engineer and Surveyor. Deposit £2.

DECEMBER 7.—**Haslemere.**—EXTENSIONS.—For (1) 222 yds. lin. of 4 in. diameter cast iron pipe water main, together with sluice valve, hydrant, &c., at Petworth-road; (2) 782 yds. lin. of 4 in. diameter and 1,442 yds. lin. of 3 in. diameter cast iron pipe water main, together with hydrants, sluice valves, hose connections, &c., on the Half Moon estate; (3) 680 yds. lin. 3 in. diameter cast iron pipe water main, together with hydrants, sluice valves, &c., at Grayswood-road; and (4) 140 yds. lin. 3 in. diameter cast iron pipe water main, together with hydrants, sluice valves, &c., at Bunch-lane, for the U.D.C. C. A. Best, surveyor to the Council. Deposit £1 ls.

DECEMBER 7.—**Letchworth.**—MAKING-UP.—Of Campers-road, 247 lin. yds.; Campers-avenue, 100 lin. yds.; Burnell-rise, 173 lin. yds.; Burnell-walk, 83 lin. yds.; Sollershort East, 438 lin. yds.; South-view, 165 lin. yds.; Shott-lane, 290 lin. yds., and for the laying of surface water sewers as under:—Shott-lane, 194 lin. yds.; Ridge-avenue, 144 lin. yds., for the U.D.C. G. T. Hill, engineer and surveyor. Deposit £2 2s.

DECEMBER 7.—**Manchester.**—PAVING, &c.—Drainage, flagging, paving (with concrete), &c.—Whitley-street, Clayton, from Clayton-street to a point 19 yds. distant in a north-easterly direction; John Heywood-street, Clayton, from the end of the existing paving to a point 30½ yds. distant in a north-easterly direction; sewerage, drainage, flagging, paving (grit sets), &c.,

street, Ardwick, from the end of the existing to the south-westerly end of the street; draining (with concrete), &c.;—Passages adjoining stock-street, 33-35, Gunson-street, and behind stock-street, and 27-39, Gunson-street, Ancoats; &c. behind 20-34, Hulme Hall-lane, Newton, for the T.C., P. M. Heath, Town Clerk. Deposit £1.

DECEMBER 7.—**Penge.**—IMPROVEMENTS.—For (a) approximately 535 super yds. Durax paving, with centimetres Scandinavian granite setts laid common Ankerly Hill; (b) approximately 2,774 super of road reconstruction with 6 in. reinforced concrete, surfaced with 1½ in. asphalt in Parish-lane, for the U.D.C. H. W. Longdin, surveyor, Hall, Ankerly, S.E.20. Deposit £1 ls. each.

DECEMBER 7.—**Romford.**—MAKING-UP.—Of Fan-crescent, Walden Way, and Wykeham-avenue, church, the total length being about 833 yards, for the R.D.C. W. J. Grant, Surveyor, 16A, South-lane, Romford, Essex. Deposit £2 2s.

DECEMBER 7.—**Tadcaster.**—PIPES.—Supplying and approximately 1,000 yds. of cast-iron water pipes, with valves, hydrants, &c., complete, at the Bywater and Mickfield housing sites, for the U.D.C. E. Thackray, Water Inspector, Station-Place, Kippax, near Leeds. Deposit £5.

DECEMBER 8.—**Brampton.**—SEWERS.—1,300 lin. of 6 in. and 9 in. sanitary pipe sewers, with the necessary manholes and flushing chambers. Also the execution of purification works and the levelling and cutting out of land at the outfall at Castle Carrock, and about three miles from How Mill Station, for the U.D.C. Taylor & Wallin, engineers, 47, Pilgrimage, Newcastle-on-Tyne. Deposit £5.

DECEMBER 8.—**Epsom.**—ROADS.—Burdon-lane and Mid-avenue, in the parish of Cheam, for the U.D.C. T. E. Ware, Surveyor, Waterloo-road. Deposit £2 2s.

DECEMBER 8.—**Eton.**—SEWERS.—Sewers in Fulmer-gerrards Cross, for the R.D.C. A. Gladwell, Engineer and Surveyor, Council Offices, 160, High-street, Slough. Deposit £2 2s.

DECEMBER 9.—**Carshalton.**—IMPROVEMENTS.—Street widening and widening at Westmead-road and at the junction of Westmead-road and Westmead-lane, for the U.D.C. W. Willis Gale, surveyor, 12, Westmead-lane, Carshalton, Surrey. Deposit £2.

DECEMBER 11.—**Braintree.**—MAINS.—Excavating and laying 468 yards 6 in., 541 yards 5 in., and 143 yards 4 in. cast-iron water mains, together with contingent work, for the U.D.C. Surveyor.

DECEMBER 11.—**Derbyshire.**—WIDENING.—Widening the Derby-Alfreton main road between Coxbench and Holbrook Level Crossing, a length of about 1½ miles, for the C.C. J. W. Horton, County Surveyor, Derby Gate, Derby. Deposit £3 3s.

DECEMBER 12.—**Chesterfield.**—MAINS.—Laying and laying of cast-iron water mains:—(1) 2,093 yards of 6 in. main in the parishes of Temple Normanton and Wingfield; (2) 1,310 yards or thereabouts of 6 in. main in the parish of Stretton, for the R.D.C. H. Waterworks Engineer. Deposit £1 ls. each.

DECEMBER 12.—**Manchester.**—PAVING.—Sewering, kerbing, flagging, paving (concrete) roads on housing estate, Sandywell-street, Openshaw, for the C. City Engineer. Deposit £1 ls.

DECEMBER 14.—**Chesterfield.**—SEWERAGE.—Sewerage disposal in the parish of Shirland and in the parish of Stretton, for the R.D.C. H. Taylor, M.C., engineer and surveyor, 14, Stretton, Chesterfield. Deposit £2 2s.

DECEMBER 14.—**Chipping Sodbury.**—DRAINAGE.—Construction of drainage systems and sanitary appliances at the undermentioned sites, viz.:—(a) Cotton Cottrell, The Common site; Frampton Hill, Woodend site; Westerleigh, May's Hill site; Bourne, Watley's End site, for the R.D.C. W. Williams, Sanitary Inspector.

DECEMBER 14.—**Chipping Sodbury.**—REPAIRS.—Repair and repair of the sewerage works at Wickwar, for the R.D.C. W. H. Williams, Sanitary Inspector.

DECEMBER 14.—**Eccles.**—REPAIRS.—Sewering, flagging, flagging and making-up of the front and back streets and passages:—(a) cadam carriageways and flagged footways, in Anson-street, School-street, Anson-street (part of), Cleavley-street, Cleavley-street, Dover-street, Dover-street (carriageway only), Edison-road (north of Dover-street), back Monton-road, back Anson-street, back Alfred-street, back Granville-street, back Francis-street, back Catherine-street, back Alexandra-road, back Scotta-road and four lanes, back Cleavley-street, back Worsley-road (2), back Trevelyan-street West, back Mayfield-road (part 2), back College-road North and seven lanes, back Perrin-lane; (c) flagging in passage in Anson-street, back Worsley-road (Part 1), back Worsley-avenue, back Mayfield-road West (Part 1), Ladywell-terrace, for the T.C. Borough Surveyor. Deposit £2 2s.

DECEMBER 14.—**Heysham.**—SEWERS.—Construction of about 1,800 yards of 12 in. and 9 in. diameter stone-pipe sewers, together with manholes; also for the construction of a pumping station and pump well, together with cast-iron rising main and other incidental work, for the U.D.C. Willcox & Raikes, engineers, 63, Colindale Avenue, Birmingham. Deposit £3 3s.

DECEMBER 14.—**Skegby.**—MAKING-UP.—Albert-avenue, Alexandra-street, Victoria-street, and West-lane, for the R.D.C. L. Dodsley, surveyor, 14, Chambers, Sutton-in-Ashfield. Deposit £1.

DECEMBER 15.—**Carlisle.**—SEWERAGE.—Laying, flagging and construction of the following works at supply for the parishes of Dalston, Orton, St. Albert Without, and Wreay:—About 42 miles of 3, 4, 5, and 7 in. diameter cast-iron and steel pipes from the lake in Broughton Gill, in the parish of Caldbeck, Caldbeck, Warrnell Fell, Roundhill, Goosegreen, and in the parish of Wreay, into and through the parishes of Dalston, Orton, St. Cuthbert Without and St. Cuthbert Within, together with necessary valves, hydrants, casings, &c., and other incidental work; also a covered service reservoir of 100,000 gallons capacity at

Roundhill, to be constructed principally of concrete with all necessary inlet and outlet valves, chambers, overflows, washouts, drains, &c., and other incidental work, for the R.D.C. J. C. Boyd, engineer, 18, Bank-street. Deposit £5.

DECEMBER 15.—**Turtan.**—SEWERS.—535 lineal yards of 12 in. sewer in Chapel-town-road, 492 lineal yards of 9 in. sewer in Chapel-town-road, 164 lineal yards of 9 in. sewer near Chapel-town-road, 651 lineal yards of 9 in. sewer near Chapel-town-road, 191 lineal yards of 9 in. sewer in back Chapel-town-road, 291 lineal yards of 9 in. sewer in Shady-lane, 182 lineal yards of 9 in. sewer in Cox Green-road, for the U.D.C. V. W. Laithwaite, Surveyor. Deposit £2.

DECEMBER 15.—**West Riding.**—ASPALTING.—Tar asphalt to playgrounds at (1) Adwick-le-Street Park Council school; (2) Darton Council school, for the E.C. Education Department, County Hall, Wakefield. Deposit £2 2s.

DECEMBER 18.—**Penybont.**—IMPROVEMENTS.—For (1) diversion of Wernfach-road, Coychurch Higher; (2) widening of Trebryn-road, Pencoid; (3) widening of Heol Spencer, Coity, for the R.D.C. G. P. Alexander, Highway Surveyor, 79A, Nolton-street, Bridgend. Deposit £2 2s. each.

DECEMBER 18.—**South Kensington.**—WORKS.—Execution of works to the forecourt of the Imperial Institute. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 ls. (Cheques payable to the Commissioners.)

DECEMBER 19.—**Rothwell.**—IMPROVEMENTS.—Excavating, granite sett paving, stone walling, surface water drainage, concreting, demolition of buildings, &c., for the U.D.C. J. Southward, surveyor. Deposit £1 ls.

DECEMBER 20.—**Hambleton.**—SEWERS.—Construction of 9 in. and 6 in. sewers in cast-iron and stoneware, with appurtenant works, in the rural districts of Hambleton and Guildford, and discharging into sewers vested in the Godalming T.C., for the Surrey C.C. G. B. Hartree, Engineer, Municipal Buildings, Godalming. Deposit £2 2s.

DECEMBER 21.—**Edinburgh.**—ROAD.—Construction of Section E.F. (Starlaw to Dechmont), Contract No. 5 West, of a new road from Glasgow to Edinburgh, for the T.C. D. A. Donald, engineer, 271, Alexandra-parade, Glasgow. Deposit £3 3s.

DECEMBER 21.—**Newton Abbot.**—ROADS.—Roads and sewers in connection with the first instalment of the Broadlands housing scheme, for the U.D.C. C. D. White, surveyor. Deposit £2 2s.

DECEMBER 22.—**South Kensington.**—DRAINAGE.—Redrainage work at the Imperial Institute. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 ls. (Cheques payable to the Commissioners.)

DECEMBER 31.—**Whitby.**—SEWER.—950 yards of stoneware pipe sewers, varying in size from 9 in. to 12 in. diameter, with manholes and all appurtenant works, for the U.D.C. W. H. Radford & Son, Chartered Civil Engineers, Albion Chambers, King-street, Nottingham. Deposit £3 3s.

JANUARY 1, 1926.—**Thornton.**—MAKING-UP.—For (1) Alexandra-avenue (from Rossall-road to Cleveleys-avenue), (2) Rough Lea-road (from Rossall-road to Nutter-road), (3) Beach-road (from Rossall-road to Queen's-road, adjoining Council Schools), (4) Thornton-gate (from Rossall-road to Queen's-walk), (5) Hastings-road, for the U.D.C. H. Fenton, Surveyor.

JANUARY 30.—**Gosforth.**—SEWERS.—For laying new sewers and formation of roadways to complete the layout of the Coddridge housing site, for the U.D.C. G. Nelson, engineer and surveyor.

Competitions.

(See Competition News page 800.)

Auction Sales, Tenders, etc.

DECEMBER 8.—**Elstree, Herts.**—Hampton & Sons will sell at the St. James's Estate Rooms, 20, St. James's-square, S.W.1. freehold building estate at Deacon's Hill, Elstree, comprising 36 acres; vacant possession of whole. Auctioneers, as above.

DECEMBER 8 AND 9.—**Evesham.**—E. G. Righton & Son will sell at Swan-lane, the stock-in-trade of a plumber and painter, including two motor lorries. Auctioneers, Evesham.

DECEMBER 9.—**Beddington.**—C. E. Clark will sell, without reserve, at Beddington House, prime timber and builders' effects. Auctioneers, Beddington House, near Croydon.

DECEMBER 9.—**Croydon.**—Veryard & Yates will sell, without reserve, to clear site for road widening, 32 to 36, North End, timber and building materials rising from demolition of premises. Auctioneers, 365, Norwood-road, S.E.27.

DECEMBER 9.—**Rolliston, Staffs.**—Henry Butcher & Co. will sell, without reserve, at Rolliston Hall, fixtures, fittings and fittings of the mansion, including gas engine and dynamo. Auctioneers, 63 and 64, Chancery-lane, London, W.C.2.

DECEMBER 15.—**Bromley.**—Knight, Frank & Rutley will sell, by direction of Captain Maurice Trouton and W. H. Hasland, Esq., at the Royal Bell Hotel, "The Rookery," a freehold residential property, together with buildings and two cottages, about 84 acres. Auctioneers, 20, Hanover-square, W.1.

Public Appointments.

DECEMBER 7.—**Clapham.**—Vacancies for visiting teachers at the L.C.C. School of Building, Ferndale-road. Education Officer T.1 (A), The County Hall, Westminster Bridge, S.E.1 (stamped addressed foolscap envelope necessary).

DECEMBER 7.—**Mansfield.**—Architectural Assistant required by the Education Committee. J. S. Robinson, Town Clerk's Office, White Hart-street.

DECEMBER 12.—**Weilstanten.**—Clerk of Works required by the Staffordshire Education Committee in connection with the erection of a secondary school. Architect, County Education Offices, Stafford.

DECEMBER 15.—**Durham.**—Assistant Quantity Surveyor required by the County Council in their Architectural Department. Director of Education, Shire Hall.

DECEMBER 16.—**London.**—General Foreman required to supervise the erection of a maternity and child-welfare centre, &c., in Latchmere-road, by the Battersea B.C. Edwin Austin, Town Clerk, Town Hall, S.W.11.

DECEMBER 16.—**Wakefield.**—Architectural Assistant in the Office of the Education Architect required by the E.C. of the West Riding of Yorkshire. Education Department, County Hall.

NO DATE.—**Nigeria.**—Foreman of Works (7) required by the Government for two tours each of 12 to 18 months' service, with possible extension. Apply at once, Crown Agents for the Colonies, 4, Millbank, London, S.W.1., quoting M/14150.

Bathing Establishments.

In the course of a meeting of the Institution of Heating and Ventilating Engineers (Incorporated), held at the Shipping, Engineering, and Machinery Exhibition, Olympia, on December 2, Mr. J. E. Boaz, in the course of a paper on this subject, said the whole question in respect of the requirements of bathing establishments resolved itself into the proper application and utilisation of the heat generated. Baths could be divided into many categories, but might be classified as ablutionary, recreative, and curative or medicinal baths. Coming to the requirements of the various types of baths, which he sub-divided, it was first necessary to provide adequate service. Public baths were institutions which belonged to the community, and were built and maintained by public funds. It was therefore obvious that the fullest consideration should be given to economy in running costs, as well as giving to the users of such establishments the very best service procurable. Dealing with the various types of baths, he considered the various plant required, and stated that in the present day newly-constructed swimming baths, provision was made for the installation of water purification plant for maintaining the water in a fit state for bathing. In such cases no provision need be allowed for the boiler plant, as in the old days, to heat the large bulk of water daily from cold, as the initial heating could be extended over a longer period than four to six hours ordinarily taken. The boiler plant need be only of sufficient power to provide for the daily heat loss of approximately six to eight degrees per day.

TABLES & CHAIRS
OF EVERY DESCRIPTION.
STRONG & INEXPENSIVE.



GEO. M. HAMMER & CO. LTD.
CROWN WORKS, ST. JAMES'S ROAD,
BERMONDSEY LONDON S.E.16.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ALDRIDGE.—A committee has been formed to further the scheme for providing a memorial hall. A site for the building has been offered with a frontage to Rookery-lane.

BARKING TOWN.—Plans prepared by the surveyor have been approved for the erection of bandstand and shelters in parks, at a cost of £3,000. Plans are to be prepared for a new refreshment pavilion in the park.

BARNOL SWICK.—The Vicar of St. Mary le Gill is appealing for funds for a new church, which is estimated to cost £30,000. Plans prepared by Mr. R. Martin, Diocesan Architect, Manchester.

BARNLEY.—The Education Special Sub-Committee have considered plans of the proposed Mining College and Technical Institute prepared by Messrs. Briggs & Thornley, of Liverpool, which have been further amended to enlarge the Principal's Room and the Reference Library. They have decided to ask for a further alteration in the first floor plan respecting the cloak-rooms. Mr. H. T. Turner, architect, Westville-road, has prepared plans for the erection of a combined Chapel and Sunday School, for the local Wesleyan authorities, to be erected in Huddersfield-road. Tenders are to be invited.

BIRKENHEAD.—The B.E. has approved the erection of a new secondary school for girls on land off Park-road South, to cost £55,000. Plans by Rees & Holt, of Liverpool.

BIRMINGHAM.—The E.C. has accepted a tender for the erection of a school at Sattley, with accommodation for 500 children. The site is in Belchers-lane, and the cost is estimated at £51,069. The T.C. recommend that the proposed purchase by the Watch Committee of an area of land at the junction of War-lane and Fellows-lane, Harborne, to be used as a site for the erection of 212 houses for the police, be approved, and application be made to the M.H. for sanction to borrow. It is intended to erect 27 parlour type houses on this site.

BLACKBURN.—The Corporation has formulated a scheme for the improvement of Green Park, and the approach from New Wellington-street, and the reconstruction of the Canal bridge in Albion-street, the total cost being estimated at £10,600.

BLACKPOOL.—The C.B. passed plans: Eleven houses, Vicarage-lane, J. Marsh; business premises, Promenade and Bank Hey-street, F. W. Woolworth & Co., Ltd.; eight houses, North-drive, R. Brown & Sons; 20 houses, Hudson-road, Bradshaw & Turner; 23 houses, Powell-avenue, F. Holmes.

BOLTON.—The members of the Chorley Old-road Congregational Church are raising funds for the erection of new school buildings. The members of the Deane Church propose to erect a new vicarage and parochial hall.

BOLTON-UPON-DEARNE.—A plan for the erection of a mortuary has been approved subject to the market scheme being proceeded with.

BOSTON.—The B.D.C. are inviting the T.C. to join them in approaching the Witham Commissioners with a proposal for the construction of a dam across Bargate Drain at Cowbridge.

BOURNEMOUTH.—The M.H. has approved the acceptance of the tenders for the erection of 96 houses and maisonnettes on the Charminster-road site, and also the borrowing by the T.C. of £42,484 and £1,500 for the erection of the houses and road works in connection therewith.

BRAIFOR.—A new masonic hall is to be erected in Manningham-lane, to cost in all about £65,000. Plans have been prepared by Messrs. Ross & Briggs, Eldon Chambers, 75, Manningham-lane.

BROMLEY.—The E.C. has asked the T.C. to apply to the B.E. and the M.H. for preliminary approval to the proposal to erect a separate building for the purposes of the school clinic. The scheme is estimated to cost £1,850.

BURNHAM-ON-SEA.—The Rev. H. E. Wake, Vicar of Burnham-on-Sea, St. Peter's Church, is raising funds for the completion of the church, at a cost of about £2,000.

BURTONPORT.—The Donegal C.C. are proposing to rebuild the 11 dwellings at an estimated cost of £3,000.

CARLIFE.—The final plans for the proposed new schools for St. Josephs, The Heath, are now waiting for the approval of the B.E. The building is planned so as to accommodate 400 children and the architect is C. Bates, of Newport, Mon.

CARLISLE.—The U.D.C. has approved plans submitted by T. W. Lomas, for the erection of a village Hall at Aglionby.

CARLTON (YORKS).—Funds are being raised for the proposed erection of a United Methodist Church Sunday School in Ferry-lane.

CHAUDERTON.—The U.D.C. has approved plans and sections for the new generating station to be erected on the banks of the canal by the Oldham Corporation.

CAELMSFORD.—The E.C. recommend that plans for a new elementary school be approved, and that application be made for sanction to borrowing £23,600.

CERTSEY.—The R.D.C. has reported that F. W. Farris, builder, Acton, has acquired 19 acres of land in Pyrford-road.

CHICHESTER.—The West Sussex C.C. has approved the proposed erection of a secondary school for boys, at an estimated cost of £28,500.

CHORLEY.—The Corporation are preparing for the development of the housing site at Harrison-road. The Corporation has asked a committee to consider what improvements can be made in the Council Chamber to provide more satisfactory and healthy accommodation. A scheme is being prepared for the erection of houses adjoining The Ranglets. Messrs. Biram & Fletcher are to report as to the heating of the Highfield school and the provision of open-air class rooms.

CHURCH.—The U.D.C. have approved plans submitted by the Oswaldtwistle Council for the erection of a new rectory house.

CLADON.—South Shields R.D.C. are negotiating for fifteen acres for a housing scheme.

CLITHEROE.—The E.C. have approved a site in Brownlow-street for the erection of an upper standard school.

DERBY.—The management of the Derbyshire Children's Hospital are appealing for funds for the proposed extensions to the Children's Hospital. An appeal is being made for £3,000 to carry out repairs to the tower of All Saints' Church.

DONCASTER.—A housing scheme, embracing 1,000 dwellings, is to be carried out in South Elmsall, Hemsworth, South Kirby, &c., by the National Housing Corporation of Great Britain, Ltd., London, S.W. Plans are in the hands of Major Douglas Wood, F.R.I.B.A., 35, Craven-street, Strand, W.C.2.

DOUGLAS.—The Tynwald Court has approved a scheme recommended by the Isle of Man Harbour Commissioners to extend the breakwater at Douglas 800 ft., at an estimated cost of three-quarters of a million pounds.

DOVER.—It is proposed to carry out an extensive housing scheme at Tilmanstone Colliery, and to build about 1,000 houses, a market centre, &c. Plans have been prepared by Messrs. Ewart G. Culpin & R. S. Bowers, 27A, Bush-lane, E.C.4.

DUKINFIELD.—Members of the Town-lane Baptist Church are raising funds to meet the cost of the new Sunday School to be erected off Town-lane.

DURHAM.—The following relief schemes have been prepared by the Durham C.C.: New arterial road from Chester Dene to Longey-lane, estimate £310,310; new arterial road from Jingle Gate to proposed Hylton Bridge, estimate £240,860; new arterial road from Hylton Bridge to Seaham, estimate £335,336; and Blackwell Bridge reconstruction and road diversion, estimate £52,500.

EARBY.—The U.D.C. has submitted plans for the lay-out scheme providing for shops, houses and bungalows additional to 60 houses already sanctioned. **EARLSTOWN.**—New public baths are to be built, at a cost of £16,000. Plans, &c., by Mr. C. Cowles-Voysey, A.R.I.B.A., 14, Gray's Inn-square, W.C.1.

ECCELESFIELD (SHEFFIELD).—The proposed new church and lecture hall to be erected for the Methodists is estimated to cost £6,000, and additions are to be made later comprising Sunday School, class-rooms, and other buildings, at an additional cost of £2,500.

ELY.—The Isle of Ely E.C. has acquired a site upon which it is proposed to erect a new school.

FINGOLEY.—The M.H. has sanctioned a loan by the Middlesex E.C. of £29,700 for extensions at Christ's College. Sanction has been given to the Middlesex E.C. to borrow £9,234 for extensions at the Woodhouse secondary school.

FINDON.—The West Sussex C.C. has approved the erection of the police cottage. A tender has been accepted at £625.

FILTON.—The U.D.C. are proposing to erect a new public mortuary on a site off Church-road.

GAINSBOROUGH.—The U.D.C. are proposing to complete the Spital Hill housing site and to lay a new and larger sewer in the centre of the town.

GO STONE.—The B.G. has decided to convert buildings into workshops at a cost of £250.

GLASGOW.—The Watch Committee are considering the question of increasing the accommodation for the detective force at the police offices in Tobacco-street. The Housing Committee are considering suggestions for the erection of social centres at Hamilton Hill and Logan-street. The Housing Committee are arranging for the erection of the following subsidy houses: J. Adams & Co., 54, Shawlands; R. Buchan, six, New-street, Tollcross; and J. Downs, 61, Jordanhill.

GRAVESEND.—The Corporation has approved the Surveyor's plans for the construction of an underground convenience in Parreck-street. A site on the King's Farm estate is to be appropriated for the erection of an elementary school.

GUILDFORD.—Efforts are being made by the Y.W.C.A. to raise £5,000 for a building scheme.

HAM.—The Housing and Town Planning Committee has resolved that the Surveyor should prepare an estimate for the erection of 20 houses.

HAREFIELD.—The Middlesex E.C. has obtained sanction to borrow £7,830 for the erection of an infants' block at the elementary school.

HARROW.—The Middlesex C.C. are to erect a tuberculosis dispensary at Greenhill-crescent, at a cost of £1,500.

HASLINGDEN.—The U.D.C. are negotiating for land at the "Fields," as a site for the erection of houses.

HEMSWORTH.—The R.D.C. has approved of the amended plans for the erection of the proposed new

infirmary, prepared by W. T. Lynam. The estimate cost is £30,000.

HORDEN.—The Horden Collieries, Ltd., are to erect a further 84 houses.

HORWICH.—A new elementary school is to be erected to replace the Leigh-lane Council School, a site that has been obtained adjacent to the Long-street Council School.

HOUSLOW.—Additional lands are to be bought by the Metropolitan District Railway Co. to make possible the enlargement and improvement of their station Houslow Barracks, to plans by the company. Engineers at St. James's Park Station, S.W.1.

HOYLAND.—The U.D.C. are considering the question of a site for the construction of 20 iron houses on land at Platts Common.

IOKENHAM.—The Middlesex C.C. are to widen the bridge over the Regent's Canal at Ruislip-road.

LEORY.—The U.D.C. passed plans: Suburban Developments (London), Ltd. two houses, 11 and Cranley-road and 24 houses, 7-30, Beresford-gardens, Eastern-avenue; J. W. Lohden, 28 houses, 2-3, Benton-road; British Builders, Ltd., 31 houses, 1 to 173, Gordon-road and 14 houses at 143; S. & Robinson amended plan of houses, 92-126, Wanstane-lane; 1-29 and 2-36, Preston-gardens; 43-81 and 64-132, Castleview-gardens; 57-135, Avenue garden, Eastern-avenue; 146-192, 255-327, The Drive.

ILHAM.—The U.D.C. have decided to proceed with the erection of band stands in Princess Park, Ilham, and Cadishead Recreation Ground, at a cost of £900.

LANCASTER.—The Health Committee are negotiating for the building of 56 houses for the tenants who will be dispossessed under the St. Leonard Gate scheme.

LEEDS.—Tenders are to be invited for the erection of a proposed new church in the Harehills district in accordance with plans prepared by S. Kitson, Kitson, Parish & Ledgard, Bank Chambers, Vicar-lane.

LEICESTER.—The City Council has decided to carry out an electricity extension scheme which will involve an expenditure of £314,000, subject to the approval of the Electricity Commissioners.

LIMERICK.—The Corporation has adopted a scheme for the building of 45 houses.

LITTLEHAMPTON.—The U.D.C. are considering plans for a refreshment pavilion and shelters on the Common.

LIVERPOOL.—It has been decided to build new Church of England schools in connection with St. Andrew's Church, Maghull. A Cuddy, Maghull, the Diocesan Schools' Architect for the Archdeaconry of Liverpool, has been commissioned to prepare the plans. Plans for the new Joint Hospital for Women combining in one new building the Shaw-street Hospital for Women and the Samaritan Hospital for Women, have been approved by the Estate Committee. The new institution will be situated at the junction of Faulkner-street and Bedford-street, at an estimated cost of £120,000.

LONDON (DEPTFORD).—The B.C. has given instruction for plans to be prepared for the proposed tuberculosis dispensary in Harton-street, for submission to the M.H.

LONDON (FULHAM).—The L.C.C. has decided to remodel the Everington-street school, the estimate cost being £21,000.

LONDON (POPLAR).—The Borough Council are to proceed with the erection of a maternity centre in Wellington-street, at a cost of £12,227. The Island swimming bath is to be adapted, at a cost of £1,600 as a public hall. In connection with the widening of St. Leonard's-street, Messrs. Mann, Crossman & Paul are to rebuild "The Woodman" beerhouse, at a cost of £6,000, plans having been passed by the Licensing Justices.

LONDON (ST. PANCRA'S).—The B.C. are building 7 flats for the purpose of rehousing people displaced by the improvement of Somers Town Wolcot-street area.

LONDON (WANDSWORTH).—The L.C.C. recommend the borrowing by the B.C. of £3,169 for the reconstruction of a bridge.

LONDON (WESTMINSTER).—The City Council has received sanction from the L.C.C. to the borrowing of £10,000 for purchasing freehold land immediately in the rear of and adjoining the dwellings in Regency-street, for the purpose of a subsidised housing scheme. The Council recommend approval of the construction of four new erections, one at Regent-street quadrant one at Piccadilly by the Circus, one at Regent-street south or the Circus, and one at Shaftesbury-avenue by Piccadilly, for the purpose of ventilating and giving access to the pipe subways to be constructed under Piccadilly Circus.

LONDON (WIMBORNE).—The City Council agree to the construction by the London Electric Railway Co. of the opening from the passageway north of the conveniences in Tratalgar-square into the railway booking hall, subject to special conditions. The Council recommend the provisional approval of the amended plans of the proposed new public conveniences in Piccadilly Circus. A committee has been appointed to consider the question of the erection of a memorial to the late Alderman Major-General Lord Chylesmore.

LYME REGIS.—The Council has borrowed £3,900 for housing.

MAIDSTONE.—The Council has decided to urge the Southern Railway to expedite the work in progress on the High Level bridge. The extension of Tonbridge road school for 288 children is estimated to cost £8,464.

MANCHESTER.—The T.C. passed plans: Conveniences to works, Stockport-road, West Gorton; tennis pavilion off Rutland-avenue and Goulston-road; Withington; shops, dance hall, offices, and store, Pin Mill Brow and Lyon-street, Ardwick; 30 lock-up garages, North Western-street, Levenshulme.

MANSHFIELD.—The Miners' Welfare Committee propose to make a grant towards the cost of the new accident ward which is to be built adjoining the Hospital.

MARGATE.—The T.C. has approved plans for the construction, by a private owner, of a bathing pool

* See also our List of Contracts, Competitions, &c.

opposite the Clifton Baths.—In connection with the jubilee celebration of the Cottage Hospital there is a project to raise £50,000 for the erection of a hospital.

MERSHAM.—The Surrey C.C. are being asked to provide a police station in the district.—A site for a mortuary is to be obtained.

NEWCASTLE.—Plans have been passed by the Corporation Town Improvement Committee for the erection of 37 self-contained houses in various parts of the city.

NEWMARKET.—The U.D.C. has decided to apply to the M.H. for sanction to a loan to carry out the second housing scheme at Laureate Paddocks.

NORTHAMPTON.—A new factory is to be erected in Kingthorpe-road, for A. Bell & Co., Ltd., to plans prepared by William and Edward Hunt, F.F.R.I.B.A., 30, Norfolk-street, Strand, W.C.

NORTH FLEET.—The U.D.C. has authorised the housing surveyor to proceed by direct labour with the erection of twenty-six houses on the Northfleet House estate. Estimates are to be prepared for road construction on the undeveloped part of the estate for the erection of seventy-six houses.

NORTHUMBERLAND.—Plans have been passed by the E.C. for the erection of a new Earsdon-Shiremoor Central Council School, at a cost of £16,610, and a new Central Council School at Newbiggin, at a cost of £17,310; and the committee has also agreed to the construction of a secondary school to accommodate 150 girls, at Berwick.

ORMSKIRK.—The U.D.C. are to apply to the M.H. for sanction to borrow £11,980 for houses.

PLYMOUTH.—The C.B. has given a site in St. Andrew-street to the Electricity Committee for the purpose of a sub-station.—The Council has approved the spending of £115 for repairs to certain libraries.—The Borough Surveyor is to erect 24 flats at Pottery Quay by direct labour.—Application is to be made to the M.H. for sanction to borrow £11,260 for the erection of buildings.

—The Council are proposing to erect a convenience at St. Budeaux.—New conveniences are to be built at Phoenix-street and Prince's Rock.

PRESTON.—The Borough Surveyor has prepared plans for the construction of an underground convenience at the junction of North-road, Walker-street, Meadow-street, and Park-road, for which tenders are to be invited. Plans have been approved for the erection of 55 houses and bungalows.—The Health Committee are seeking sanction to carry out an extension scheme at the Preston and Garstang Joint Smallpox Hospital, comprising an additional ward of 12 beds at an estimated cost of £9,000.

RAWMARSH.—The U.D.C. has received sanction from the M.H. to borrow £14,000 for the provision of public baths and a concert hall.

REIMINGTON.—The Bowland E.C. are urging the West Riding C.C. to carry out certain improvements at the school, at an estimated cost of £360 10s., in accordance with plans prepared by the County Architect.

ROCHFORD.—The R.D.C. are inviting tenders for 30 houses.

ROTTERHAM.—The T.C. has received formal sanction for the borrowing of £17,566 for the erection of 38 non-parlour type houses.—Tenders are to be obtained for the erection of 86 additional houses at Eastdene.—The cost of work in connection with the new cattle market is estimated at £3,500.

RUISLIP.—The Middlesex E.C. has obtained consent for a loan of £13,979, for the erection of an elementary school.

SALFORD.—The C.B. are proposing to purchase from the executors of the late Louis Schwabe, for the sum of £1,035, the land and premises known as the Hart Hill estate, Pendleton.

SEA LAM HARBOUR.—The U.D.C. has resolved that application be made to the M.H. for sanction to the borrowing of £22,000 for the erection of houses.

SHEFFIELD.—The Corporation Tramways Committee have approved plans for the new depot and garage at Tenter-street, the cost being estimated at £100,000.—A sub-committee has been asked to deal with plans for the proposed extension of the Lodge Moor Hospital.—The Health Committee has prepared a scheme, to cost £30,000, for improving public conveniences.—The City Architect has prepared plans for the extension of the Rivelin filter house, and tenders are to be invited.

SHEPPLE (YORKS).—The Higher Education Sub-Committee recommend to the West Riding C.C. the urgency and necessity for the erection of a new secondary school for boys with accommodation for 400 pupils. It is also proposed to adopt the present Salt High School buildings into a high school for girls, with accommodation for 400. The estimated cost of the new scheme is £30,000.

SOUTH ELMSALL.—The P.C. are considering a scheme for the construction of a proposed market upon a site adjoining the Chequers Inn. Mr. W. T. Lyman, Surveyor to the Hemsworth R.D.C., is preparing the plans.

SOUTHBEND.—The new scheme of sewage disposal, which is estimated to cost £271,250, will provide for a resident population of 300,000.

SPILSBY.—The R.D.C. propose to erect a number of houses allocated to the following districts:—Four at Ingoldmills, four at Croft, four at Orby, two at Thorpe St. Peter, two at Wlton-le-Marsh, six at Willoughby, and eight at Welford.

STANES.—The R.D.C. has received sanction from the M.H. to the sale of a portion of the Harlington housing site to the Middlesex C.C. at £685, for the purpose of erecting a school.

STAINFORTH.—Three schools are to be erected in the district—two at Thorne and one at Dunscoff.

STANLEY (W. YORKS).—The U.D.C. are to acquire a site comprising more than two acres, on the Bradford-road, at Wrenthorpe, for the purpose of carrying out an additional housing scheme thereon.—The L.N.E.R. Co. are to reconstruct their bridge over Lee Mount-road.

STAVELEY.—Additional class-room accommodation is to be provided at the Grammar School.

STOCKTON.—A conference of local authorities called by the Corporation has decided in favour of the establishment of a joint small-pox hospital at an estimated cost of £25,000, with provision for 36 patients and capacity for extension to accommodate 60.

SUN ERLAND.—The R.D.C. decided to seek the permission of the M.H. to the erection of 50 houses in Ford.

SUTTON COLDFIELD.—The Warwickshire E.C. are to prepare a scheme for a new High School, with accommodation for 300, the cost being estimated, with the site, at £50,000.

SWANSEA.—New branch premises are to be erected in Woodfield-street, for Messrs. The Midland Bank, Ltd., Threadneedle-street, E.C. Messrs. Whinney, Son & Austen Hall, 8, Old Jewry, E.C. 2, architects.

TORQUAY.—Messrs. Spiers & Ponds, Ltd., caterers, of New Bridge-street, E.C. 4, propose to build a large residential hotel at Rockend, where, it is reported, accommodation will be provided for 1,000 guests. Plans have been prepared by the company's architect, Mr. J. G. Martin, A.R.I.B.A.

SWINTON.—The U.D.C. has agreed to ask the M.H. for sanction to borrow £31,500 for the purpose of erecting 70 houses on the Cliffe Field.

WALTHAMSTOW.—The U.D.C. passed plans: Hall, Bedford-road, L. H. Rushton; 10 houses, Wadham-road, H. Hawthorn.

WARRINGTON.—The E.C. resolved to expedite the completion of the Bewsey estate from Lord Litford, with the object of building a school on the site. It was also decided to ask the Borough Surveyor to submit plans and estimates for the conversion of a portion of the Training College, which was recently destroyed by fire.

WARWICK.—The Warwick County Mental Hospital and Institution Committee contemplate the installation of new central heating and electric lighting systems at a considerable cost. A scheme has been prepared by Mr. A. B. Mallinson, Worsley-street, Salford.

WATERFORD.—The Corporation has decided to provide a permanent electric lighting installation for the city at a cost of £30,250.

WEMBLEY.—A sum of £4,000 is needed to complete the first portion, costing £15,000, of St. Augustine's Church, Wembley Park.

WEST BROMWICH.—The B.G. has approved recommendation by the special committee for the reorganisation and staffing of Hallam Hospital and Hallam House.

WEST HARTLEPOOL.—The T.C. has resolved to make application to the M.H. for permission to erect five houses on a site in Hart-lane, at a cost of £425 each.

WHITEHAVEN.—The old Whitehaven and West Cumberland Infirmary has been purchased privately by the Corporation for conversion into a school.

WILLES DEN.—The Health Committee of the U.D.C. are still holding a site on the Brentfield estate for the erection of a clinic.—The U.D.C. recommend that the engineer be instructed to arrange for the necessary redecoration of the Council chamber.—The Council are considering the question of inviting tenders for the erection of the remaining houses on the Brentfield estate.—The West Willemsden Ratepayers' Association are suggesting the erection of self-contained flats in preference to houses on the Brentfield estate.—Plans passed: Fifteen houses, Hanover-road, Brondesbury Park, by H. Shaw, for F. Hilborn; offices and stores, 307, 309 and 311, High-road, Kilburn, by H. Austen Hall, for The Gas Light & Coke Co.; additions, sanitary conveniences and alterations, electricity sub-station, Salusbury-road, Kilburn, by A. W. Blake, for the Electricity Committee; transformer house, Edgware-road, Cricklewood, by A. W. Blake, for the Electricity Committee.

WOLLS.—The B.E. has approved of the plans of the Surrey E.C. for adapting a hut, levelling and laying out grounds at the Country School for Girls, at a cost of £4,750; also for the erection of a junior mixed and infants' school at Westfield.

WOLVERHAMPTON.—The T.C. propose under the boundary extension scheme to acquire lands in the borough for the extension of the fire station, town hall, and other municipal purposes, and for the extension of the cattle market and abattoir.

WORCESTER.—The Infirmary Committee are contemplating building a new X-Ray department, at an estimated cost of £1,000.

WORTHING.—The West Sussex C.C. has approved the recommendation of the E.C. for £4,500, part of the £20,000 for additional accommodation at the Secondary School for Boys.

PATENTS.

APPLICATIONS PUBLISHED.*

235,837.—F. Himmel, and I. Himmel: Store-front construction.

237,975.—W. W. Love: Construction of framed buildings.

237,980.—E. Y. Robinson, E. J. E. Hubbard, and Metropolitan-Vickers Electrical Co., Ltd.: Method for securing metal to insulating material.

237,992.—C. L. Burdick: Means for washing and conditioning air supplied to buildings.

237,996.—E. G. Enticknap: Machine for manufacturing concrete blocks.

238,024.—R. Grierson, and Grierson, Ltd.: Electrical heating of rooms or buildings.

217,571.—A. F. Decker: Floor covering.

238,029.—R. W. de Montalk: Facing of concrete slabs and buildings.

238,112.—J. Parker: Roofing-tile.

238,136.—H. Hope & Sons, Ltd., and H. D. Hope: Steel doors.

237,304.—J. W. Thorpe, J. A. Bowden, and J. Taylor: Means for holding sliding doors and windows, in open, closed, or intermediate positions, and preventing rattling.

237,347.—J. R. Wade: Reinforced-concrete structures and removable reinforcements therefor.

237,380.—E. C. Caley, and C. Downs: Building of houses and other buildings or structures constructed of bricks, stones, and concrete blocks.

237,438.—G. W. Stokes: Centering of false-work used as temporary supports in the construction of concrete floors.

237,470.—C. Taylor: Domestic hot-water and like supply systems.

237,475.—G. E. Wight: Apparatus for use in the laying of bricks and similar elements in building.

237,483.—A. Nutter: Domestic fireplaces.

237,499.—F. H. Clark: Manufacture of roof felt.

228,508.—Etablissements Jaquetmet et Mesnet: Automatically operating curtains or shutters for isolating fires.

233,302.—C. H. Jucho Dortmund Bruckebau: Building structures.

The Inspection of Cranes.

In the House of Commons recently Mr. Cluse asked the Home Secretary how many inspectors were engaged in inspecting cranes used in building and other operations; and whether, seeing that cranes were responsible for a total of 3,093 accidents in 1924, including 76 fatal accidents, it was proposed to increase the number of inspectors and take other action to reduce the number of accidents due to cranes?

Mr. Locker Lampson said that the inspection of cranes formed part of the routine duty of the district staff, no inspectors being specially detailed for this work. The prevention of crane accidents had been receiving close attention and special steps had been taken and further steps were under consideration with a view to reducing the danger. For example, the provisions as to cranes in the Docks Regulations had been strengthened and similar requirements included in the new draft codes for the building and ship-building industries. Further, in order to guard against crane collapses which were a fruitful source of accidents, the British Engineering Standards Association had agreed, at the Home Office request, to prepare standard specifications for the construction and design of cranes. He was glad to see from the Chief Inspector's report that the standard of safety in regard to hoists was distinctly advancing throughout the country, but he agreed that further provision on the subject was desirable. The matter was being considered in connection with the Factory Bill.

* All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.

Steel Houses.

The suggestion of giving an increased subsidy towards steel houses and others manufactured by mass production methods, is not, we understand, proving to be very popular with local authorities. Another suggestion made with the object of providing cottage houses quickly without calling upon the depleted ranks of the building trade operatives, is at present under consideration. One of the difficulties that hampers firms who have systems for applying engineering methods to the housing problem is the cost of the necessary machinery needed for mass production.

Builders' Estates.

Mr. Jervis Veale, builder, of South Brent, Devon, has left net estate of £14,057.

Mr. G. T. Martin, contractor, of Carisbrook-road, Edgbaston, has left net estate of £13,476.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by Inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.	£ s. d.
Best Stocks	4 5 6
Second Hard Stocks	3 18 6
Per 1,000. Delivered at London Goods Stations.	£ s. d.
Flettons, at	2 s. d.
King's Cross	2 13 3
Do. grooved for Plaster	2 15 3
Do. Bullnose	3 8 3
Best Stourbridge Fire Brick:—	
2½ in.	8 11 3
3 in.	10 3 0
GLAZED BRICKS—	
Best White	D'ble Str'ch'rs 30 0 0
Ivory, and	D'ble Headers 27 0 0
Salt Glazed	One Side and
Stretchers	two ends 31 0 0
Headers	Two Sides and
Quoins, Bull-	One End 32 0 0
nose and 4½ in.	8 plays and
Plats	Squints 29 10 0
Second Quality. £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, £5 10s. extra over white.	

BREEZE CONCRETE SLABS.

Delivered London.

2 in. per yd. super	1 11	3 in. per yd. super	2 9
2½ in. " "	2 4	4 in. " "	3 6
Thames Ballast	10 6	per yd.	
Pit Sand	13 9	" "	
Thames Sand	14 6	" "	
Best Washed Sand	14 6	" "	
1 in. Shingle for Ferro-	12 9	" "	
Concrete	14 0	" "	
1 in. " "	14 0	" "	
1 in. Broken Brick	11 6	" "	
Pan Breeze	7 6	" "	

Per ton delivered in London area in full van loads.

Best Portland Cement. British

Standard Specification. Test £2 18 0 to £3 3 6

5½s. alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above.

Super Cement (Waterproof)

Roman Cement

Parian Cement

Keene's Cement, White

" " Pink

Plaster, Coarse, Pink

" " White

" " Fine

Strapite, Coarse

" " Finish

Grey Stone Lime

Chalk Lime

Best Ground Blue Lias Lime

Hair

Granite Chippings

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months car. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dp.

STONE.

BATH STONE—delivered in railway trucks at

Westbourne Park, Paddington, G.W.R., or

South Lambeth, G.W.R., per ft. cube.

Do. do. delivered in railway trucks at Nine

Elms, L. & S.W.R., per ft. cube.

PORTLAND STONE—

Brown Whitbed, in random blocks of 20 ft.

average, delivered in railway trucks at

Nine Elms, L. & S.W.R., South Lambeth

Station, G.W.R., and Westbourne Park,

Paddington, G.W.R., per ft. cube.

Do. do. delivered on road wagons at above

stations, per ft. cube.

White basebed, 3d. per ft. cube extra.

NOTE.—1d. per ft. cube extra for every foot over

20 ft. average, and ½d. beyond 30 ft.

HOPTON-WOOD STONE—

Delivered at any Goods Station, London.

Small random blocks, up to 10 ft. cube. P. ft. cb.

Random blocks from 10 ft. and over

Sawn two sides.

Sawn three or four sides.

YORK STONE, BLUE—Robin Hood Quality.

Delivered at any Goods Station, London.

6 in. sawn two sides landing to sizes (under

30 ft. super.)

6 in. rubbed two sides, ditto.

3 in. sawn two sides slabs (random sizes)

2 in. to 2½ in. sawn one side slabs

(random sizes)

1½ in. to 2 in. ditto, ditto.

HARD YORK—

Delivered at any Goods Station, London.

Scalloped random blocks

6 in. sawn two sides landing to sizes (under

40 ft. super.)

6 in. rubbed two sides, ditto

4 in. sawn two sides slabs (random sizes)

3 in. ditto

2 in. self-faced random flags.

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft.

cube:—Plain, 8s. 6d.; Moulded, 9s. 6d. Cills, 10s. 0d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	25 0	3 × 6	21 0
4 × 9	25 0	3 × 11	25 0
4 × 8	24 0	2 × 11	25 0
4 × 7	23 0	3 × 9	24 0
3 × 8	21 0	2½ × 9	23 0
3 × 7	20 0	3 × 4½	22 0
2½ × 7	20 0	3 × 4	22 0

PLANED BOARDS.

1 × 11

27 0

1 × 9

26 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
1	20/-	1½	31/-
1	22/-	1½	34/-
1	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.	Inches.	per sq.
1	25/-	1½	16/6
1½	31/-	1½	19/-
1½	34/-	1	24/-

BATTENS.

2 × 2

2 6 per 100 ft.

Per bundle

1½ AND UP THICK.

Dry Austrian Wainscoat, per ft.

Dry American and/or Japanese

Figured Oak, ft. cube

Dry American and/or Japanese

Plain Oak, ft. cube

Dry sq. edged Honduras Mahog-

any, ft. cube

Dry Log cut Honduras Mahog-

any, ft. cube

Dry Cuba Mahogany, ft. cube

Dry Teak, ft. cube

Dry American Whitewood, ft.

cube

Best Scotch glue, per cwt.

Liquid Glue, per cwt.

SLATES.

First quality slates from Bangor or Portmadoc

carriage paid in full truck loads to London Rate

Per 1,000 of 1,200.

24 by 12

22 by 12

22 by 11

20 by 12

20 by 10

TILES.

Best machine-made tiles from Broseley or

Staffordshire district

Ditto hand-made ditto

Ornamental ditto

Hip and valley tiles

(per dozen)

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

R.S. Joists, cut and fitted

Plain Compound Girders

Stanchions

In Roof Work

MILD STEEL ROUNDS.

To London Station, per ton.

Diameter.

1 in.

1½ in.

2 in.

2½ in.

3 in.

3½ in.

4 in.

4½ in.

5 in.

5½ in.

6 in.

6½ in.

7 in.

7½ in.

8 in.

8½ in.

9 in.

9½ in.

10 in.

10½ in.

11 in.

11½ in.

12 in.

12½ in.

13 in.

13½ in.

14 in.

14½ in.

15 in.

15½ in.

16 in.

16½ in.

17 in.

17½ in.

18 in.

18½ in.

19 in.

19½ in.

20 in.

20½ in.

21 in.

21½ in.

22 in.

22½ in.

Staffordshire "Marked"

Bars

Mild Steel Bars

Steel Bars, Ferro-Concrete

quality, basis price

Hoop iron, basis price

Galvanised

Soft Steel Sheets, Black—

Ordinary sizes to 20 g.

" " " 24 g.

" " " 26 g.

Sheets Flat Best Soft Steel, C.R. & C.A. quality—

Ordinary sizes, 6 ft. by

2 ft. to 3 ft. to 20 g.

Ordinary sizes, 6 ft. by

2 ft. to 3 ft. to 22 g.

Ordinary sizes, 6 ft. by

2 ft. to 3 ft. to 26 g.

No. 1 quality £4 per ton extra.

Flat and Galvanised Corrugated Sheets—

Ordinary sizes, 6 ft. to

9 ft. to 20 g.

Ordinary sizes, 6 ft. to

9 ft. to 22 g. and 24 g.

Ordinary sizes, 6 ft. to

9 ft. to 26 g.

Sheets Galvanised Flat, Best quality—

Best Soft Steel Sheets,

6 ft. by 2 ft. to 3 ft. to

20 g. and thicker

Best Soft Steel Sheets,

22 g. and 24 g.

Best Soft Steel Sheets,

26 g.

Cut Nails, 3 in. to 6 in.

(Under 3 in. usual trade extras.)

METAL WINDOWS.—Standard sizes, suitable for com-

plete houses, including all fittings, painting two

coats, and delivery to job, average price about

1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)

LEAD—Sheet, English, 4 lb. and up

Pipe in coils

Soil Pipe

Compo Pipe

NOTE.—Country delivery, 30s. per ton extra; lots under

3 cwt., 3s. per cwt. extra, and over 3 cwt. and under 5

cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.

Old lead, ex London area,

at Mills

Do., ex country, carriage

forward

COPPER.

Seamless Copper tubes (basis)

Strong sheet

Thin

Copper nails

Copper wire

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR

IRON

1½ in. 1 in. 1½ in. 1½ in. 2 in.

29/- 45/- 76/- 153/- 246/- 510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND

UNIONS.

1½ in. 1 in. 1½ in. 1½ in. 2 in.

41/6 62*- 92/- 174/- 30

THE SCOTTISH BUILDER

NEW BUILDINGS IN SCOTLAND

Upper Renfrewshire.—**HOUSES.**—The District Committee of Upper Renfrewshire propose to proceed with the erection of 500 houses. The houses are to be allocated as follows :—Thornliebank, 50; Busby, 60; Elderslie, 100; Neilston, 100; Nitshill, 100; and other areas 90.

Ayrshire.—**HOUSES.**—The Northern District Committee of Ayrshire C.C. has recommended the erection of 352 houses throughout seven parishes, and it was decided to proceed with the erection of the first hundred houses at once, these to be erected in parishes of Drghorn, Kilbirnie, and Stevenston. The hundred houses will be of the Dennis Wild system, and will be erected by Messrs. James Rome & Sons, builders Kilmarnock.

Hawick.—**LIBRARY.**—The Hawick Public Library Committee has resolved to adopt the open access system in the lending department, the cost of the alterations being estimated at £275.

Lennoxtown.—Houses.—The Western District Committee of Stirlingshire C.C. has decided to ask the Scottish Board of Health to sanction the erection of 20 steel houses at Lennoxtown and two at Milton of Campsie.

Paisley.—**HOUSES.**—The Dean of Guild Court approved plans for the erection of 57 blocks of houses on the Lochfield-road, for the Corporation.

Edinburgh.—**HOUSING.**—The Housing and Town-Planning Committee of the Town Council has recommended the purchase of thirty-two acres of ground on the Prestonfield estate, for the purpose of a new housing scheme.

Dundee.—**REPAIRS.**—Re-roofing parts of Dundee Central Baths is estimated by the city engineer to cost approximately £5,000.

Berwick.—THEATRE.—Messrs. Johnston & Darlings, Berwick, have accepted £2,000 from Berwick Theatre, Ltd., for their old premises in Hide Hill. A picture-house and theatre is now to be built on the site.

Leven.—HORSES.—The Leven Town Council has decided to erect 64 houses on the remaining 8½ acres of the 20 acre field in which they have been erecting houses.

Glasgow.—VARIOUS.—The Dean of Guild Court passed plans: St. Barnabas Episcopal Church, Dennistoun, hall, Craigpark; City Bakeries, Ltd., clubhouse at Helensburgh-drive, Jordanhill; Corporation Electricity Department, electricity sub-station at Finlay-drive; Corporation Gas Department, electricity sub-station at Crawford-street; Corporation Police Department, public halls at Charles-street and Summers-street, Fridgeton.

Lanarkshire.—Horses.—The Middle Ward District Committee of Lanarkshire approved a minute of the Housing Buildings Sub-committee relative to the construction of 1,500 houses sanctioned by the Board of Health. Arrangements are being made for borrowing the sum required to meet the cost of the houses, which is estimated at £720,000. The question of purchasing outright the Carfin brickworks at a cost of £10,000 is under consideration, and a recommendation to the County Council to this effect was approved.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.		Per Ft.
Polished plate	.....	41d.
Rough rolled	.....	53d.
Rough rolled	.....	s. d.
Figured Rolled, Baltic, Oceanic, Arctic, Ship-pole, and small and large Flemish White.	.....	61d.
Do. tinted	.....	6d.
White Sheet	.....	6d.
White Koiled Cathedral	.....	51d.
Tinted do.	.....	71d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.		Per Gallon.	
		s.	d.
Black Varnish	Outside	0	14
ditto	ditto	0	16
ditto Copal	ditto	0	18
ditto Copal	ditto	1	0
ditto Copal Carriage	ditto	1	4
ditto	ditto	1	12
ditto	Inside	0	18
ditto Varnish	ditto	0	18
ditto Pale Paper	ditto	1	2
ditto Copal Cabinet	ditto	1	6
ditto Copal Flattning	ditto	0	18
ditto Hard Drying Oak	ditto	0	19
ditto Hard Drying Oak	ditto	1	0
ditto Copal Varnish	ditto	1	2
ditto	ditto	1	12
ditto	ditto	0	12
ditto Japan Gold Size		0	10
ditto Black Japan		0	12
ditto Black and Mahogany Stain (water).		0	7
ditto Unswick Black		0	14
ditto Rlin Black		1	5
ditto Polishing (patent)		0	17
ditto French and Polish		0	9
ditto French and Polish		0	9
ditto French and Polish		0	7

Messrs. G. & J. Weir, Ltd., have produced a new type of steel house at a lower cost than previously.

The new house, known as the "Blanefield" is built in two-storied blocks of four and consists of three apartments, kitchenette, and bathroom.

The first of the new type has been erected at the firm's factory at Cardonald. The houses are quoted at £357.

The death has occurred at Huntley of Mr. James Morrison, builder.

The death has occurred at Langside House, 44, Mansion House-road, Glasgow, of Mr. Archibald Stewart, builder, in his 79th year.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

[illegible]

* The information given in this table is copyright. The rates or wages in the various towns in England and Wales are given on page 822.



CURRENT PRICES FOR BUILDING WORK IN LONDON

EXCAVATOR.

Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep....	per yard cube	s. d.
Digging and throwing	11	0
Add if in clay.....	" "	1 0
Add for every additional depth of 6 ft.....	" "	0 6
Planking and strutting to trenches.....	per foot super	0 5
Do. to sides of excavation, including shoring	" "	1 0

CONCRETOR.

Portland cement concrete in foundation 1 to 6..	per yard cube	32 0
Add if in underpinning in short lengths.....	" "	7 0
Add if in floors 6 in. thick.....	" "	3 3
Add if in beams.....	" "	3 9
Add if aggregate 1:2:4.....	" "	10 0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.....	" "	2 6

BRICKLAYER.

Reduced brickwork in lime mortar and Fletton bricks.....	per rod	£ s. d.
Reduced brickwork	30	0 0
Add if in stocks.....	" "	7 10 0
Add if in Staffordshire blues.....	" "	22 0 0
Add if in Portland cement and sand.....	" "	1 10 0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks.....	per ft. super	0 0 1½
---	---------------	--------

POINTING.

Neat flat struck or weathered joint.....	" "	0 0 3
--	-----	-------

ARCHES.

Extra only to the price of ordinary brickwork :—		
Fair external in half brick rings.....	" "	0 0 10
Axed in stocks.....	" "	0 1 9
Rubbed and gauged jointed in putty camber or segmental.....	" "	0 6 0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement.....	" "	0 1 0
Setting ordinary register grates and stoves....	each	1 0 0
Setting kitchener, including forming flues, &c., with all necessary fire bricks.....	" "	4 15 0

ASPHALTER.

Half-inch horizontal damp course.....	per yard sup.	s. d.
Half-inch horizontal	4	3
Three-quarter-inch vertical damp course.....	" "	8 6
¾ inch on flats in two thicknesses.....	" "	6 3
Angel fillet.....	per foot run	0 3
Skirting and fillet 6 in. high.....	" "	1 2

MASON.

York stone templates fixed.....	per foot cube	13 0
York stone sills fixed.....	" "	22 0
Bath stone and all labour fixed.....	" "	10 6
Portland stone fixed.....	" "	20 0

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails....	per square	72 9
Do. 20 in. × 10 in. Do. Do.	" "	80 9
Do. 24 in. × 12 in. Do. Do.	" "	90 0

CARPENTER AND JOINER.

Fir framed in plates.....	per foot cube	5 0
Do. joists.....	" "	5 6
Do. roofs, floors, and partitions.....	" "	6 0
Do. trusses.....	" "	8 6

Deal rough close boarding.....	per sq.	35/6	1" 40/-	1½" 45/-	2" 72/-
Flat centering for concrete floor, including struts or hangers.....	" "	50 0			
Do. to beams.....	per ft. sup.	1 0			
Centres for arches.....	" "	1 6			
Gutter boards and bearers.....	" "	1 0			

FLOORING.

Deal-edges shot.....	per sq.	3/4	1" 44/6	1½" 53/-	2" 60/6
Do. tongued and grooved.....	" "	49/-	51/-	57/6	65/-
Do. matchings.....	" "	45/-			
Moulded skirting, including backings and grounds.....	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

One-and-a-half moulded sashes or casements.....	per foot super.	s. d.
One-and-a-half	1	10
Two Do. Do.	" "	2 1
Add for fitting and fixing.....	" "	0 3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights; average size.....	" "	3 9

DOORS.

Two-panel square framed.....	per ft. sup.	1½" 2/1	1½" 2/4	2" 2/6
Four-panel Do.	" "	2/5	2/8	2/11
Two-panel moulded both sides.....	" "	2/8	2/11	3/2
Four-panel Do. Do.	" "	2/11	3/2	3 5

CARPENTER AND JOINER—continued.

FRAMES.

Deal wrot moulded and rebated.....	per foot cube	14		
		1"	1 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/4
Deal shelves and bearers.....	"	1/4	1/6	1/2
Add if cross-tongued	"	-d.	2d.	

STAIRCASES.

Deal treads and risers in and including rough brackets.....	1" 2/1	1½" 2/4	1½" 2/9	2" —
Deal strings wrot on both sides and framed.....	1/8	2/-	2/2	2/8

Housings for steps and risers.....	each	0
Deal balusters, 1 in. × 1½ in.....	per ft. run	0
Mahogany handrail: average 3 in. × 3 in.....	" "	6
Add if ramped.....	" "	11 1
Add if wreathed.....	" "	23

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts.....	8½d.	Rim locks.....	2
Sash fasteners.....	11½d.	Mortice locks.....	4
Casement fasteners.....	1/5	Patent spring hinges and Casement stays.....	letting into floor and making good.....
Cupboard locks.....	1/5		19/

FOUNDER AND SMITH.

Rolled steel joists.....	per cwt.	s. d.
Rolled steel	16	
Plain compound girders.....	" "	19
Do. stanchions.....	" "	21
In roof work.....	" "	27

RAIN-WATER GOODS.

Half-round plain rebated joints..	ft. run	3" 1/6	4" 1/9	5" 2/-	6" 2/3
Occ. Do. Do.	" "	1/9	2/-	2/6	3/2
Rain-water pipes with ears....	" "	1/9	2/7	—	—
Extra for shoes and bends.....	each	4/4	5/11	—	—
Do. stopped ends.....	" "	1/11	2/4½	3/7	4/4
Do. nozzles for inlets.....	" "	2/2	2/7	3/10	4/4

PLUMBER.

Milled lead and laying in flashings and gutters....	per cwt.	s. d.
Milled lead	63	
Do. Do. in flats.....	" "	62
Extra labour and solder in coated cesspools.....	each	6
Welf joint.....	per ft. run	0
Soldered seam.....	" "	1
Copper nailing.....	" "	0

Drawn lead waste per ft. run	1½" 1/2	2" 1/9	2½" 2/7	3" 3/4	4" 4/-
Do. service.....	1/8	2/2	2/7	3/10	—
Do. soil.....	—	—	—	—	6/8
Bends in lead pipe.....	each	—	—	—	3/3
Soldered stop ends.....	1/2	1/8	2/1	2/10	3/6
Red lead joints.....	11d.	1/-	1/3	1/11	2/4
Wiped soldered joints.....	2/10	3/6	4/-	4/11	6/6
Lead traps and cleaning screws.....	—	—	—	14/7	19/6
Bib cocks and joints.....	6/4	9/7	15/4	41/-	—
Stop cocks and joints.....	15/4	17/2	25/8	64/-	—

PLASTERER.

Render, float and set in lime and hair.....	per yard sup.	s. d.
Render	2	
Do. Do. Siapite.....	" "	2
Do. Do. Keen's.....	" "	3
Do. Do.	" "	1
Add sawn lathing.....	" "	2
Add metal lathing.....	" "	2
Portland cement screed.....	" "	2
Do. plain face.....	" "	3
Mouldings in plaster.....	per 1 girth	0 1
One-and-a-half granolithic pavings.....	per yard sup.	5 6

GLAZIER.

21 oz. sheet plain.....	per foot sup.	0 6
26 oz. Do.	" "	1 0
Obscured sheet.....	" "	0 6
½ in. rolled plate.....	" "	0 10
½ in. rough rolled or cast plate.....	" "	1 4
½ in. wired cast plate.....	" "	1 4

PAINTER.

Preparing and distempering, 2 coats.....	per yard sup.	0 6
Knocking and priming.....	" "	0 7
Plain painting, 1 coat.....	" "	0 9
Do. 2 coats.....	" "	1 2
Do. 3 coats.....	" "	1 9
Do. 4 coats.....	" "	2 4
Graining.....	" "	2 3
Varnishing twice.....	" "	1 4
Sizing.....	" "	0 3
Flatting.....	" "	0 7
Enamel.....	" "	1 1
Wax polishing.....	per foot sup.	0 6
French polishing.....	" "	1 2
Preparing for and hanging paper.....	per piece, 2/- to 4/-	

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.
Notes accepted. † Denotes provisionally accepted.
Denotes recommended for acceptance.
Denotes accepted subject to modification.

ARKING TOWN.—Electrical transformer houses, the U.D.C.:—
H. Newell £6,000
ELFAST.—New school, Ormeau Park, for the Mr. W. G. Davies, A.R.I.B.A., M.S.A., Educational Architect:—
James Henry & Sons £31,049 0 0
McRoberts & Armstrong 30,254 2 8
J. & W. Stewart 29,220 0 0
Patrick Ritchie 29,280 0 0
Courtney & Co. 28,220 0 0
Wm. J. Campbell & Son 27,850 0 0
Thornbury Bros., Ltd. 27,600 0 0
F. B. McKee & Co., Ltd. 27,000 0 0
J. & R. Thompson, Ltd. 27,455 0 0
Thos. McKee & Sons, Ltd. 27,211 0 0
Isaac Copeland & Sons 26,250 0 0
(All of Belfast.)

ERWICK-UPON-TWEED.—Secondary school for 150 girls, for the Northumberland E.C. Mr. C. Jans, Director of Education:—
P. Whittle & Sons, Berwick-upon-Tweed £13,084 3

EXHILL.—Twenty-four houses on the London-estate, for the T.C.:—
Walter A. Meader, London .. £14,050 0 0
Charles Parker, Bexhill 13,860 6 9
James Bodie, Ltd., Bexhill 11,709 0 0
J. W. Woolnough, Ltd., Eastbourne 11,626 0 0
White Bros., Bexhill 11,040 0 0
J. W. Simms, Sons & Cooke, Ltd., Nottingham 10,520 0 0

OLTON.—Tram shelter, offices and public conveniences at Trinity-street, for the Corporation. The Engineer Surveyor:—
Builder's work—S. Porter.
Steelwork—J. Booth & Sons.

OLTON-ON-DEARNE.—Seventy houses on the moor-street, Goldthorpe, and Furlong-road sites, the U.D.C.:—
Leadley, Firth & Whittington, Ltd., Doncaster.

OURNEMOUTH.—Enlargement of Stourfield school by the erection of a new department, for T.C. Borough Engineer:—
Jenkins & Sons, Ltd. £12,288

RISTOL.—Pair of steel gates at the Avonmouth locks, for the Docks Committee:—
Sir W. G. Armstrong Whitworth & Co., Ltd.

UCKNALL.—Heating installation at infectious diseases hospital, for the Stoke T.C.:—
G. Hall, Hanley £490

HADWELL HEATH.—House, Bennetts Castle, for Dr. Elphick. Mr. E. Meredith, A.R.I.B.A., architect and surveyor, 7, Goodmayes-road, Goodmayes:—
Baker, Hammond & Laver, Ltd., Rainham £1,519
F. W. Romain & Sons, Chadwell Heath 1,470

COALVILLE.—Seventy-six houses on a site between vicar-road and Forest-road, for the U.D.C. Messrs. Carthy, Collings & Co., and Goddard & Wain, architects, Coalville:—
John L. Ford, Loughborough £39,512
Coalville & District Building Trades Employers' Association, Coalville 38,007
J. E. Jervis, Ltd., Long Eaton 35,954

ROYDON.—Alterations to "Golden Lion," railway-road, Thornton Heath:—
F. Franklin & Sons, St. Quintin's Park £2,906 0
Bridge & Co., Croydon 2,885 10
Truett & Steel, Thornton Heath 2,870 0
G. E. Everitt & Sons, Croydon 2,710 0
Harding & Marks, Brockley 2,645 0

AGENHAM.—Club in Broad-street, for the Aghnam Working Men's Club and Institute. Mr. E. Meredith, A.R.I.B.A., architect and surveyor, 7, Goodmayes-road, Goodmayes:—
Allen & England, Leigh-on-Sea £8,590
J. Eaton & Sons, Chelmsford 5,360
Hammond & Kiles, Ltd., Ilford 5,100
Thomas & Edge, Woolwich 4,886
Baker, Hammond & Laver, Ltd., Rainham 4,567
H. J. Gower, Ltd., London 4,250

AGENHAM.—House in Broad-street, for Dr. Elphick. Mr. E. Meredith, A.R.I.B.A., architect and surveyor, 7, Goodmayes-road, Goodmayes:—
H. J. Gower, Ltd., London £1,250
F. W. Romain & Sons, Chadwell Heath 1,212
J. Eaton & Sons, Chelmsford 1,150
Baker, Hammond & Laver, Ltd., Rainham 987

DUDLEY.—Two cast-iron non-parlour type houses the Brewery Fields estate, for the T.C.:—
Eclipse Foundry & Engineering Co.

DUDLEY.—Ten type "A" houses on the North Road (No. 2) site, for the T.C.:—
C. Coulson, Dudley £4,625

DURHAM.—Memorial church in the Convent grounds at Lanchester, for the Rev. Canon Harris, of Eshlaude. Mr. F. Coyle, architect, 29, Newmarket-street, Consett:—
*Lough Bros., Consett £5,500

GOODMAYES.—Alterations and additions to 57, Goodmayes-road, for Madam Drury. Mr. E. Meredith, A.R.I.B.A., architect and surveyor, 7, Goodmayes-road, Goodmayes:—
*Baker, Hammond & Laver, Ltd., Rainham £1,043 10

GOOLE.—Forty-six type "B" houses on the Wakefield-avenue site, for the D.C. Mr. J. H. Castle, surveyor:—
*Platt & Featherstone, Goole £24,338

GREAT WAKERING.—Twenty houses, for the Rochford R.D.C. Mr. A. C. Madge, surveyor:—
*A. J. Arnold, Leigh-on-Sea £9,200

GRIMSBY.—Elementary schools for the E.C.:—
Steelwork—*Homan & Rodgers, Manchester.

HANFORD.—Conversion of privies, for the Stoke T.C.:—
33 privies and three pail-closets—
*Mellor & Cope, Stoke £435 4 6
35 privies and three pail-closets—
*F. Jervis, Stoke 676 1 0

HULL.—Workshops in Ringrose-street, for the Corporation:—
*Sugden & Co., Bradford £10,851 13 7

ILFORD.—Partition at the Isolation Hospital, for the U.D.C.:—
H. L. Bird £248 15

ILFORD.—Central library and extension of Town Hall, for the U.D.C.:—
*Kind & Co., Leytonstone £24,090

JOHNSTONE.—Tenements at the corner of Laighcartside-street and Russell-street, for the T.C. Messrs. Kerr Watson, architects, Johnstone. Quantities by Messrs. Jaffrey & Lochhead, Johnstone:—
Mason work—
Jas. Y. Keanie, Ltd. £1,604 10 10
Joiner work—
*Jas. Y. Keanie, Ltd. 1,102 18 5
Plumber work—
*Robt. Love & Sons, Ltd. 557 0 0
Slater work—
*Alex. Hutton 319 17 5
Plaster work—
*Geo. Thomson & Son 261 11 3
(All of Johnstone.)

KINLOCKLEVEN.—Trades for the erection of a school and janitor's house, for the Argyll County Education Authority. Mr. R. Cameron, Master of Works:—
Excavator, brick and concrete work—
*J. MacLachlan, Oban £7,982 12 9
Carpet layer, joiner and ironmongery work—
*J. Black, Tynribbie, Appin 3,202 16 9
Plumber, electric work—
*J. F. Scott, Glasgow 973 19 11
Slater and roofer work—
*W. McLean, Leith 999 9 2
Plaster work—
*D. Peat, Fort William 658 0 0
Steel roofing—
*Fleming Bros., Glasgow 179 15 6
Glazier work—
*J. W. Oliver & Son, Oban 113 16 8
Asphalt work—
*Associated Asphalt Co., Ltd., Glasgow 504 16 8
Metal window—
*McLean & Co., Glasgow 582 5 0
Smith work—
*A. & J. Main & Co., Ltd., Glasgow 521 10 0
Electric light—
*Grindlay Ross & Co., Ltd., Glasgow 245 5 7
Painter work—
*J. W. Oliver & Son, Oban 365 0 0
Heating—
*Jas. Cormack & Son, Ltd., Glasgow 726 15 0

LEEDS.—Painting work, for the T.C.:—
*J. Cushworth-Holbeck baths £339 13 4
*L. E. Wilkinson—Hunslet baths 337 16 0

LIVERPOOL.—Tramway works and car depot, Edge-lane, comprising main car repair shop, administrative block, motor-bus repair shop, oil stores, boundary wall, c., with ferro-concrete side and rear walls, for the T.C.:—
*W. Moss & Sons, Ltd., Liverpool £243,623

LIVERPOOL.—Alterations and additions to the Hightown School, for the T.C.:—
*Brown & Backhouse £1,361

LIVERPOOL.—Erection of the Walton Hall-avenue Council School, for the T.C.:—
*Tysons (Contractors), Ltd. £41,690

LIVERPOOL.—Works in connection with proposed alterations to classrooms, &c., at the Caledonian School, Oldham-street. Mr. A. D. Jenkins, City Architect:—
*A. R. Jones.

LIVERPOOL.—Wesleyan school-chapel to accommodate 500 persons at Queen's-drive, Clubmoor, for the Rev. W. A. Harrison. Messrs. A. Brocklehurst & Co., architects, Manchester:—
*G. Holmes & Co., Warrington £6,500

LONDON.—Repairs to the stonework, &c., at the St. James's Dwellings, Silver-place, for the Westminster City Council:—
F. G. Minter, Ltd. £938 0 0
John Daymond & Son, Ltd. 780 7 6
Raines & Porter, Ltd. 759 3 2
George Barker 683 17 6
Sims & Russell 509 0 0
(All of London.)

LONDON.—Erection of Pickwick House, on the Dickens estate, for the L.C.C.:—
J. Garrett & Son, Balham £30,499 0 0
Griggs & Son, Westminster 30,295 14 11
W. Harris, Ltd., North Woolwich 29,929 0 0
Thomas & Edge, Woolwich 28,750 0 0
Rowley Brothers, Ltd., Tottenham 28,659 0 0
Wm. Akers & Co., Ltd., South Norwood 28,351 0 0
Allen Fairhead & Sons, Ltd., Enfield 28,154 0 0
Bovis, Ltd., Marylebone 27,964 0 0
Wilson Lovatt & Sons, Ltd., Wolverhampton 27,131 1 6
W. Lawrence & Son, Ltd., City 26,990 0 0
A. E. Symes, Stratford 26,647 0 0
W. Simons, Stepney 26,600 0 0
A. Monk, Lower Edmonton 26,338 0 0
F. T. Thorne, Isle of Dogs 26,280 0 0
J. E. Billings & Co., Ltd., Westminster 25,937 0 0
E. D. Winn & Co., Ltd., Westminster 25,490 0 0
The architect's comparable estimate, £26,522.

MACCLESFIELD.—Thirty-four houses at Poynton, for the R.D.C. Mr. G. Clayton, architect, Stockport:—
*Oldham & Horsworth, Hazel Grove (22 houses)
*Redfern Bros., Knutsford (12 houses).

MAIDSTONE.—Six houses for members of the Police Force in Moter-road:—
*G. Pearce & Sons £2,568 16

MAIDSTONE.—Forty-one houses in Upper Pant-road, for the T.C.:—
Eleven houses—
*R. Lawrence £4,442 0
Eight houses—
*Cox Bros. 3,476 0
Nine houses—
*W. Burrows 3,858 18
Seven houses—
*W. Burrows 2,982 5
Six houses—
*W. Burrows 2,498 2

MANCHESTER.—Two hundred houses on the Moston housing estate, for the City Council. Mr. H. Price, A.R.I.B.A., City Architect:—
*Grimshaw & Thomas, Ltd., Stretford.

MIDDLEBROUGH.—Four shops on the Marton-grove estate, for the T.C.:—
*G. B. Long & Co. £2,547

MIDDLETON (LANCS.).—Bank and new premises for the Middleton and Tonge Co-operative Land & Building Society, Ltd. Messrs. F. A. Fitton & Son, architects and surveyors, Corporation Chambers, 19A, Corporation-street, Manchester:—
G. H. Goldstraw, Salford £11,636 12
Jones & Rawlinson, Salford 10,900 0
C. H. Normanton & Sons, Ltd., Manchester 10,802 0
S. Megarity & Co., Ltd., Manchester 10,409 0
Fearnley & Sons, Ltd., Salford 9,850 0
F. Butterworth, Manchester 9,750 0
Wm. Richards, Middleton 9,740 0
S. Pollitt & Sons, Middleton 9,700 0
E. Partington & Son, Middleton 9,600 0
Ogden Bros., Oldham 9,380 0
J. Hartley, Oldham 9,347 0
Chas. Schofield & Co., Oldham 9,340 0
J. Partington, Ltd., Oldham 9,250 0
*R. Taylor, Middleton 9,150 0
Architect's estimate 9,500 0

MORECAMBE.—Construction of railway bridges on the Ring-road, for the L.M.S. Ry.:—
*Byrom, Ltd.

NEWCASTLE.—Seven steel bridges, for the L. & N.E.R. Co.:—
*S. Butler & Co., Ltd., Stanningley.

ORMSKIRK.—Twenty-four houses on the Tank-lane site, for the U.D.C. Mr. W. Chadwick, District Surveyor:—
*Barton Bros., Formby.

PORTSMOUTH.—Shop front at 4, Garfield-road. Messrs. A. E. Cogswell & Sons, architects, Prudential Buildings:—
*John Lay & Co.

RADSTOCK.—Eighteen houses on the West Hill-gardens site, for the U.D.C.:—
*G. S. Plummer, Radstock £8,350

RAWTENSTALL.—Forty houses on the Oakley estate, and 26 houses on the New Inn, Crawshaw Both site, for the T.C. Mr. R. Brocklehurst, architect, Watford:—
*Ashworth & Hodgson (18 houses).
*C. Bradley (46 houses).
*H. Trickett (two houses), £613 per house.

RETTFORD.—Extensions to King Edward VI Grammar School, for the Governors:—
Steelwork—*Homan & Rodgers, Manchester.

ROCHDALE.—Fifty-four houses on the Clark's-lane site, for the T.C. Mr. S. Morgan, Borough Surveyor:—
*R. & T. Howarth, Ltd.

SALFORD.—Alterations to the public convenience and shelter at Windsor, for the C.B. :—

*R. T. Warburton & Son,
Pendleton £411 16 6

SALFORD.—Tramway shelters at Victoria Bridge, Crownwell-road and Liverpool-street, for the C.B. :—

*T. Blackburn & Sons, Ltd., Preston.. £407

SALFORD.—Public convenience at Albert Park, for the C.B. :—

R. T. Warburton & Son,
Pendleton £354 3 6

SHEFFIELD.—Fifty-four houses on the Wybourn estate, for the T.C. City Architect :—

*M. J. Gleeson, Ltd. £19,226 6 7

SHEFFIELD.—Thirty-six houses on the Dykes Hall estate, for the T.C. City Architect :—

*G. M. Payling £18,450

SHEFFIELD.—Twenty-eight additional bedrooms at the Union Hospital, for the B.G. Mr. J. E. Whitehead, architect, Gerrard Hall-road :—

*J. Vasey & Sons, Sheffield £5,099

SHEFFIELD.—Additions and alterations to the administrative block at the Swallow Nest Hospital, for the South Rotherham and Kiveton Park District Isolation Hospital Committee. Mr. J. Haslam, architect and surveyor, Ryton-chambers. Workshop :—

Bramwell Lightall & Co., Ltd., Woodhouse.

PORTABLE PARQUET DANCE FLOORS

In OAK, or OAK and WALNUT.
For PUBLIC or PRIVATE DANCE ROOMS
As supplied to the leading Hotels, etc.

Write or Phone (Park 1682) for particulars to
TURPIN'S PARQUET FLOORING CO.
25 Notting Hill Gate, London, W 11

J. GLIKSTEN & SON

LIMITED

Specialities in

SEASONED

HARDWOODS

MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.

REGISTERED OFFICE AND WHARF

CARPENTERS RD.
STRATFORD
LONDON E.15

Telephone :
EAST 3771
(5 lines)

Telegrams
GLIKSTEN 'PHONE
LONDON

SKELLOW (YORKS).—Elementary school, for the West Riding E.C. :—

Builders, joiners, plumbers, and plasterers—

*A. Gregory & Son, Ltd. £25,287

Tiler—

*J. Makin, Ltd. 1,465

Painters—

*Summerscale & Waterhouse 375

Asphalter—

*Best & Young 1,577

SPILSBY.—For houses, for the R.D.C. :—

Eighteen houses—

*G. W. Horton & Son £7,560

Two houses—

*Vamplew Bros. 810

Two houses—

*Vamplew Bros. 825

STALYBRIDGE.—Conversion of the Oddfellows' Hall into a cinema, for Mr. H. H. Moorhouse :—

*E. Marshall & Sons, Ltd., Ashton-under-Lyne.

STOCKPORT.—Additions to the Infirmary, for the B.G. Messrs. Thomas Worthington & Sons, architects, Manchester :—

Co tractors—*D. Eadie & Co.

Concrete floor—*Armoured Tubular Co., Swinton.

STOCKPORT.—Warehouse, Wellington-road South

Mr. C. Hartley, architect, Buxton-road :—

*Briggs & Co., Heaton Norris.

STOKE.—Buildings and foundations at new chemical works, for the T.C. :—

*C. Cornes & Sons, Hanley £2,161

STRETTFORD.—Girls' high school off Chester-road, for the Lancashire C.C. :—

Steelwork and fireproof floors—

*Homan & Rodgers, Manchester.

SWINTON.—Seventy houses on the site adjoining Brookfield housing scheme, for the U.D.C. Mr. H. Binks, engineer and surveyor :—

*Leadley, Firth & Whittington, Don-

caster £31,500

WATH-ON-DEARNE.—Ninety-six houses, for the D.C. Messrs. Tennant & Smith, architects, Pontefract :—

*F. B. Ward & Sons, Wombwell £40,588

WETHERBY.—Houses, for the R.D.C. Mr. A. Suttel, architect :—

Twelve houses at Wetherby—

*Carr & Kettlewell, Tadcaster £6,300

Four houses each at Weston and Kirby Overblow,

and two at East Keswick—

*H. Richardson, Moortown £5,200

WHICKHAM.—Sixty-four flats on the housing site at Dunston, for the U.D.C. Mr. T. Fenbow, surveyor :—

*Shield Bros., Swatwell—per block of

four flats £1,606

WILLESDEN.—100 Houses on the Brentfield estate, for the U.D.C. :—

*Corolite Co.

J. J. ETRIDGE, J^r

SLATING AND TILING

SLATE MERCHANTS

CONTRACTORS.

Inspections and Reports made on

OLD or FAULTY ROOFS

in any part of the country.

Telephone : Bishopsgate 1944/5. or write.

Bethnal Green Slate Works,

BETHNAL GREEN, LONDON. E.

FLOORINGS

HIGH-CLASS

of every description in
WOOD BLOCKS PARQUETRY
SEASONED T. & G. WAINSCOT OAK
TEAK AND MAPLE
FACTORY AND ROADWAY PAVING

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASANT

WANDSWORTH, S.W.18.

(Phones : Putney 1700 & 2457)

School & Hospital Stoves

MAKERS OF

WRIGHT'S IMPROVED and also SHORLAND PATENT
WARM AIR VENTILATING STOVES.

GEO. WRIGHT (LONDON) LIMITED

19, Newman St., Oxford St., London, W.1
Barton Weir works, Rotherham.

FITZPATRICK & SON

MASONS & PAVERS

Secondhand and Redressed (equal to new
Granite Setts and Kerb.

York Paving, Crazy Paving, Rockery Stone
Granite Spur Stones made to order.

Granite Chippings and Tarmacadam.

Granolithic and Sett Paving.

WRITE, PHONE or CALL :—

455, OLD FORD RD.
BOW, LONDON, E.3.

Phone : EAST 4808.

Telegrams : 'Frollic, Liverpool' Phone 228 Bank

E. B. BURGESS & CO.

6, CASTLE ST., LIVERPOOL.

WOOD BLOCK FLOORING

AND PARQUETRY.

OGILVIE & CO.,

Mildmay Works, Mildmay Avenue, Islington,

EXPERTS IN HIGH-CLASS JOINERY.

ALTERATIONS AND DECORATIONS.

Telephone ULISOLD 13
Many years connected
with the late Firm
W. H. LASCELLES & Co.
of Bunhill Row.



GRANITE AND MARBLE

We supply all classes of
polished Granite and Italian
Marble Memorials.

Specialists in Carvings and
Statuary, War Memorials,
etc.

All enquiries promptly attended to

WM. EDWARDS
& SON,

Pittodree St. Aberdeen

HOWELL J. WILLIAMS

Builders Ltd.

High-Class Building

and

Joinery Work

11/17, BERMONDSEY STREET,

LONDON BRIDGE, S.E.1

Telephone: HOP 202

Builders of very many well-known Banks, Office
and Business premises. Our works especially
convenient for City Building and fittings.

THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

CCXIX.—No. 4,323

DECEMBER 11, 1925

THE PERIL TO THE COUNTRYSIDE

WE have so many times in these columns called attention to and illustrated actual examples of the devastation of the countryside, often wholly unnecessary, that we are glad to see the concentrated attention now being bestowed on the subject. President of the R.I.B.A., in his recent address, referred to this national calamity, as when he said, "When we turn to our villages and country towns the position is not hopeful. Too often we see villages, whose rustic character is their chief charm and attraction, being spoiled by new buildings that ape the worst features of our city buildings and are intrinsically out of place. Yet all this is being done under the mistaken idea that progress is being made. The country possesses exquisite old villages and country towns, some of the most beautiful in the world. They are a unique and priceless heritage, the admiration and envy of all who visit our shores, that should be preserved at all costs; but to exaggerate to say that in half a century's time, the rate so-called improvements are being made, the destruction of almost all the beauty and distinction with which our ancestors enhanced these towns and villages will be complete."

Professor Abercrombie spoke to the same effect when at the Town-Planning Conference he told us, "The countryside is an even more pressing problem than civic planning. Our cities are already mostly ugly, but the country is still beautiful and in greater danger. What is lacking is any plan at all of landscape design, applicable to the ordinary countryside." And now we find a contemporary devoting two columns to the subject, under such titles as "How England is being spoiled," "Degrading the countryside," and more to the same effect; while in the article itself, Mr. Morley Horder gives detailed instances, and expresses some strong views on the subject, pointing out how regard for these things is the basis of a nation's culture, and of the dangerous symptoms of neglect of this foretells. He tells us also of an American friend who said to him:—"We come here because England is the most beautiful country in the world, and because we can see in her old towns and in her villages things that we can find nowhere else in the world; but every time we come we see less and less of these beautiful things, and more and more of a growing contempt for beauty, which we find very disgusting; if this spirit continues there will certainly be fewer Americans than tourists returning to the United States with affectionate and reverential memories of England."

It is well that we should sometimes regard what other people think, lest, wrapt in our own complacency, we lose sight of the reality of things. Outside opinion is not negligible, and there are those who would tell us that "England's days are numbered." We resist such an assumption with all the force of our nature, but not to hide from ourselves the dangers in which we live—nor the disquieting features in much that is around us—for in facing them we shall find the remedies, the necessary discipline, appreciation and new effort to bring the ancient hereditary England with the life of to-day. They can be re-united, though under new forms, if the spirit which guides them is actuated in a like way.

So we are, indeed, glad that the disfigurements and abuses which have been allowed to develop to an extent so alarming should now at last be receiving the attention they deserve, for in such case we are entitled to believe that amelioration is not so far off. The beauty of our country districts, attacked from all sides by the manufacturer, the road maker, the motor interests—even the builder at times—has involved an ever-growing disintegration of that rural and special beauty which is the characteristic of our beloved motherland. And it is most desirable while the matter is receiving the especial attention now bestowed upon it by authoritative opinion, that the subject should not be allowed to drop, until by legislation or whatever other means, local and central, the steps necessary for preservation of the rural and historical characteristics of England are adequately taken.

We are suspicious of arguments drawn from consideration of the material advantages that the attraction of a beautiful country has for the foreign visitor, and the injury to those interests lying in the mutilation and disfigurements of the countryside. Yet that this is the case, and that people of other nations are less attracted to our shores, as its traditional and rural characteristics are more and more impaired, cannot be doubted. But the most important view is that which directs the nation, for its own sake and out of love and pride in our inheritance, and the things which matter most, to preserve and carry on its most distinguishing and beautiful characteristics. The problem which, with the destruction now going on, most requires solution, is how to unite the ancient hereditary England with the life of to-day. Such re-union is possible, because though the terms of our present life and its requirements may differ superficially, underneath they are the same, so long as we are guided by those principles which give security to life and permanence to institutions. The Englishman is naturally conservative, only his conservatism too often comes out at the wrong end, so that it is directed to conserving the wrong things, the temporary advantages instead of the ultimate good. This one-sided commercial advantage and a too undisciplined freedom in pursuit of it, and the claim "to do what he likes with his own," narrows his conception of citizenship, and so weakens the national character. Now that we are thinking more in the terms of the nation, and of the public service owed by each of us to secure its well being, we may hope that this peril of the countryside will be the concern of everyone who cares for it, and that the evils which afflict us will gradually disappear.

For who has not witnessed with ever deepening regret the rapidly changing character of our small country towns and villages as the endeavour to ape the fashions of our larger cities actuates what they do? The front of the charming old house torn out, to be replaced by the only new shop front and its ephemeral merchandise, the advertisements which infect the street, the ugly surroundings of the garage—who but regrets these things? not that they are inevitable, but because they are unnecessary. Nor does prosperity lie that way, for, in the end we shall cease to enter these towns for our pleasure at all. So we are glad to think that a better outlook is before us, and that not yet too late the fair fame of our countryside may be gradually restored.

NOTES.

Solidarity in the Architectural Profession. Most of our readers know that the Royal Institute of British Architects has ever striven to promote professional solidarity among architects. A circular recently issued by the Institute announces that the Council have considered the representations made to the profession by the Incorporated Association of Architects and Surveyors, and they hasten to assure all members of the Institute and Allied Societies that nothing done by the Institute in promoting legislation for the registration of architects will affect detrimentally the interests of any person now living by the practice of architecture. To this we would direct the attention of all architects, whether members of the Institute or not. The circular concludes with these words: "Members of the R.I.B.A. or of the Allied Societies who help to establish independent architectural organisations are *not* assisting the cause of registration, but are dividing the profession and destroying the professional unity which has only just been achieved after many years of effort."

Waterloo Bridge. We must congratulate the L.C.C. on their wisdom in proposing to pass over the responsibility for Waterloo Bridge to the Government. The agitation for its preservation has been so sincere and far spread that everybody must now realise the value of the Bridge to the nation. It must be preserved and we cannot believe our engineers are incapable of the task. The bridge is one more of the instances of failure to anticipate the growing needs of city development. Can one believe that the designer of Waterloo Bridge would have built such a narrow bridge had he at all realised the coming needs of London? It is only in recent years that we have adequately realised the overwhelming claims of transport facilities. But the merest tyro in town-planning would know that if you allow the congestion of crowded city buildings to continue indefinitely a time must come when provision of ade-

quate transport becomes practically impossible. Yet we are still permitting great accumulations of crowded humanity, so as to add indefinitely to our transport difficulties. For the moment the L.C.C. appear to realise that the point at issue is not mainly the transport facilities to be offered by Waterloo Bridge, but its value as a national monument, and in this they are right.

Building Stones and Bricks. Mr. A. P. LAURIE, whose recent lecture at the Royal Academy of Arts excited much interest, has offered to conduct a series of tests upon lime stones by exposing them to acid vapour, if the Royal Institute of British Architects will collect samples for the purpose. He also suggests making similar experiments upon the various bricks in use, especially when the materials and mode of manufacture are known. These suggestions, if carried out, would be of great practical value to architects, who would be spared some of the risks attendant upon employing building materials of which they have had no previous experience. A correspondent informs us that unburnt bricks made with some kind of cement and sand have been used in the walls of houses erected by the London County Council in outlying districts. It would be interesting to know how such bricks are likely to stand the test of time, and Mr. Laurie's proposed acid test might help to solve this question.

Testing Concrete Blocks. The paper which Mr. H. G. Lloyd, M.Inst.C.E., read at the last meeting of the Institution of Structural Engineers on "A Method of Testing Concrete Blocks," an abstract of which we give on p. 850 was one of those practical contributions to knowledge which are made from time to time, and which are of great value to those interested—in this case, those engaged in the design of reinforced concrete structures. The paper was the sequel to a previous one by Mr. Lloyd on "The Consistency of Portland Cement, Mortar and Concrete," read before the Concrete Institute in 1920, and the object of the author was to describe the application of the principles described in

the previous paper to the testing of concrete and hence of concrete blocks. It may be recalled that Mr. Lloyd is a recognised expert on his subject, and was responsible for the introduction of Granuloid, a porous material that has been used very successfully for tennis courts.

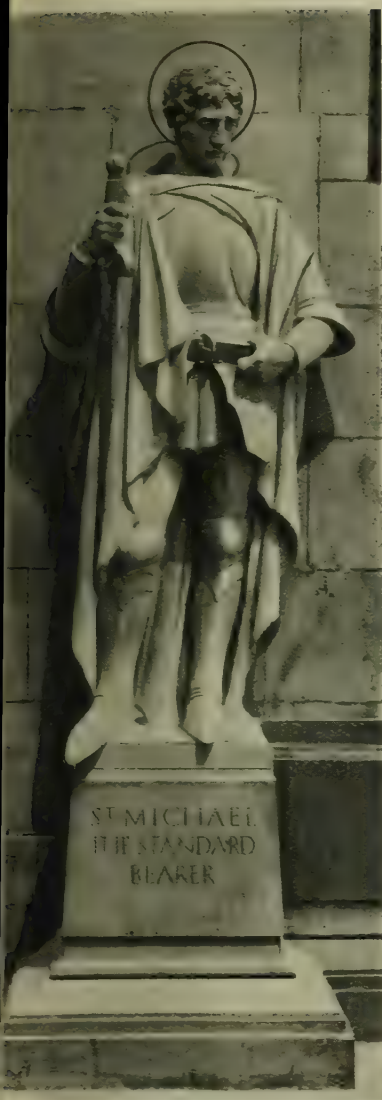
Sky Signs and Architecture. THE President of the Architecture Club, in addressing the Manchester Luncheon Club on a recent occasion is reported to have suggested that commercial architect, "whoever it should take in hand the sky sign, make it beautiful. We confess to doubts as to the advantage of sky signs in relation to architecture, nor do we see that this sort of advertisement readily grow out of architectural requirements. Would it not be better for the sky sign retired to a field of its own? We suggest that if this form of advertisement has come to stay, it should be "parked" on ground of its own—the derelict White City could be redeveloped in order to furnish the opportunity for its display, instead of disfiguring prominent buildings. In this way architecture would be left free to pursue more legitimate aims. Nor are we that the gaiety added to the night of London by illuminated signs is the cost at which it is obtained. There are not even some comparisons between the value of the kind of building and this sort of display, and not supplementary to its character. A fine architecture would, we think, be its security against such disfigurement, as it improves the sky sign will form part of its design.

Smoke Abatement. WE welcome the evolution of its activities in the annual report of the Smoke Abatement League of Great Britain. This is one of those agencies of good which we hope will continue to receive continued and active support. The fight for an improved domestic atmosphere in our cities is one of the most careless and prejudice, and calls for all the forces both legal and moral that can be made use of. One wonder



The Kitchen Memorial, St. Paul's Cathedral.

MR. W. REID DICK, A.R.A., Sculptor.



the Kitchener Memorial, St. Paul's Cathedral.
MR. W. REID DICK, A.R.A., Sculptor.

the memory will carry of our wonderful when London seemed almost smoke—because we couldn't get coal fires. are glad to know that arrangements have been made for a Universal Smoke Statement Exhibition in Bingley Hall, Birmingham, in September, 1926. The office of President formerly held by Sir George Lodge is at present vacant. It could be pointed out that the Coal Smoke Statement Society, London, is in harmonious relation with the League whose work is entirely in the provinces.

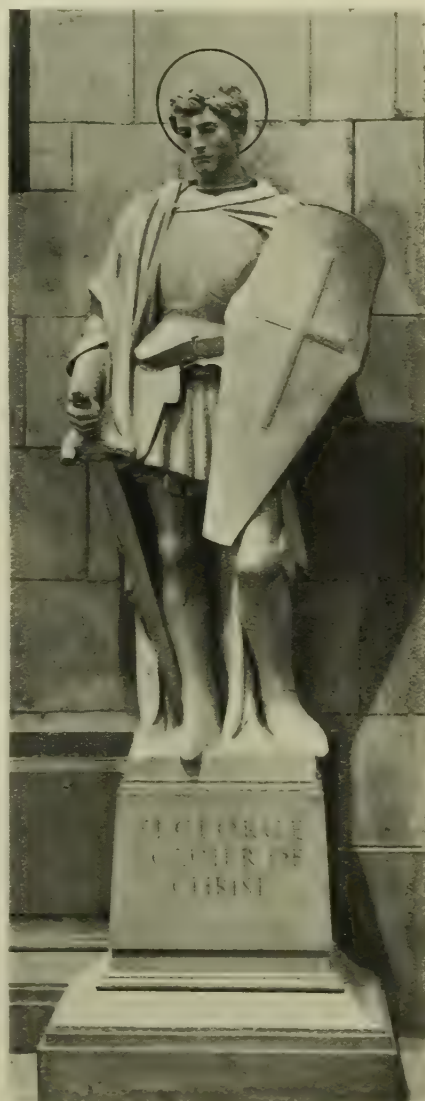
IN our notice of the Trade Unemployment Union Congress in our issue of October 2, we pointed out that the continued necessity of paying extended benefit under the Unemployment Insurance Acts might eventually lead to the principle of insurance becoming lost sight of, and we suggested that it might be well to keep the scheme of Unemployment Insurance intact on its contributory basis and administer extended benefit, not contributed to, from a separate fund. We notice that in the recent debate upon Unemployment

Captain Macmillan pressed the same point upon the House. He said that especially in necessitous areas the principle of insurance was beginning to be overlooked by men and women, and urged the necessity of administering standard benefit and extended benefit by separate schemes so as to retain the principle of insurance, the extended benefit being administered from a separate fund contributed to by assistance given by the State as a whole. We feel this point is of the greatest importance. The principle of insurance on an actuarial basis forms the basis of the many schemes for improving the condition of the people and it is steadily being undermined, for human nature cannot distinguish between two classes receiving benefit from the same fund to which some contribute whilst others do not. There is even a tendency on the part of a small class of employees to force the contributions to Health Insurance entirely upon the employer, and those employers who give in to this are acting extremely wrongly.

IN a recent communication to the papers in reference **County Hall Pictures.** to this subject, we are informed that the committee "have been offered pictures not regarded as suitable," and it is added: "Pictures which have no relation to public or municipal life are not regarded as suitable, unless of outstanding importance." While in general agreement with these provisions, the question of what is important is open to much variety of interpretation. It might be that the pictures which dwell most insistently on the importance of commemorating the activities of the L.C.C. to-day would not appear to a later generation of the same interest. The objects of art do not lie wholly in commemorating municipal activity. There is room for the larger interpretations of art as well as those directly concerned with local life. A picture can be an end in itself, without being put to any useful end, and perhaps be all the finer for it. To insist on subject matter revolving round the activities of "public or municipal life," is to leave out from representation those larger interpretations which embrace the whole field of life.

THE consideration of the **County Hall Decoration.** mural decorations—another matter—requires that the approach to any scheme should be on sound and practical lines, and is really less concerned with conformities in regard to subject matter. Given these, we should have very little doubt but that the subject matter to be interpreted would be important and applicable to the situation. And to secure this result, a co-ordinated scheme for the treatment of the walls as a whole should be first prepared, if we are to avoid the mistakes of the past, which cannot be a guide to us, as too often we see that instead

of any solidarity and corporate approach, mural paintings such as those at the Royal Exchange represent a patchwork of more or less unrelated artistry only. If, as in the case of a public building, a competition for a scheme of decorations for the Hall were promoted, we might reach a good result, especially were it the case that a corporate effort was made by groups of artists to prepare their schemes together. It would eliminate that dangerous tendency to be coerced by fashionable names and the assumptions of reputation. We have only to look round an exhibition, such as that now on view at the R.A., to see what scope for fine decoration exists, if only opportunity were forthcoming, and we were less dependent on the recommendations of committees of experts, which result in such memorials as that now the subject of so much controversy. The fine decorative paintings by Ernest Proctor at the International Exhibition would grace any public building, and opportunity should be made for such good art.



The Kitchener Memorial, St. Paul's Cathedral.
MR. W. REID DICK, A.R.A., Sculptor.

GENERAL NEWS

Proposed Cardiff Schools.

A scheme, prepared by the Cardiff Town Council, provides for the erection of new schools and extensions, at an estimated cost of £200,000.

Hull Fire.

Damage estimated at £250,000 was caused by a fire at Bremen warehouse, on the William Wright Dock at Hull, on Tuesday last.

A Lost Rubens Discovered.

Rubens's painting, "Saint Theresa," which disappeared in the seventeenth century, has been found in Berlin.

Proposed Lewisham Town Hall.

Powers are to be sought by the L.C.C. to enable the Lewisham Borough Council to erect a public hall, offices, and shops, on a site in their possession.

Madame Tussaud's.

The directors of Madame Tussaud's & Sons, Ltd., are inviting tenders for the purchase of the freehold site and buildings, the goodwill, and the contents of the Exhibition.

Proposed Yorkshire Sugar Factory.

The United Sugar Co., Ltd., have purchased the site of the airship shed at Barlow, near Selby, upon which to erect a beet sugar factory covering 30 acres.

Newcastle's Proposed Museum.

A site adjoining the Black Gate of the Castle has been given to the Newcastle Society of Antiquaries, upon which to erect a new museum at an estimated cost of £5,000.

Birmingham University.

At a recent meeting of the Council of the University of Birmingham it was announced that Sir Charles Hyde, Bart., had given unconditionally, a contribution of £100,000 to the University.

Yardley Parish Church.

The roof of Yardley's ancient parish church is in danger of collapse owing to the ravages of the death-watch beetle in the roof timbers. The work of restoring the roof will be put in hand immediately.

Concrete Houses.

The Ministry of Health announces that definite arrangements have been made for the erection of 24,060 concrete houses under the subsidy scheme. Of these, 4,606 houses have been completed, and 8,407 are now in course of erection.

Proposed Peterborough Beet Factory.

The contract for the erection of a sugar-beet factory at Woodston, near Peterborough, has been given to the Dyer Company, of Cleveland, America. Work will begin next month on the factory, which will cost £350,000.

New Wimbledon Station.

The Southern Railway has begun a reconstruction of Wimbledon railway station, which is expected to occupy about two years and a half, and to cost about £250,000. The scheme provides for a completely new lay-out of the platforms, buildings, and approaches.

Harlington Parish Church Restoration.

The authorities of Harlington (Beds.) Parish Church, an example of fourteenth-century architecture, are appealing for funds with which to restore the tower. Professor Richardson has prepared a scheme for the work required.

Birmingham Hospital Extensions.

Large additions, including three pavilions, 156 beds, a nurses' home, two isolation wards, and twenty-four beds, are to be made to the Little Bromwich Isolation Hospital, at a total cost of £108,460. Messrs. Dallas & Lloyd, 45, Newhall-street, Birmingham, are the architects.

Proposed Clerical Institution, Liverpool.

A site of several acres at Chidwall, Liverpool, has been secured for the rebuilding of the Training College for Clergy, which was destroyed by fire at Warrington some years ago. An institution to accommodate about 200 residents, costing £100,000 to build and equip, has been designed by Mr. A. H. Moberly, F.R.I.B.A.

Manchester Town Planning.

A scheme for the future development of a large area in the North of England, including parts of Cheshire, Derbyshire, Lancashire, and the West Riding of Yorkshire, has been approved, at a meeting of the Manchester and District Joint Town Planning Advisory Committee in Manchester.

Philadelphia International Exhibition.

Our contemporary, *The Evening News*, stated in a recent issue that Sir Lawrence Weaver, who, as Director of United Kingdom Exhibits, organised the displays in the Palace of Industry and Palace of Engineering, has just left for Philadelphia to report on the arrangement of certain classes of exhibits in connection with an international exhibition which is to be held there next year.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

Architectural Competitions.

SIR,—My attention has been called to a letter in your last issue in which it is said that the Institute issued a statement "that no action could be taken because it would cut at the basis of the competition system." Your correspondents go on to say that "this information emanated from the Institute." Your correspondents are mistaken. No such statement has ever emanated from the Royal Institute.

IAN MACALISTER,

Secretary, R.I.B.A.

A New Architectural Society.

SIR,—A few weeks ago the professional Press made the disconcerting announcement that practically concurrently with the completion of arrangements to amalgamate the two principal architectural bodies, and thus present a united front in the endeavour to improve the status of the profession, a new society was about to be formed. Personally I have not received any of the literature broadcast by this new organisation. But the Royal Institute of British Architects has issued to members a statement in regard to the proposed society. It was gratifying to find that all the architectural journals seemed to be enthusiastic in regard to the amalgamation proposals, and they congratulated the two Societies on their consummation. I suggest that these important papers can assist to some purpose now. Let them decide to give no publicity to the affairs or transactions of this new society, and it will soon cease to exist.

EDGAR H. WOODCOCK, A.R.I.B.A.

[* * We confess we are not in sympathy with our correspondent's suggestion. There is an implied obligation on the part of a newspaper to represent impartially and to the best of its ability the public it serves, and therefore to give publicity to any genuine expressions of opinion on matters of public interest. At the same time we regret that the assurances of the R.I.B.A. with reference to registration have not been accepted.—ED.]

COMPETITION NEWS

Secondary School, Worcester.

Worcester City Council have decided to offer 100 guineas and 50 guineas for the first and second designs in connection with a new Secondary School for Girls, to be erected in the City. Mr. Herbert T. Buckland, of Birmingham, is the assessor.

Town Hall Extension, Manchester.

Messrs. Robert Atkinson, Ralph Knott, and Thomas R. Milburn have been appointed by the Manchester Town Hall Extension Scheme Committee as assessors in this competition.

Preston War Memorial.

The design of Mr. H. Pegram, R.A., has been accepted by the Preston War Memorial Committee for an emblematical group to occupy the niche in front of the memorial.

East Bromwich Permanent Benefit Building Society: Larger Offices.

The President of the Institute has nominated Mr. W. Alexander Harvey, F.R.I.B.A., assessor in this competition.

Public Memorial, Blackpool.

The Corporation of Blackpool invite designs for a clock tower with drinking fountains, to be erected as a memorial to the late Dr. V. Cocker, J.P. The assessor is Mr. E. Bert Kirby, F.R.I.B.A. Particulars can be obtained from Mr. D. L. Harbottle, Town Clerk, T. Hall, Blackpool, on deposit of £1 ls. Designs to be sent in by February 13, 1926.

Meanwood Park Colony, Leeds.

Leeds Town Council have resolved that the President of the Royal Institute of British Architects be asked to nominate an assessor in connection with the competition for the extension of the Meanwood Park Colony.

Competitions Open.

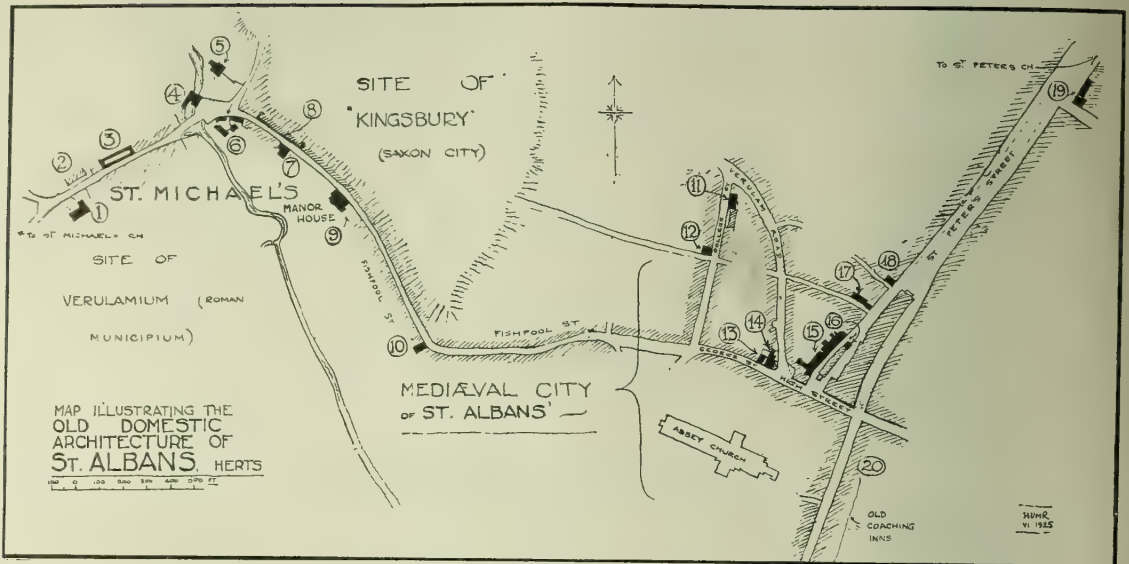
Particulars published in "The Builder." Send in designs by the following dates:

Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply particulars., 35, Old Queen-street, S.W.1	April 24	Dec.
New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool	Aug. 7	1926 Jan.
Houses for Smaller Middle-Classes and Intellectual Workers. Held under auspices of International Federation of Building and Public Works. Prizes: 1st, 500 dollars; 2nd, 300 dollars; 3rd, 200 dollars. Write to Director-General of the International Federation, 17, Avenue Carnot, Paris	Oct. 30	Jan.
Branch Library, Gabalfa, Cardiff. Limited to qualified architects in Cardiff. Premiums £75, £50 and £30. Mr. Sidney K. Greenslade, F.R.I.B.A., assessor. Apply, with deposit of £2 2s., to Librarian, Central Library, Cardiff	Nov. 27	Jan.
Art Gallery and Museum, Birkenhead. Limited to competitors practising within 20 miles of Birkenhead since January 1, 1923. Premiums: £250, £175, £100. Sir Robert Lorimer, A.R.A., assessor. £2 2s. deposit. Apply Curator, Central Public Library, Birkenhead	Oct. 16	Jan.
Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London	Aug. 14	Mar.
Royal National Eisteddfod of Wales, Swansea, Competitions: (1) National Parliament House of Wales (Prize, £100); (2) Street Facade to a Large Stores (Prize, £25); (3) Set of Measured Drawings of Architecture (Prize, £25). Apply for programme to publishers, Messrs. Morgan & Higginbotham, Heathfield-street, Swansea (Is. 2d. post paid). Mr. Arthur Keen, F.R.I.B.A., Assessor	Nov. 6	July 1
Incorporated Architects in Scotland: (1) Rowand Anderson Medal and £100; City Art Gallery and Museum; (2) Rutland Prize (£50) for Study of Materials and Construction; (3) Prize (£10 to £15) for 3rd year Students in Scotland; (4) Maintenance Scholarship, £50 per annum for 3 years. Apply Secretary of the Incorporation, 15, Rutland-square, Edinburgh	Nov. 6	
Plan for construction of Conference Hall, for League of Nations, Geneva. International Competition, Sir John Burnt being British representative on Jury of Assessors. 100,000 Swiss francs to be divided among architects submitting best plans. Programmes with R.I.B.A., 9, Conduit-street, where intending competitors should apply. Single copies from Secretary-General, League of Nations, Geneva, on payment of 20 Swiss francs.	Jan. 2	

* Competitions when "warned" or vetoed by the R.I.B.A. are starred.



Pieta Group for the Kitchener Memorial Chapel, St. Paul's Cathedral.
MR. W. REID DICK, A.R.A., Sculptor.
[Unveiled on Thursday.]



OLD DOMESTIC ARCHITECTURE OF ST. ALBANS

By H. V. MOLESWORTH ROBERTS

Part II.—THE LATER RENAISSANCE.

To study what is left of the more symmetrical and developed architecture of the "William and Mary," "Queen Anne," and "Georgian" types, i.e., later in the seventeenth century than that we have considered in Part I, and also that erected in the following century—we must retrace our steps to the city itself.

Perhaps the most interesting and (till lately) a fairly intact example is the house in the Market Place, on its west side, at the corner of Spencer-street (Fig. 1; 18 on plan), a dignified red-brick example with middle and side doorways, with typical hoods and architraves, and original sash-windows of small square panes with wide-filleted bars, altogether a most charming building. It is regrettable to record, however, not only that the south side to Spencer-street and half of the main front has been pulled down on the ground story and replaced by a characterless shop-front of plate glass, which has seriously detracted from the character and unity of the façade; but also that the angle has been deeply splayed off for the shop entrance, leaving the right-angle of the upper floor overhanging in mid-air, which looks structurally bad, as shown in the photograph. However inevitable in a busy city this commercialisation of an important front may be, one cannot help feeling that the work might well have been carried out on more sympathetic lines, with a door flush with the east front and in keeping therewith. The slight extra expense of carrying out a "William and Mary" shop-front would

have benefited the shop and the city of St. Albans alike. How long will the central doorway and northern half of the front survive? We plead for its preservation, or, at least, its worthy transformation.

Of the ordinary Georgian of the eighteenth



FIG. 2.—DARROWFIELD HOUSE, ST. MICHAEL'S (EIGHTEENTH CENTURY).

century, there is much work remaining in St. Albans, marked by the characteristic brick of dull reddish-brown hue with flared "headers," and sash windows with oblong divisions and surrounding wood architrave.

A typical example is Darrowfield House, St. Michael's (Fig. 2; 1 on plan), serving as the vicarage of that parish, a symmetrical mansion with central hooded doorway and "pine-apple" gates; the neighbouring Kingsbury Mill, by the stream (Fig. 3; 4 on plan) is interesting, though slightly later; and Kingsbury House (Fig. 5; 5 on plan) is also a charming building, with windows of a tripartite type, i.e., with side wood mullions and narrow lights flanking them, derived from the Venetian type introduced by Adam and Kent, but with straight architrave. Many of the houses lining Fishpool-street, especially its lower or western end, are irregularly terraced, giving one the impression of some Flemish or Dutch town (8 on plan), the effect having recently been increased by re-pointing some of the joints with pink mortar. These are interspersed with the earlier stuccoed work already described. Interesting also are the terraced cottages adjoining this Abbey Church (Fig. 4), with small wood casements, and false timbering on the further part.

A building of doubtful date, which should be noticed here, was the Collegium Insanorum, private asylum, kept in the eighteenth century (12 on plan), and where William Cowper the poet, is reputed to have stayed during periods of his derangement. It stood till recently at the angle of Dagnall-street and College-street, and gave the latter its name. It has already lost most of its character; the east side was of Victorian date, of brick, the only interesting feature being the south side, a rough compound of bricks and rubble masonry, the latter of which is said to have been culled from some mediæval building; some old fireplaces were found recently, but the original date is difficult to determine. The Collegium has now been entirely swept away to make room for a new poetic modern building.

The traditional Georgian type, but with plainer treatment of cemented or plain brick reveals and thinner sash-bars, survived long into the nineteenth century, and was adopted for the tall street house type, with small front areas and parapet roofs, such as the houses in College-street (11 on plan), still in good service, with their stout brick walls and lofty rooms. Those further south, set farth back, are doubtless later versions of a similar tradition, with their iron porticoes.

This survey may fitly be concluded with a glance at an interesting group of houses on the east side of St. Peter's-street at its upper end (Fig. 6, 19 on plan), a little to the south of St. Peter's Church, for these may sooner or later be in danger of demolition. The house and shop at the angle of the Hatfield-road (on right-hand view), modern brickwork of c. 1830, are already swept away; beyond are seen some typical much earlier weather-boarded cottages almost stuccoed in further still, probably of the eighteenth century, in a very picturesque situation facing a lawn and the War Memorial and stretching up to the churchyard gate. The destruction of the angle building was necessitated by the widening of the road to Hatfield and it is hoped that the other cottages will long remain where they are, to give the right



FIG. 1.—OLD HOUSE, MARKET-PLACE (SEVENTEENTH CENTURY).



FIG. 3.—KINGSBURY MILL, ST. MICHAEL'S.



FIG. 4.—TERRACE OF COTTAGES, (WEST
END OF ABBEY CHURCH BEYOND).

ination to the widest thoroughfare in
Albans.

the future, whenever it does become
sary to alter or rebuild any of the historic
ures of this ancient city for purposes of
hygienic housing, road widening or com-
cial development, let us hope that the new
transformed buildings which take their
s will be at least to some extent worthy to
lant their predecessors; this is a responsi-
which all architects and builders should
ly face in this and all other corners of our
try where men, in this restless age, may seek
alness and inspiration among the remains
rlier times.

or the first part of this article, see our
for September 11.]

OXFORD RENOWNED

is recent addition to the considerable
ellany of historical and topographical works
t Oxford and its University necessarily
akes somewhat of a predatory character, as
uthor at the outset candidly admits owning
ve looted not a few of the best books on the
et. He has not hesitated to add a list by
of a bibliographic "note" which manifestly
nces the reference value of Mr. L. Rice-
y's scholarly essay to which he gives the
"Oxford Renowned."* His artistic
utor Mr. H. B. Knapp-Fisher, F.R.I.B.A.,
ontributed much distinction by his first-rate
r-colour sketches in and about the city,
ally made for this work. The colour plates
nicely reproduced, but it is a pity the
ings were not made to conform better with
proportions of the shape of the pages. A
f his views are printed in monochrome, and
prints are amplified by toned repro-
ns of historic paintings and some portraits
ld masters of Oxford worthies selected
the University treasures. A capital
ograph is included of the famous bust of
hristopher Wren (housed in the Ashmolean
um), the work of Edward Pierce (D.1698).
Oxford Renowned" far exceeds the limits of
ady "Guide Book," although the author
o ordered the subject matter that it cannot
to accommodate the convenience of any
r, ensuring students considerable pleasure
eir itinerary through the colleges, churches
ibraries or further explorations beyond the
nes of the town. The map of Oxford and
nvironments fixed inside the cover of this
is most useful in following the topo-
nical descriptions.

ie introduction opens with particulars about
pproaches to Oxford by road, river or rail,
he chapter on "London Roads" is replete
much interesting information.
Neither Time, Temperance nor Proctors are
likely to eradicate Taverns and Inns," for
ghout the history of Oxford they have
always intimately associated with its high-

ways, and for many centuries naturally formed
an intimate feature in the social life of the
University inasmuch as Common Rooms are
comparatively a modern institution. The
taverns, frequented even by Dons, were dingy
and horrid ale-houses, innumerable and scattered
about Oxford. They passed away gradually,
leaving no recorded history, but many haunted
memories. A few of the better type still remain
and are well known and valued in the enjoyment
of their story of coaching days. Besides "The



[FIG. 5.—KINGSBURY HOUSE, ST. MICHAEL'S.

Mitre" there was "The Angel" (now gone),
"The Golden Cross," "The White Horse," and
"The King's Arms." One of the most charming
water-colour prints by Mr. Knapp-Fisher in this
book shows "The Jolly Farmers," in Paradise-
street, and another view illustrates the courtyard
of "The Golden Cross Hotel." Coffee houses
in time became the vogue and are still fashio-
able.

Mr. Rice-Oxley dedicates "Oxford Re-
nowned" to his fellow-members of Keble
College, and throughout his ecclesiological and
architectural chapters we recognise how
thoroughly an intimate acquaintance with his
subject is manifested with reliability and
judicious care. When Keble College was built
(1868-70) by Wm. Butterfield in red brick
varied by blatant bands and devices of yellow
and black glazed bricks, Ruskin gave up his
daily walk past "his museum" into the parks
as he could not bear the sight of such startling
innovations. "Time is a colleague whom every
good architect consults, and Time has been at
work mellowing and completing his partner's
work..." and it must be admitted that
Butterfield was a creative architect... and
when in years to come artists consider the
buildings erected in the nineteenth century they
will rank this of Butterfield's certainly among
the most original and probably among the best."
Benjamin Woodward's Oxford Museum, based
upon Veronese palaces and detailed under
Ruskin's influence, assuredly will not be included
in the same category. The Broad-street front
of Balliol College designed by Alfred Water-
house (1867-9), known now as the "Broad-
street Hotel," is among the least successful
modern buildings in Oxford. The chapel at
Balliol is "an unlovely structure" designed by
Butterfield in 1856, but it contains some six-
teenth-century glass belonging to the old chapel.
George Edmund Street's Church of St. Philip
and St. James is not mentioned, and no reference
appears as to William Burges being the architect
of the "elaborate and didactic scheme" of stalls
and decoration in the dark, square, lugubrious
chapel of Worcester College, executed some half-
a-century ago. The splendid tower in the
precincts of Christ Church, by Bodley and
Garner, and their excellent additions to Magdalen
College no one will forget; and Sir Thomas
Jackson's repairs of St. Mary's Church, with the
aid of Sir George Frampton, are referred to, as
well as his examination schools and other works.
Henry T. Hare's Town Hall frontage in Blue
Boar-lane "is much better than that in the
main street... so tawdry in its design, so
meretricious in its abundant ornament..."
Lady Margaret Hall, adjoining the Parks, was
built by Mr. Basil Champneys, and the
"Georgian" portion now being added is by Sir
Reginald Blomfield. It is a mistake to attribute
St. George's Hall, Liverpool, to Professor C. R.
Cockerell, the architect of the Taylorian building
at Oxford. He finished St. George's Hall at the
express wish of H. L. Elmes, the genius who
designed it and deserves all the credit.

Lancashire Road Scheme.

The Lancashire County Highways Com-
mittee report in favour of the scheme for the
construction of a road from Liverpool to East
Lancashire at a cost of three millions, and
recommend a grant of £307,000.



FIG. 6.—BRICK, TIMBER AND STUCCO HOUSES,
TOP OF ST. PETER'S-STREET.

Oxford Renowned," by L. Rice-Oxley, illustrated
B. Knapp-Fisher, F.R.I.B.A. Methuen & Co.,
Essex-street, W.C. 1925. 18s. net.

SOCIETIES AND INSTITUTIONS

ROYAL INSTITUTE OF BRITISH ARCHITECTS.

At a general meeting of the Royal Institute, held on Monday, November 30, the following members were elected:—

AS FELLOWS (97).

Prof. L. P. Abercrombie, M.A.
Major W. B. Binnie, M.C.
H. A. Dickman, M.C.
W. G. Dobie.
S. T. Hennell.
F. B. Hobbs.
A. J. McLean.
C. B. Metcalfe.
T. A. Pole.
F. Sutcliffe.
W. W. Tasker, M.C.
H. G. Turner.
A. J. Wood.
J. Wollatt.
E. H. Abbott.
J. H. Bakes.
E. F. S. Biram.
J. W. Boyd.
C. E. Compton.
S. Davies.
S. French.
A. Gardner.
T. Garrett.
J. H. Heywood.
W. R. Morris.
W. R. Nunns.
T. H. N. Parr.
W. H. Raffles.
W. R. Sharp.
G. Simpson.
A. W. Tribe.
J. G. T. West.
A. G. Wilkinson.
C. C. Winmill.
W. H. Adams.
S. P. Anderson.
C. M. Bentley.
D. A. Beveridge.
E. Bird.
C. E. Blackburn.
P. C. Boddy.
C. Brett.
E. J. Brett.
O. A. Bridges.
F. A. Browne.
J. G. Burgess.
E. W. Burnnett.
E. P. Cameron.
E. W. Cannell.

S. E. Castle.
H. G. Cherry.
G. Cotman.
H. S. Davis, M.C.
E. H. Evans.
H. M. Fairweather.
J. Forbes.
B. H. P. Haigh.
L. E. Harper.
L. H. Harrington.
E. J. W. Hider.
J. J. Hill.
W. P. Horsburgh, F.S.I.
E. T. Johns.
A. H. Jones.
F. E. Jones.
H. J. Lyons.
D. G. McIntosh.
H. Macintosh.
J. M'Lachlan.
S. McLauchlan.
D. Matheson.
E. E. Moody.
J. I. Morrison.
J. Murray.
H. B. Newbold.
H. Nurse, M.C.
J. P. Pearce, F.R.Hist.S.
G. Pemberton.
E. J. Pomeroy.
W. H. Poole.
H. R. Poulter.
F. E. B. Ravenscroft.
F. Rimmington.
H. E. Rowland.
J. H. Rutherford.
W. N. Scaife.
F. H. Shann.
A. E. Shervey.
C. E. Simmons.
D. Mc. Stoddart.
F. Thorpe.
F. Vaux.
C. B. Wagstaff.
F. S. Webber.
W. E. N. Webster.
F. N. Waightman, M.A.
A. B. West.

AS ASSOCIATES (62).

K. W. Aimer.
W. J. Allcorn.
C. E. A. Andrews, B.Sc.
F. N. Astbury, B.Arch.Liv.
B. W. S. S. Baily.
A. E. Cameron.
G. D. Channon.
A. O. Chatterley, B.Arch.Liv.
J. C. Clark.
S. E. Coleman.
H. Conolly.
J. B. Cooper.
F. H. Crossley.
P. Cutbush.
T. V. Deas.
C. P. Fahy.
L. G. Farquhar, F.S.A.Scot.
E. Forster, B.A.
D. W. F. Gale.
W. Glashan.
F. E. Green.
J. T. W. Greenidge.
G. Gregor-Grant.
R. S. R. Harman.
B. S. Hume.
H. H. Khan.
J. G. King.

F. J. Landrie.
R. S. Lawrie.
D. A. Lewis.
H. J. Louw.
J. A. Metcalfe.
J. C. Miller.
C. A. Minoprio.
S. G. Moberly.
R. H. Morrison.
J. H. L. Owen, B.Arch.Liv.
W. P. Page.
J. H. Parker.
W. Percik.
W. J. B. Price.
G. E. Read.
A. D. Rix.
L. Senyard.
P. L. Sharma.
C. C. Shaw, B.Arch.Liv.
J. R. M. Simpson.
E. S. Smith.
H. W. Stokes.
K. S. Tayler.
H. Thearle.
A. J. Thompson.
W. Tocher.
A. A. G. Toone.
E. Unwin.

A. G. Walker.
P. R. Wilson, B.Arch.(McGill).
T. F. Winter.
T. R. Wood.
J. A. Woodgate.
K. F. Wray.
F. H. Wrigley.

AS HON. ASSOCIATES (3).

A. H. M. Brice, J.P., F.R.G.S.
A. H. Smith, M.A., F.S.A., F.B.A.
Sir D. Y. Cameron, R.A., R.S.A., LL.D.

AS HON. CORRESPONDING MEMBERS (5).

C. Cort y Boti.
G. Giovannoni.
Prof. A. Kemal-ad-Din.
A. Sciortino.
Dr. J. Strzygowski.

THE LEEDS AND WEST YORKSHIRE ARCHITECTURAL ASSOCIATION.

PRESIDENTIAL ADDRESS.

MR. W. ALBAN JONES delivered his Presidential Address to this Society, in the course of which he said that Leeds stood at the moment fraught with great architectural possibilities. The new street and the University scheme afforded unique opportunities for a new era in the visible character of their city. Certain preliminaries in both cases had been dealt with in so noiseless a fashion that local architects and the public were quite unaware until important commitments had been made. In the case of the new street, over half a mile in length from Victoria-square to Vicar-lane, Sir Reginald Blomfield had been appointed as the designer. For the University buildings, for which an appeal was being made for £500,000, a competition had been apparently decided upon limited to eight selected architects, of whom only one, so far as he had heard, was a Yorkshireman. Evidently in the regard of the powers that be, Yorkshiremen in architecture were not to be compared with Yorkshiremen in cricket.

The civic gateway to the city by means of the L.M. & S. Railway, so reminiscent of a third-rate cattle market, still continued the chief blot on City-square. Archaeological interest was gradually growing round the old gate piers, which were acquiring veneration due to things of past ages. Last May a deputation from the Corporation and the Chamber of Commerce waited upon the railway authorities to urge the necessity of new station premises. This scheme, he noted, was again shelved indefinitely. About the time of this deputation he suggested that if a big scheme of rebuilding was not an immediate possibility on account of cost, then the eyesore of the approach from City-square might be got rid of by a temporary expedient in the form of a screen facade just high enough to hide the shed roofs. He further stated that an inexpensive scheme of this sort, if by means of pillars it supported a large room or suite of rooms over, could be made commercially profitable even if the structure had to be demolished in a few years. He suggested this modest problem as a subject for their students' design competition, but it was thought too limited in scope, and the students' designs exhibited that night therefore represented their efforts in the way of an ideal station entrance.

The students' designs did not, however, assist to illustrate his more limited idea for a temporary station entrance. The frontage now occupied by the old gateways and the small one-story building at the corner was 38 yards long. An erection 10 yards deep could be provided without unduly affecting light and air, giving an area of 380 square yards. Land in the centre of Leeds had sold at much more than £120 per square yard, but even £100 per yard gave over £38,000 as the site value for this 380 yards. When they realised that this valuable land could be built over and still leave exactly the same access for passengers and vehicles to the station, he asked whether any business concern other than a railway company could afford to leave it undeveloped and in its present derelict state? The rooms could either be an annexe approached from the first floor of

the Queen's Hotel or entirely separate entrance and stairs, etc., at the opposite corner where stood the small one-story office.

Referring to the defacement of buildings by electric signs, the speaker said that personally he had no quarrel with the temporary vulgarities as jolly vulgarities in certain quarters of a city, and he thought that in any sense they typified the restless spirit of the age, so apparent in a bustling crowd on a night bent at night. It was quite a matter when we found respectable old offices defiling their fine buildings.

Sir Reginald Blomfield, continued, Jones, had been lamenting a growing tendency since the war of the younger architects to indulge in caustic public criticisms of the work of their colleagues; he would stifle it in public school fashion by deeming it "unmanlike." Unfortunately the rules of the game were not so well defined as those of cricket or professionalism. We could not have both ways: if architecture was an art, we had to realise that living art had over the subject of fierce controversy. He suggested to Sir Reginald that, leaving matters quite out of the question, there was an aspect of youthful criticism since the war could be assessed in terms of cricket, and this aspect had been best put by Sir James B. A vote of thanks to the President was proposed by Colonel Kirk and seconded by J. G. Procter.

The Growth of the Gothic Church Window

In the course of a paper on this subject, before the Society of Engineers on Monday, Mr. H. E. Irving Taylor, M.A., traced the history of the Gothic church window developed in England, comparing and contrasting this development with that in France. The lecturer explained how the original "lancet windows—long, narrow apertures surmounted by a pointed arch, and dating from c. A.D. 1150, were, in England, often constructed in groups whose members became more and more intimately associated as time went on; how a group of lancets became collected within a frame, producing one composite window, slightly spaces of bare stone would often exist between such windows between the arch of the window and the heads of the contained lancets. The author described the first attempts made to obviate this objection by the design of geometrically-shaped apertures, such as circles, triangles, and quatrefoils. This gave rise incidentally to a kind of "tracery," known now by the name "tracery." Evidence was then adduced that the fact became recognised by the designers of the day; that, once their attention centred on the branching stone-work, rather than upon the apertures, they disliked its want of uniformity as to thickness, &c.; that they ultimately quenched their new-born discontent by soiling the apertures as to result in tracery of uniform thickness. Such tracery was known as "Bar tracery." The apertures were then referring their character to the tracery, the immediate result being a complete reversal of the principles of design. Early bar tracery was a simple kind, and was known as "geometric tracery," but after A.D. 1315 the conscious introduction into tracery-design of the "ogee," or S-curve, altered its character to such an extent that it took on another name—"Curvilinear tracery," or "Flowing." The Gothic window in France flourished in this form for another hundred years. In England, however, a comparatively sudden change came over tracery, quickly resulting in the virtual disappearance of the curves, the places being taken by straight lines, placed horizontally and vertically disposed. Some of the names of this period were "Rectilinear," "Perpendicular" had been given to English architecture of that period: c. A.D. 1350 to 1500. The speaker suggested some explanation of this striking deflection from such a natural growth as was seen in France. Of these, the chief one was a suddenly-awakening English predilection for Bible history told pictorially through stained glass.

READING CONTENTS. PAGE

PERIL TO THE COUNTRYSIDE.....	833
ES.....	834
ERAL NEWS.....	836
ETITION NEWS.....	836
DOMESTIC ARCHITECTURE OF ST. ALBANS	838
NFORD RENOWNED.....	839
ETIES AND INSTITUTIONS.....	840
METHOD OF TESTING CONCRETE BLOCKS..	850
EK IN PARLIAMENT.....	851
INCORPORATED ASSOCIATION OF ARCHITECTS	
ND SURVEYORS.....	852
DEEN METHODS OF ROAD MAKING.....	853
CHITECTS' AND BUILDERS' INQUIRY	
BUREAU.....	854
E BUILDING TRADE.....	855
W BUILDINGS IN LONDON.....	856
TRACTS COMPETITIONS, ETC.....	858
POSED NEW BUILDINGS AND OTHER	
WORKS.....	861
W BUILDINGS IN SCOTLAND.....	864
DECISION UNDER THE FACTORY ACT....	866
NDERS.....	866

ILLUSTRATIONS

Women's Hospital, Yellore, South India.

The buildings of the United Mission Women's Hospital at Yellore, now under construction, are part of a large scheme controlled by a dozen or so co-operating Missionary societies, British and American, in South India. It has been embarked upon not only to bring medical relief in a district which has been associated with this type of work through three generations, but also to contribute to the higher education of Indian women in the Madras Presidency by the Medical College and hostel, for which plans have also been prepared for erection on a neighbouring site. The institution is really three hospitals in one—a General Hospital of 125 beds, a Maternity Hospital of 75 beds, and a Children's Hospital of 50 beds—and has to some extent been specially subscribed for under its three divisions, which therefore preserve their identity though embodied in one scheme.

The site is a restricted one, and free planning was rather limited by the positions of certain buildings already erected in a rather haphazard manner. It will, however, be seen from the drawings that the various problems arising in Indian hospital design have been met in a straightforward way. The existing dispensary and out-patients' block was taken as the starting point for the lay-out of the whole hospital, with which it is in direct communication for the admission of patients. The orientation of the ward blocks is necessarily east and west for the exclusion of the sun, with wide verandahs to wards and louvered shutters and sunshades to service rooms. Special provision is made in all buildings for easy access to sanitary blocks or special rooms for outcaste menials for the removal of slops and dirty linen, emptying of bed-pans, etc. Private wards for paying patients and their servants are equipped with their own sanitary and kitchen arrangements; they are for the treatment of persons of different caste or religion, though any one ward is not necessarily set aside continuously for people of one caste only. These blocks are arranged for convenience as groups in connection with the various branches of the hospital—medical, surgical or maternity. The question of caste and religion also influences the cooking arrangements: three main kitchens are provided, one for Brahmmins, one for non-Brahmin Hindus, and one for non-Hindus.

The hospital is being equipped with an electric light plant with crude oil engines, and under the same roof as that installation is included an ammonia ice machine for making half-a-ton of ice per day. The drainage system is carried to a septic tank disposal plant of a modified Dortmund type with simple filters. The central clock tower on the administration block commemorates the comple-

tion of twenty-five years' work in India by Dr. Ida Scudder, the Principal of the Medical College; it is backed by a tank room for the storage of a reserve of water in two tanks of 2,000 gallons each; the town supply being only equal to nine gallons per head per day, the water service of the hospital is supplemented by wells in different parts of the grounds. The wards over the dispensary are designed for temporary use only, the ultimate purpose of this block being for the housing of Anglo-Indian (Eurasian) nurses and dispensary compounders.

In the elevations some inspiration has been taken from the indigenous Dravidian architecture of Southern India. As granite is still obtainable at moderate price for columns and cornices, many of the simpler native forms can be reasonably embodied in a building where strong horizontal lines are mainly relied on for effect.

As elsewhere in India, a good deal of the cost is absorbed in the foundations, owing to the alluvial nature of the ground, a satisfactory bed of hard red earth being found at 6 ft. down, only capable of carrying 1 to 1½ tons per foot. The walls are built of local country brick, protected by a particularly hard lime stucco of very smooth surface, having a natural tendency to mellow in outside use and capable of being thoroughly disinfected inside rooms by washing down. Floors of wards and service rooms are in hard Italian quarry tiling on local terrace brick construction, which is also the method employed for the flat roofs.

The cost of the ward blocks of two stories works out at approximately 10½ rupees per sq. ft. of plinth area, or 4.2 annas per cub. ft.; the Administration block cubes out at 5.3 annas, including a good deal of stone-work in the entrance; the one-story private ward blocks cost about 6 rupees per sq. ft. of plinth area. These prices are exclusive of equipment, sanitation, water supply and lighting. The architects are Messrs. Reginald Dann, M.T.P.I., and Laurence Angus, M.A., A.R.I.B.A., of Madras and London.

House for Sir Alfred Mond, near Tiberias, Palestine.

This house was designed according to the individual as well as the specific climatic requirements of Palestine. The window and door openings are placed so as to allow a cooling atmosphere to enter the house. Open terraces and pergolas serve a similar purpose. Fire-places and chimneys are not required, and are not provided. Stairs leading to the open roof terrace are a feature required by the hot climate of Palestine. Views are opened up to the Galiy Mountains on the north side, to the Lake of Tiberias on the south, and to orange groves on the east. It is proposed to use dark basalt stone, which is the local stone of the district, and the roof will be covered with pantiles. The pergolas are of open construction so that creepers may be readily trained to grow upon them. The house will be used as a residence by Sir Alfred Mond when visiting Palestine.

Screen and Pulpit, Lapworth Church, Warwickshire.

This illustration is reproduced from a photograph recently on view in the Architecture Club Exhibition. Mr. Edwin F. Reynolds, F.R.I.B.A., is the architect.

House at Bagthorne End.

The perspective drawing which we illustrate this week shows a recent example of domestic work by Mr. P. D. Hepworth, F.R.I.B.A.

Widening Piccadilly.

Piccadilly widening figures in a report of the L.C.C. Improvements Committee, which recommends that the Council concurs in the proposal of H.M. Commissioners of Crown Lands, that the strip of land between Piccadilly-circus and Air-street shall be transferred to the Council in two blocks, and that a proportionate part of the purchase money of £100,000 shall be paid when the first block is handed over.

ON THE LOIRE

VIGNETTES OF FRENCH LIFE.

IN a second lecture on the Renaissance Architecture of France, given at the Central School of Arts and Crafts on December 2, Sir Banister Fletcher described the chateaux on the Loire, built in that newly-formed style which was the expression of the beauty of life and the unity of France. The handsome Renaissance palace took the place of the frowning "donjons" of the mediæval castles. In the lovely valley of the Loire these palaces arose with a wealth and variety of skyline that made them natural features of the landscape, such as the Chateau de Chenonceaux, rising from its enchanted site, partly on the river and partly on the water-bridge. Sir Banister described also the famous Chateaux of Blois, Chambord, and others, his descriptions being accompanied by lantern slides. These chateaux, said Sir Banister, were the vignettes of the French life of the period and were to the French what the manor-houses were to England, and represent that charming mingling of Gothic and Renaissance in which the French excelled.

The lecture to be given next week will concentrate on the two most famous palaces of Paris—the Louvre and the Tuileries.

MEETINGS

FRIDAY, December 11.

Glasgow Architectural Craftsmen's Society.—Mr. W. Hunter on "Reinforced Concrete." At the Royal Technical College. 7.45 p.m.

London Society.—Mr. G. Pepler on "Regional Planning Applied to London and its Environs." At 18, John-street, Adelphi, W.C. 2. 4.30 p.m.

Toynbee Planning Institute.—Dr. J. G. Gibbon on "The Problem of Planning Built-up Areas." At 92, Victoria-street, S.W. 1. 6.30 p.m.

Institution of Mechanical Engineers.—Mr. J. G. Pearce on "Foundry Practice: Cast-iron and Modern Engineering Practice"; and Mr. J. E. Fletcher on "Some Applications of Research to Modern Foundry Practice." At Storey's-gate, St. James's Park, S.W. 1. 6 p.m.

SATURDAY, December 12.

Royal Institution of British Architects.—Visit to St. Paul's Cathedral.

MONDAY, December 14.

Royal Institute of British Architects.—Mr. H. A. Welch, F.R.I.B.A., on "The Condition of the Building Industry with Special Regard to the Shortage of Skilled Labour and the Increased Cost of Work." At 9, Conduit-street, W. 1. 8 p.m.

College of Estate Management.—Mr. D. Knoop on "Economics of Rent." At 35, Lincoln's Inn Fields, W.C. 2. 5.30 p.m.

TUESDAY, DECEMBER 15.

Institution of Civil Engineers.—Mr. A. Honeysett on "Pressure-boosting Station for the Waterworks of the City of Monte Video." At Great George-street, S.W. 1. 6 p.m.

WEDNESDAY, December 16.

Institution of Civil Engineers.—Sir C. R. S. Kirkpatrick on "The Development of Harbour and Dock Engineering." At Great George-street, S.W. 1. 6 p.m.

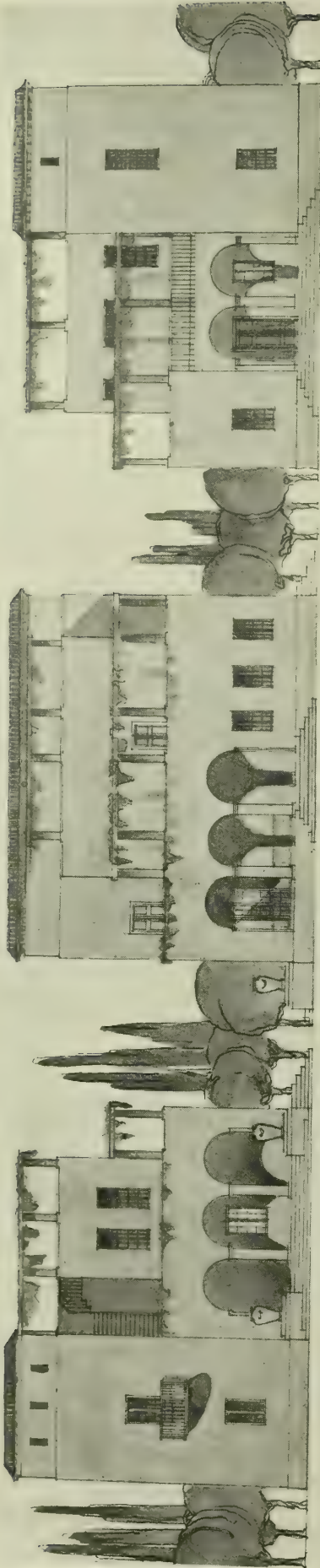
THURSDAY, December 17.

Victoria and Albert Museum.—Mr. C. S. Clarke on "Mogul Painting." At South Kensington, S.W. 7. 6 p.m.

Society of Antiquaries.—Messrs. V. E. Nash-Williams and R. E. M. Wheeler on "Recent Excavations at Caerwent." At Burlington House, W. 1. 8.30 p.m.

Stepney Public Lectures.—Mr. P. J. Ashton on "Night in a Great City; or, London While You Sleep." At 236, Cable-street, E. 1. 8 p.m.

Royal Institute of British Architects.—Professor E. G. Coker on "Some Problems in the Construction of Buildings considered experimentally." At the University College, Gower-street, W.C. 1. 5 p.m.



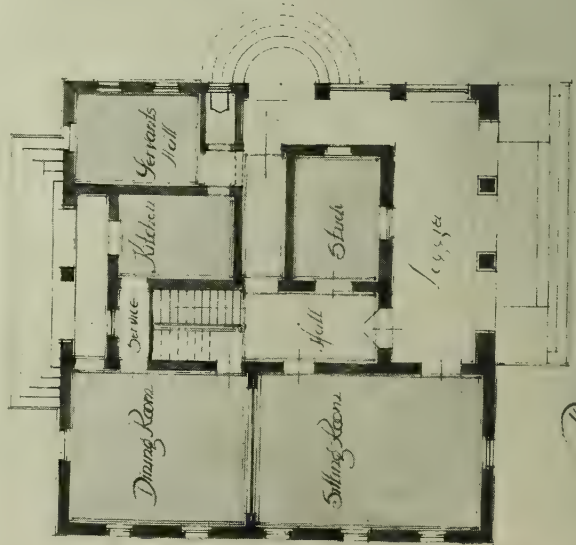
East, or Garden Elevation

North Elevation (to Road)

West Elevation

Feet 10 5 0 5 10 15 20 25 30 35 40 45 50 Feet

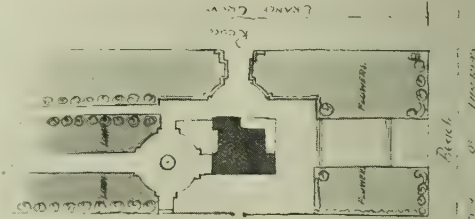
Scale 1/8" = 1 foot



Plan of Ground Floor

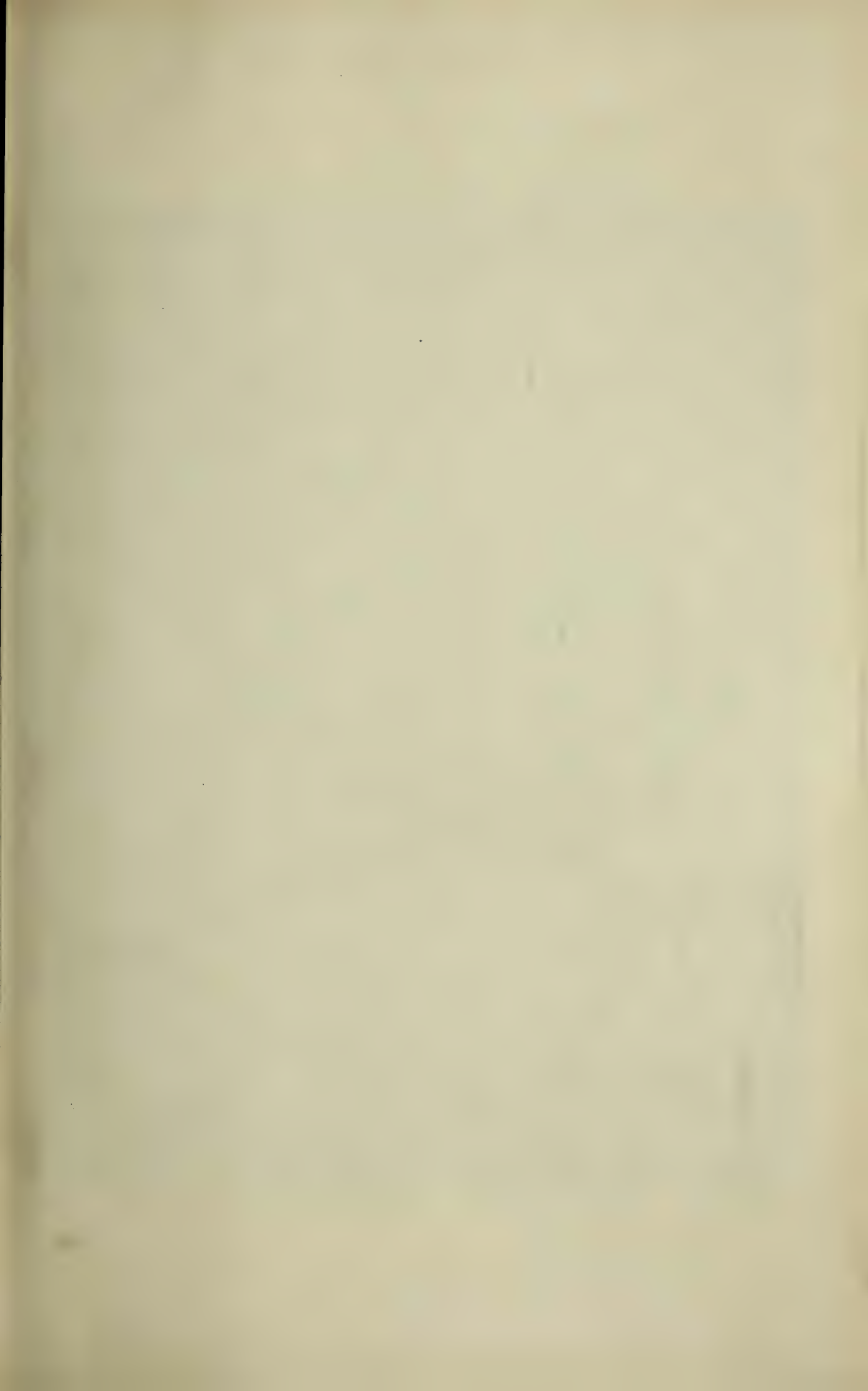


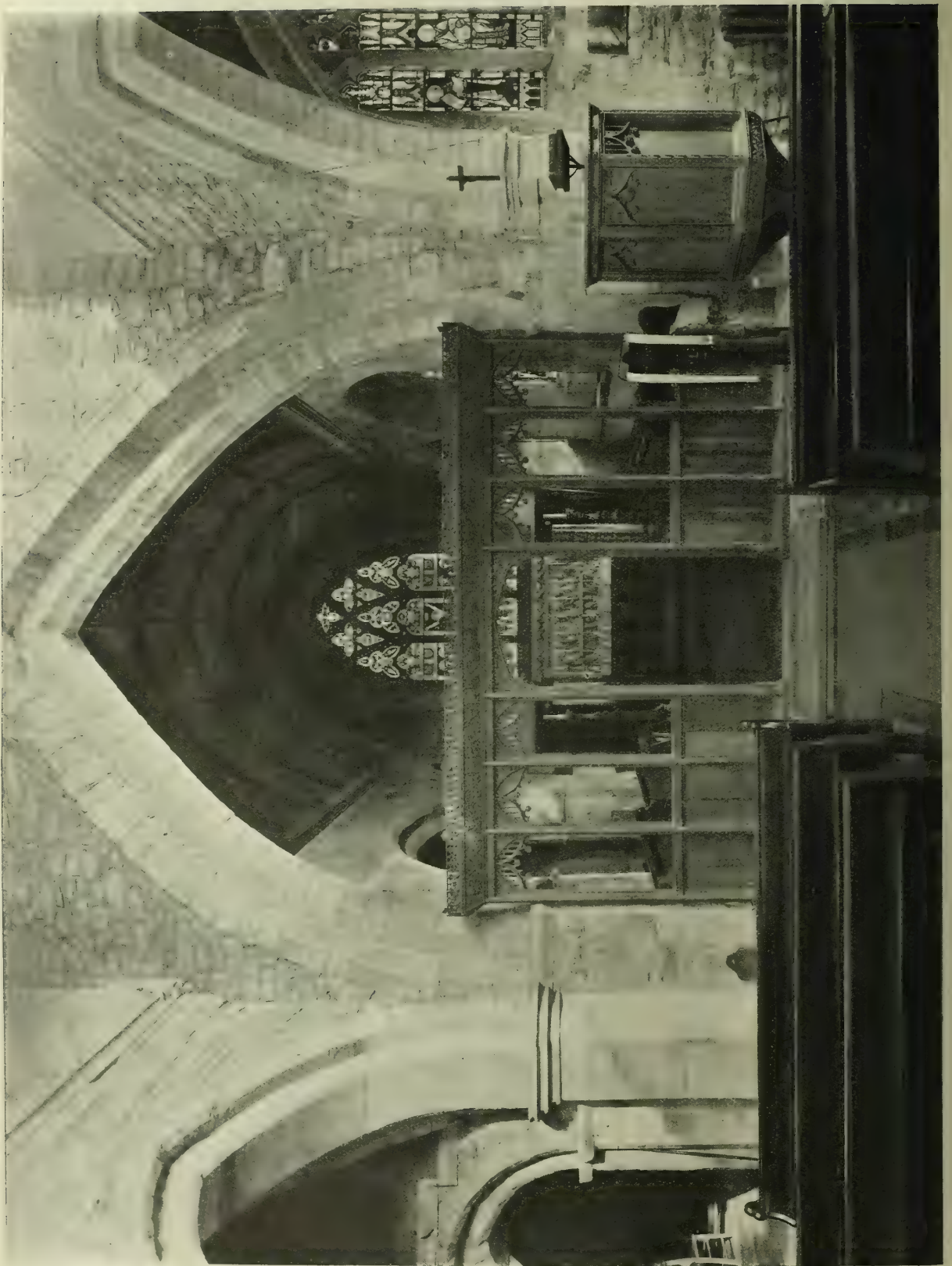
Plan of First Floor



Block Plan

ZWI G. SIROTKIN ARCHITECT
6th Architectural Association
— 34-35 BEDFORD SQ —
W.C.I.





New Screen and Pulpit, Lapworth Church, Warwickshire.

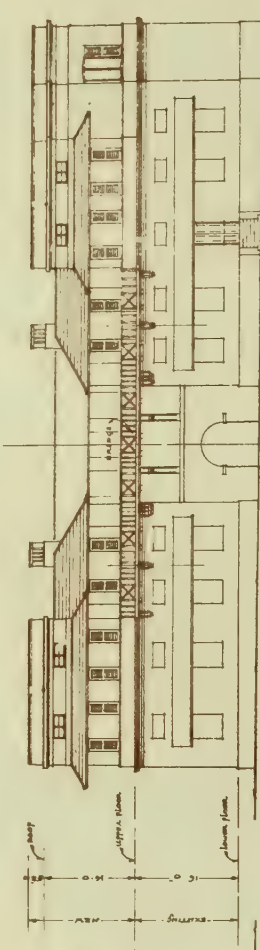
MR. EDWIN F. REYNOLDS, F.R.I.B.A., Architect.

D 9 N 2 H 19 - 1924

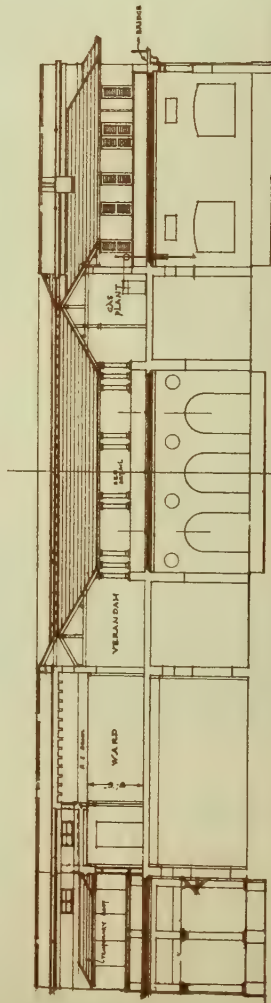
U.M. WOMENS HOSPITAL : VELLORE : TEMPY WARDS over DISPENSARY



FRONT ELEVATION TO SOUTH

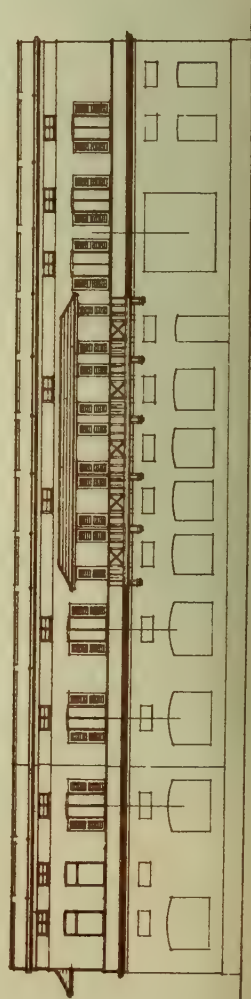


SIDE ELEVATION TO EAST

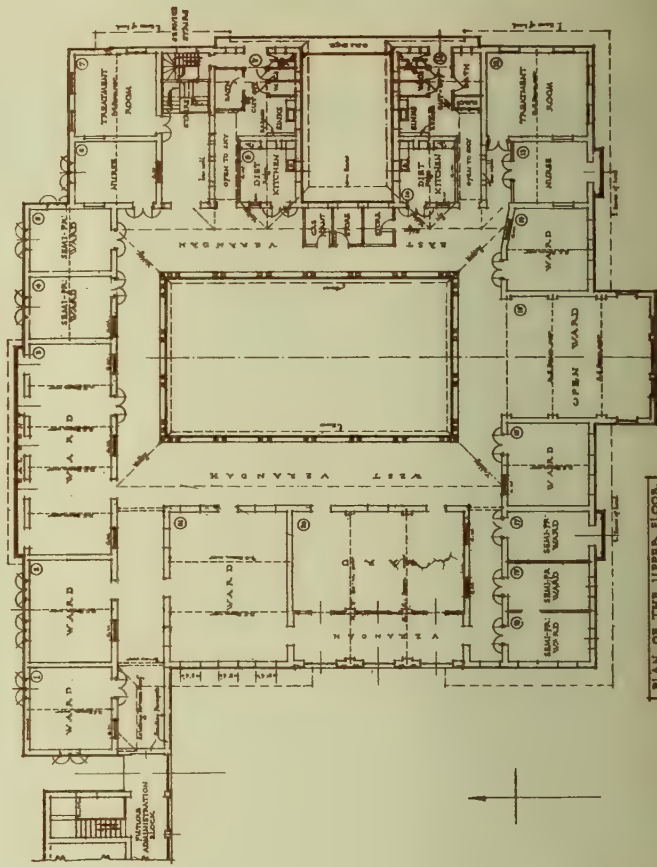


CROSS SECTION WEST TO EAST

SCALE 1" = 20' 0"



BACK ELEVATION TO NORTH

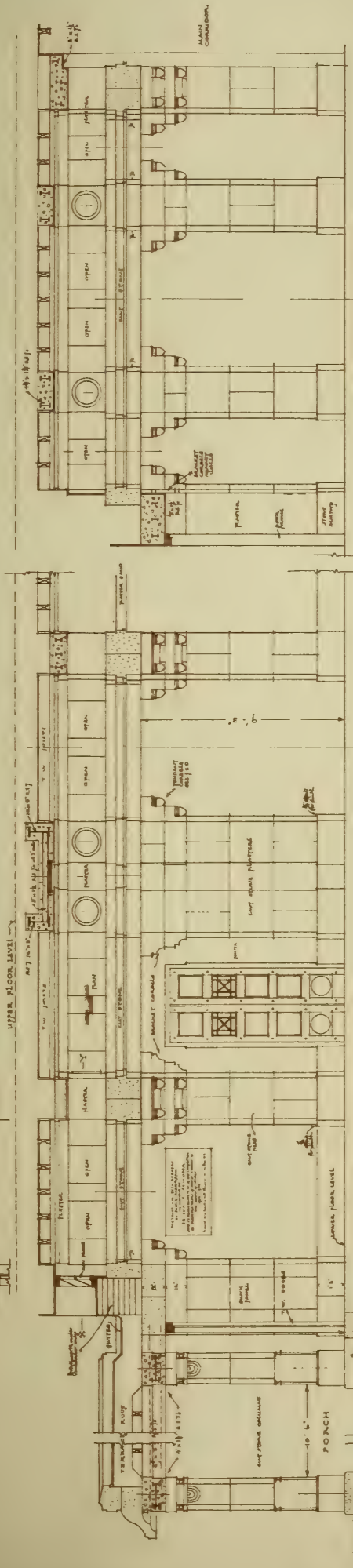


PLAN OF THE UPPER FLOOR

D 511 H 57
MARCH 1925

U.M. WOMENS HOSPITAL, VELLORE - ADMINISTRATION BLOCK
DETAIL OF ENTRANCE HALL AT MAIN ENTRANCE

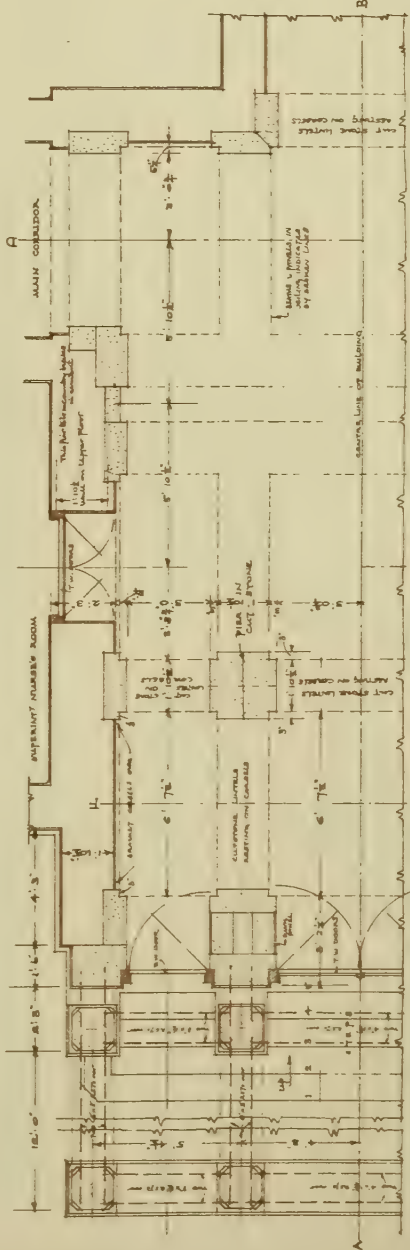
SCALE 1" = 10' 0" FEET



LONG SECTION A-B

CROSS SECTION C-D

UPPER FLOOR LEVEL



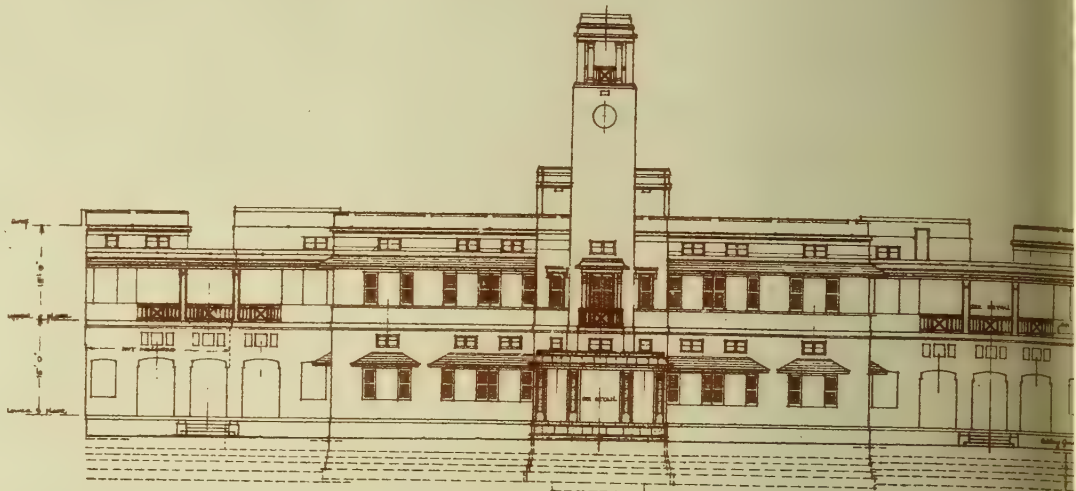
HALF PLAN OF THE ENTRANCE HALL - LOWER FLOOR LEVEL

CROSS SECTION E-F

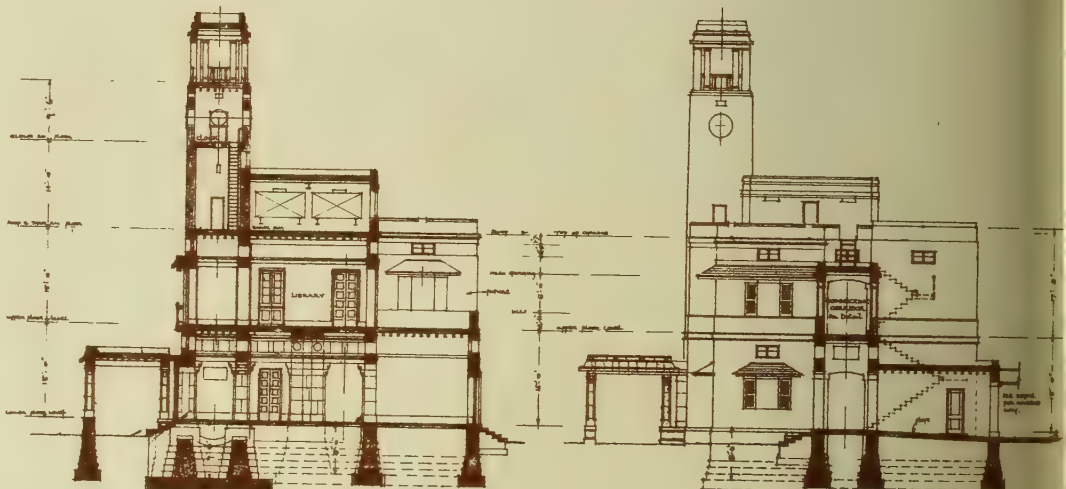
BY P.L.
L. M. ARIBA
ARCHITECTS, MADRAS

WOMEN'S HOSPITAL, VELLORE, SOUTH INDIA.
MESSRS. REGINALD DANN, M.T.P.I., & LAURENCE ANGUS, M.A., A.R.I.B.A., ARCHITECTS.

U. M. WOMEN'S HOSPITAL : VELLORE
ELEVATIONS & SECTIONS OF THE ADMINISTRATION BLOCK



FRONT ELEVATION TO SOUTH



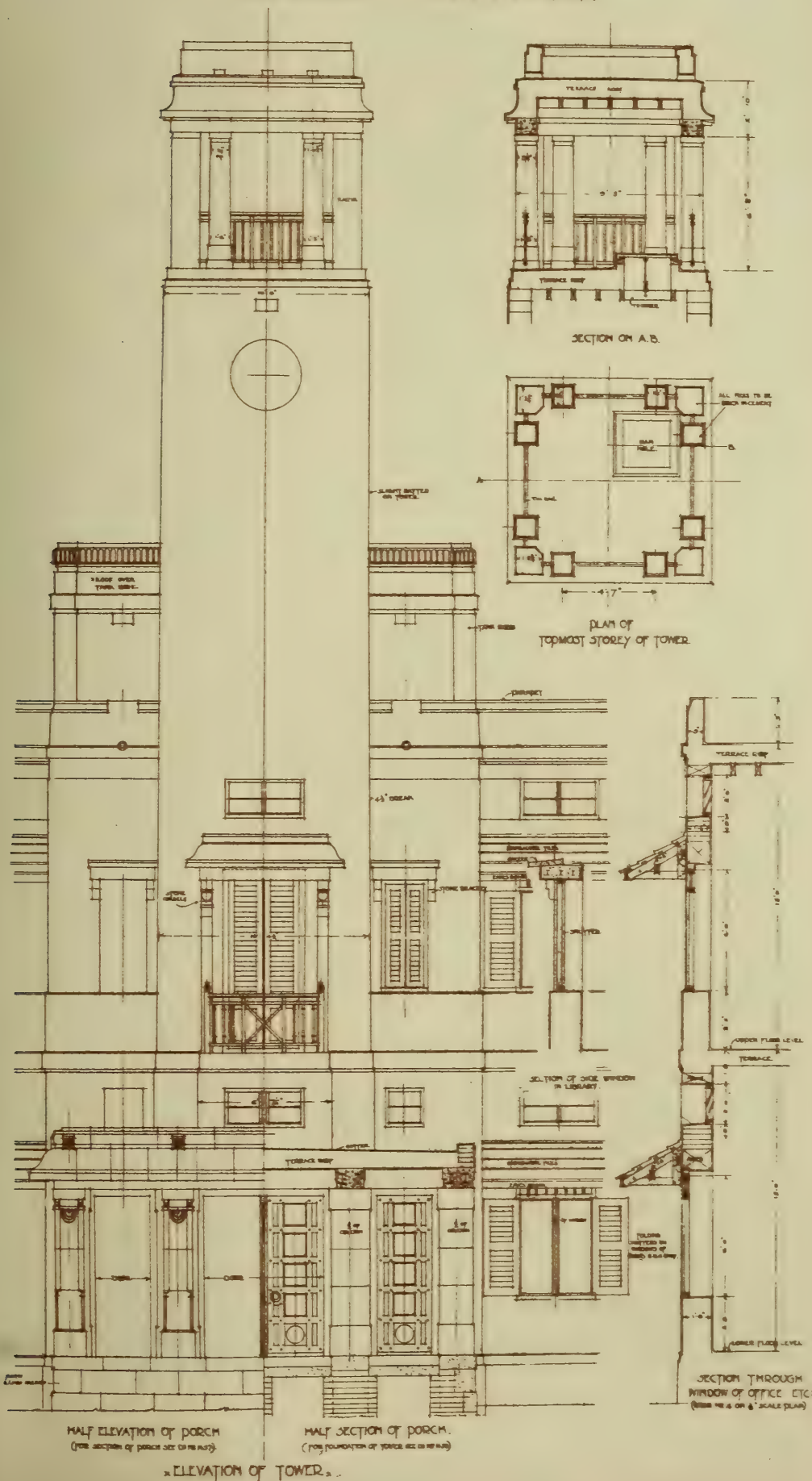
CROSS SECTION A-B

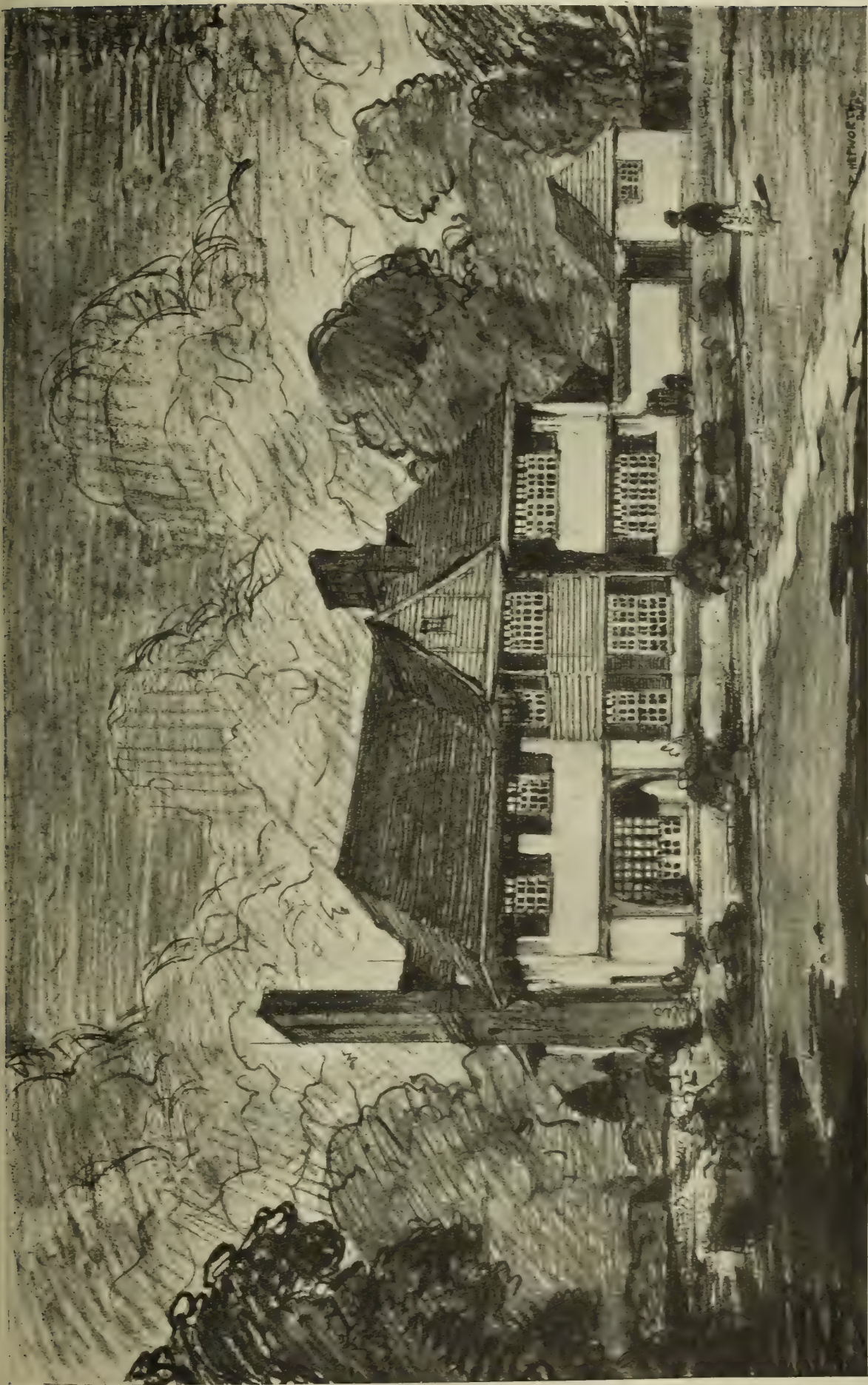
END ELEVATION TO EAST



BACK ELEVATION TO NORTH

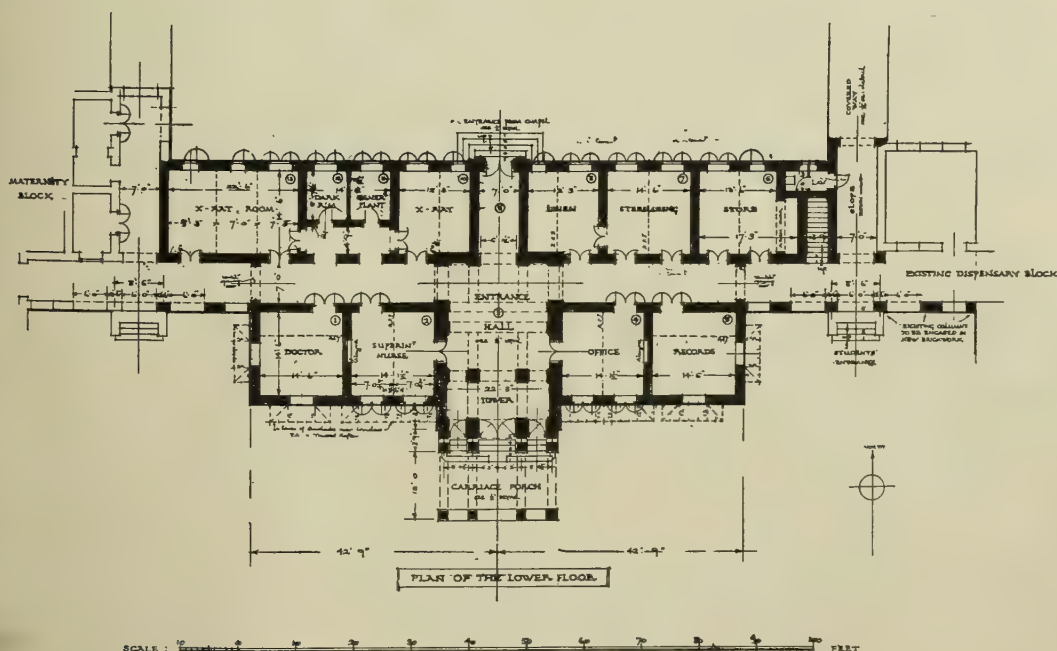
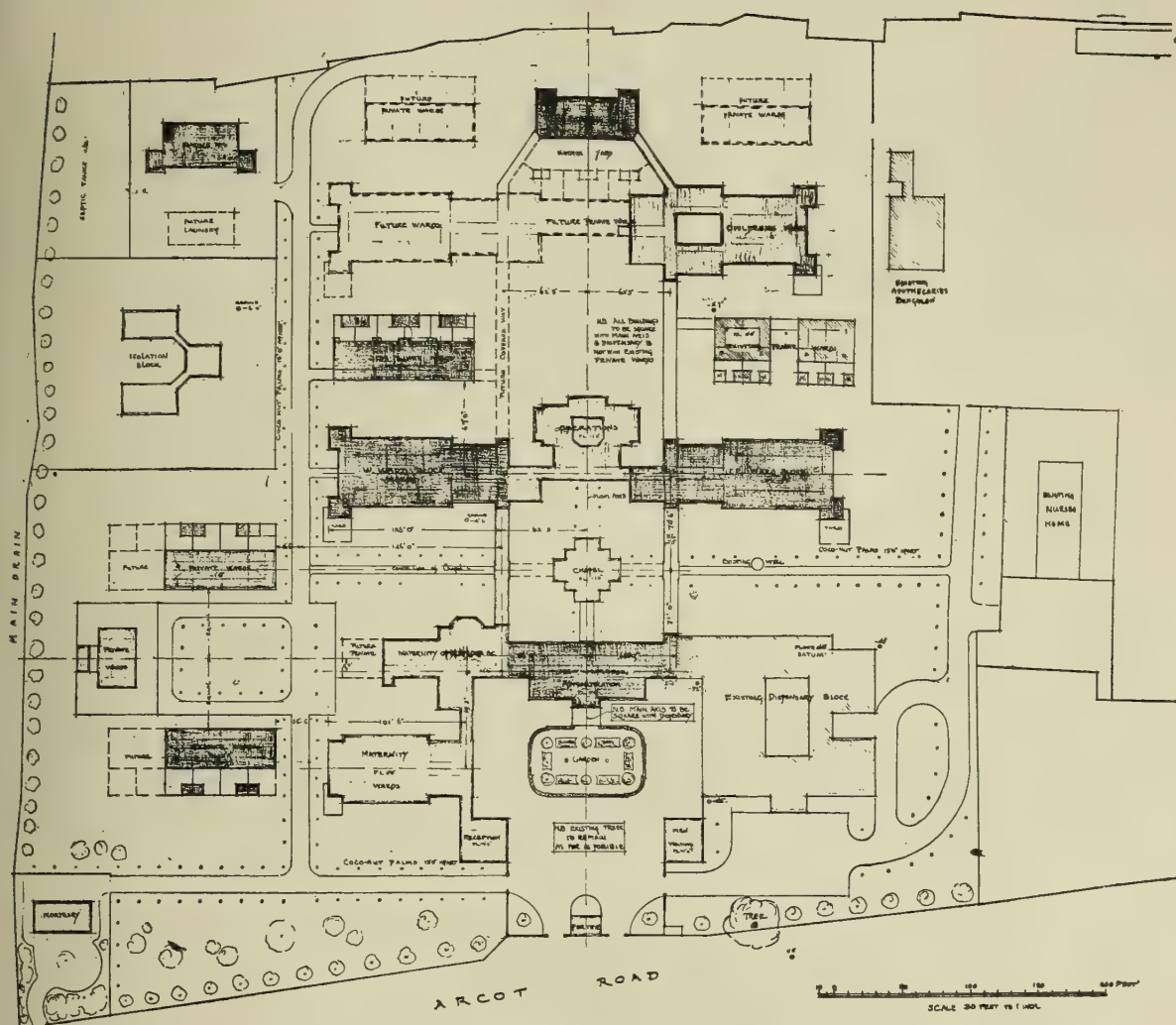
SCALE : 1" = 20' 0"



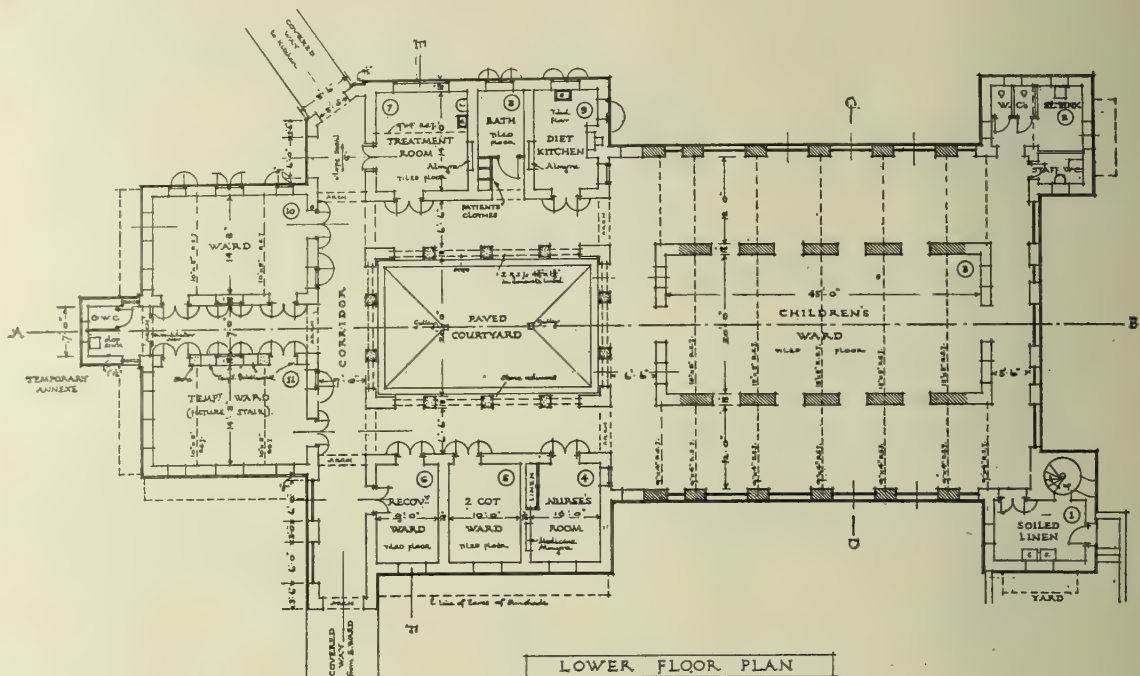


ROYAL ACADEMY EXHIBITION, 1925.

House at Bagthorne End.
Mr. P. D. Hervorth, F.R.I.B.A., Architect.



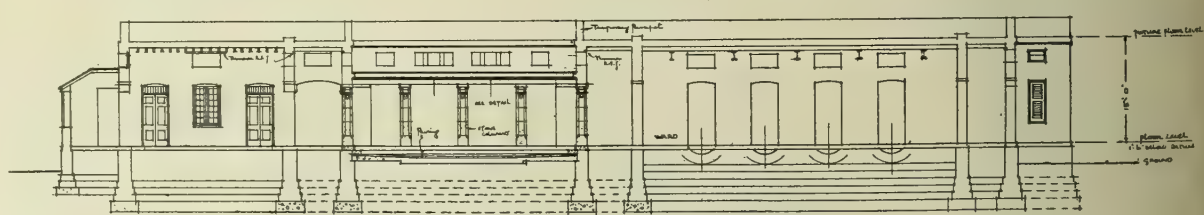
MESSRS. REGINALD DANN, M.T.P.I., AND LAURENCE ANGUS, M.A., A.R.I.B.A., Architects.



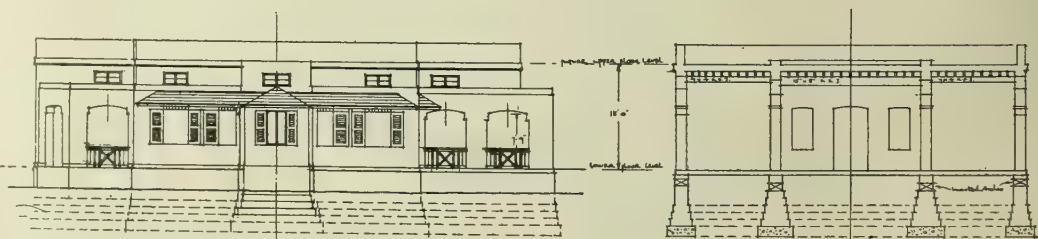
LOWER FLOOR PLAN
UPPER FLOOR, TO BE A FUTURE ADDITION



SOUTH ELEVATION



LONG SECTION A-B



WEST ELEVATION

CROSS SECTION C-D

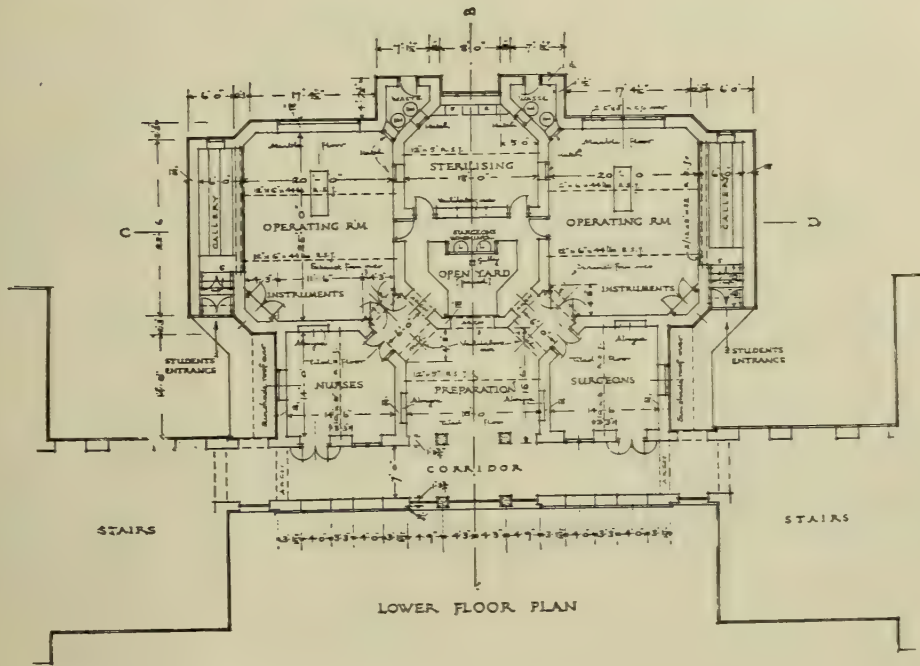
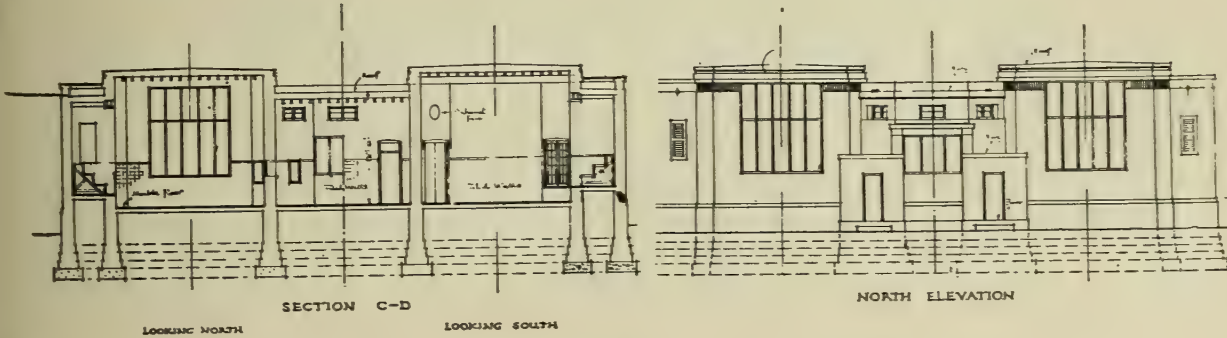


M.T.P.I.
LAURENCE ANGUS & M.A. A.R.I.B.A.
ARCHITECTS
MADRAS & LONDON

Women's Hospital, Vellore, South India : Children's Block.

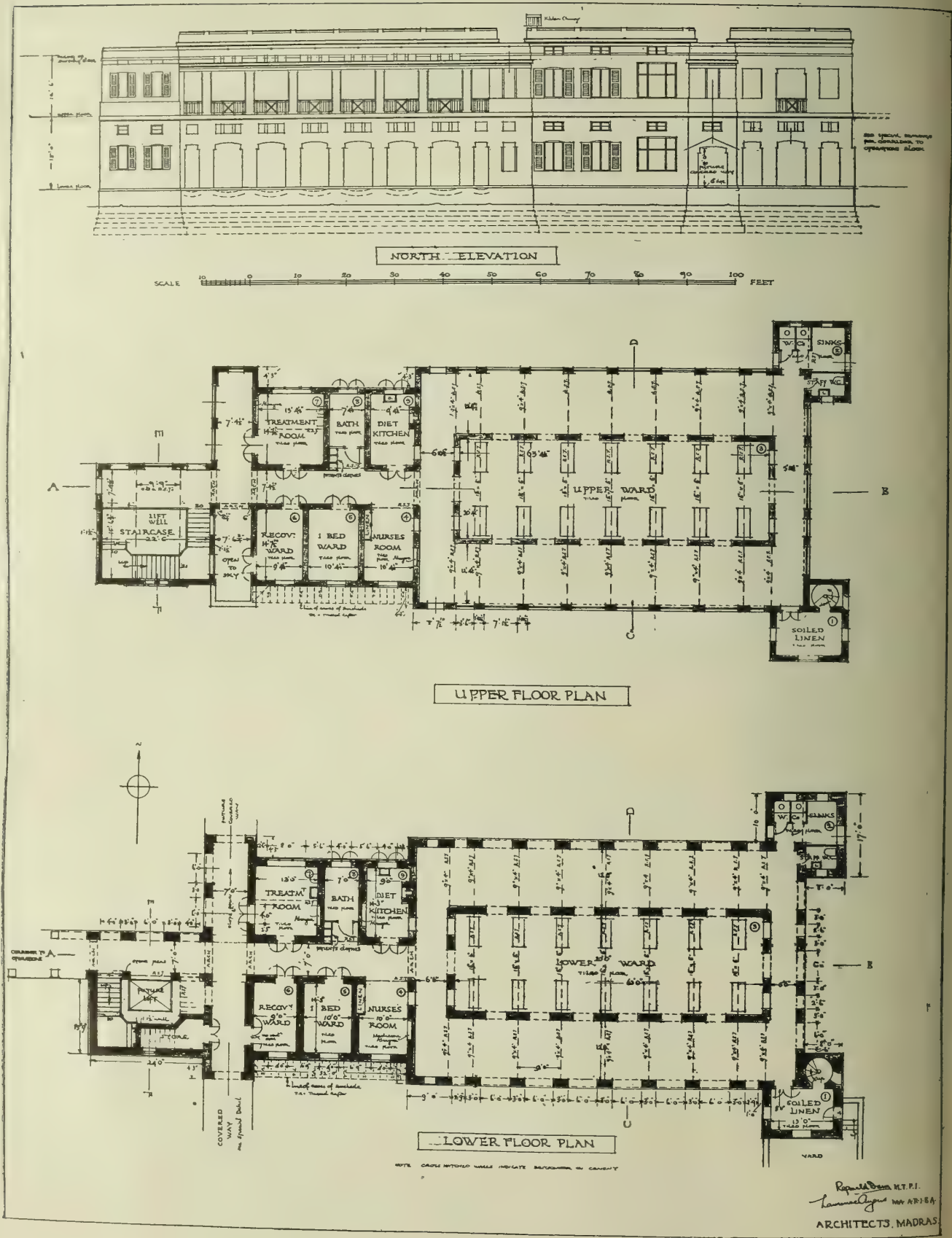
MESSRS. REGINALD DANN, M.T.P.I., AND LAURENCE ANGUS, M.A., A.R.I.B.A., Architects.

U. M. WOMENS HOSPITAL VELLORE
OPERATIONS BLOCK



Women's Hospital, Vellore, South India : Operations Block.

MESSRS. REGINALD DANN, M.T.P.I., AND LAURENCE ANGUS, M.A., A.R.I.B.A., Architects.



Women's Hospital, Vellore, South India : East Ward Block.

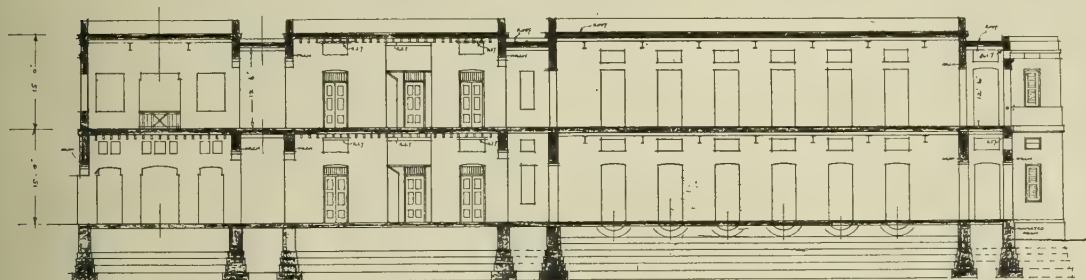
MESSRS. REGINALD DANN, M.T.P.I., AND LAURENCE ANGUS, M.A., A.R.I.B.A., Architects.

DS No H 61
MARCH 1925

U. M. WOMEN'S HOSPITAL, VELLORE
ELEVATIONS & SECTIONS OF THE EAST WARD BLOCK etc



SOUTH ELEVATION



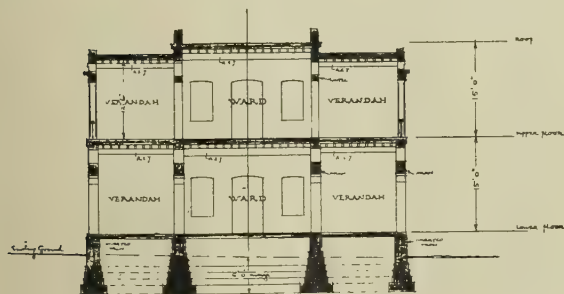
LONG SECTION A-B



EAST ELEVATION



WEST ELEVATION



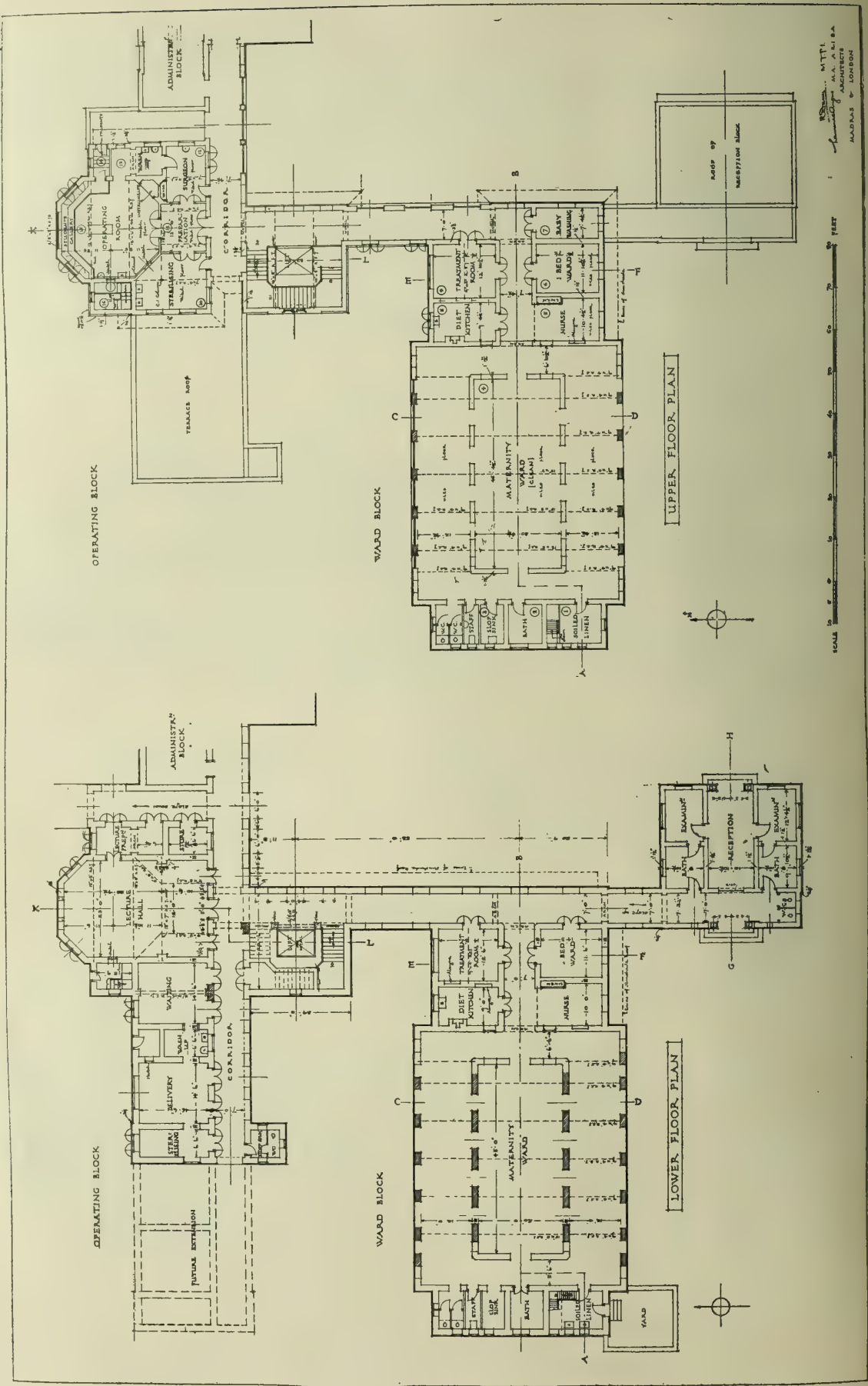
SECTION C-D THRO' WARD



SECTION E-F THRO' STAIRS

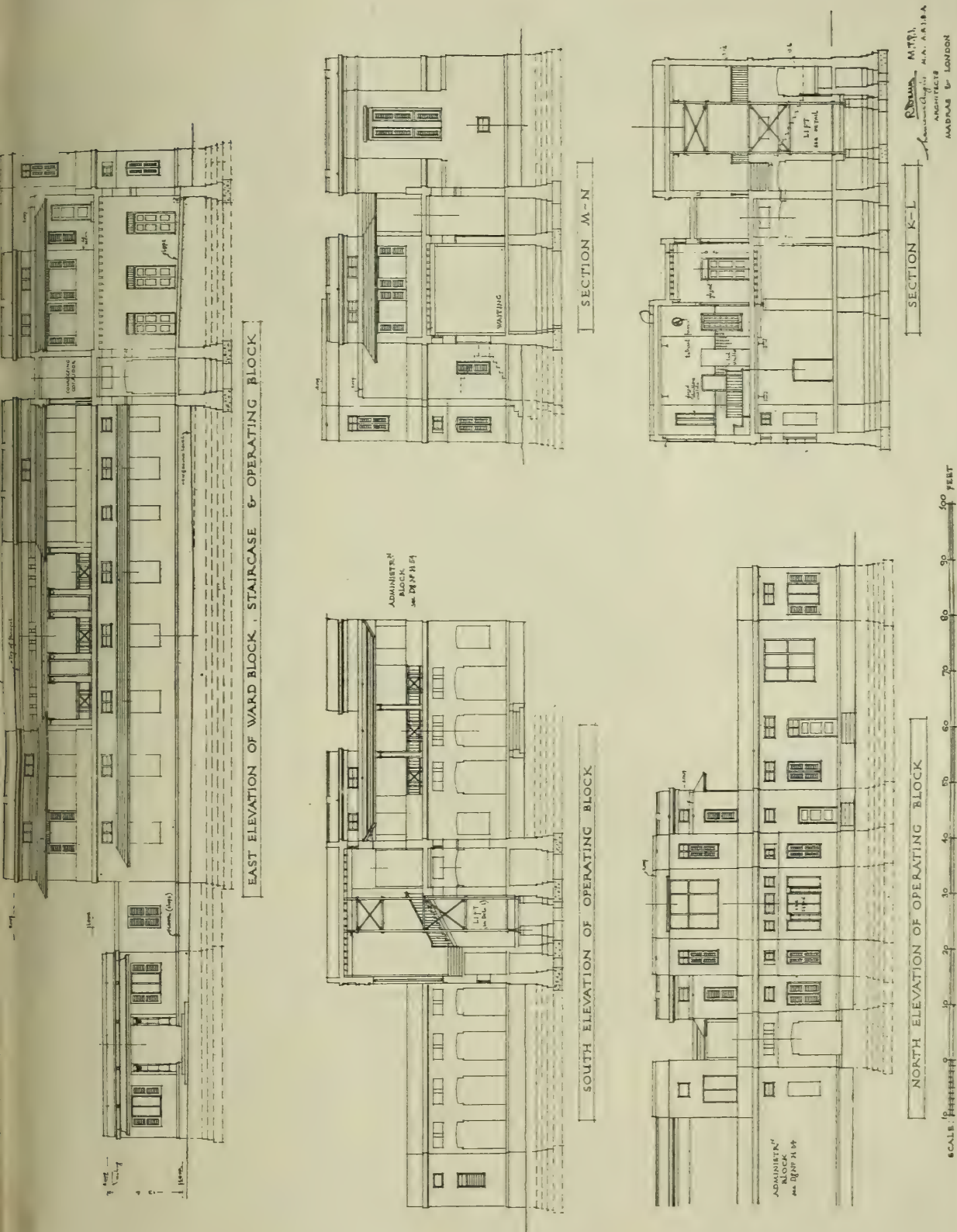
Women's Hospital, Vellore, South India : East Ward Block.

MESSRS. REGINALD DANN, M.T.P.I., AND LAURENCE ANGUS, M.A., A.R.I.B.A., Architects.



Women's Hospital, Vellore, South India: Maternity Blocks.

Messrs. Reginald Dann M.T.P.I. and Laurence Angus M.A., A.R.E.A., Architects.



Women's Hospital, Vellore, South India : Maternity Block.
Messrs. REGINALD DANN, M.T.P.I., and LAURENCE ANGUS, M.A., A.R.I.B.A., Architects.

A METHOD OF TESTING CONCRETE BLOCKS

At the meeting of the Institution of Structural Engineers, held on December 3, Mr. H. G. Lloyd, M.Inst.C.E., A.C.G.I., read a paper on this subject from which the following extracts are taken. The paper, said the speaker, was the sequel to a previous one of "The Consistency of Portland Cement, Mortar, and Concrete," read by the author at the Concrete Institute on April 22, 1920. The object of that paper was "to describe a simple means of ascertaining the quantity of water required when mixing mortar or concrete." For Portland cement it was stated that "the required consistency is such that the Portland cement contains the least quantity of water—no more and no less—in order for it to set completely." For convenience "this may be called the 'standard' consistency. The quantity of water which will produce standard consistency varies with different cements. It is usually expressed as a percentage by weight of the Portland cement." For cement mortar it was stated that "if the ingredients are considered separately, it will be seen that, since the quantity of water required by the cement is known, it only remains to find out how much is required by the sand, in order that it may have the surface of each grain covered by a thin film of water. In other words, the sand needs dampening, so that it may not take the water for this purpose from the Portland cement."

For concrete it was stated that "in order to obtain the standard consistency for any proportions of concrete composed of Portland cement, sand and coarse material, the same principle may be adopted as in the case of mortar." The object of the present paper was to describe the application of the principles, described in the previous paper, to the testing of concrete and hence to describe a method of testing concrete blocks.

Consistency of Neat Portland Cement.

It was also stated that "the standard consistency may be ascertained by means of the Boulogne method, or the Vicat apparatus." Then followed a description of the two methods as practised at that time.

After testing thoroughly the two methods as described, the author had discarded the Vicat plunger method, because it required a wetter consistency than that which results in the greatest strength, and had amended the Boulogne ball test, besides introducing two other methods for the determination of consistency, which might be used in conjunction with it.

The details of the method for the determination of the "standard" consistency of the Portland cement were as follows:—Weigh out 0.900 pounds of dry cement and place it in the centre of a clean slab on the mixing table. Weigh out a quantity of water equal to 20 per cent. of the weight of cement. This amounts to 0.180 pounds. Mix the dry cement by trowel for half a minute. Form a ring or crater of cement with the trowel and leave a small quantity of cement in the ring. Note the time and pour the water into the ring. Turn the dry cement from the outside of the ring into the centre without allowing any water to escape. This would take 45 seconds. The area of the damp portion of the slab would be only about 6 in. in diameter. Hold the trowel with one edge of the blade on the slab, the end pointing away from the body and the blade vertical. Then chop the partly moistened cement with the edge of the trowel from left to right. This should be done in 15 strokes. Make a fresh heap and again chop it up. After three heaps had been chopped in this manner, the slope of the trowel should be flattened to 30 degrees with the horizontal and pressure applied to the cement by the trowel when succeeding heaps were being chopped up. Continue mixing for 2½ minutes from the time that the water was added. The advantage of this method of mixing was that the water was squeezed into the cement, the cement was kept together, and there was little loss of water on the slab, as

the area damped should not exceed an ellipse of 11 in. by 9 in.

Cone Test.—A cone-shaped heap should be made next, by pressing and patting with the trowel against the neat cement supported and shaped by the left hand, which should rest on the slab with the thumb uppermost. Immediately the cone has been shaped turn it over quickly, aided by the trowel placed partly under it. The bottom of the cone should just show a film of moisture which should disappear rapidly.

Ball Test.—Mould the neat cement into a ball in the hands. Small pieces might be picked up from the slab as the ball gained shape if it was dabbed on them. When all the cement had been made into a ball, then squeeze it together and turn it round in the hands and throw it from hand to hand. In one minute from the time that the cone was finished, a firm jelly-like ball should be formed which would feel neither lumpy nor soft. Hold the ball with both hands at a height of 18 in. measured from the slab to the underside of the ball. Then drop it. After impact it should retain its shape without cracking and show a indentation where it impinged on the slab. Reshape the ball in the hands and then drop it gently into a Vicat mould placed on a steel plate, $4\frac{1}{2}$ in. by $4\frac{1}{2}$ in. by $\frac{1}{2}$ in. thick. The top of the ball should then protrude $1\frac{1}{4}$ in. above the top of the mould.

Plate Test.—Take a steel plate $4\frac{1}{2}$ in. by $4\frac{1}{2}$ in. by $\frac{1}{4}$ in., weighing 0.67 pounds. Grasp it between the thumb and forefinger of each hand at diagonally opposite corners. Hold it horizontally 6 in. above the top of the mould. Beat the ball with the centre of the plate. Repeat the blows at the rate of one per second. The momentum of the blow should be such that, if the mould was placed on a platform weighing machine, the lever arm would just be lifted when the jockey weight recorded 25 pounds. At the tenth blow the surface tension should be such that when the plate was raised, the neat cement, the Vicat mould and the bottom plate would be lifted also.

Ingredients Used in the Concrete.

The cement used in each series of these tests was the surplus from some 50 samples received for testing which had passed the British Standard Specification (1920) for Portland Cement.

WATER.—The tap water was taken from the Metropolitan Water Board's supply.

Thames ballast was selected for the tests because it was readily available, and owing to its general use on works in and around London, it appeared probable that tests made with it would be of most practical value, being comparable with other gravels.

GRADING.—The Thames ballast was washed dried and then graded by hard labour through sieves mounted on circular frames. Sand was graded to the following six sizes:—

Through $\frac{3}{16}$ in. and on the $\frac{1}{2}$ in. sq. mesh sieve.

Through	16	in. and on the	8	in. sq mesh sieve
"	8	"	16	"
"	16	"	32	"
"	32	"	50	"
"	50	"	75	"
"	75	"	Residue	"

Gravel was graded to the following five sizes: $\frac{3}{8}$ in. and on $\frac{3}{8}$ in. sq. mesh sieve; $\frac{5}{8}$ in. and on $\frac{5}{8}$ in. sq. mesh sieve; $\frac{1}{2}$ in. and on $\frac{3}{4}$ in. sq. mesh sieve; $\frac{3}{4}$ in. and on $\frac{1}{2}$ in. sq. mesh sieve; and $\frac{1}{4}$ in. and on $\frac{3}{16}$ in. sq. mesh sieve.

AGGREGATE.—Two parts by weight of the gravel graded as described were mixed with one part by weight of the graded sand.

Method for the Determination of the Percentage of Water Required to Damp the Aggregate.

SAND.—The method described in the previous paper was as follows:—

“Weigh out half a pound of dry sand; immerse in water in a small bowl; stir it well and allow it to stand. Then pour off the superfluous water and empty the sand on to a clean cloth and wring out the cloth with the sand in it. Screw the cloth up by the four corners and whirl it at arm's length until only occasional drops are thrown off. Pour the sand on to a sheet of plate glass; then with a small trowel push the sand to one side of the glass. Mop up the water on the glass, push back the sand with the trowel and repeat the process to and fro, mopping the glass each time while keeping the sand well mixed, until no pools of water remain on the glass and the glass is only just uniformly damp. Weigh out a convenient quantity of the sand, dry it thoroughly and weigh it again; the difference of weight will be that required to damp the known weight of dry sand. The percentage weight can then be calculated.”

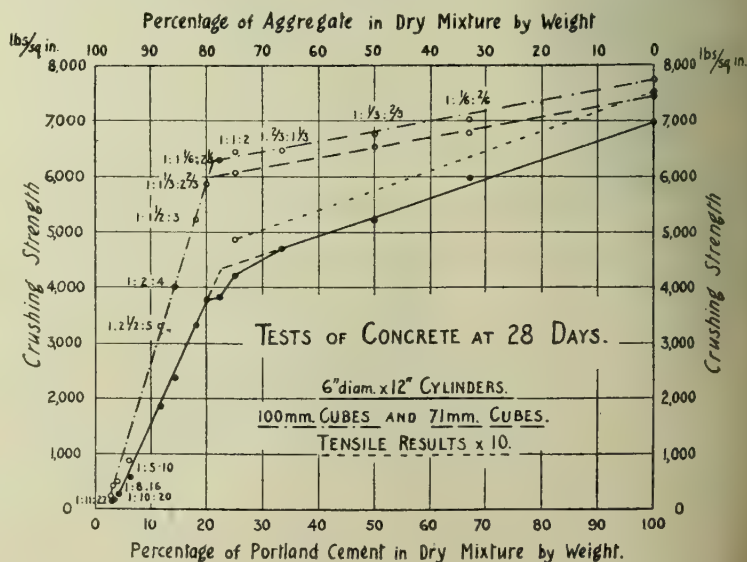
The percentage of water required for each of the grades of sand was obtained in this manner. The average used in these tests was 6 per cent of the weight of the dry sand graded as described already.

GRAVEL.—The percentage of water required to damp the gravel was obtained for each grade in the same manner as that described already for the sand. The average used in these tests was 2 per cent. of the weight of the dry gravel graded as described previously.

Before each test was commenced, the quantity of water was calculated in the manner fully described in the previous paper. The formula used was:—

$$w = \frac{C_e + S_s + G_g}{C + S + G}$$

where w equals the percentage of water by weight required by the combined weights of Portland cement, sand and gravel



C = the weight of dry Portland cement ;
S = the weight of dry sand ;
G = the weight of dry gravel or stones ;
c = the percentage of water required by the Portland cement ;
s = the percentage of water by weight required to damp the sand ;
g = the percentage of water by weight required to damp the gravel or stones.

WEIGHT OF MATERIALS.—The total quantities required for each mix were estimated beforehand, so that almost all of the concrete mixed was filled into the moulds.

MOULDS.—The cylindrical mould used was in. internal diam. by 12 in. long.

At the expiration of 28 days the concrete cylinders were crushed in an hydraulic press between steel plates.

The following simple formulæ showed the relationship between the percentage of cement in the concrete and the crushing strength of the blocks. If the quantity of water required or "standard" consistency was increased, it would be found that the formulæ still held good. This was also the case if a heavier aggregate was used.

When the voids were filled and $N > V$.

Let N = the strength of neat cement.

V = the strength at the critical mixture.

n = the maximum percentage of dry cement by weight = 100 per cent.

v = the percentage of dry cement in the critical mixture.

y = the percentage of dry cement in the mixture of unknown strength.

Y = the required strength with y percentage of dry cement.

Then
$$\frac{n - y}{n - v} = \frac{N - Y}{N - V}$$

Or
$$Y = N - \left\{ (N - V) \frac{100 - y}{100 - v} \right\}$$

If $N < V$, then the formula may be re-cast to suit the case.

When the voids are not filled—

Let M = the strength of the mixture with the minimum quantity of cement.

m = the percentage of cement in that mixture.

y' = the percentage of dry cement in the mixture of unknown strength.

Y' = the strength with y' percentage of dry cement.

Then
$$\frac{v - y'}{v - m} = \frac{V - Y'}{V - M}$$

Or
$$Y' = V - \left\{ (V - M) \frac{v - y'}{v - m} \right\}$$

Comparison of Crushing Strength of Cylinders and Cubes

A comparison of the curves on the diagram showed that the critical point occurred at about the 1:1½:2½ mixture, both in the cubes and cylinders, and at this point the difference in the crushing strengths was at its maximum, decreasing steadily as the voids increased or the cement increased.

Comparison of Tensile Strength and Crushing Strength.

If the average tensile stress be multiplied by 10 and plotted on the Diagram, the line joining the two points would be almost parallel to that of the crushing strength of the cylinders. It therefore appeared that, between the limits of neat cement and the critical point, there was a definite relationship between the tensile strength of briquettes, moulded in accordance with the British Standard Specification, and the crushing strength of cylinders, composed of this type of aggregate and moulded in accordance with the method described herein. Other experiments indicated that this relationship held good below the critical point also.

Conclusion.

The success attained was chiefly due to the method of obtaining standard consistency. It was also due to the great care taken in every detail of the tests, particularly the grading, the tamping into the moulds, the use of the top plate to close the mould and to make the top and bottom of the blocks parallel.

THE WEEK IN PARLIAMENT

WESTMINSTER, Wednesday.

Houses Built.

Mr. N. Chamberlain informed Mr. H. Williams that an estimate based on the returns already received showed that some 32,400 houses were built in England and Wales without State assistance during the half-year ended September 30 last.

The Subsidy for Scottish Housing.

Sir John Gilmour, Secretary for Scotland, informed various members that the general principles governing the selection of makes of houses for special subsidy were cost, construction, output, and limitation of building trade craftsmen to 10 per cent. of total labour engaged.

Atholl Steel Houses, Ltd.

Mr. R. Morrison asked the Secretary for Scotland whether he was aware that the Atholl Housing Company had definitely arranged to pay trade union rates of wages to all their workmen; that this company was excluded from the selection of contractors to receive the special subsidy of £40 per house for Scotland as recently announced by the Prime Minister; that this company's business was prejudiced by this decision; and whether they were to be finally precluded from receiving the Government subsidy.

Sir John Gilmour said he was informed that Atholl Steel Houses, Ltd., had arranged to pay trade union rates of wages to their workmen, and he was aware that this company was not included in the firms approved by the Scottish Board of Health for the purposes of the additional housing subsidy. The number of houses covered by the new subsidy scheme was but a small proportion of the number of houses required in Scotland. Moreover, while this firm's houses would not participate in the additional subsidy, they were still eligible for participation in the ordinary subsidies under the Acts of 1923 and 1924, subject to their cost being reasonable.

Unhealthy Areas.

Mr. Grotian asked the Minister of Health whether he was aware that local authorities were being deterred from representing areas as unhealthy owing to the unfairness of paying nothing for buildings which in themselves were unexceptionable, but which happened to be within an unhealthy area; and whether he would consider the repeal of Section 46 of the Housing Act, 1925, and the putting into force of the recommendations of the report of the Unhealthy Areas Committee, 1921.

Mr. N. Chamberlain said he could not accept the suggestion that no compensation was paid for buildings which in themselves were unexceptionable. Payment on the basis of site value was prescribed by the Act for buildings which were included in a scheme on account of their sanitary condition or because the premises were dangerous or prejudicial to health. He was not in a position to make any statement as to future legislation at the present time.

Compensation for Slum Clearances.

Mr. N. Chamberlain informed Mr. Cassels that the question of the basis of compensation in connection with slum clearance was engaging his attention, but he was not at present able to make any announcement as regarded future legislation.

British Bricks.

Mr. N. Chamberlain informed Mr. Ramsden that as details of local authorities' housing schemes were not submitted for his approval, he had no knowledge whether British bricks were always specified. The Government had urged local authorities to arrange that all contracts for or incidental to works carried out by them should, in the absence of special circumstances, be placed in this country.

Output of Bricks.

Mr. N. Chamberlain informed Mr. H. Williams that returns which had been obtained by the Building Materials Committee indicated that the annual output of common building bricks in England and Wales was now about 5,115 millions.

Brickmakers' Hours.

Answering a question as to brickmakers' hours, Sir A. Steel-Maitland said that in Belgium the working hours of brickmakers in rural brickworks might not exceed ten a day in summer (April 15 to October 15), nine a day in winter, and an average of eight a day over each six-monthly period. In brickmaking by machinery, working hours might not exceed 108 a fortnight and ten a day in summer, and 84 a fortnight and seven a day in winter. In France, the working hours of brickmakers appeared to vary from eight to nine a day. In Great Britain the normal working hours fixed by agreement between the employers' and workers' organisations in the principal centres of the industry were 48 a week.

The Fine Arts Commission.

Sir William Davison asked the Under Secretary of State for the Home Department, as representing the First Commissioner of Works, if he would state for what purpose the Fine Arts Commission was constituted; and whether the Government did not consider it to be a competent tribunal to decide as to the desirability of removing to another site a monument or piece of sculpture erected in a public place as to which a controversy had arisen.

Mr. Locker-Lampson said that the Fine Arts Commission was appointed to advise Departments of State and public bodies on such questions of public amenity or of artistic importance as might be referred to them, and, in so far as the Hudson Memorial was concerned, they might be considered the successors of the Sites Committee who advised the Department in regard thereto. The First Commissioner considered the Commission a thoroughly competent tribunal to advise on such matters.

Unemployed in Glasgow.

Sir A. Steel-Maitland informed Mr. Buchanan that the numbers registered as unemployed on October 26 in the Glasgow area in the various occupations in the building trades were:—

Carpenters.....	155
Bricklayers	58
Masons	77
Slaters	30
Plasterers	17
Painters.....	470
Plumbers	109
Labourers to the above	1,062
Others	1,019

Total

Cost of the Subsidy.

Mr. N. Chamberlain informed Sir G. Collins that the following table showed the number of houses authorised and the estimated capital value of the Government contributions which would be payable in respect of such houses:—

Housing Act of	Number of houses authorised.	Estimated capital value of Government contributions.	
		£	s.
1923 ..	240,604 ..	£18,045,300	
1924 ..	88,954 ..	£14,232,640	

Demonstration Houses.

Mr. N. Chamberlain informed Lt.-Col. Horlick that £28,800 had been allocated for grants in respect of demonstration houses. The subsidy was not payable until the houses had been completed and had been open to inspection by the public for one month. The actual payments made amounted to £2,800. According to the latest information 51 of the houses had been completed, and apart from work on foundations 48 had not been commenced.

INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS

NEW LAW OF PROPERTY.

MR. A. E. SOCKETT, Barrister-at-Law, the Senior Reader of the College of the new Incorporated Association of Architects and Surveyors, recently delivered a lecture on the new law of property to members of this Association. At the outset Mr. Sockett, in order to make a comparison between the old and new laws relating to property, pointed out the difference between a freehold estate and a leasehold estate. The former, he said, was an estate of uncertain duration because it may continue indefinitely, and the latter was limited for a definite term of years. He did not want them to think that because an interest was granted to a person for a very long term of years, say, to the extent of 3,000 years, that it was the equivalent of a freehold estate in the eyes of the law. In spite of this, he personally would sooner have a long leasehold than the lowest kind of freehold estate known to our old system of land laws as a freehold estate for life. It should be clearly understood that an estate for life was also a "freehold" estate, although of a low type—it lasted only during a person's life, and a person buying such a freehold would be turned out of the estate or house on the death of the person for whose life the property was held. In dealing with a term of years, no matter how long the term was, the estate was only a leasehold one.

Having pointed out that, under the existing old system of land laws, a freehold estate might be one of three kinds—(1) in fee simple, which was popularly known as absolute ownership; (2) in fee tail, or an entailed estate; (3) the estate for life—the lecturer mentioned that he would cut out of consideration in his lecture No. (2), the estate in fee tail. The new law on such estates had been radically altered. After January next, copyholds would be enfranchised, and the only two tenures remaining would be freehold and leasehold; on the former, in so far as the legal estate in the land was concerned, they would only have the estate in fee simple.

Technicalities in deeds and documents, or in the creation of estates in land, were going to be swept away, although it would take some years for the new system to become assimilated. At the beginning the system would even be more difficult to the public and practitioners, because the old and new systems must be known. When there was an estate for life the absolute interest was to be given to the man who was the tenant for life, but he would hold it to a certain extent on trust for the people entitled beyond his own life; in other words, he would have the estate in fee simple vested in him as a trustee. The ordinary form of conveyance would be simplified, and all the technicalities that had governed it for many years past would cease to have any effect, although he thought they would find that conveyances would continue to contain certain expressions at present in use.

Dealing with the question of contracts for sale, Mr. Sockett said that under the old law, going back to the Statute of Frauds of 1677, a contract with regard to the sale of land had to be in writing and must be signed by the party to be chargeable. The New Law of Property Acts provided that a contract with regard to land should still be evidenced by writing, but it went further, and said that where they had a contract by correspondence the Lord Chancellor might make certain rules which should be incorporated into that correspondence, and together should form what one might call a complete contract. Such rules had already been issued, and members were advised to obtain a copy from the Government printers.

The new law also provided for a new system of registration of estate contracts, which were defined as "contracts to create or convey legal estates." They were not compelled to

register their contract for the sale or purchase of an estate, but he recommended them to do so in all cases when acting on behalf of the purchaser. He advised them to register a contract for the sale of land, a contract which was an agreement for a lease, and also any option that they had to purchase property, as the whole world then had notice of their rights with regard to that particular land.

Among other matters touched upon by the speaker was that of the effect of the new law on intestate succession. In the first place, he said, all real and personal estate would be transferred to the "personal representatives," the executors or administrators. In the case of large estates, the surviving husband or wife would get all personal chattels and £1,000 straight away, free of all death duties, after which he or she was given other rights with regard to the balance of the property. Where there was issue, the husband or wife would get a lifetime interest to the extent of one half, and where there was no issue the surviving partner of the marriage would get a life interest in the whole of the balance of the estate.

The speaker was thanked for his address, and a large number of questions were put to and answered by the lecturer.

[We have ascertained that the Incorporated Association of Architects and Surveyors has a membership of nearly 300, and that a number of applications for membership have still to be considered. The Ordinary Members of Council have been appointed by the Provisional Members of Council, but a President has not yet been elected. The Council is as follows:—Captain C. B. J. Athoe, of London (Secretary, Society of Valuers); Mr. F. E. R. Bicknell, of Bradford (Lecturer, Bradford Technical College); Mr. W. B. Blanchard, of Hull; Mr. W. H. T. Brewer, of London; Mr. W. Forbes Campbell, of Dundee, Stirling and London; Mr. W. H. Fletcher, of Cardiff; Mr. W. R. H. Gardner, of Margate (Official Valuer to Margate Corporation under the Housing Act, 1923-25); Mr. R. S. Gledhill, of London (architect to the Housing Department, Bermondsey Borough Council, 1921); Mr. F. C. A. Harrington, surveyor, of London; Mr. D. Harris (partner in the firm of Widnell & Trollope); Captain C. K. Henderson (of the Surveyor's Office, Yale, Bristol); Mr. J. H. Hirst, F.R.I.B.A. (City Architect of Hull for over a quarter of a century); Mr. R. Holbrow, of Birmingham; Mr. C. J. Innes-Baillie, of London (member of the Royal Society of Arts); Mr. V. A. Lawson, L.R.I.B.A.; Mr. F. Mitchell, of Leeds; Mr. V. S. Peel, of Birmingham; Mr. J. B. Robinson, of Belfast (member of the Royal Institute of Architects of Ireland); Mr. J. Saunders (Surveyor to Leighton Buzzard Council); Mr. W. H. Silk, of Belfast (member of Ulster Incorporated Society of Architects); Councillor A. Sockett (retired Town Clerk of Middlesbrough and now President of the National Association of Auctioneers); Mr. F. Thackeray (Borough Architect, Merthyr Tydvil); Mr. R. F. A. Tutt, Barrister-at-Law (Town Clerk, Leighton Buzzard); Mr. F. G. W. Willard, of Tonbridge, Kent; Mr. E. G. Timbrell (Borough Surveyor of Crewe).

We understand that further members of Council still have to be elected.]

URBAN AMENITY

In the course of a lecture on this subject at Birmingham University, Mr. William Haywood, F.R.I.B.A., said the Town Planning Act of 1909 originated in a desire for the social improvement of new urban growth. The Act made no attempt to deal with built-up areas. It referred only to city land not yet developed, and was designed to prevent a continuance of the sordid and unhealthy social conditions to be found in most of our large industrial towns. The promoters of the Act were not ignorant of the merits of town management and central planning as practised in German cities, but their interest, as that of all English reformers of the nineteenth century, was for the betterment of housing conditions—after the manner already demonstrated at Bournville, Port Sunlight, and the Hampstead

Garden Suburb. Those communities had been built with a desire to give homeliness and charm to all aspects of community life, even to the smallest cottage; and although they were pioneer experiments in reform, they achieved their purpose far better than many of the schemes which had followed the Act.

It was not surprising perhaps that much of the good intended by Town Planning legislation has not been realised. It was difficult to combat incompetence in design, and already there was evidence here and there that new slums for future reformers would not be lacking. Beauty in town planning was a less tangible commodity than road construction and sewage disposal, and the loss by its omission was not so easily measured. Cities which neglected appearance did so to their own social and financial loss. In Birmingham the extension of Corporation streets would have been more profitable had its aesthetic possibilities been considered; and the treatment of the new station wall in Snow Hill, aided by the viaduct across Great Charles-street, would lessen the value of property in that part of the city while these conditions remained.

These were errors of the past, however, and there were hopeful signs for the future. The Ministry of Transport had recently made known that an adequate regard for beauty in the design of new road bridges would influence grants in aid. This was a notable contribution towards a greater consideration for aesthetics in town planning, and the best possible evidence of change in official practice which came none too soon. Public opinion also was moving towards a greater appreciation of beauty in public life and in this new interest we should find the impetus we needed towards a more imaginative treatment of town planning problems. We need not wait for new works in which to show our progress; there was preventable ugliness in our cities, chiefly in the design, production and fixing of such street accessories as lamp-post tramway masts, public conveniences, telephon boxes, and so on—details which, taken singly, might be of no great importance, but which, in the aggregate, were a constant reminder of local civic department.

Incorporated Church Building Society.

At the last monthly meeting of the Incorporated Church Building Society, held at Queen Anne's Gate, Westminster, the Hon. S. E. P. Thesiger, K.C.B., in the chair, grants were made towards rebuilding the church at Withycombe Raleigh, St. John-in-the-Wilderness, £50.

Towards enlarging or repairing the churches at: Ashill, St. Mary, £30; Bermondsey, Christ Church, £40; Dean, All Hallows, £60; Denford Holy Trinity, £50; Dorchester, SS. Peter and Paul, £15; Earlestown, St. John-the-Baptist, £150; Etton, St. Stephen, £25; Foleshill, St. Lawrence, £75; Grimsbury, St. Leonard, £40; Folkestone, St. Peter, £30; Higham, St. Mary, £50; Kentish Town, St. Benet and All Saints, £150; Kingsdon, All Saints, £25; Lode, St. James, £10; Morville, St. Gregory, £50; Newton, St. Botolph, £20; Othry, St. Michael, £20; Putney, St. Margaret, £100; Shocklach, St. Edith, £25; Silver on, St. Mary, £30; Walpole St. Peter, £15; Weston, St. Mary, £25; Whitstable, St. Peter, £225; Woolacombe, St. Sabinus, £50.

From the Mission Buildings' Fund grants were made towards: Allenton (Alvaston), £50; Cleadon Park, £75; Middleton, Holy Cross, £75.

The following grants were paid for works completed at: Birkenhead, Holy Trinity, £25; Brecon, St. David, £200; Brixton, St. Matthew, £80; Denshaw, Christ Church, £75; Gosport, Christ Church, £100; Harlton, St. Mary-the-Virgin, £20; Henlow, St. Mary-the-Virgin, £50; Hill Farrance, The Holy Cross, £30; Holloway St. James, £75; Manaton, St. Winifred, £125; Otterford, St. Leonard, £60; Quinton, St. Swithin, £50; Rampside, St. Michael, £50; Southend, St. Erkenwald, £100; Stydd, St. Saviour, £40; Thaxted, St. John-the-Baptist, £100; Walpole, St. Peter, £20; Walsingham Great, St. Peter, £50; West Hackney, Parish Church, £50; Wigmore, Mission Church, £100; Worstead, St. Mary, £25.

MODERN METHODS OF ROAD-MAKING

MR. C. HERBERT BRESSEY, C.B.E. (Chief Engineer, Roads Department, Ministry of Transport), reading a paper on this subject at the Surveyors' Institution on December 7, said that for the surface of our roads we are seeking more and more permanent and impervious materials which would avoid the vexatious process of frequent renewal. Incidentally, an impervious surface would enable the camber cross-fall of the carriageway to be reduced, thereby adding to the safety and convenience of drivers. Cambers of 1 in 24 and even steeper used to be common. In modern practice this had been reduced to 1 in 48. We are trying to provide highways of such width that it should not be necessary to lay mains and pipes under the carriageway. The wide road has the further advantage of allowing space for tree-planting, and of keeping the noise and vibration of traffic at a tolerable distance from the future householder's windows. We aimed at the suppression of abrupt changes of direction and sharp bends, substituting easy curves of long radius. Where, owing to the configuration of the ground, curves of slight radius were unavoidable, the outer edge was super-elevated or banked. Steep gradients, which so frequently occurred on the rigidly straight Roman roads, were avoided by modifying the line to suit the contours of the hill-side. In laying out the new arterial roads in the neighbourhood of London, we had almost invariably been found possible to limit the gradients to 1 in 30. Besides studying the need of traffic, we desired in forming new roads, so to locate them as to promote the development of the area traversed and increase its attractions. The Roads Improvement Act, passed last session, gives recognition to this principle by conferring upon the Ministry and highway authorities the power to incur expenditure upon tree-planting.

In the case of the North Circular Road between Edmonton and Chingford the flat and low-lying valley of the Lea had to be crossed in order to connect the counties of Middlesex and Essex. It was debated for some time whether the new road should be raised above flood level on an earth bank, in accordance with the usual practice; but having regard to the number of watercourses to be crossed, the difficulty of obtaining sufficient soil for the bank, and the length of time that must elapse before the bank would attain ultimate consolidation, it was decided that the purpose would be better served by a reinforced concrete viaduct which would impose no perceptible obstacle upon the flow of flood water down the valley, and would take all the streams, watercourses and other impediments in its stride. It would, moreover, present the great merit of being capable of completion at a single operation. Resting on a firm foundation of concrete piles, the new structure could be given its permanent running surface as soon as the concrete working had set, whereas in the case of a high earth bank piled on a marshy meadow, some years must elapse before the permanent road surface could safely be imposed, owing to the lengthy process of consolidation to which such banks are subject. The viaduct designed by Sir Owen Williams extends for a length of about 600 yards, and measures 60 ft. in width between parapets. There were two 10-ft. footways and a 40-ft. carriageway. Underneath the footways was space for mains, pipes, etc., whereas the carriageway would be entirely free from any services whatever. Not only would the viaduct connect the teeming suburbs of Middlesex and Essex, now severed by the Lea marshes, but it would also supply one of the last of the missing links in the North Circular Road which would soon span London in a curve 26 miles long extending from Woolwich Ferry to Kew Bridge where access was gained to the new Great West Road, 120 ft. wide.

Having referred in detail to questions affecting arterial roads and road widenings, the lecturer gave some practical information regarding to carriage-way construction. On a firm chalk stratum in Kent, he said, it

sufficed in many cases, after preliminary shaping operations, to form a layer of well-compressed clinker to carry the surfacing coat. Equally serviceable as a natural foundation was a well-drained bed of coarse gravel; finer gravels, and even so fine a material as sand, were not to be despised, provided that the latter had no opportunity of escaping laterally under pressure. The bearing capacity of clay, loam and other similar subsoils was so diminished by the presence of water that the utmost care should be taken to ensure adequate drainage before road-making operations began. The want of uniformity and reliability in the chance supplies of material available for hardcore in areas devoid of quarries had led of late to a notable extension in the use of cement concrete as a road foundation. In the south-east of England, where hitherto, for want of other resources, brick hardcore had largely been used, concrete was increasingly likely to take its place. Hardcore was so nondescript and uncertain a material that it obviously forms a somewhat hazardous foundation for a road designed to endure modern traffic stresses.

The life of a waterbound macadam road could be extended by the judicious use of surface dressings such as tar or various bituminous mixtures, which should be applied in warm sunny weather to a thoroughly swept, dry carriage-way, the surface of which should then be "gritt" with chippings, fine shingle or sand. Crude tar should not be used, as it often contained ingredients injurious to fish life. An interesting development of the last year or two was the introduction for use as surface-dressings of various asphaltic or bituminous emulsions which could be applied cold, regardless of the weather.

The adoption of tar as a surface-dressing led, not unnaturally, to its use as a binder, to be mixed with materials prior to their application, so that the road crust for its entire thickness might become a cohesive mass. The introduction of this method had enabled materials such as Kentish Rag, limestone and slag to be utilised, which would not be suitable for use under the waterbound method.

The speaker then quoted a few particulars from a recent specification for (a) one-coat; and (b) two-coat bituminous clinker surfacing, pointing out in passing that special interest attached to this process as it enabled profitable use to be made of an otherwise almost valueless material—clinker.

(a) The one-coat surfacing was to measure 2 in. in thickness after complete consolidation, and to have a cross-fall or camber of 1 in 50. The mineral aggregate was to consist of well-burnt hard clinker, free from coke, ash, or foreign matter. The bitumen had to comply with certain "penetration" and "solubility" tests. The concrete foundation, after thoroughly cleansing, was painted with a coat of hot bitumen. The clinker aggregate was to be mechanically broken to pass a half-inch mesh screen, and should consist of approximately the following proportions of smaller grades:—

	per cent.
Clinker evenly graded, $\frac{1}{2}$ in. to $\frac{3}{4}$ in.	33
Clinker passing 10-in. sieve	
" " 20-in. "	...
" " 30-in. "	... 20
" " 40-in. "	...
" " 50-in. "	...
" " 80-in. "	... 5
" " 100-in. "	... 10
" " 200-in. "	... 15
Soluble bitumen as specified Clause 20	17
Total ...	100

The clinker was to be thoroughly dried and heated to a temperature of 300 to 350 degrees Fahrenheit. It should be mixed in a mechanical mixer with 17 per cent. of soluble bitumen. After thoroughly mixing, the material was to be delivered on to the road at a temperature of 300 to 350 degrees Fahrenheit and spread with hot rakes to the specified thickness. Rolling should immediately follow with a light roller.

(6 to 7 tons), and as the temperature of the material fell the rolling was to be continued with a 10 to 12-ton roller until no impression was made upon the road surface, which was subsequently to be dusted over with cement, or other approved filler so that a close compact surface might be formed.

(b) The two-coat surfacing comprised a sub-crust or binder course measuring $1\frac{1}{2}$ in. after consolidation and a wearing surface measuring $1\frac{1}{2}$ in., total finished thickness 3 inches. For the binder coat the clinker was so graduated as to form a close dense mixture from $\frac{1}{2}$ -in. gauge downwards, and 12 per cent. by weight of bitumen was added. The top coat or wearing surface was composed of finer clinker graduated from $\frac{1}{2}$ in. downwards, with 10 per cent. of Portland cement and 15 per cent. of bitumen added. The process of laying and rolling followed that already described for the single-coat work.

A road-making material (running surface) now attracting much attention from engineers was cement-concrete. Special interest attached to the application of concrete in view of the wide range of materials utilisable as aggregate, as compared with the very uneven geographical distribution of good road-stone supplies. On the other hand, concrete was somewhat handicapped by the lengthy period of setting and "curing," which was requisite before the new surface could be subjected to the strain of traffic. This unavoidable delay was of less moment in the case of entirely new roads than in that of the reconstruction of existing highways, where acute inconvenience was caused to traffic by any lengthy period of closing. It seemed not unlikely that this difficulty might be mitigated in future by the use of quick-setting cements.

It could not be said that standard specifications and practice had yet been evolved in the matter of concrete road construction in this country. There was considerable variety of method. The construction might take the form of one-course work or two course work, the former consisting of one grade of concrete for the full thickness, while the latter provided two layers of concrete mixed in varying proportion. One course work was simpler, and avoided the risk of cleavage between two layers of differing consistency. For two-course work economy could be claimed in some instances, on the ground that a poorer concrete could be used for the lower layer. In America great lengths of new concrete highway were now being constructed across tracts of country hitherto unprovided with modern roads. The concrete measured 8 in. to 9 in. in thickness and 18 ft. to 21 ft. in width, with a scarcely perceptible camber.

In the actual process of laying the concrete, there was also much variety of practice, some engineers preferring to proceed continuously, while others adopted the "alternate bay" system, in which the carriage-way was divided into slabs of uniform length, each extending the full width of the carriage-way. The length of the slab might vary under different specifications between 20 ft. and 50 ft. If one numbered the slabs consecutively the odd numbers would be laid first, separated by gaps representing the even numbers; these gaps would not be filled until the odd numbers had completely set. By this means it was hoped to counteract the effects of expansion and contraction, which were the bugbear of the concrete road engineer. The transverse joints separating the slab were sometimes disposed at right angles across the road; in other instances they lay at an angle of 60 degrees or so to the kerb-line, so that the impact of the wheels of the vehicle did not strike any slab simultaneously.

The aggregate, consisting of crushed stone or gravel, should not only be clean but should be well graded in size, so as to reduce the percentage of voids to a minimum. In American practice the specification often prescribed that the stone should be retained on a screen $\frac{1}{2}$ in. mesh, and pass a screen of $1\frac{1}{2}$ in. mesh. In some a $\frac{3}{4}$ in. mesh was substituted for a $\frac{1}{2}$ in. Risks of failure in the concrete were greatly reduced by washing the aggregate. The sand, too, must pass a rigorous test for cleanliness, and should be condemned if containing more

than 3 per cent. of loam, earth, or clay. The particles of sand should have the largest possible range of size from fine to coarse, but if only one grade was obtainable, coarse was to be preferred. The water used in mixing the concrete should be reasonably free from alkalis, acids, and vegetable matter. The proportions commonly adopted varied from 1 cement, 1½ sand, and 3 gravel to 1 cement, 2 sand, and 4 gravel. Only a bare sufficiency of water should be added—a very wet mixture encouraged voids. Uniformly reliable results were hardly attainable by hand mixing, unless a very close degree of supervision was exercised. Far greater confidence could be felt if mechanical mixing plant was adopted. The utmost expedition should be used in placing the newly-made concrete in position and consolidating it, for which purpose the use of mechanical tamping and finishing machines was greatly favoured in the United States, where they were found to play an invaluable part in minimising voids. It was often desirable slightly to moisten the sub-grade before depositing the concrete, so as to prevent absorption of water from the concrete.

The precautions to be taken during the setting of the concrete depended largely on the climatic conditions. In moist weather no harm would arise from leaving the green concrete uncovered for a few hours, but in hot sunny weather exposure would lead to the formation of hair cracks. Heavy canvas was often used for protecting the concrete during the first 24 hours of setting. The canvas was then removed, and a layer of earth spread over the surface about 2 in. thick and left there for a fortnight or so.

For the purpose of indurating the surface of the cement concrete, recourse was sometimes had to two or three applications of a weak solution of silicate of soda. Where anxiety was felt as to the soundness of the sub-soil on which concrete was laid, and it was accordingly desired to form a slab qualified to serve as a raft or bridge, one or two layers of metal reinforcement were often introduced into the concrete.

THE COLLEGE OF ESTATE MANAGEMENT

IN the course of a lecture on "Rating in the Metropolis," at the College of Estate Management, Mr. C. Gerald Eve, F.S.I., F.A.I., after explaining the nature of the quinquennial, provisional and supplementary valuation lists, emphasised the fact that a provisional list could be made only where a specific "cause" (such as a structural improvement) had arisen during the current year; a provisional list could not be made in respect of an improvement carried out in a previous year. The "cause" itself must not be one affecting all hereditaments, but must be one affecting a particular hereditament or a particular class of hereditaments. The premises on which a change had been made should not be re-valued for the purpose of a provisional list, for it was the value of the change only which was to be assessed. The supplemental (or quinquennial) list at the end of the year was retrospective, in that, if a property was assessed at a lower value than that in the provisional list, a person who had paid on the higher basis might reclaim the excess. In dealing with notices and objections, he laid stress on the fact that there was under the Act of 1869 only one "meeting" for the consideration by the assessment committee of objections on re-deposit, though this "meeting" might be adjourned from time to time. Objections, which under the Act must be made at least seven days before the "meeting," would be out of time if lodged seven days before an adjourned hearing. Mr. Eve then dealt with the statutable deductions under the 1869 Act and under the Valuation (Metropolis) Amendment Act, 1925, an Act which, in his opinion, was producing some most unequal results for similar properties. In regard to forms and returns, the assessment committee sometimes asked for information which they were not authorised to ask for by Section 57 of the 1869 Act. It was held by the House of Lords that the trade takings of licensed premises need not be divulged.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting?—ED.

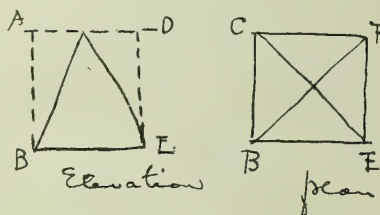
Penalty Question.

SIR,—We have a contract (with a penalty clause) which should have been finished about six months ago, but owing to alterations, non-delivery of material, and sub-contract work, arranged direct by the architect, being unfinished, we have been unable to complete. Are we entitled to claim the penalty for this delay from our client?

P. W. G.

Measuring Stonework.

SIR,—I have recently been measuring stonework and "taking-out" the labours on the same in detail, and a difference of opinion has arisen as to whether "beds and joints" should be taken to stones similar to the sketches of one given in accompanying sketch, i.e., half-beds to A D and B E, and half-joints to A B and D E,

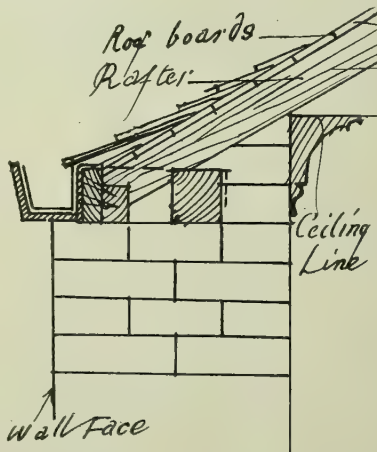


and whether such measuring would be in accordance with the "Standard Method of Measurements of Builders' Work" issued by the Surveyors' Institution, or otherwise. It will be observed that the faces A B and D E are not in contact with other stones or surfaces, but sunk. Perhaps one of your readers would give an opinion on this.

Q. S.

Fixing Gutter.

SIR,—I have been fixing a new gutter, 5 in. by 6 in. ordinary gauge, in cast-iron, to a building 60 ft. high. The fascia board is 1½ in. by 5 in. Blocked between each rafter is 3 in. by 4½ in. yellow deal, well nailed to sides of rafters, so that the fascia board is practically 4½ in. thick. The fascia and blocks are sound. To the fascia I screwed some specially-made brackets (which fitted exactly all around outside of gutters) of 1½ in. by ¾ in. wrought iron, using 3½ in. No. 18 screws for the purpose. These brackets were fitted every 3 ft. on fascia, so that each 6 ft. length of gutter had three brackets to hold it. Furthermore, I had holes drilled in the gutter



between brackets, and screwed gutter to fascia with 3 in. by No. 18 screws every 1 ft. 6 in. between holes. Now, I am informed that the brackets and fixings would not be safe to carry

a duck board if such should be necessary at any time, and have instructions to make brackets for over wall plate with 3 in. lip and to screw to top of wall plate as well as fascia. I realise this is most certainly stronger, but I would like your opinion as to whether I was justified in stating that the extra strength was not at all necessary. Would any reader work out for me the exact thrust required to draw these 3½ in. screws from such fixing as described, should anyone happen to be working on the roof, which is pitched at 30 degrees to ceiling line with duck board on such staging.

REGULAR READER.

Contract Documents.

[REPLY TO "T. L. W.," DECEMBER 4.]

SIR,—There is no rule as to what document should be furnished the contractor invited to tender for an entire contract. Nor is there any rule of law which determines what document "must" be in his possession, so that he can prepare his estimate. There is nothing, however, to prevent his making an "offer" of tender without taking the precaution to examine essential documents; though it is unwise to do so. And if his "offer" is subsequently accepted it is binding, and he must complete the "entire" contract at the price tendered. It is customary to state in the invitation to tender that documents will be furnished to all. In contracts of any magnitude bills of quantities are provided and these only, together with a form of tender are supplied to the contractor, opportunity being afforded for inspecting the plans, drawings and specification, and, in certain instances, the form of contract. When, however, bills of quantities are not provided, either arrangements are made for the contractor to inspect the specification and drawings, &c., in order to make up his tender, or one, or all, of them, are sent to him, for a period, for a like purpose. It is obvious that it is to the contractor's interest to obtain all documents forming part of the contract, and to which all contractors competing have access, in order that he may have a fair chance. In any case, it is wise to peruse and understand the form of contract proposed to be used for the work, and which the contractor is usually informed in the invitation he will be required to sign.

"CONTRACTOR."

SIR,—In order to prepare a tender for work of any size it will be necessary for the tendering firm to have complete explanatory plans and specification, or complete specification and bill of quantities, with access to the plans on view at surveyor's or architect's office. In the former case it will be necessary for the tendering firm to prepare their own bill of quantities. The documents to be signed on making the contract will be in the first case the contract agreement, the contract plan, and the contract specification. In the second case these will comprise the above documents together with the contract bill of quantities. In many districts it is the custom to embody the specification within the bill of quantities.

"A. X."

Making of Special Bricks.

SIR,—A brickmaking business in a small way, but with up-to-date pressing plant, finds that there is a demand for a certain amount of cant bricks and bull-nose for the making of which the plant does not provide. Have any of your readers any suggestions how this demand may be met without large outlay in the way of new plant?

"BRICKS."

Contracts.

SIR,—I have been told that in this country a tender presented and signed by the contractor, and written acceptance thereof make a good contract in law without any further signed contract agreement. Can you tell me whether this contention is correct?

"QUERY."

THE BUILDING TRADE

RATING AND ASSESSMENT BILL : REPORT STAGE

II.

CONTINUING our notice of the proceedings on "Report" stage of the Rating and Assessment Bill to clause 52, which relates to proceedings on appeal, an amendment was moved accepted by the Government that on appeals to quarter sessions under the Act any appeal to the appeal can be heard either in person or by counsel or by a solicitor. To those of our legal friends who may not have studied the Act, this amendment might give a shock, but quarter sessions there is exclusive right of defence to counsel; but under this Act, this is not the ordinary court of quarter sessions, but duties under the Act are delegated to a committee of the justices of the county, and the justices are to hold their courts at one or more places as the committee may think proper, having regard to the convenience of parties. With regard to clause 48, which deals with the publication of the Bill to London, a very important pronouncement was made by the Minister of Health, in moving that this clause should be omitted from the present Bill. He is reported as having said that after discussion with the London County Council and representatives of Metropolitan boroughs, it had been recognized that as the next quinquennial valuation for London would not take effect until 1931, it would be necessary in any case to introduce a new Bill relating to London before that date was reached, and therefore it seemed better to leave the matters dealt with in this section until the new Bill was introduced. But the most important feature in the Minister's announcement was that he had also given an assurance that the provisions as to separate valuations for rates and taxes should not be barred from consideration when the new legislation was considered. This clearly illustrates the chameleon nature of this Bill in its passage through Parliament. When it was introduced the single valuation prevailing in London was stated to form the model on which the Bill was framed; London was held as the good boy of the class with uniformity which the rest of the country ought to conform to, but now the rest of the country has been allowed to continue in the error of its ways, and more than doubtful whether London should retain its unique position.

As regards the City of London, the Minister stated that some concern had been expressed as to the application of the provisions relating to rating of machinery in clause 24 which had already been passed, and without giving a definite edge he would see when he brought in the new Bill relating to London whether some provision should be made, by giving it retrospective effect, to apply the provisions of that clause to such machinery in the City that came within its scope. Clause 61, which relates to the inspection of documents without payment of a fee, was amended by empowering the local authorities to charge a fee to ratepayers in respect of documents more than ten years old, the Minister undertaking that the clause should be so framed as to prevent an unreasonable charge.

It will be remembered that under clause 64 as amended in Committee, all Crown property used for public purposes was to be rated in accordance with the provisions of clause 22 of the Bill, this clause having been carried against the Government. The Minister moved that this clause should be deleted, and pointed out the difficulties it involved, whilst the present system under which such properties were rated by agreement worked fairly and equitably. The clause was then withdrawn without a division. An amendment moved by Sir Kingsley Wood, for the purpose of facilitating the new rating authority in entering upon their duties on the appointed day by relieving them of certain preliminary work, was also agreed to without a division. In clause 70, which contains the

definitions, on the motion of the Minister, the definition of "rate" was amended so as to make it clear that it should not include water rates, or "garden" or "square" rates, if levied by any persons other than a rating authority.

On Part I of the Second Schedule, the deductions from gross value were the subject of discussion, and an amendment moved by Mr. Peto was accepted by the Government making the amount of the deduction where the gross value of houses and buildings without land other than gardens does not exceed £20, 40 per cent. in place of 33½; but the position did not remain there, for, by a further amendment moved by Mr. Peto, the value of the houses was reduced to £10 instead of £20, the latter figure being deleted. The result of the composite amendments accepted appears to be that where the value does not exceed £10 the deduction is to be 40 per cent., but where it exceeds £10 but not £20 then as in the Bill, 33½.

There is a note to Part I of the Second Schedule, which provides that for the purposes of this part of the Schedule the expression "houses and buildings" does not include mills, manufactories, or premises of a similar character used wholly or mainly for industrial purposes; this has been enlarged on the motion of the Government by the addition to the exceptions of the words, "or hereditaments valued as part of any railway, dock, canal, gas, water, electricity, or other public utility undertaking."

A motion to delete from Part II of the Second Schedule the 75 per cent. of the net annual value of agricultural land was defeated, but an amendment making the 75 per cent. deduction apply to certain buildings used in connection with agricultural operations was left by the Government to a free vote and was carried by a majority of 142—261 votes for, 119 against. The Minister pointed out that this would involve an increased burden on other ratepayers if it was accepted, reducing the rates on agricultural land by some £600,000 to £700,000 out of a total amount of about twenty-one million pounds raised from rural areas, which might involve an increase of between twopence to sixpence in the pound to other ratepayers, but there was some analogy between this proposal and the rating of machinery, and, therefore, the Government felt that the same course should be adopted as in the case of machinery and the decision left to a free vote of the House; but the Minister intimated that no subsidy could be expected from this Government after this concession had been granted. It is not quite clear from the report whether the above figures relate to the 75 per cent. reduction on land alone, or including buildings.

Part III of the Second Schedule, which provides for "Schemes for determining certain deductions in urban areas," was the subject of a Ministerial amendment, which we need not detail here as it is of considerable length.

In the Third Schedule, which specifies the classes of machinery and plant to be deemed to be part of the hereditament, after the words "lifts and elevators" were inserted the words "mainly or usually used for passengers."

In Part II of the Fifth Schedule, clause I, which relates to arbitrators nominated by Courts of quarter sessions, an amendment was accepted, providing that the arbitrator should be a person agreed upon between the parties, or in default of agreement a person appointed by the President of the Surveyors' Institution.

Milford Sanatorium Extension.

The Surrey County Council propose to increase the accommodation of the Milford Sanatorium from 200 to 300 beds, at a cost of £197,746. Mr. Sidney Tatchell, F.R.I.B.A., is the architect.

BUILDERS' FOREMEN AND CLERKS OF WORKS' ASSOCIATION

THE annual dinner of the London Association of Builders' Foremen and Clerks of Works was held at the Holborn Restaurant on Saturday, December 5, the chairman being Mr. F. D. Huntingdon, F.I.O.B. (F. D. Huntingdon, Ltd.). Amongst those present were:—Mr. G. H. White, General Secretary, Mr. F. Denning, Mr. J. T. Cummings, M.B.E., Mr. F. Thorne, F.I.O.B. (President of the London Association of Master Builders), Mr. Austen Hall, F.R.I.B.A., Mr. H. Watkins, Mr. B. Carter.

The toast of "The King" was proposed by the Chairman.

The toast of the London Association of Builders' Foremen and Clerks of Works having been proposed by the Chairman and responded to by Mr. F. Denning, Mr. G. H. White, giving a short history of the Association, said that it was formed in 1894 as The Builders' Foremen's Association by a few enthusiasts, who had as their main object their mutual benefit and protection. In the course of some 20 years the membership had increased and multiplied considerably, and as in course of time many of their foremen members became clerks of works, it became necessary to change their name; soon afterwards they became affiliated to the National Federation in conjunction with other provincial associations, and took their present name. They had now 360 active members. The aims of the Association were many and varied, among them being provision for placing their disengaged members in fresh engagements, provision for an unemployment benefit fund, and a pensions fund for the widows of deceased members. This fund was established in 1904, and at the present time 17 persons were deriving benefit from it at an annual cost of £400. This fund was maintained by a proportion of their subscriptions and any other donations that might accrue.

Mr. Huntingdon, replying, said that foremen and clerks of works were the motors of our industry; without them no architect, however talented, could complete his buildings, and no contractor, however able, could construct them. Speaking of the fund, he said that unfortunately there were cases where one did not have reasonable luck; there were accidents; there were cases when the physique of a man was insufficient, and the case of the man who had given the best years of his life but was passed over, and possibly found himself an old man, still able and competent but unrequited. It was largely for this latter reason that this Association expected substantial support.

Mr. J. T. Cummings proposed the toast of The Building Trade, Architects and Surveyors, This was responded to by Mr. F. Thorne, F.I.O.B., and Mr. Austen Hall, F.R.I.B.A.

Mr. Thorne said that for a long time the industry had been traduced by men of low ideas. Some people were calling them jerry-builders, but for some time past they had been living it down; there was no industry in this country that had the right to call itself a permanent industry unless it be theirs. Foremen and clerks of works, and architects and surveyors, and quantity surveyors were to-day more than ever responsible for the benefit of the goodwill of this country. Since the war they had had to pass through the tribulation of high prices and small output; this phase he believed to be passing away. There was prohibition placed by the crafts upon the crafts in the way of restrictions on employment of labour. Mr. Thorne informed them that he was not a trade unionist, but believed that a man was worthy of his hire, and he (the speaker) believed they should pay a fair price for the best. He wanted them to understand that the master builders wished to create an atmosphere whereby they could elicit the best from the workman; they could only do this by the human touch. He

advocated the policy of letting the workman know that they were personally interested in his welfare, and that the building trade was not, and not meant to be, all pocket and dividend; if this were done he was sure every man would give of his best. If they treated the workman as if he were a human being, they would be stamping out class hatred and its danger. It was possible to-day to bring down the cost of building to such an extent that local authorities would give them the advantage of their finances; but only by private enterprise could the people of this country be housed and covered.

Mr. Austen Hall, F.R.I.B.A., said that it was impossible to exaggerate the value they attached to the skill of the foremen and the clerks of works with whom they came into contact. He had noticed that there existed the closest co-operation between the master builder and the foreman; the foreman was the master builder's trusted agent, whilst superintendent of the works, and nobody was quicker to notice this confidence and understanding than the architect, who found his affairs progressing well as a natural consequence. The improved understanding between the masters and the men depended more upon the foreman than upon anyone else.

The toast of the Visitors was proposed by Mr. G. H. White, and responded to by Mr. Hugh Watkins.

The toast of the Chairman was proposed by Mr. Ben Carter.

Underground Stations Reconstruction.

A start is shortly to be made with the rebuilding of Charing Cross Underground station. A contract has been placed with Messrs. John Mowlem & Co., Ltd., for the construction of the new subways and circulating area beneath the District Railway permanent way and platforms.

The Underground has placed a contract with James Carmichael for the entire reconstruction of the City line stations at Clapham-road and Oval. The schemes provide for the removal of the lifts and the installation of escalators.

Reinforced Concrete.

On the occasion of their tenth anniversary Messrs. Peter Lind & Co. have issued a new catalogue of plans and illustrations of work designed and carried out by them. The firm has closely studied and developed the possibilities of reinforced concrete from an economical, structural and æsthetic point of view, and in selecting these illustrations the endeavour has been to make them representative of the various kinds of structures that the firm has carried out. The brochure must make an intimate appeal to friends and customers, for whom it has been principally prepared, but it has also a broad general interest for all who are in any way concerned with reinforced concrete. The illustrations given are wholly of executed work, for the firm believe that the work itself is greater testimony to merit than any verbal description overflowing with superlatives. The illustrations are divided into sections, the first of which includes industrial buildings, foundations and piling. The big, clean-cut spans obtainable by reinforced concrete are eminently suited for warehouses and industrial buildings generally, where every square foot of space is wanted, and cleanliness and light are qualities of first importance. A good example of work in this connection is afforded by a stove and meter works at Fulham for the Gas Light & Coke Co. Gasworks, coal bunkers and tar tanks are other structures where reinforced concrete has been used with entirely satisfactory results. A large section is given over to bridges and culverts; it is here perhaps that reinforced concrete is seen to best advantage, for the delicate yet firm lines of the bridges depicted are unobtainable in any other materials. The benefit of the firm's experience is placed at the disposal of all who may be contemplating reinforced concrete work. The London offices are at 2, Central Buildings, Westminster, S.W.1.

NEW BUILDINGS IN LONDON.

Battersea.—The L.C.C. have bought a site in Meteor-street, S.W. 8, for a new elementary school. Mr. G. Topham Forrest, F.R.I.B.A., architect to Education Committee.

Becontree.—In view of extensive housing developments, the Co-operative Wholesale Society, Ltd., 99, Leman-street, E.1, have bought a site for a branch stores. Mr. L. G. Ellins, F.R.I.B.A., society's architect.

Bow-road.—Alterations are to be effected at the chapel of the Bow Institution at 2, Bow-road, E. Mr. Albert E. Pridmore, F.R.I.B.A., architect, 3, Broad-street Buildings, E.C. 2.

Canning Town.—Plans have been prepared by H.M. Office of Works, Storey's-gate, S.W.1, for alterations, &c., to the Canning Town Employment Exchange. Messrs. Marrable Bros., contractors, 60, Pretoria-road, E. 11.

Caxton-street.—Messrs. Chandos Court Mansions, Ltd., have let the corner shop in Caxton-street to Messrs. R. Lewis & Co. Mr. Ernest Cannell, M.S.A., 259, High Holborn, W.C.1, architect to property. Messrs. Elliott & Son, shop fitters, Reading.

East Dulwich-grove.—Plans for a new X-ray department, dark room, electrical treatment room, and stores, at the East Dulwich-grove Hospital, have been prepared by Messrs. A. Saxon Snell & Phillips, architects, 9, Bentinck-street, Manchester-square, W. 1. Mr. William C. Moore, quantity surveyor, Devereux Buildings, Devereux-court, Strand, W.C. Messrs. Prestige & Co., Ltd., builders, Cambridge Wharf, Grosvenor-road, S.W.1.

East Ham.—An early start is to be made with the East Ham Memorial Hospital building scheme, in Shrewsbury-road. Accommodation for sixty-six beds is provided in the plans of Messrs. F. E. Meurice & Smith, A.R.I.B.A., architects, 11, New-court, Lincoln's Inn, W.C. Mr. J. Rockwood, F.S.I., quantity surveyor, 25, Bedford-row, W.C.

Edgware.—A row of 17 shops with flats on two stories is to be erected at the corner of Hale-lane and Edgwarebury-lane, under the direction of Mr. F. Howkins, surveyor, 1, Russell-parade, Golders Green. Mr. Howard Farrow, builder, Russell-parade, N.W.11.

Eltham.—Plans have been prepared for new shops, &c., at the corner of Eltham High-street and Grove-yard. Mr. J. A. Emes, architect, 21, Surrey-street, Strand, W.C.

Fetter-lane.—Large offices and works are to be constructed at Rolls-buildings, E.C. 4, for Messrs. *Daily Mirror Newspapers, Ltd.*, 23, Bouverie-street, E.C. 4. Mr. Nelson Wise, excavation, Henshall-street, N. 1; Messrs. Moreland, Hayne & Co., Ltd., steelwork, 80, Goswell-road, E.C.1. Messrs. Killby & Gayford, Ltd., builders, 87, Worship-street, E.C. 2. Messrs. Herbert O. Ellis & Clarke, architects, 3, Old Queen-street, S.W. 1.

Fleet-street.—The entire island site forming New-street Square, E.C. 4, has been bought by Messrs. Wyman & Sons, Ltd., Fetter-lane, E.C. 4, for warehouse and office premises. Messrs. Walter Lawrence & Sons, Ltd., 19, Finsbury-square, E.C. 2, builders. Messrs. B. Goodman, Ltd., 88, Haggerston-road, E., excavation. Messrs. Brown & Barrow, architects, Lennox House, Norfolk-street, W.C. 2.

Fleet-street.—Alterations and improvements are to be made to premises in Wine Office-court, E.C. 4. Mr. John C. Mather, architect, 38, Northampton-street, N. 1.

Hammer-smith.—A further section of the rebuilding scheme at the emporium in Hammer-smith Broadway and King-street, W. 6, is to be put in hand by Messrs. Palmer's Stores, Ltd. Messrs. John S. Quilter & Son, architects, 3, St. James's-street, S.W. 1.

Harrow.—A new factory for Messrs. Kodak, Ltd., Kingsway, W.C., of two stories, 500 ft. in length, is being erected by Mr. H. Peikrill, builder, the Bridge, Wealdstone. Messrs. Trussed Concrete Steel Co., Ltd., reinforced

concrete engineers, 22, Cranley-gardens, Kensington, S.W. 7.

Hemel Hempstead.—A one-story mat ward block for ten beds is to be added to Hemel Hempstead Hospital, for the Comm. Messrs. Paine & Hobday, F.R.I.B.A., archt, 2, Millbank House, Wood-street, Westminster, S.W. 1.

Hornsey.—Accommodation will be provided for 810 scholars at a new school on the Co Housing Estate. Mr. H. Carter Pegg, F.R.I.B.A., 35, Parliament-street, S.W. 1, architect, Hornsey Education Committee.

Hounslow.—Messrs. William Harbrow, builders, 214, Rotherhithe New-road, S.E., are developing an estate for housing purposes.

Lewisham.—The Athelney-street Elementary School is to be enlarged to plans by Mr. Topham Forrest, F.R.I.B.A., architect, C. Hall, S.E. 1.

Morden.—A new terminal station is to be built on the City and South London Railway extension, to plans prepared by Messrs. A. Holden & Pearson, F.R.I.B.A., 9, Knighbridge, S.W.

New Oxford-street.—Messrs. Cole, Loan Co., Ltd., 45, Museum-street, W.C. 2, are extending the premises at the corner of New Oxford-street, and Hart-street, W.C., for Mr. Barclays Bank, Ltd. Messrs. H. Young Co., Ltd., Nine Elms Ironworks, S.W. 8, work. Mr. Dudley S. Marsh, architect, Chancery-lane, W.C.

Norbury.—Plans have been approved for a large palais de danse and cafe-restaurant on London-road. Mr. F. C. Mitchell (Messrs. Mitchell & Mitchell), 80, George-street, Porters-square, W. 1, architects.

Oxford-street.—The plans for the block of residential self-contained flats to be built in Cork-street, W.1, referred to in a recent issue will be designed by Mr. Gervase B. F.R.I.B.A., King's Buildings, King's-square, S.W.1.

Regent-street.—Messrs. Callard Stewart Watt, confectioners and bakers, Old Broad-street, W.1, propose to increase their capital from £250,000 to £500,000, of which £200,000 is required to provide the cost of building and equipping their new restaurant and office premises in Regent-street, W.1. Messrs. How & Co., 3, Broad Court Chambers, Covent Garden, W.C., builders. Messrs. William Woodward & Sons, 15, Great James-street, W.C.1.

St. Pancras.—Funds are being raised to build Queen Charlotte's Hospital, in Marylebone-road, N.W.1. Messrs. Jarvis & Richards, architects, 60, Tufton-street, Westminster, S.W. 1.

Tudor-street.—Messrs. *Daily News and Telegraph, Ltd.*, Bouverie-street, E.C. 4, are to build a large extension of their works and warehouse at the junction of Tudor-street and Bouverie-street, E.C. 4. Messrs. Trollope & Colls, Ltd., builders, 5, Coleman-street, E.C. 2; Messrs. Moreland, Hayne & Co., Ltd., steelwork, 80, Goswell-road, E.C.1. Messrs. M. E. & O. H. Colson, architects, 115, Old Broad-street, E.C. 4. Sir Douglas Fox & Partners, consulting engineers, 54, Broadway, Westminster, S.W. 1.

Upper Edmonton.—The Edmonton Union propose to build a mortuary and post-mortem room at the North Middlesex Hospital, in Silver-street. Mr. J. C. S. Mummery, A.R.I.B.A., architect, 34, Bloomsbury-square, W.C. 1.

Walthamstow.—The Walthamstow, Wanstead and Leyton Hospital, in Orford-road, E. 7, is to be enlarged at a cost of £35,000. Mr. F. J. Coxhead, builder, 45, Blumer-road, E. 1. Mr. J. Andrew Minty, A.R.I.B.A., architect, 35, Craven-street, Strand, W.C. 2. Messrs. Waggett & Bradford, quantity surveyors, 2, Regent-street, W. 1.

Waterloo-place.—New office premises, with a Portland stone frontage, are being erected in Waterloo-place, Regent-street, S.W. 1, to the plans of Mr. Durward Brown, architect, 2, Regent-street, S.W. 1. Messrs. Holland & Hannen and Cubitts, Ltd., builders, 256, Grays Inn-road, W.C.

LONDON MASTER BUILDERS' ASSOCIATION

ANNUAL DINNER.

OVER three hundred members and guests of the London Master Builders' Association were present on Wednesday evening at the annual dinner of the Association, held at the Hotel Victoria, Charing Cross, under the chairmanship of Mr. Fred Thorne, J.P., the President.

Amongst those present were: Sir John Byford, Col. A. J. Foster, C.M.G., Mr. G. Topham Forrest (Architect to the London County Council), Mr. G. W. Humphries (Chief Engineer to the London County Council), Mr. Arthur Keen (Vice-President, Royal Institute of British Architects), Sir Frank Baines (Director of Works, H.M. Office of Works), Mr. J. M. Theobald, F.S.I., Mr. F. Higgs, Major R. J. Holliday (President, Institute of Builders), Mr. Stanley Hamp, F.R.I.B.A., Mr. A. B. Falkner, Mr. W. E. Watson, F.R.I.B.A., Mr. H. D. Searles-Wood, F.R.I.B.A., Sir Walter Lawrence, Sir J. Walker Smith (Director, National Federation of Building Trades Employers), Mr. T. P. Bennett, F.R.I.B.A., Mr. A. H. Adamson, Mr. W. J. Lansdell (President, Southern Counties Federation of Building Trade Employers), Mr. A. A. Fillary (President, District Surveyors' Association), Mr. J. R. Farnood (President, London Builders' Foremen's Association), Mr. A. G. White (Secretary, National Federation of Building Trade Employers), Mr. P. J. Spencer (Secretary, Institute of Builders), Mr. John Croad (President, National Federation of Building Trade Employers), Mr. Josiah Gunton, F.R.I.B.A., Sir Frederick Rice, Sir Charles Ruthen, Mr. C. E. F. Everett (President, Eastern Federation of Building Trade Employers), Mr. G. A. G. Robertson, Mr. Ralph Knott, F.R.I.B.A., Mr. F. L. Griggs, Mr. A. F. A. Trehearne, F.R.I.B.A., Mr. F. D. Huntington, Mr. G. R. Holland, Mr. George M. Burt, Mr. R. L. Roberts, Mr. Henry T. Holloway, Mr. E. J. Brown (Director, L.M.B.A.), Mr. Percy C. Culver, Mr. G. H. Parker, Mr. F. J. Walton, Mr. F. J. Gayer, Mr. A. Alban Scott, Mr. A. Roome, Mr. G. Lansdown, F.R.I.B.A., Mr. H. E. Steinberg, Mr. S. Gordon Jeeves, F.R.I.B.A., Mr. L. Martin, F.R.I.B.A., Mr. E. G. Cole, F.R.I.B.A., Mr. Charles Boot, Mr. Ben Carter, Mr. W. M. Epps, F.R.I.B.A., Mr. R. S. Ayling, F.R.I.B.A., Mr. E. S. Collins, F.R.I.B.A., Mr. G. J. Aldous, Mr. Thos. Wallis, F.R.I.B.A., Mr. G. S. Roberts, Mr. F. Harbrow, Mr. W. B. Simpson, F.R.I.B.A., Professor A. E. Richardson, F.R.I.B.A., Mr. C. Lovett Gill, F.R.I.B.A., Mr. Alfred Cox, F.R.I.B.A., Mr. H. G. Fairhead, Mr. W. J. Walford, F.R.I.B.A., Mr. A. Vigor, Mr. Frank T. Verity, F.R.I.B.A., Mr. Maurice E. Webb, F.R.I.B.A., Sir David Shackleton, Mr. F. Thorne, Mr. H. Austen Hall, F.R.I.B.A., Mr. Roland B. Chessum, Mr. E. Stanley Hall, F.R.I.B.A., Mr. A. J. Davis, F.R.I.B.A., Mr. H. C. D. Whinney, F.R.I.B.A., Mr. G. G. Wornum, F.R.I.B.A., Mr. H. W. Gaze, Mr. A. D. S. Rice, Mr. C. W. Ferrier, F.R.I.B.A., Mr. H. H. D. Anderson, Mr. H. T. Buckland, F.R.I.B.A., Mr. F. A. Minter, Mr. H. J. Barns, Mr. F. M. May, Mr. L. C. D. Hannen, Mr. W. J. Griggs, Mr. E. H. Wall (Assistant Secretary, L.M.B.A.), and Mr. W. J. Rutterham (Secretary, L.M.B.A.).

After the loyal toasts had been proposed by the CHAIRMAN and enthusiastically honoured, Mr. P. C. CULVER proposed "The Architects and Surveyors." In the course of his remarks, he said the younger generation of builders generally had been brought up to regard the architects and surveyors as the "elder brethren" of the industry, and it was in that sense that he welcomed them at the annual festival of the Association. Builders were interested to see that the first step of the newly amalgamated Royal Institute of British Architects and the Society of Architects was to press for statutory registration, and also that representation was being made to the Ministry of Health for the employment of only qualified architects in future on housing schemes. The R.I.B.A. also proposed to give attention, through the medium of the lecture by Mr. Herbert Welch, to the condition of the building industry, and he hoped builders would attend in force. This

illustrated that whilst architects were determined closely to watch their own immediate interests, they had the fullest intention to be mindful of the wants of others. He felt certain there would be important suggestions made at Mr. Welch's lecture, among which he hoped would be found particular reference to the great contribution architects could make to the solution of to-day's problems by restricting their tenders to federated builders. Federated builders had always stood for the betterment of the conditions of their operatives and fair dealing. One of the contributory causes of dissatisfaction was the position of the builder who carried on his calling with an utter disregard of agreements. He paid above or below the rate to suit the needs of the moment, and readily took full advantage of the voluntary services of his fellows who gave their time and talents to the settlement of wages and conditions, drafting of model forms of contract, and assisting in the preparation of such monumental works in their industry as the Standard Mode of Measurement. He hoped that by the architect's personal example and encouragement there would be evinced in the future greater evidence of the determination of the profession to see that every possible support was given to the federated builders throughout the country in their efforts to promote the best interests of all those connected with the industry.

In responding, Mr. ARTHUR KEEN said that 130 years ago Sir William Chambers, the architect of Somerset House, writing on the essential qualifications of an architect, said: "To the excellence of the designer's art must be added the humbler but not less useful skill of the mechanic and the accountant." In the L.M.B.A. the industry had a strong and effective body, and he wished well to it. The association which existed in all the trades and industries of the country, among professional men, among artists, among operatives, appeared to him to be in a very marked way characteristic of the present age and of the country. They had an extraordinary value in promoting progress and development, and the essential test he would apply to them was the test of service: if they existed to render more efficient the services their members rendered to the community, or if they existed merely to secure the material interests and well-being of their members. If the latter was the case, instead of being valuable they were only injurious. They all had the right to secure by combination their proper rights and privileges, but they had to respect the rights of others, and while they lived in communities "the care of each for the well-being of all" was not a bad ideal. It had been stated that the industries of this country were governed by thousands of societies and combinations of people, and that the great majority of them had by degrees assumed the position that they were out for selfish aims; that they were operating not for the expansion of trade, but for its limitation, and that they were responsible for a great deal of the present unemployment. He (the speaker) was afraid it was perfectly true, and it was a very serious accusation. The Royal Institute of British Architects spent a great deal of time and money on architectural education, and found that extraordinary results had been obtained from an architectural school run by architects. Training in schools rather than apprenticeship was a growing tendency, and one could not consider the conditions obtaining in the building industry to-day without feeling that the disappearance of apprenticeship was inevitable, and had to be reckoned with. In his opinion the solution of the apprenticeship problem in the future would be found in the technical schools. They all knew the limitations of the technical schools, but was it impossible that the schools of building should be run by the builders? He thought it was up to the builders to take in hand the technical schools and shape them to their own requirements. It would require a great deal of organisation and imagination to carry it through, and there was no one better qualified to do so than the members of the L.M.B.A.

Mr. J. M. THEOBALD, in a humorous speech, which was much appreciated, responded for the surveyors.

The toast of "The Association" was proposed by Mr. TOPHAM FORREST, who said there can be no question as to the need for the closest co-operation between everyone concerned in the design and construction of buildings, and to

that end he ventured to suggest that it would do a tremendous amount of good were recognition given to the craftsman who had performed an exceptionally fine piece of work. The recognition of individual effort stimulated emulation, and went a long way to obtain harmonious working between employer and employee. Since 1921 there had been a great activity in the building industry throughout the world, and most who had had the privilege of travelling beyond these shores had been impressed not only with the enormous volume of work, but also with the standard of excellence which had been attained in many places. He did not think, in fact he was sure, they need be ashamed of the part which Britain, and London in particular, had played in this great building revival. In spite of controversial questions the results might be considered as really wonderful. Work was being produced to-day which, in its excellence of design, its execution, and its commercial soundness, had never been surpassed. There was an absence of the parrot-like repetition which debased, and in its place a variety of original design which could only be successfully translated into reality by the most effective organisation and the highly skilled workman. Legislation in past years had all been directed to limiting the hours of labour and raising wages, but national forces were stronger than legislation, and the whole industrial machine had to be speeded up and output and production increased, or he was afraid they would very soon become a nation of unemployed. They would, no doubt, expect him to say something about new methods of construction as distinct from traditional brick methods, but it would only be necessary to express the hope that members of the Association would make every endeavour to adapt themselves to the new conditions, so that they might undertake the work and not allow it to pass into the hands of other organisations.

The PRESIDENT, in responding, said the London County Council had agreed to operate with the Building Industry Committee; that was of the greatest importance, as if the Committee functioned properly it would bring the industry into the place it ought to occupy. They were suffering to-day from a shortage of skilled craftsmen. The Association was endeavouring to overcome the difficulty, but there was a great deal of prejudice to overcome before the Committee came into existence. If a builder took work for a local authority for the erection of houses it entailed the employment of one apprentice for every three craftsmen, and one could not take a contract, whether for 20 or 2,000 houses, without that stipulation. In the past the builders themselves had been to blame for the lack of apprentices, as they preferred to recruit their ranks from the provinces, and they would never get men to come to London now while the difference in the rate of wages was so small. It was therefore incumbent on the London builders to see what could be done to increase the number of apprentices, and the building industries committee would help in that direction. Within the past few months the employers and operatives had agreed to waive the employment of one apprentice to every four craftsmen, but that, of course, would not be effective if the one to three proportion became a success. He was hoping that next year the apprenticeship scheme would be put in force, and would be so successful that in a few years all the skilled craftsmen needed would be at the disposal of the industry. In conclusion, he appealed for closer co-operation between all concerned with building, and pointed out that the members of the Association had nothing but good will towards the operatives.

Mr. A. B. FALKNER proposed the toast of "The Guest," and expressed his special pleasure at the presence of Sir David Shackleton, whom he assured of the good will of builders in his forthcoming retirement. One branch of the industry not present that evening was the operative: the grandest designs could not be carried out without the assistance of the operatives, and he assured them of the hearty goodwill of the members of the London Master Builders' Association.

COLONEL A. J. FOSTER, in responding, said the industry was very fortunate in having a long period of housing work before it, and therefore was in a very good position. On the question of associations, he said that so long as they were properly run associations were one of the most important things in the country, and that so long as we had free trade it was up to the industries themselves to look after themselves.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	Carpenters.	Plasterers.	Slaters.	Plumbers.	Painters.	Lab'rs.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bedford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Birkenhead	1/9	1/9	1/8 1/2	1/9	1/9	1/9	1/8 1/2	1/4
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Bournemouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Brentwood	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Bridgewater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Brighton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Cambridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chatham	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Chelmsford	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Colchester	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Crewe	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
E. Glam. (Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Eastbourne	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/6	1/2 1/2
Folkestone	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/1 1/2
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Grantham	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Grays	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/8 1/2	1/3 1/2
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Great Yarmouth	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Guildford	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hartlepool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hastings	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/4 1/2	1/1 1/2
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Ipswich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Lancaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leamington Spa	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Lichfield	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Liverpool	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
Llanelli	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
London { 12 m. radius	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/9 1/2	1/4 1/2
London { 12-15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Maidstone	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Norwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Oakham	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Rochester	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Rugby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
St. Albans	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Scarborough	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/7 1/2	1/2 1/2
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Shrewsbury	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Southend-on-Sea	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Stroud	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Taunton	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Tonaway	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Tonbridge Wells	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/5 1/2	1/1 1/2
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2 1/2
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1 1/2
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2
Worcester	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/6 1/2	1/2
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3 1/2

(For rates of wages in the Building Trade in Scotland, see page 864.)

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in the List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender or the names of the willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

DECEMBER 14.—**Bethford**.—FOUNDATIONS.—For (1) mass concrete engine foundations (approximately 400 cubic yards); (2) concrete cooling pond (approximately 890 square yards); (3) reinforced concrete road (approximately 200 yards run), for the U.D.C. H. Wilson, Electrical Engineer, 11, Bank-street.

DECEMBER 14.—**Banff**.—ELECTRICITY.—Trade including steel and electrical work, required in connection with the erection of the Town Hall, for the T.C. J. E. Adamson, L.R.I.B.A., 56, Victoria-street, S.W. 1. Deposit £2 2s.

DECEMBER 14.—**Banff**.—HOUSES.—One block of houses at the Burgh housing site, for the T.C. Alex. Brodie, Town Clerk.

DECEMBER 14.—**Bootle**.—BUILDINGS.—Buildings in connection with the new refuse disposal works at Pine-grove, for the C.B. Borough Engineer.

DECEMBER 14.—**Chelmsford**.—ADDITIONS.—To Infirmary 11 and female acute block at the Severalls Central Hospital for the Essex C.C. The County Architect, Jno. Stuart, F.R.I.B.A., Springfield, Old Court, Chelmsford. Deposit £1 1s.

DECEMBER 14.—**Chipping Sodbury**.—HOUSES.—Six houses at Shortwood, Pucklechurch, for the R.D.C. Housing Inspector. Deposit £1 1s.

DECEMBER 14.—**Colchester**.—ADDITIONS.—At the Essex and Colchester mental hospitals, for the Essex C.C. John Stuart, F.R.I.B.A., County Architect, Springfield Old Court, Chelmsford. Deposit £1 1s.

DECEMBER 14.—**Edinburgh**.—BUILDING.—New X-ray building at Bangour Mental Hospital, for the District Board of Control. J. D. Gibson, surveyor, 60, Frederick-street.

DECEMBER 14.—**Edinburgh**.—HOUSES.—Brick, concrete, or other approved alternative at Lochend-road of 48 two-apartment tenement houses, for the T.C. Director of Housing, City Chambers, 329, High-street. Deposit £2 2s.

DECEMBER 14.—**Finchley**.—BUILDING.—Domestic subjects centre at the Albert-street school, North Finchley, for the U.D.C. P. T. Harrison, engineer, 9, The Hawthorns, Regent's Park-road, Finchley, N. 2. Deposit £2.

DECEMBER 14.—**Gloucester**.—SCHOOL.—Erection of a new elementary school, at Filton, near Bristol, for the E.C. R. S. Phillips, F.R.I.B.A., architect, Shire Hall.

DECEMBER 14.—**Horsham**.—VARIOUS WORKS.—Executing certain works in connection with the extension and drainage of Roffey Cemetery, for the Roffey Burial District Joint Committee. A. Newbery, Clerk to the Committee, 1, Chenell Villas, Ruspur-road, Horsham, Sussex. Deposit £1 1s.

DECEMBER 14.—**Kent**.—ENLARGEMENT.—Of the Central School at Bexley, Welling, for the C.C. W. H. Robinson, F.R.I.B.A., Room 69, Sessions House, Maidstone. Deposit £2 2s. by cheque, payable to the Kent Education Committee, and crossed "National Provincial Bank, Ltd."

DECEMBER 14.—**Manchester**.—COTTAGES.—Three pairs of semi-detached cottages at Middlebrook, near Horwich, for the T.C. Secretary, Waterworks Offices. Deposit £2 2s.

DECEMBER 15.—**Blackrock**.—HOUSES.—Eight, one-story houses at Grotto-avenue, Bootertown, for the D.C. J. J. Robinson, architect, 8, Merriem-square, Dublin.

DECEMBER 15.—**Braintree**.—HOUSES.—Twelve houses at Bocking, for the R.D.C. E. O. Wheeler, consulting surveyor, 71, Rayne-road.

DECEMBER 15.—**Cowdenbeath**.—HOUSES.—Forty-eight houses at Stevensonsbeath, adjoining Stonehouse-treet, for the T.C. C. A. Alexander, Burgh Surveyor. Deposit £2 2s.

DECEMBER 15.—**Dublin**.—REPAIRS.—Conversion of the laundry in the Governor-General's demesne into station for the Garda Siochana and for a wall enclosing the station, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath, Dublin. Deposit £1.

DECEMBER 15.—**Dublin**.—RECONSTRUCTION.—Of the Central block (section C) of the General Post Office, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath. Deposit £5 5s.

DECEMBER 15.—**Durham**.—SCHOOL WORK.—(a) General builder's work in connection with alterations and improvements at Forest-of-Teesdale Council School, and (b) additions and alterations, for the E.C. F. Willey, F.R.I.B.A., F.S.I., 34, Old Ivet, Durham.

DECEMBER 15.—**Ecclesfield**.—ALTERATIONS.—Opening lights and alterations to doors at the Burn Cross Council school, for the West Riding E.C. A. Rayner, 51, Cross-hill, Ecclesfield.

DECEMBER 15.—**Greenwich**.—BUILDING.—To be erected for coal-washing plant, &c., at H.M. Fuel Research Station. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s. (cheques payable to the Commissioners.)

DECEMBER 15.—**Mexborough**.—HOUSES.—Sixteen non-parlour type houses on Harlington-road, for the D.C. G. Fenwick Carter, surveyor.

DECEMBER 15.—**Paddington**.—CONVERSION.—Of 14 Stationery Stores, Paddington, into stores for the Hotel and Refreshment Rooms Dept. Engineer at his Station, between the hours of 10 a.m. and 4 p.m. Deposit £2 2s.

DECEMBER 15.—**Plymouth**.—EXTENSION.—Of Central Police Offices, for the C.B. J. Webberley, Borough Engineer and Surveyor. Deposit £3 3s.

DECEMBER 15.—**Plymouth**.—PAVILION.—Tea pavilion on the Hoe, for the C.B. J. Webberley, Borough Engineer and Surveyor. Deposit £2 2s.

DECEMBER 15.—**Southampton**.—HOUSES.—Twenty, fourteen, fourteen, and twelve houses respectively at blocks 8 and 9 of the lay-out plan of the Burgess-aid housing site, for the C.B. Borough Engineer. Deposit £2 2s.

DECEMBER 15.—**Tending**.—COTTAGES.—Six cottages in the parishes of Beaumont and six cottages in parish of Little Holland, for the R.D.C. F. G. Incent-Brown, Cliff-road, Dovercourt Bay.

DECEMBER 15.—**Tullamore**.—HEATING.—Heating St. Brigid's Parochial House, Tullamore. Rev. T. alvany, P.P.

DECEMBER 15.—**West Bromwich**.—HOUSES.—16 to 206 houses on Charlemont estate, for the T.C. Harvey & Wicks, architects, 5, Bennett's-hill, Birmingham. Deposit £2 2s.

DECEMBER 15.—**Whitby**.—HEATING.—Installation heating and/or ventilating schemes in connection with the band pavilion and spa theatre, West Cliff, for the U.D.C. L. M. Blanchard, surveyor.

DECEMBER 15.—**Worthing**.—CONVENIENCES.—Erection of conveniences at Selden Lanes, Worthing, for the Corporation. Borough Surveyor, Municipal Offices, Tudor Lodge. Deposit £1 1s.

DECEMBER 15.—**York**.—HOUSES.—Erection of 406 uly type houses (350 with three bedrooms and 56 with two bedrooms) on the Tang Hall estate, No. 2, methods of construction designed to give rapid construction and completion are invited. F. W. Spurr, ty Engineer, Guildhall, York.

DECEMBER 16.—**Aberdare**.—VILLA.—Villa at Iwydoed, Aberdare. Thomas Roderick & Sons, architects, Clifton-street.

DECEMBER 16.—**Belfast**.—ALTERATIONS.—Alterations and additions to the Fire Brigade station in pier's-place, Shankill-road, for the C.B. City Surveyor.

DECEMBER 16.—**Hilton**.—HOSTELS.—Two hostels and subsidiary buildings at Hilton, Killybegs, Berden, for the National Committee for the Training of Teachers. J. A. O. Allan, F.R.I.B.A., architect, 5, Union-terrace, Aberdeen.

DECEMBER 16.—**Hove**.—SORTING OFFICE.—To be erected for the Commissioners of His Majesty's Office of Works. The Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

DECEMBER 16.—**Marsfield**.—HOUSES.—Erection and completion of 92 (13 blocks of six flats and 34 blocks of four cottages). The contracts may be for the works as a whole or separately, each contract including drainage, fencing, asphalt and water supply, for the T.C. Vaude Thompson, Assoc.M.Inst.C.E., Borough Engineer, Market-street. Deposit £2 2s.

DECEMBER 16.—**Plymouth**.—CONVENIENCE.—At Phoenix-street, Stonehouse, and for the conversion of tramway shelter into a convenience at Prince Rock, for the C.B. J. Webberley, Borough Engineer and Surveyor, Municipal Offices. Deposit £1 1s.

DECEMBER 16.—**Plymouth**.—WALLS.—Boundary wall and railings at the Astor Playing Field, Embankment-road, for the C.B. J. Webberley, Borough Engineer and Surveyor.

DECEMBER 16.—**Rochdale**.—CONVENIENCES.—Conveniences and tramway offices in Faulkner-street, for the C.B. Borough Surveyor.

DECEMBER 16.—**Sheffield**.—HOUSES.—200 houses at the Manor estate, Intake, for the T.C. F. E. P. Edwards, F.R.I.B.A., City Architect. Deposit £2.

DECEMBER 16.—**Tiverton**.—HOUSES.—Erection of 12 non-parlour houses (in blocks of six) at Council Gardens, for the T.C. A. M. Kinnison, Borough Surveyor, Town Hall. Deposit £1 1s.

DECEMBER 16.—**Wallingford**.—BARKS.—HOUSES.—Erection of 20 at Didcot, for the R.D.C. F. H. Floyd, Council's Architect, Market-place.

DECEMBER 16.—**Walton-on-the-Naze**.—ADDITIONS.—Alterations and additions to the Shore-road public conveniences, for the U.D.C. Surveyor.

DECEMBER 17.—**Bolton**.—FLATS.—Eighteen blocks of flats, a total of 72 flats, on the site adjoining the site of the steel houses, off Union-road, for the C.B. S. Parker, Town Clerk.

DECEMBER 17.—**Glasgow**.—HOUSES.—180 houses at Wellmeadow, for the T.C. J. Lindsay, Town Clerk.

DECEMBER 17.—**Greenwich**.—WORKSHOP EXTENSIONS.—At the Children's Homes, Sidcup, Kent, for the Guardians of the Union. W. C. Cornish, Clerk, Guardians' Offices, Board Room, East Greenwich, S.E.10. Deposit £3 3s.

DECEMBER 17.—**London**.—REPAIRS.—For (1) Painting and decorating work on tenements, and (2) alteration and decoration of a house on the Bethnal Green estate, for the Bethnal Green B.G. Borough Surveyor. Deposit £2 2s.

DECEMBER 17.—**Manchester**.—TELEPHONE EXCHANGE.—At Moss Side. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

DECEMBER 17.—**Ogmore and Carw**.—SHELTER.—Sports shelter and conveniences at Caeu Recreation Ground, Ogmore Vale, for the U.D.C. W. P. Ollivant Jones, engineer and surveyor, Council Offices, Brynmryn.

DECEMBER 17.—**Whickham**.—HOUSES.—Seventy self-contained houses in blocks of six, and semi-detached on the Rectory housing site, for the U.D.C. Thos. Fenbow, surveyor. Deposit £3 3s.

DECEMBER 18.—**Dublin**.—REPAIRS.—To cottage in farmyard, Crookling Sanatorium, for the C.B. J. J. Murphy, Town Clerk.

DECEMBER 18.—**Dublin**.—SUPERSTRUCTURE.—Reconstruction of the Henry-street superstructure (Block B) of the General Post Office, for the Commissioners of Public Works. J. J. Healy, Secretary, Office of Public Works, Baile Atha Cliath. Deposit £5.

DECEMBER 18.—**Hale**.—HOUSE.—Air compressing station and disinfecting house, including concrete foundations for buildings and machinery, steel framing, and concrete block walls, for the U.D.C. G. Midgley Taylor, engineer (of Messrs. John Taylor & Sons), Caxton House, Westminster, S.W.1.

DECEMBER 18.—**London**.—WIRING.—Electric wiring in conduit of the western annexe, &c., at the British Museum, for H.M. Office of Works. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

DECEMBER 18.—**Nunton**.—HOUSES.—Erection of 144 at Stockingford, for the B.C. H. N. Jepson, A.R.I.B.A. Queen's Buildings. Deposit £2 2s.

DECEMBER 18.—**Rochdale**.—HEATING.—Accelerated low-pressure hot-water heating at the Post Office and Telephone Exchange, for H.M. Office of Works. Contracts Branch, H.M. Office of Works, King Charles-street, London, S.W.1. Deposit £1 1s.

DECEMBER 19.—**Chester**.—NEW SCHOOL BUILDINGS.—At Calday Grange Grammar School, West Kirby, for the C.C. H. Beswick, F.R.I.B.A., County Architect, Newgate-street. Deposit £2 2s.

DECEMBER 19.—**Dewsbury**.—BUILDING.—Sludge pump house, suction pit, rising mains, chemical mixing and workmen's rooms, and other appurtenant works, at the Mitchell Laithes sewage works, for the C.B. J. Diggle & Son, consulting engineers, 14, Brown-street, Manchester; or H. Dearden, Borough Engineer, Town Hall. Deposit £2 2s.

DECEMBER 19.—**France**.—CEMETERIES.—Construction of 26 in France. Contract 1926 "X" Secretary, Works Department, Imperial War Graves Commission, 82, Baker-street, W.1, before 10 a.m. on above date. Deposit £15 15s.

DECEMBER 19.—**Manchester**.—ADDITIONS.—Renewals and additions in connection with the X-ray plant at the Crumpsall Infirmary, Crumpsall, for the B.G. J. Macdonald, Clerk to the Guardians, Union Offices, All Saints.

DECEMBER 19.—**Parksmouth**.—HOSPITAL BUILDINGS.—Erection of quarters for eight nurses, accommodation for assistant medical officers, and alterations to the nurses' home, for the Guardians of the Poor. G. E. Smith, L.R.I.B.A., Victoria-road North, Southsea. Deposit £2 2s.

DECEMBER 19.—**Solihull**.—HOUSES.—Eighteen non-parlour type houses at Hermitage-road, for the R.D.C. W. T. Orton, architect, 7, Waterloo-street, Birmingham. Deposit £1 1s.

DECEMBER 20.—**Whitehead**.—ELECTRIC LIGHT.—Public lighting by electric light, for the Town Commissioners. R. Maxwell Magill, Clerk to the Commissioners, Whitehead, Co. Antrim.

DECEMBER 21.—**Mansfield Woodhouse**.—TIMBER AND JOINERY WORK.—Required for the erection of 40 houses for the Mansfield Woodhouse U.D.C. The Surveyor to the Council, Council Offices, Station-street.

DECEMBER 21.—**Poplar**.—HOUSES.—Erection of 24 houses and 40 flats on a site in Glengall-road, for the Borough Council. Harley Heckford, M.Inst.C.E., Borough Surveyor, Council Offices. Deposit £3 3s.

DECEMBER 21.—**Rotherham**.—STATION.—Police station and court house for the West Riding C.C. P. O. Platts, A.R.I.B.A., County Architect, County Hall, Wakefield.

DECEMBER 21.—**Bellshill**.—BUILDING.—Post Office at Bellshill, Lanarkshire, for H.M.O.W. Architect, H.M. Office of Works, 122, George-street, Edinburgh. Deposit £1 1s.

DECEMBER 22.—**Eastbourne**.—HEATING AND LIGHTING.—Additions to Nurses' Home, &c., hot-water, heating, and supply, electric lighting installa-

tions at new infirmary block, for the Guardians of the Eastbourne Union. F. G. Cooke, L.R.I.B.A., 2, Hyde-gardens, Eastbourne. Deposit £3.

DECEMBER 22.—**Glasgow**.—EXCHANGE.—Telephone exchange and postmen's office at Govan, for H.M.O.W. Architect, H.M. Office of Works, 122, George-street, Edinburgh. Deposit £1 1s.

DECEMBER 22.—**Nottingham**.—HEATING.—Steam heating apparatus in the Nurses' Home at the City Mental Hospital, Mapperley Hill, for the T.C. T. J. R. Kiernan, consulting engineer, 17, Victoria-street, Westminster, S.W.1. Deposit £2 2s.

DECEMBER 22.—**Southall-Norwood**.—COTTAGES.—Erection of 45 cottages at Montague-road. The cottages are divided into 16 blocks and contractors may tender for one or more blocks. J. B. Thomson, Assoc.M.Inst.C.E., Engineer and Surveyor, Town Hall, Southall.

DECEMBER 22.—**Stonebridge**.—HOUSES.—Erection of 140 on the Brentfield estate, for the Willesden D.C. F. Wilkinson, M.Inst.C.E., Engineer, Town Hall, Dyne-road, Kilburn, N.W.6.

DECEMBER 22.—**Stafford**.—ALTERATIONS AND ADDITIONS.—To Stafford Employment Exchange. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

DECEMBER 22.—**Teddington**.—POST OFFICE.—To be erected. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

DECEMBER 22.—**Willesden**.—HOUSES.—140 houses on the Brentfield estate, Stonebridge, for the U.D.C. F. Wilkinson, engineer, Town Hall, Dyne-road, Kilburn, N.W.6.

DECEMBER 23.—**Aberdeen**.—HOUSES.—Houses, &c., at H.M. Coastguard Station, Torry, for H.M.O.W. Architect, H.M. Office of Works, 122, George-street, Edinburgh. Deposit £1 1s.

DECEMBER 25.—**Birmingham**.—HOUSES.—Erection of 125 non-parlour two-bedroomed houses on Morcom-road Greet, for the Public Works and Town-Planning Committee of the City. Herbert H. Humphries, M.Inst.C.E., City Engineer, The Council House, Birmingham. Deposit £1 1s.

DECEMBER 25.—**Stapleford**.—HOUSES.—Erection and drainage, &c., of ten pairs of parlour houses, for the R.D.C. G. C. Hardy, architect, 11, Church-street. Deposit £2 2s.

DECEMBER 27.—**Folkestone**.—PAVILION.—Erection of a cricket pavilion at the Sports Ground, Cheriton-road, for the Corporation. A. E. Nichols, M.Inst.C.E., Borough Engineer, 11, Church-street, Folkestone. Deposit £5 5s.

DECEMBER 28.—**Sowerby Bridge**.—HOUSES.—Four blocks of houses in Nelson-street, on the Willow-street housing site, for the U.D.C. J. Eastwood, surveyor.

DECEMBER 28.—**Wimbledon**.—CEMETERY EXTENSIONS.—Laying out of the extensions for 1926, including drainage, walling, fencing and gates, for the B.C. Borough Engineer and Surveyor's Office, Town Hall, Wimbledon.

DECEMBER 29.—**Colchester**.—EMPLOYMENT EXCHANGE.—Erection and completion for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

DECEMBER 29.—**London, W.C.**—EXTENSION.—To the National Gallery, for the Commissioners H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s.

DECEMBER 29.—**Paulton**.—HOSPITAL.—Isolation hospital at Paulton, near Bristol, for the Bath, Clutton, Midmore Norton and Radstock Joint Hospital Committee. A. J. Pictor, F.R.I.B.A., 14, Queen-square, Bath. Deposit £2 2s.

DECEMBER 30.—**Hendon, N.W.9**.—ALTERATIONS, &c.—(1) Alterations to Isolation Block A into Operating Block, Western Fever Hospital, Seagrave-road, Fulham, S.W.6; (2) new Gate Office, Colindale Hospital, Hendon, N.W.9, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

DECEMBER 30.—**Hendon, N.W.9**.—NEW ENTRANCE ROADWAY.—At Colindale Hospital, Hendon, N.W.6, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

DECEMBER 30.—**Heane Bay**.—ISOLATION ACCOMMODATION.—To be formed for the Metropolitan Asylums Board, at St. Anne's Home, Kent. G. A. Powell, Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

DECEMBER 31.—**Ipswich**.—HOUSES.—Designs for the erection of houses suitable for the working classes in Samford, for the R.D.C. A. J. Haward, Clerk to the Council, 5, Queen-street.

DECEMBER 31.—**Stockton-on-Tees**.—HOUSES.—106 semi-detached houses on the Grangefield estate, Oxbridge-avenue, for the T.C. Hays & Gray, architects, Wingate, Co. Durham.

JANUARY 4, 1926.—**Bebington and Bromborough**.—HOUSES.—Seventy-two houses at Bebington and 28 houses at Bromborough, for the U.D.C. Surveyor, Council Offices, Bebington. Deposit £2 2s.

JANUARY 4.—**Clutton**.—HOUSES.—Eight houses at Publow, for the R.D.C. Mr. Hawker, architect, Council House, Temple Cloud. Deposit £2 2s.

JANUARY 12.—**Southall**.—STORES.—Various, for annual contracts, April 1, 1926, to March 31, 1927, for the U.D.C. J. B. Thomson, Assoc.M.Inst.C.E., &c., Engineer and Surveyor, Town Hall.

JANUARY 18.—**Bakewell**.—ADDITIONS.—Isolation hospital, on Monyash-road, for the Haddon District Hospital Committee. Chas. Flint, L.R.I.B.A., The Quadrant, Buxton. Deposit £2 2s.

JANUARY 30. — Gosforth. — HOUSES. — 84 semi-detached houses on the Colledge site, for the U.D.C. G. Nelson, engineer and surveyor.

NO DATE. — Amersham. — OFFICES. — New offices for the Amersham, Beaconsfield and District Waterworks Co., Ltd. Kemp & How, F.R.I.B.A., 4, Bloomsbury-square, W.C.1. Deposit £2 2s.

NO DATE. — Birmingham. — REPAIRS. — To lanterns, slating, ventilators, gutters, walls, &c., including interior and exterior painting, renovations to basement and general work in connection with the older portion of Woodcock-street swimming and private baths, for the T.C. Rd. Hoggins, Superintendent Engineer, Offices, Kent-street. Deposit 10s.

NO DATE. — Caernarfon. — SHOP. — Pulling down the existing buildings at 1, Pool-street, and reconstructing a new shop for J. B. Parker. R. Pierce, F.R.I.B.A., architect and surveyor, Insurance Chambers.

NO DATE. — Grzeze. — HOUSES. — Twelve houses, for the U.D.C. Thos. Huddleston, Surveyor, Grange-over-Sands.

NO DATE. — Hetton. — BUNGALOWS. — Ten bungalows at Easington-lane. A. H. Fennell, architect and surveyor, Chester-le-Street.

*** NO DATE. — Hillingdon, West Drayton, and Ickenham. — COTTAGES.** — To be erected at the above, for the Uxbridge R.D.C. Frederick Hall Jones, F.R.I.B.A., 11, Haven Green, Ealing, W.5. Deposit £2 2s.

NO DATE. — Kendal. — BUNGALOW. — Bungalow residence at Hornep, Kendal, for J. Wilson Brown. J. Stalker, L.R.I.B.A., architect.

*** NO DATE. — London. — GARAGE.** — Erection of garage with workshop and rooms above. Freeholder, 25, Upper Millway-street, St. John's Wood, N.W.8. Phone, Hampstead 481.

NO DATE. — Milechuse. — GARAGE. — Garage and work shop at Wolsley-road, for Bawden & Pengelly, W. J. Pearce, architect and surveyor, Law Chambers, Princess-square, Plymouth.

NO DATE. — Ruislip-Northwood. — COTTAGES. — Sixteen cottages on the housing site, Wiltshire-lane, East-cote, and 24 at Addison Way, Northwood, for the U.D.C. A. S. Soutar, 8, King William-street, Strand, W.C.2. Deposit £2 2s.

MATERIALS, etc.

DECEMBER 14. — Boston. — SHINGLE. — 6,000 tons of shingle, for the R.D.C. A. Barton, 8, Market-place.

DECEMBER 14. — London. — MATERIALS. — Builders' materials, &c., for the Woolwich B.G. A. Holder, Clerk, Plumstead High-street, S.E.18.

DECEMBER 14. — Newcastle-on-Tyne. — MATERIALS. — Timber, bricks, &c., oils, paints and varnishes, and builders' hardware, for the B.G. Gladstone Walker, Clerk to the Guardians, 127, Pilgrim-street.

DECEMBER 16. — Stockton-on-Tees. — MATERIALS. — Cement, lead and compo pipe, castings, cast-iron S. and S. pipes, paints, oils, &c., lime, hand-picked (Settle or Buxton and building qualities), wrought-iron tubing (steam quality), for the T.C. W. W. Atley, Engineer and General Manager, Corporation Gas Works.

DECEMBER 21. — Edinburgh. — CEMENT. — Portland cement in quantities of approximately 300-400 tons per month, for the T.C. Tramways Manager, 2, St. James's-square.

DECEMBER 21. — Salford. — BRICKS. — Retorts, fire-bricks, &c., for the C.B. Gas Engineer, Gas Offices, Bloom-street.

DECEMBER 28. — Berkshire. — MATERIALS. — Broken road material, gravel and sand, for the C.C. Lt.-Col. J. F. Hawkins, County Surveyor, Shire Hall, Reading.

DECEMBER 28. — Rhondda. — MATERIALS. — Bricks, stoneware pipes, iron castings, pavings, kerbs, channels, and pitchings, artificial paving, Portland cement and hydraulic lime, paints, oils, &c., and granite and limestone road macadam, for the U.D.C. E. Taylor, engineer and surveyor.

*** DECEMBER 30. — Caterham. — CORRUGATED STEEL PAVING.** — Supply and delivery to Caterham Mental Hospital, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

DECEMBER 31. — West Riding. — MATERIALS. — Granite and whinstone, tarred and untarred slag, do. limestone, sand and gravel, refined tar and bituminous compounds, bituminous compounds, stoneware pipes, cast-iron gully grates and frames, stone and concrete kerbing, edging, flags and setts, for the C.C. West Riding Surveyor, County Hall, Wakefield.

JANUARY 1, 1926. — Gloucestershire. — MATERIALS. — Clean and tarred road stone and sea gravel, for use on main roads, for the C.C. County Surveyor.

JANUARY 2. — Bexley. — MATERIALS. — Tar and other road surfacing proprietary articles, highway materials, best glazed stoneware socketed pipes, and best Portland cement, for the U.D.C. W. T. Howse, Surveyor.

ENGINEERING. IRON AND STEEL.

DECEMBER 16. — Swinton. — TANK. — Construction of new sewage disposal works, comprising detritus pits, screen chamber, storage tank and motor house, Dortmund settling tank, percolating bacterial filter beds, humus tanks, mud-drying beds, and other appurtenant works, for the U.D.C. W. H. Radford & Son, engineers, Albion Chambers, King-street, Nottingham. Deposit £5 5s.

DECEMBER 17. — Campden. — RESERVOIR. — Laying of water mains, together with the construction of a mass concrete reservoir, at Mickleton. H. J. White, 119, St. Aldate's, Oxford.

DECEMBER 17. — Glasgow. — STEELWORK. — Structural steelwork required in connection with a sub-station at Tradeston gasworks, for the T.C. General Manager, Gas Department 30, John-street.

DECEMBER 18. — Finedon. — WIDENING. — Widening of Finedon Bridge, for the Northamptonshire C.C. H. Willett, Acting County Surveyor, County Hall, Northampton.

DECEMBER 21. — Portadown. — SHED. — Reinforced concrete engine shed, coal bank, &c., for the G.N.R. (Ireland). J. B. Stephens, Secretary, Amiens-street, Station, Dublin. Deposit £2 2s.

DECEMBER 22. — Liskeard. — BRIDGES. — Demolition of two bridges and two culverts, also the erection of two reinforced concrete bridges and two reinforced concrete culverts at Polperro, for the R.D.C. W. L. B. Smale, surveyor. Deposit £1 1s.

DECEMBER 23. — Manchester. — BRIDGE. — Bridge, carrying road No. 10 over the L.M. & S. Rly., near Chorlton, for the T.C. City Engineer. Deposit £3 3s.

JANUARY 5, 1926. — Westport. — SHED. — Extension of 100 ft. to the transit shed at Westport quay, for the Harbour Commissioners. T. P. Flanagan, B.E., Castlebar.

JANUARY 13. — Middleton. — CULVERT. — Construction of a proposed culvert, 234 ft. in length, over the Wince Brook, at Kirkway, for the T.C. Borough Engineer.

ROAD, SEWERAGE, AND WATER WORKS.

DECEMBER 14. — Bromley. — SEWER. — Sewer in Sherman-road, of an approximate length of 460 ft., for the T.C. Borough Engineer. Deposit £1 1s.

DECEMBER 14. — Chesterfield. — SEWERAGE. — Sewerage and sewage disposal in the parish of Shirland and Higham, for the R.D.C. H. Taylor, M.C., engineer and surveyor.

DECEMBER 14. — Chipping Sodbury. — DRAINAGE. — Reconstruction of drainage systems and sanitary conveniences at the undermentioned sites, viz.: Frampton Cotterell, The Common site; Frampton Cotterell, Woodend site; Westerleigh, May's Hill site; Winterbourne, Watley's End site, for the R.D.C. W. H. Williams, Sanitary Inspector.

DECEMBER 14. — Chipping Sodbury. — REPAIRS. — Renovation and repair of the sewerage works at Wickwar, for the R.D.C. W. H. Williams, Sanitary Inspector.

DECEMBER 14. — Eccles. — REPAIRS. — Sewering, paving, metalling, flagging and making-up of the following front and back streets and passages:—(a) Tarmacadam carriageways and flagged footways, in Vaughan-street, School-street, Anson-street (part of), Sutherland-street, Cleavley-street, Dover-street, Catherine-street (carriageway only), Edison-road (north part); (b) sett paving in back Monton-road, back Algernon-street, back Alfred-street, back Granville-street, back Francis-street, back Catherine-street East, back Alexandra-road, back Scotta-road and four passages, back Cleavley-street, back Worsley-road (part 2), back Trevelyan-street West, back Mayfield-road West (part 2), back College-road North and seven passages, back Perrin-lane; (c) flagging in passage No. 1, Anson-street, back Worsley-road (Part 1), back Knowsley-avenue, back Mayfield-road West (Part 1), back Ladywell-terrace, for the T.C. Borough Surveyor. Deposit £2 2s.

DECEMBER 14. — Heysham. — SEWERS. — Construction of about 1,800 yards of 12 in. and 9 in. diameter stoneware pipe sewers, together with manholes; also for the construction of a pumping station and pump well, together with cast-iron rising main and other incidental works, for the U.D.C. Wilcox & Raikes, engineers, 63, Temple-row, Birmingham. Deposit £3 3s.

DECEMBER 14. — Pontefract. — SEWERAGE. — Construction of about 2,000 lin. yards of 15, 12, 9, and 6 in. earthenware pipe sewers, 2,700 lin. yards of 12, 10, and 7 in. cast-iron pumping mains, manholes, two pumping stations complete with storage tanks and pumping plant, sedimentation tanks, percolating filters, humus tanks, &c., for the R.D.C. D. Balfour & Son, Civil Engineers, 3, St. Nicholas-buildings, Newcastle-on-Tyne. Deposit £5.

DECEMBER 14. — Roffey. — EXTENSION. — Extension and drainage of Roffey Cemetery, for the Roffey Burial District Joint Committee. A. Newbery, Clerk to the Committee, 1, Chenell Villas, Rusper-road, Horsham. Deposit £1 1s.

DECEMBER 14. — Skegby. — MAKING-UP. — Albert-street, Alexandra-street, Victoria-street, and West Hill-street, for the R.D.C. L. Dodsley, surveyor, Portland Chambers, Sutton-in-Ashfield. Deposit £1.

DECEMBER 15. — Carlisle. — SEWERAGE. — Laying, making and construction of the following works of water supply for the parishes of Dalston, Orton, St. Cuthbert Without, and Wreay:—About 42 miles of 3, 4, 5, 6, and 7 in. diameter cast-iron and steel pipes from the intake in Roughton Gill, in the parish of Caldbeck, via Caldbeck, Warnell Fell, Roundhill, Goosegreen, Welton and Nether Welton, into and through the parishes of Dalston, Orton, St. Cuthbert Without and Wreay, with all necessary valves, hydrants, casings, chambers, &c., and other incidental work; also a covered service reservoir of 100,000 gallons capacity at Roundhill, to be constructed principally of concrete with all necessary inlet and outlet valves, chambers, overflows, washouts, drains, &c., and other incidental work, for the R.D.C. J. C. Boyd, engineer, 18, Bank-street. Deposit £5.

DECEMBER 15. — Tottenham. — MAKING-UP. — For (a) Wargrave-avenue, (b) Gladsmore-road, (c) Dowsett-road, for the U.D.C. Engineer. Charge 10s. 6d.

DECEMBER 15. — Turton. — SEWERS. — 335 lineal yards of 12 in. sewer in Chapeltown-road, 492 lineal yards of 9 in. sewer in Chapeltown-road, 164 lineal yards of 12 in. sewer near Chapeltown-road, 651 lineal yards of 9 in. sewer near Chapeltown-road, 191 lineal yards of 9 in. sewer in back Chapeltown-road, 291 lineal yards of 9 in. sewer in Shady-lane, 182 lineal yards of 9 in. sewer in Cox Green-road, for the U.D.C. V. W. Laithwaite, Surveyor. Deposit £2.

DECEMBER 15. — West Riding. — ASPHALTING. — Tar asphaltting to playgrounds at (1) Adwick-le-Street Park Council school; (2) Darton Council school, for the E.C. Education Department, County Hall, Wakefield.

DECEMBER 16. — Bingham. — DRAINS. — Laying of sewer and surface water drain and the construction of a rough road, on the housing site, Shelford-road, Ratcliffe-on-Trent, for the R.D.C. C. W. Kendrick, Sanitary Surveyor. Deposit £1 1s.

DECEMBER 16. — Clacton. — MAKING-UP. — Of Cornought Gardens West, Albany Gardens East, Albion Gardens West, Lancaster Gardens East, Lancaster Gardens West, Albert-road, Frinton-road, part of Wash-lane, part of King's-road; also resurfacing remaining portion of King's-road, for the U.D.C.

DECEMBER 16. — Cupar. — PIPES. — Laying and joining 1,100 yds. or thereby of 4 in. diameter cast-iron pipes, provided by the Burgh, and executing other relative works, for the T.C. Bruce & Proudfoot, C.E. Kirkcaldy. Deposit £1.

DECEMBER 16. — Ross. — MAKING-UP. — Part of the hill-road, for the U.D.C. C. H. Caddick, surveyor. Deposit £1 1s.

DECEMBER 17. — Halstead. — DRAIN. — Excavating and laying about 800 lin. yds. of 6 in. effluent drain, 1,700 lin. yds. of 9 in. sanitary pipe intercepting sewers and 180 lin. yds. of 9 in. cast-iron pipe sewers, with the necessary manholes and flushing chambers; also the construction of purification works, the erection of a small pumping station, and the fixing of oil engine and pumps, also the laying out of the land at the outfall, situated about 300 yds. south of Alderton Mill, in the parish of Sibie Hedingham, for the R.D.C. Taylor & Wallin, engineers, 47, Pilgrim-street, New castle-on-Tyne. Deposit £5.

DECEMBER 17. — Preston. — SEWERS. — New sewer manholes, outfall works, and power-house, &c., at Penwortham Sewerage, for the R.D.C. H. Heaton Civil Engineer, 41, Fishergate. Deposit £1 1s.

DECEMBER 18. — Inverness. — ROAD. — Construction reconstruction and surfacing from Kinlochleven to North Ballachulish, a length of approximately 9 miles on the Kinlochleven-Port Augustus road, for the C.C. The Chief Engineer, 98-104, Academy-street, Inverness. Deposit £3.

DECEMBER 18. — Penybont. — IMPROVEMENTS. — For (1) Diversion of Wernfarn-road, Coychurch Higher; (2) widening of Trebryn-road, Pencoe; (3) widening of Heol Spencer, Coity, for the R.D.C. G. P. Alexander, Highway Surveyor, 79A, Noltton-street, Bridgend. Deposit £2 2s. each.

DECEMBER 18. — South Kensington. — WORKS. — Execution of works to the forecourt of the Imperial Institute. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

DECEMBER 19. — Cornwall. — GRANITE. — Granite or approved elvan for ballast and hedging stone in connection with the St. Austell by-pass road, for the C.C. E. H. Collett, County Surveyor.

DECEMBER 19. — Rothwell. — IMPROVEMENTS. — Excavating, granite sett paving, stone walling, surface water drainage, concreting, demolition of buildings, &c., for the U.D.C. J. Southward, surveyor. Deposit £1 1s.

DECEMBER 20. — Hambleton. — SEWERS. — Construction of 9 in. and 6 in. sewers in cast-iron and stoneware, with appurtenant works, in the rural districts of Hambleton and Guildford, and discharging into sewers vested in the Godalming T.C., for the Surrey C.C. G. B. Hartree, Engineer, Municipal Buildings, Godalming.

DECEMBER 21. — Berwick-on-Tweed. — ROADS. — Construction of approach roads to Berwick-on-Tweed bridge, for the Northumberland C.C. J. A. Bean, County Surveyor, Moot Hall, Newcastle-on-Tyne. Deposit £10.

DECEMBER 21. — Bideford. — DEVIATION. — Construction of a deviation of the Bideford-Northam main road, approximately 3,900 ft. in length, to connect the Quay within the Bideford Borough and Raleigh Cross within the Northam Urban District, for the T.C. Borough Surveyor. Deposit £20.

DECEMBER 21. — Edinburgh. — ROAD. — Construction of Section E.F. (Starlaw to Dechmont), Contract No. 5 West, of a new road from Glasgow to Edinburgh, for the T.C. D. A. Donald, engineer, 271, Alexandra-parade, Glasgow. Deposit £3 3s.

DECEMBER 21. — Hendon. — WIDENING. — Surface water drainage widening works, kerbing, concrete carriageway, footway paving and other works in connection with the widening of Queens-road from Brent-street to near the bridge over the L.N.E.R. (Edgware Branch), for the U.D.C. A. O. Knight, Engineer and Surveyor. Deposit £5.

DECEMBER 21. — Lymington. — RAILINGS. — 130 lin. yds. of unclimbable wrought-iron square bar railing, 4 ft. 6 in. in height, with standards, stays, bolts and nuts, &c., for the U.D.C. Surveyor.

DECEMBER 21. — Newton Abbot. — ROADS. — Roads and sewers in connection with the first instalment of the Broadlands housing scheme, for the U.D.C. C. D. White, surveyor. Deposit £2 2s.

DECEMBER 21. — Thorne. — SEWERS. — About 7,330 yds. of stoneware and iron pipe sewers (7 in. to 18 in., mostly 9 in.), together with manholes and all appurtenant works, storage tank and pump house, and about 4,300 yds. of 10 in. iron pipe pumping main, and about 3,810 yds. lin. of stoneware and iron pipe sewers (7 in. to 21 in., mostly 12 in. and 15 in.), together with manholes and all appurtenant works, about 2,400 yds. 10 in. iron pipe pumping main, and erection of Dortmund tanks, mud-drying beds, small pump house, effluent outfall sewer, and other sundry works, for the R.D.C. W. H. Radford & Son, engineers, Albion-chambers, King-street, Nottingham. Deposit £3 3s.

DECEMBER 21. — Warwickshire. — WIDENING. — Widening and incidental works connected therewith, of about 5½ miles of main road from Stonebridge to Allesley, for the C.C. D. H. Brown, County Surveyor, County Surveyor's Office, 8, Northgate-street, Warwick. Deposit £5.

DECEMBER 22. — Dublin. — PIPES. — 1,300 yds. lin. 33 in. internal diameter; 11,900 yds. lin. 24 in. internal diameter; 3,400 yds. lin. 12 in. internal diameter. Alternative tenders and guarantees of delivery may be submitted for (a) steel pipes, bitumen lined; (b) steel

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; R.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

pipes, concrete lined; (c) cast-iron pipes, concrete lined; (d) cast-iron pipes, bitumen lined; (e) cast-iron pipes coated, for the T.C. Acting Borough Surveyor, 28, Castle-street.

DECEMBER 22.—**South Kensington.**—**DRAINAGE.**—Redrainage work at the Imperial Institute. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

DECEMBER 23.—**Caerphilly.**—**PAVING.**—Forming, ballasting, metalling, sewerage, paving, kerbing, A.C., of Princes-avenue, Corbett-crescent, for the U.D.C. I. H. Richards, surveyor. Deposit £1 1s.

DECEMBER 31.—**Whitby.**—**SEWER.**—950 yards of stoneware pipe sewers, varying in size from 9 in. to 12 in. diameter, with manholes and all appurtenant works, for the U.D.C. W. H. Radford & Son, Chartered Civil Engineers, Albion Chambers, King-street, Nottingham. Deposit £3 3s.

JANUARY 1, 1926.—**Thornton.**—**MAKING-UP.**—For (1) Alexandra-avenue (from Rossall-road to Cleveleys-avenue), (2) Rough Lea-road (from Rossall-road to Sutter-road), (3) Beach-road (from Rossall-road to Queen's-road, adjoining Council Schools), (4) Thornton-road (from Rossall-road to Queen's-road), (5) Hastings-road, for the U.D.C. H. Panton, Surveyor.

JANUARY 4.—**Watford.**—**ROADS.**—Construction of about 760 lin. yds. of new roads, 1,400 lin. yds. of new sewers and the widening of 200 lin. yds. of existing roads, on the housing estate, Gammons-lane, for the T.C. W. W. Newman, Borough Engineer. Deposit 2s.

JANUARY 30.—**Gosforth.**—**SEWERS.**—For laying new sewers and formation of roadways to complete the layout of the Coddage housing site, for the U.D.C. G. Nelson, engineer and surveyor.

Competitions.

(See Competition News page 856.)

Auction Sales, Tenders, etc.

*DECEMBER 14.—**Tooting, S.W.**—F. H. Clark will sell, without reserve, at the Tooting Home, Church-avenue, timber and building materials recovered from government buildings above. Auctioneers, Railway Yard, York-road, Wandsworth, S.W.18.

DECEMBER 15.—**Bromley.**—**Knight, Frank & Rutley** will sell, by direction of Captain Maurice Routon and W. H. Hasland, Esq., at the Royal Bell Hotel, "The Rookery," a freehold residential property, together with buildings and two cottages, about 84 acres. Auctioneers, 20, Hanover-square, W.1.

*DECEMBER 15.—**Deptford, S.E.3.**—Frank G. Bowen will sell, at the Sale Rooms, 62A, Aldersgate-street and arcade, E.C.1, re E. A. Kimpton & Co., Ltd., by order of the Receiver, on account of whom it may concern, enamelled iron baths and Columbian pine and their doors, &c. Auctioneers, as above.

*DECEMBER 15.—**London, S.W.**—Vereyard & Yates will sell an assorted stock of timber, fittings and building materials, &c., at 255, Clapham-road, S.W. Auctioneers, 365, Norwood-road, S.E.27.

*DECEMBER 22.—**Bermondsey, S.E.1.**—Charles R. Davis & Co. will sell, upon the premises, 91, Tooley-street (near London Bridge Station) and the Yard, Trillery-street (in voluntary liquidation, re J. A. Enwick, Ltd., by order of the liquidator), the whole of the stock-in-trade, plant and materials of a builder, contractor, and decorator. Auctioneers, 285, Borough High-street, S.E.1.

Public Appointments.

*DECEMBER 15.—**Essex.**—Quantity Surveyors' Assistant for working up and abstracting of the temporary staff, required by the C.C. Jno. St. John, R.I.B.A.

DECEMBER 16.—**London.**—General Foreman required to supervise the erection of a maternity and child-welfare centre, &c., in Latchmere-road, by E. Battersea B.C. Edwin Austin, Town Clerk, own Hall, S.W.11.

DECEMBER 16.—**Wakefield.**—Architectural Assistant in the Office of the Education Architect required by the E.C. of the West Riding of Yorkshire. Education Department, County Hall.

*DECEMBER 19.—**Grays.**—Tenders for an Ingersoll and 8 by 8 type 14 Portable Air Compressor and a 24 in. Gun size N.1, together with complete equipment, which can be seen on housing estate at Grays Nurseries, Essex. Clerk to the Council, Bank Buildings, Grays.

*DECEMBER 21.—**Guildford.**—Buildings Surveyor and an Assistant Surveyor required, by the R.D.C. S. V. Cullerne, Clerk to the Council, Commercial-road, Guildford.

*DECEMBER 22.—**Southall, Middlesex.**—Fully qualified store-keeper required by the U.D.C. The Engineer and Surveyor, Town Hall, Southall.

*DECEMBER 23.—**Cape Town.**—Senior Lecturer and organiser in the Building Trades Department at the Cape Technical College. Chambers, Guthrie & Co., Ltd., 9, Idol-lane, London, E.C.3.

*NO DATE.—**Gold Coast.**—Foreman of Works required by the Government of the Gold Coast, for the Public Works Department, for two tours of 12 to 18 months' service. Apply, Crown Agents for the Colonies, Millbank, Westminster, S.W.1, quoting "M/14189."

*NO DATE.—**Tanganyika.**—Inspectors of Works required by the Government of the Territory, for the Public Works Department, for a tour of 20 to 30 months' service, with possible extension. Apply at once, Crown Agents for the Colonies, 4, Millbank, Westminster, S.W.1, quoting "M/13566."

ALFRETON.—The U.D.C. has received sanction from the M.H. to the erection of sixteen houses at Somercoates.

ALWICK.—The T.C. is to approach the Northumberland E.C. with a view to securing the provision of a new infants' school at New Town.

BATH.—The M.H. has held an inquiry into the application of the City Council to borrow £19,331 for the reconstruction of the Old Royal Baths.

BELFAST.—The Engineering Inspector to the Ministry of Home Affairs held an inquiry into an application of the Corporation for sanction to the following loans:—£70,000 for road construction and footway works; £2,850 (supplemental) for road reconstruction and street widening works in Holywood-road; and £12,000 for the rearrangement of the City Hall grounds.

BILLERICAY.—The R.D.C. has received from Messrs. Wilcox & Raikes, consulting engineers, further particulars of the Wickford sewerage scheme. A revised estimate has been prepared, based on a population of 3,000. The cost is estimated at £19,000.

BILLINGHAM.—The U.D.C. has received sanction from the M.H. to the borrowing of £25,972 for the erection of 66 houses on the Chiltons-lane site and £1,193 for the construction of streets and sewers.

BIRKENHEAD.—The Corporation have decided to construct a tramway shelter in Bedford-road, at a cost of £175. Plans have been prepared for a housing scheme on land near Hoylake-road. Plans have been prepared for the erection of three-story flats, with shops on the ground floor, in New Chester-street, on the Dell estate.—The B.E. has approved the plans of the new secondary school for girls, at an estimated cost of £55,000.

BIRMINGHAM.—Notification has been received by the Public Works and Town-Planning Committee that the M.H. has approved experimental schemes for the erection of smaller type two bed-roomed houses to be erected at Greet, and two or three bed-roomed type flat dwellings to be built in Garrison-lane.

BLACKBURN.—The T.C. has decided that the following sums should be borrowed:—£5,564 for the purchase of land, bridge and road works in connection with the widening and improvement of Bolton-road at Ewood Bridge; £8,350 for the construction of a highwater tank on Eddyfields Farm.—Mr. Charles Baynes, Hack Saw Works, Knuzden, proposes an extension to the engineering works. Mr. A. Frost, civil engineer, Lisborn-terrace, has charge of the scheme.

BLACKPOOL.—The Town Council has approved the erection of a borough information bureau on an embayment of the promenade opposite West-street, midway between the North Pier and Church-street.

BOLTON.—The Corporation are to obtain fresh tenders for the erection on the Union-road site of 15 blocks of four flats each.—Seven acres on the Moorfield estate are to be acquired for housing purposes.—The E.C. has agreed to the plans for the remodelling of St. Mark's Church of England schools.—A tram shelter is to be constructed at a cost of £400 at the Dunsen terminus.—Plans and estimates have been approved for the first portion of the works in connection with the extensions at the Hacken sewage works.—A site is to be obtained at Tonge Moor for the erection of a branch library.

BOSWORTH.—The question of the reconstruction of the pier and approach to Bournmouth Pier, at an estimated cost of £18,000, is under consideration.

—The Corporation's £170,000 pavilion scheme is progressing rapidly, and the contract for the superstructure is to be put out to tender. The pavilion will provide a large concert and entertainment hall, licensed refreshment rooms, tea rooms, &c.

BRAMHALL.—Mr. G. Fryer, Tenement-lane, has a scheme on hand for the erection of 17 shops.

BRISTOL.—The Corporation have prepared a Bill seeking power to acquire land for the purposes of the dock undertaking, and land at Portishead for a generating station.—Compulsory powers are also to be sought for acquiring lands in the city for municipal buildings and for the extension of the Avon View cemetery.—A preliminary town plan has been prepared for the development of the Avonmouth, Shirehampton, Westbury, Horfield and Filton districts.

BURNLEY.—The M.H. has consented to the borrowing of £20,000 by the Corporation for the erection of shops on the site of the old property demolished in connection with the St. James's-street improvement scheme.

BURTON-ON-TRENT.—The Housing Committee has accepted, subject to sanction, a tender for pulling down property known as Park House and building on the site with the material displaced 16 houses, at a cost of £6,180.

BUXTON.—The T.C. has resolved that the Surveyor be authorised to advertise for tenders for the erection of 20 houses of the parlour type and 20 houses of the non-parlour type on the Heath-grove site.

CANNOCK.—The U.D.C. has decided to apply to the M.H. for a loan of £15,000 for the erection of 36 houses in Hunter-road.—In connection with an application by the R.D.C. for sanction to borrow £63,000 for works of sewerage, an inquiry has been held by the M.H. into part of the scheme relating to the parish of Bushbury, estimated to cost £32,400.

CARDIFF.—The R.D.C. has received sanction from the M.H. for the loan of £60,000 for advances under the Small Dwellings Acquisition Acts.

CARLOW.—The Mental Hospital Committee has received plans for building an extension to the building at an estimated cost of £14,910.

CHELTENHAM.—Mr. Malvern has prepared plans for 15 houses, and the Corporation are to invite tenders.

CERTSEY.—The Poor Law Guardians have decided to make structural alterations at the infirmary at a cost of £1,000.

CHESTERFIELD.—The R.D.C. has decided to acquire sites for the erection of 50 houses at Deighton, 25 at Pilsley, 25 at Calow, and 40 at Sutton-cum-Duckmanton.

CHORLEY.—The R.D.C. scheme to erect 50 houses has been approved by the M.H. Tenders will be invited for 30 houses.

CLITHEROE.—The R.D.C. have approved plans for a proposed R.C. church school, to be erected at Whalley Abbey on part of the old Abbey ground.

COLCHESTER.—A three-story banking hall is to be erected in the High-street for Messrs. Lloyds Bank, Ltd. Messrs. W. F. Cross, Ltd., Princes-road, Felixstowe, are carrying out the building work under the direction of Mr. H. Munro Cantley, A.R.I.B.A., The Thoroughfare, Ipswich, architect.

DARLINGTON.—Plans passed by the T.C. include ten houses and two combined houses and shops, for J. E. Chilton.

DERBY.—The Corporation Housing Committee recommended the erection of a further 270 brick-built houses. They recommend that the Borough Surveyor be empowered to offer additional contracts to W. Walkerdine, Ltd., 25 pairs on Cowsley estate and 25 pairs on the Osmaston estate; E. Morley & Sons (Derby), Ltd., 24 pairs, Osmaston estate; J. H. Fryer, 36 pairs on the Osmaston estate; Special Works Department, 25 pairs, Osmaston estate, at £923 per pair.

DONCASTER.—The Doncaster Industrial Co-operative Supply Co., Ltd., has acquired a site at Duns Croft upon which they propose to erect a branch stores.

DOTGLAS, I.O.M.—The parishioners of St. Mary's propose to erect a new parochial hall for which funds are being raised.

DUBLIN.—The Commissioners have decided to make application to the Minister for Local Government and Public Health for sanction to a loan of £120,000 for an improved water supply.

EAST PRESTON.—The Housing Committee reported that they had approved of a revised lay-out plan for the Darrington site, providing for 26 houses, instead of 12, and, subject to the approval of the M.H.—The R.D.C. also approved the surveyor's specifications for cottages at Angmering, East Preston, Poling, and Warmingcamp.

EPSOM.—The U.D.C. are seeking permission to erect another 30 houses.

FAREHAM.—The R.D.C. are acquiring land at Sarisbury for a housing scheme.

GALWAY.—The Local Government Department is to hold an inquiry into the application of the U.D.C. for a loan of £3,600 for the erection of latrines in Eyre-square and improvements at the Galway Technical Institute.

GATESHEAD.—The T.C. has adopted new works schemes to the extent of £22,593.

GRAVESEND.—A new boiler house is to be erected at the Electricity Works. Mr. Thorald Bennett, 191, Parrock-street, architect.

GRAYS.—A new police court-house is to be built.

HALIFAX.—It is proposed by the B.G. to carry out an extension scheme at the Children's Home in Gibbett-street. C. F. L. Horsfall & Sons, architects, of Lord-street, Halifax, have been instructed to prepare plans.

HARROW.—The Middlesex C.C. has resolved that, subject to the approval of the M.H., a building be erected at Greenhill-crescent, at an estimated cost of £1,500 for the purposes of a tuberculosis sub-dispensary.

HASTINGS.—The Corporation are considering a proposal to assume the whole of the sea bathing arrangements, for which purpose the purchase of 110 new tents at £779 and the construction of ten concrete cabins at a cost of £565 are recommended.—The M.H. has sanctioned a loan of £31,812 for the construction of roads and erection of 60 steel houses on the Broomsgrove estate.—A loan of £2,500 has been sanctioned for sewerage in connection with the development of the Grove estate for housing purposes.

HOLYHEAD.—The Council has been engaged for a considerable time past in endeavouring to carry through a scheme having for its object the development of the town as a seaside resort, the estimated cost is £50,000.

HORNSEY.—The E.C. has decided to construct an open-air school on the Coldfall site, for which plans are to be prepared by Mr. H. Carter Pegg, F.R.I.B.A.

—Another hundred houses are to be erected on the housing estate at Muswell-hill.—Alterations are to be carried out at 22, Broadway, Crouch End, at a cost of £450.

HULL.—The T.C. has accepted the estimate of the City Engineer at £570 5s., for cleaning the Guildhall. Application is to be made to the M.H. for sanction to borrow £3,180 for erection of a porter's lodge at the new infectious diseases hospital.

ILFORD.—The M.H. has agreed to the lay-out of the Horns-road estate for the erection of 98 non-parlour houses and 24 maisonnettes, and tenders are now being invited for the scheme.

* See also our List of Contracts, Competitions, &c.

ILKESTON.—The Borough Engineer has prepared plans for the erection of a pavilion in the Rutland recreation ground at a cost of £400.

INCE.—The E.C. have approved plans of the proposed lay-out of the Rosebridge Council School. Provision is made for 18 class rooms, art room, and other rooms for instruction, and the building is so planned to obtain a north light.

KIRKHAM.—The Parish Church Committee has in hand the proposed extensions to the Church House. Plans are being prepared by Whittaker & Gardner, architects, 26, Birley-street, Blackpool. Plans have been approved for the new institute for the Kirkham and Wesham Working Men's Club. The plans have been prepared by F. Roberts, architect, Fleetwood.

LANCASTER.—A loan of £32,174 has been sanctioned for extending the gas works, a scheme which will cost a total of £54,000.

LEE, S.—The T.C. resolved that application be made to the M.H. for sanction to borrow £201,227 for the erection of 351 "B" type houses on the Hollin Park estate and £47,998 for street works and sewers; £233,311 for the erection of 300 "A2" type and 200 "A3" type houses on the York-road estate and £54,554 for street works and sewers. The Council resolved that the Improvements Committee be asked for a site near the tramway terminus at Cross Gates and also for a site for the erection of a public convenience near the tramway terminus at Meanwood. Sanction has been received from the M.H. for the borrowing of £1,350 and £28,824 for additions to Rodley Sewage Works. The Council has approved plans and estimates of cost of excavations for roads, sewerage, kerbing and surfacing works in connection with the erection of 500 houses proposed to be erected on the York-road housing estate and 351 houses proposed to be erected on the Hollin Park estate, Oakwood-lane. The T.C. are considering a question with respect to the acquisition of a site for sanatorium purposes in lieu of the site in King-lane, Moortown. The Council recommend the construction of paddling pool at Roundhay Park, and widening of Smithy Mills-lane and rebuilding of a bridge. Tenders are to be invited for the construction of additional sewage, stormwater and humus tanks, with sludge pump-house, workshop and store, at Rodley Sewage Works. The Council resolved that, subject to a grant being made by the Unemployment Grants Committee towards the cost of the work, humus settlement tanks be constructed at the main sewage works at Thorpe Stapleton and that the Sewerage Engineer be instructed to prepare and submit the necessary plans and estimates. Plans passed: H. & D. Leslie, two semi-detached houses, Montreal-avenue, Chapel Allerton Hall estate, and eight semi-detached houses, estate off King-lane and Ring-road, Moortown; Pickard & Co., 24 semi-detached houses, Buckingham House estate, Headingley.

LEVENSHULME.—The Conservative Club are raising funds for the enlargement of the club premises.

LIVERPOOL.—Contracts for the erection at a cost of £41,000 of a new elementary school has been sanctioned by the E.C. The school will accommodate 1,200 children.

LONDON (FINSBURY).—The Governors of Owens School for Boys have decided to provide an assembly hall, at a cost of £11,000.

LONDON (FULHAM).—The parishioners of All Saints has raised £4,333 for a new church hall.

LONDON (HAMMERSMITH).—The L.C.C. recommend that the portion of the Wormholt estate, Wormwoodscrubs, to be acquired from the B.C., be appropriated for housing purposes.

LONDON (HACKNEY).—The L.C.C. has approved the B.C.'s recommendation for the erection of the urinal, including lighting, draining, making-up of paths, &c., estimated at £440, at Victoria Park. Plans passed: A. J. King, Ltd., factory premises at rear of 116, De Beauvoir-road; Thomas & Edge, factory premises on land at rear of Clapton-terrace Mews leading out of Braydon-road; Crawley & Co., mortuary and laundry at St. Joseph's Hospice, Cambridge Lodge Villas, Mare-street.

LONDON (LEWISHAM).—The B.C. passed plans Eagen Bros., ten houses, Baring-road.

LONDON (POPLAR).—The L.C.C. recommend the borrowing by the B.C. of £36,480 for housing purposes.

LONDON (ROTHERHITHE).—The L.C.C. has decided to reconstruct the flooring at the Silwood-street elementary school, at a cost of about £670.

LONDON (ST. PANCRAS).—The managers of St. Aloysius R.C. school are proposing to rebuild the school, with accommodation for 300 boys.

LONDON (WANDSWORTH).—The L.C.C. recommend the borrowing by the B.C. of £550 for housing purposes.

LONDON (WOOLWICH).—The B.C. recommend that the further twenty houses on Section "C" of the Council's housing estate at Eltham, sanctioned by the M.H., be at once constructed by direct labour under the supervision of the Borough Engineer, at an estimated cost of £12,340. The M.H. are prepared to sanction a loan of £6,800, for the proposed baths at Plumstead. Plans passed: Hoskins Bros., ten houses, Weigall-road.

LUTON.—On a recommendation by the General Purposes Committee the T.C. has decided to make application to the M.H. for payment of subsidy in respect of a further 200 houses, and for sanction to the borrowing of £20,000 for the purpose. Application is to be made to the M.H. for specific approval to the erection of the further 80 houses on the Dunstable-road site.

LYNEMOUTH (NORTHUMBERLAND).—Plans prepared by Mr. J. J. Eltringham, L.R.I.B.A., of Blackhill, have been accepted by the Morpeth R.D.C. for the erection of a new Primitive Methodist Church and Sunday School, to seat 400 and 350 respectively, at a total cost of £9,000.

MALTON.—The T.C. passed plans: Holland-street, sub-station near the Greyhound Inn, for the Electricity Department; London-road, sub-station at the Athletic Ground, for the Electricity Department.

MANCHESTER.—The Corporation has obtained consent for loans totalling £1,386,000 for housing purposes. Land at New Noston has been allocated

for the erection of a municipal school. The M.H. has sanctioned the scheme for the provision of additional lairage accommodation at the city abattoirs. A shelter is to be erected at the Slade tramway terminus.

MIDDLETON.—The T.C. are considering the extension of the present town hall estimated to cost £690, or to erect a new building to cost £1,300. The Engineer, Mr. Harrison, is preparing plans.

NOTTINGHAM.—Proposed schemes for the unemployed at Nottingham will cost £60,000. It is proposed to purchase 38 acres of land in the Sneinton area for housing purposes. The Estates Committee also propose to build houses on the Lenton Abbey estate.

OLTHAM.—The Borough Engineer has prepared plans for a bus garage at Oldham Edge, and tenders are to be invited for the work. Plans are to be prepared for public conveniences at Strineside. The E.C. are negotiating with the B.E. regarding the provision of secondary school accommodation. An orthopaedic clinic is to be established by the E.C. The Corporation are considering with the Chadderton authorities a scheme for the provision of a child welfare centre and clinic.

OSWESTRY.—The R.D.C. has received sanction from the M.H. approving the tender of £8,500 for the erection of 18 houses.

OUGHTRINGTON.—Funds are being raised by the members of the Parish Church for the proposed erection of a church hall.

PETERBOROUGH.—The R.D.C. has decided to place the following in the second part of their housing scheme: Castor (six houses), Northborough (12), Glington (three), Maxey (four), Etton (four), and Fengate (14)—a total of 48 houses. The approval of the Ministry and permission to borrow £2,575 for the erection of six houses at Eye, by Messrs. Gutteridge, has been received.

PLYMOUTH.—The M.H. has sanctioned the borrowing of £1,195 for the conversion of three buildings at Elphinstone barracks. House plans in respect of the 86 houses proposed to be erected by the Great Western (Plymouth) Housing Society, Ltd., at Beechfield, were approved.

PONTFRAC.—The E.C. has decided to proceed with the erection of a new infants' school at Baghill housing estate with accommodation for 250 infants. A site is also to be acquired for the erection of a new Central School to provide accommodation for 560 infants and girls. Plans have also been prepared and approved for extensions to the Love-lane School, at an estimated cost of £1,300.

PORTSMOUTH.—The B.G. has prepared sketch plans for the new children's homes to be erected at Portdown Hill, accommodation being provided for 204 children on the cottage home system. There will be provided on the estate a swimming bath, workshops, recreation room and administrative offices. The E.C. has accepted the gift of Drayton Lodge and grounds for purposes or an institution for crippled children.

PREESALL.—The T.C. are to acquire approximately two acres of land near Ellison-terrace for a proposed housing scheme.

PRESTON.—The T.C. passed plans: A. C. M. Lillie, assembly room, Shepherd-street; A. C. M. Lillie, Royal Infirmary accident block and operating theatre, Stanleyfield-road; D. Ainsworth, 25 houses, Raikes-road, Ansdell-street, Poynter-street, Sellers-street.

REDCAP.—Plans have been prepared by Mr. J. Jackson, architect, of Marske, for the erection of a Working Men's Unionist Club.

REIGATE.—The Corporation are obtaining compulsory powers to acquire three acres at Smoke-lane for a housing scheme.

ROCHFORD.—The R.D.C. has received plans from Christiani & Nielsen, Ltd., for the proposed seven-span

concrete bridge which is to connect Canvey with mainland at South Benfleet. One hundred and two houses are to be erected, the sites being Thunders, Rayleigh, and Great Stambridge (20 each), Rochford (30), and Little Wakering (12).

ROTHERHAM.—The Markets and Baths Committee recommended approval of a plan for the new car market in Corporation-street, showing the pens, stalls and temporary shed, the total approximate cost be £3,500.

SCARBOROUGH.—The Housing, Sanitary and Welfare Committee recommended that houses for the working class should be erected as follows:—Twelve at Seaford, four at Leberston, eight at East Ayton, 12 at Snapham, eight at West Ayton, four at Burniston, and four at Cayton.

SHEFFIELD.—The members of the Endcliffe Baptist Congregational Church, Sheffield, are hoping to build a new church in the near future.

SHOREHAM.—Funds are being raised for the Shoreham Baptist Church Manse. The total cost, with renovations is estimated at £850.

SMETHWICK.—The C.B. approved the draft lay-out in respect of the additional twenty-four houses to be erected by direct labour.

SOUTH KIRBY.—The Parish Council are urging the R.D.C. to acquire further housing sites on the Barnsley road, South Kirby, and to erect an additional 12 houses.

SOUTHWRAM.—The Council has approved the erection of 20 bungalows in Long-lane.

SOUTH SHEFFIELD.—A loan of £1,670 has been sanctioned for the erection of a handicraft centre in Minter-road. The Corporation are to borrow £10,000 for further housing subsidies. The Tyne Dock L.C. Co. have prepared plans for the development of estate adjoining Deans Occupation-road, by the erection of 248 dwellings in flats and 28 shops. Sanction has been given to the borrowing of £14,555 as the Corporation's share of the cost of bridge works and road works in connection with the diversion of Jarrow road.

STALYBRIDGE.—The B.E. has agreed to the scheme of the E.C. for the erection of a school for about 100 children at West Hill. The Borough Surveyor has prepared plans for a mortuary to be erected in King-street.

STANLEY.—The U.D.C. are being urged to undertake further housing schemes, the Durham County Medical Officer estimating that about 1,000 houses are required.

STEYNING EAST.—The R.D.C. are to prepare a scheme for the erection of 14 houses on a site at Patcham.

STRETTON.—The plans have been approved for the erection of a proposed open air schools at Longferry Park, estimated to cost £10,700. The plans have been prepared by P. Howard, A.R.I.B.A., Most street, Manchester. The managers of St. Hilary Schools are proposing to make improvements to the premises by the provision of a central hall, additional lavatory accommodation, cloak and teachers' rooms.

SWANSEA.—A large extension is to be made to the Hotel Metropole, and adjoining property is to be incorporated into the scheme. The plans have been prepared by Thomas & Jones, F.F.R.I.B.A., 15, King-street. The Swansea Highways Committee have approved the widening of Mayals-road, at a cost of £35,504, and Town Hill-road, at a cost of £18,934.

TOTTENHAM.—The D.C. has approved a scheme for the erection of 12 houses in pairs of the non-parade type on the Walshaw site. A scheme is under consideration by the Lancashire C.C. for the proposed erection of a new Council school.

WAKEFIELD.—The management of the Mater Hospital are considering a proposal to spend £50,000 to carry out works of alterations and extensions at the Institution. The plans, prepared by the City Surveyor, Mr. L. Ives, have been submitted to the M.C. for approval.

WARRINGTON.—Plans have been approved by the E.C. for alterations and additions to Hamilton-street schools, at an estimated cost of £1,622. The R.D. are considering the erection of 16 houses type "A" and 20 houses type "B" by direct labour to be planned by J. Eliston, architect.

WEETSLACE.—The U.D.C. is making application to the M.H. for permission to erect 50 houses at Dudley.

WEST HARTLEPOOL.—The Management Committee of the Cameron Hospital has decided to provide orthopaedic department, at a cost of £1,600.

WESTHOUGHTON.—A proposal is under consideration for converting the seniors' department of the County school into a central school, and for the erection of a new building on or near Manchester-road to provide for displaced pupils.

WEST SUSSEX.—The C.C. are taking steps to ascertain the views of local authorities regarding the provision of a colony for mental defectives.

WIGAN.—The B.C. have approved a proposal for the erection of houses on the Bottling Wood estate by direct labour under the supervision of the Borough Engineer, R. B. Donald.

WINCHESTER.—The T.C. are considering a scheme for the erection of a further 42 houses.

WORSBOROUGH.—The U.D.C. are recommended by the Housing Committee that 22 houses be constructed under the Housing Act, 1924. The proposal has been approved. The Electrical Distribution of Yorkshire Ltd., are proposing to build a sub-station at Cuttist End.

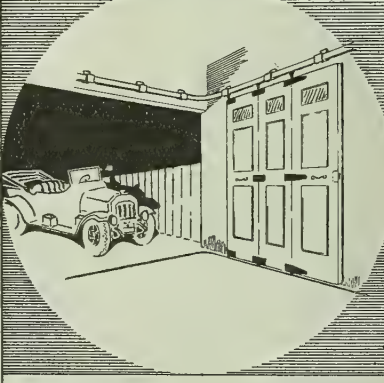
WORTHING.—During October plans for the erection of eighteen houses and nine other buildings, representing a total estimated constructional cost of £14,455, have been passed by the Corporation. Plans are being prepared by H.M. Office of Works for the new police office in Chapel-street.

YORK.—The culvert on the Tank Hall estate is to be constructed by direct labour, at a cost of about £5,000. The T.C. passed plans: Culliford & Tind ten houses, Huntington-road; and H. E. Harrow ten, Kilburn-road.

THE "HENDERSON" SYSTEM

SLIDING DOOR GEAR

FOR FACTORIES, GARAGES, SCHOOLS, ETC.



"TANGENT JUNIOR" FOR LIGHT DOORS.
"TANGENT SENIOR" FOR HEAVY DOORS.

WRITE FOR BOUND CATALOGUE B.24 TO:-
P.C. HENDERSON, LIMITED.
BARKING, ESSEX. PHONE, EAST HAM 247.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by Inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.	£ s. d.
Best Blue	4 8 6
Pressed Staffs	3 18 6
Do. Bullnose	9 15 0
Blue Wire Cuts	7 5 0
King's Cross 2 13 3	
grooved for	
Plaster	2 15 3
Bullnose	3 8 3
Stourbridge Fire Brick	
2 1/2 in.	8 11 0
3 in.	10 3 0
4 in.	10 3 0
5 in.	10 3 0
6 in.	10 3 0
7 in.	10 3 0
8 in.	10 3 0
9 in.	10 3 0
10 in.	10 3 0
11 in.	10 3 0
12 in.	10 3 0
13 in.	10 3 0
14 in.	10 3 0
15 in.	10 3 0
16 in.	10 3 0
17 in.	10 3 0
18 in.	10 3 0
19 in.	10 3 0
20 in.	10 3 0
21 in.	10 3 0
22 in.	10 3 0
23 in.	10 3 0
24 in.	10 3 0
25 in.	10 3 0
26 in.	10 3 0
27 in.	10 3 0
28 in.	10 3 0
29 in.	10 3 0
30 in.	10 3 0
31 in.	10 3 0
32 in.	10 3 0
33 in.	10 3 0
34 in.	10 3 0
35 in.	10 3 0
36 in.	10 3 0
37 in.	10 3 0
38 in.	10 3 0
39 in.	10 3 0
40 in.	10 3 0
41 in.	10 3 0
42 in.	10 3 0
43 in.	10 3 0
44 in.	10 3 0
45 in.	10 3 0
46 in.	10 3 0
47 in.	10 3 0
48 in.	10 3 0
49 in.	10 3 0
50 in.	10 3 0
51 in.	10 3 0
52 in.	10 3 0
53 in.	10 3 0
54 in.	10 3 0
55 in.	10 3 0
56 in.	10 3 0
57 in.	10 3 0
58 in.	10 3 0
59 in.	10 3 0
60 in.	10 3 0
61 in.	10 3 0
62 in.	10 3 0
63 in.	10 3 0
64 in.	10 3 0
65 in.	10 3 0
66 in.	10 3 0
67 in.	10 3 0
68 in.	10 3 0
69 in.	10 3 0
70 in.	10 3 0
71 in.	10 3 0
72 in.	10 3 0
73 in.	10 3 0
74 in.	10 3 0
75 in.	10 3 0
76 in.	10 3 0
77 in.	10 3 0
78 in.	10 3 0
79 in.	10 3 0
80 in.	10 3 0
81 in.	10 3 0
82 in.	10 3 0
83 in.	10 3 0
84 in.	10 3 0
85 in.	10 3 0
86 in.	10 3 0
87 in.	10 3 0
88 in.	10 3 0
89 in.	10 3 0
90 in.	10 3 0
91 in.	10 3 0
92 in.	10 3 0
93 in.	10 3 0
94 in.	10 3 0
95 in.	10 3 0
96 in.	10 3 0
97 in.	10 3 0
98 in.	10 3 0
99 in.	10 3 0
100 in.	10 3 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
$\frac{1}{2}$	20/-	$1\frac{1}{2}$	31/-
$\frac{3}{4}$	22/-	$1\frac{3}{4}$	34/-
1	25/-		
TONGUED AND GROOVED FLOORING.		MATCHING (BEST).	
Inches.	per sq.	Inches.	per sq.
1	25/-	$\frac{1}{2}$	16/6
$1\frac{1}{4}$	31/-	$\frac{3}{4}$	19/-
$1\frac{1}{2}$	34/-	1	24/-
BATTENS.		s. d.	
2×2		2	6 per 100 ft.

PRICES CURRENT OF MATERIALS (contd.)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

Per Ft.	Per Ft.
15 oz. fourths ... 3½d.	32 oz. fourths 8d.
15 " thirds ... 4½d.	32 " thirds 9½d.
21 " fourths ... 4½d.	Obscured Sheet, 15 oz. 4d.
21 " thirds ... 5½d.	21 " 5½d.
26 " fourths ... 5½d.	Fluted 15oz. 6½d., 21oz. 9½d.
26 " thirds ... 7½d.	En'led 15oz. 5½d., 21oz. 7½d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

Per Ft.	Per Ft.
Rolled plate 4½d.	
Rough rolled 5½d.	
Rough rolled 5½d.	
Figured Rolled, Baltic, Oceanic, Arctic, Stip- polyte, and small and large Flemish White. ... 6½d.	
Ditto, tinted 9d.	
Rolled Sheet 6d.	
White Rolled Cathedral 5½d.	
Tinted do. 7½d.	

Cast Plate is same price as rough rolled.

VARNISHES, &c.

Per Gallon.	Per Gallon.
Oak Varnish..... Outside	£ 0 14 0
Fine ditto..... ditto	0 16 0
Fine Copal..... ditto	0 18 0
Pale Copal..... ditto	1 0 0
Pale Copal Carriage..... ditto	1 4 0
Best ditto..... ditto	1 12 0
Floor Varnish..... Inside	0 18 0
Fine Pale Paper..... ditto	0 18 0
Fine Copal Cabinet..... ditto	1 2 6
Fine Copal Flatting..... ditto	1 0 6
Hard Drying Oak..... ditto	0 18 0
Fine Hard Drying Oak..... ditto	0 19 0
Fine Copal Varnish..... ditto	1 0 0
Pale ditto..... ditto	1 2 0
Best ditto..... ditto	1 12 0
Best Japan Gold Size..... ditto	0 12 6
Best Black Japan..... ditto	0 10 6
Oak and Mahogany Stain (water)..... ditto	0 12 0
Brunswick Black..... ditto	0 7 6
Berlin Black..... ditto	0 14 6
Knotting (patent)..... ditto	1 5 0
French and Brush Polish..... ditto	0 17 0
Liquid Dryers in Terebine..... ditto	0 9 0
Cuirass Black Enamel..... ditto	0 7 0

TRADE NEWS

A Gravity Conveyor.

Messrs. Herbert Morris, Ltd., have issued Book 105, dealing with the Morris gravity conveyor, the function of which is to transport goods in boxes or bags, on trays or even without containers, no power being employed except that furnished by the gravitation of the earth. The only running cost is that of lubrication, and this is reduced to a minimum by ball-bearing rollers. The illustrations in the book show how the conveyor is applied to a wide variety of trades and conditions. Figures are given to enable everyone to build up his own system without outside help, and prices are listed in a very simple and straightforward manner. A copy of the book is available to anyone applying to the firm's works at Loughborough.

The Hue Fire.

The inflated price of coal has made it imperative to be economical in consuming it; however careful one is, it is not of much avail if the fire itself burns wastefully and most of the heat escapes up the flue. Messrs. Young & Marten, Ltd., of Stratford, E., state that their "Hue" barless fire burns coal scientifically and with a minimum of waste. A very large range of pleasing suites fitted with this fire are illustrated in their latest brochure, although the fire and deflecting back-bricks can be fitted to an old-fashioned grate. The features of the "Hue" include the following:—A lift-off front, with edge to prevent fuel falling off; an air regulator to stimulate or retard combustion; a removable ash-pan, which collects dust left after combustion; a front arranged to fit between uprights where old bars were fixed; a solid cast-iron well with sloping sides, fluted, so that the fuel automatically adjusts itself during consumption, and a removable bottom grating, thickened and convex in shape, with apertures designed to induce the air current, at the same time cooling the bars and prolonging their life.

Change of Address.

Messrs. Leslie & Roe, paint, colour and varnish manufacturers, of 9, Foster-lane, E.C. 2, have moved from this address to 15, Redcross-street, S.E. 1.

NEW BUILDINGS IN SCOTLAND

Aberdeen.—BARRACKS.—Major W. Neish, Officer Commanding the Depot, Gordon Highlanders, Aberdeen, has announced that a scheme has been practically completed for the erection of new barracks in the near vicinity of Aberdeen. Negotiations have been virtually completed for the purchase of a site of about 54 acres of ground at Burnside, Balgownie, upon which it is proposed to erect, at an estimated cost of about £150,000, up-to-date barracks. The new buildings will provide accommodation for 800 men.

Inverness.—ADDITIONS.—A largely-attended public meeting has been held for the purpose of considering a proposal to reconstruct and make additions to the Northern Infirmary, at an estimated cost of £100,000.

Edinburgh.—HOUSES.—The Town-Planning Committee of the Town Council has instructed the Housing Director to prepare reports on the question of direct labour and the erection of reinforced concrete houses.

Troon.—VARIOUS.—The Troon Dean of Guild Court passed plans: J. Delaney, additions and garage at Hotel Welbeck, estimated cost £1,000; H. Brown, architect, dwelling-house at Golf-crescent, estimated cost £1,400; H. Gale, 55, West Regent-street, Glasgow, house and garage in Bentinck-crescent, estimated cost £4,000; W. Brown, Titchfield-road, house in Bogend-road, estimated cost £1,500; R. Paterson, architect and builder, house in new road off Bogend-road, estimated cost £1,700.

Rothsay.—MUSEUM.—It is stated that the Marquis of Bute intends to erect a museum and library of natural history and archaeology for the Bute Natural History Society. The site selected is in Stuart-street.

Hamilton.—HOUSES.—Plans were submitted to the Dean of Guild Court for the erection of 170 houses at Low Waters.

Dunoon.—BEDROOMS.—Plans were submitted to the Dean of Guild Court for the erection of 24 extra bedrooms, bathroom, &c., at Cordova, West Bay, for Mrs. Cannon.

TRADE CUSTOM: REMOVAL OF OLD MATERIALS

Judge Randolph, K.C., at the Wye County Court, gave judgment recently in a case in which Mr. Edward Mills, builder, Beaconsfield, claimed £5 from Mr. Moseley in respect of work executed, part of a contract, at "Thornton," Burke's Road, Beaconsfield—"balance due as per Messrs. Bailey, Denton & Co.'s certificate for work executed." Defendant, who counterclaimed £5, alleged that plaintiff in carrying out the works at "Thornton," removed the cupboard from the kitchen, a corner chimney board from the hall, and a copper geyser from the bathroom.

Mr. Charles Bray, instructed by Messrs. H. Hart & Co., of Richmond, Surrey, was plaintiff, and Mr. B. L. Reynolds (Wye) for defendant.

Plaintiff claimed that defendant had no right to keep either the cupboards or the geyser. Mr. George Langley Taylor (Mr. Bailey, Denton & Co.), denied that it was custom for a contractor to take away articles in the belief of "removal."

Cross-examined by Mr. Reynolds, Langley Taylor asserted that it was not necessary that articles to be "removed" should be stated in the specification, to remain on premises. He admitted that the cupboards after being pulled down had no backs.

Defendant said that he had had 30 years' experience in the building trade, and it was the custom, when requested, to pull down certain things. Unless otherwise stated, the property of the contractor. The cupboards were only skeletons, while the geyser was not worth more than 4s. or 5s.

Mr. Thomas Thurlow, architect and surveyor, of High Wycombe, with 40 years' experience, gave similar evidence as to custom as also did Mr. John T. Harris, builder, contractor, of Easton Street, High Wycombe. Both declared that unless stipulated, articles became the property of the contractor.

The Judge gave a verdict for £2 10s. on the counter claim. Plaintiff's claim had been admitted.

BUILDING TRADE WAGES IN SCOTLAND

The following are the present rates of wages in the building trade in the principal towns in Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers—Masons, Bricklayers, Plasterers.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/7	10½d. to 1/1
Airdrie	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/8
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/1
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/8
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/1
Blairstown	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/1
Boness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Coatbridge	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3 to 1/3
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Dumfries	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/8
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2½
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Greenock	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/4 to 1/3
Hamilton	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/8
Hawick	1/7	1/7	1/7	1/7-1/7½	1/7	1/7	1/7	1/2½
Helensburgh	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/8
Inverness	1/5	—	1/5	1/4	1/5	1/5	1/4	1/1 to 1/2
Kilmarnock	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/8
Kirkcaldy	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/8
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/1
Lanark	1/8	1/8	1/8	1/9	1/8	1/8	1/6	1/0 to 1/3
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8
Motherwell	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/8
Perth	1/8	1/8	1/8	1/9	1/8	1/8	1/6½	1/8
Stirling	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/8
Strathgordon	1/8	1/8	1/8	1/9	1/8	1/8	1/8	1/8
Wishaw	1/8-1/10	1/8-1/10	1/8	1/9	1/8	1/8	1/6½	1/8

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 858.

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.				CARPENTER AND JOINER—continued.			
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep....				FRAMES.			
Add if in clay.....	per yard cube	s. d.	11 0	Deal wrot moulded and rebated.....	per foot cube	s. d.	14 0
Add for every additional depth of 6 ft.....	" "	" "	1 0	Plain deal jamb linings framed	per ft. sup.	1' 1 1/2" 1 1/2"	1 1/2" 1 1/2"
Planking and strutting to trenches.....	per foot super	" "	0 5	Deal shelves and bearers.....	" "	1/7 1/8 1/6	1/9 1/9
Do. to sides of excavation, including shoring	" "	" "	1 0	Add if cross-tongued	" "	2d 2d 2d	2d 2d
CONCRETOR.				STAIRCASES.			
Portland cement concrete in foundation 1 to 6... per yard cube			32 0	Deal treads and risers in and including rough brackets.....	1' 1 1/2" 1 1/2" 2"	2 1/2" 2 1/2"	2 1/2" 2 1/2"
Add if in underpinning in short lengths.....	" "	" "	7 0	Deal strings wrot on both sides and framed.....	1/8 2/- 2/2 2/8	— —	— —
Add if in floors 6 in. thick.....	" "	" "	3 3				
Add if in beams.....	" "	" "	3 9				
Add if aggregate 1:2:4	" "	" "	10 0				
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.....	" "	" "	2 6				
BRICKLAYER.				Housings for steps and risers..... each			
Reduced brickwork in lime mortar and Fletton bricks	per rod	£ s. d.	30 0 0	Deal balusters, 1 in. x 1 1/2 in.....	per ft. run	" "	0 9
Add if in stocks.....	" "	" "	7 10 0	Mahogany handrail: average 3 in. x 3 in....	" "	" "	6 0
Add if in Staffordshire blues.....	" "	" "	22 0 0	Add if ramped.....	" "	" "	11 10
Add if in Portland cement and sand.....	" "	" "	1 10 0	Add if wreathed	" "	" "	23 9
FACINGS.				FIXING ONLY IRONMONGERY (INCLUDING SCREWS).			
Extra for facing in English or Flemish bond for every 10s per 1,000 over the price of the common bricks.....	per ft. super	0 0 1 1/2		6 in. barrel bolts.....	8 1/2d	Rim locks	2/-
POINTING.				Sash fasteners	11 1/2d	Mortice locks.....	4/6
Neat flat struck or weathered joint.....	" "	0 0 3		Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
ARCHES.				Casement stays.....	1/2		
Extra only to the price of ordinary brickwork:—				Cupboard locks.....	1/5		
Fair external in half brick rings.....	" "	0 0 10					
Axed in stocks.....	" "	0 1 9					
Rubbed and gauged jointed in putty camber or segmental	" "	0 6 0					
SUNDRIES.				FOUNDER AND SMITH.			
Damp course in double course of slates breaking joint and bedded in Portland cement.....	" "	0 1 0		Rolled steel joists	per cwt.	s. d.	16 3
Setting ordinary register grates and stoves....	each	1 0 0		Plain compound girders	" "	" "	19 0
Setting kitcheners, including forming flues, &c., with all necessary fire bricks	" "	4 15 0		Do. stanchions	" "	" "	21 9
ASPHALTER.				In roof work.....	" "	" "	27 6
Half-inch horizontal damp course	per yard sup.	4 3					
Three-quarter-inch vertical damp course	" "	8 6					
1/2 inch on flats in two thicknesses.....	" "	6 3					
Angel fillet	per foot run	0 3					
Skirting and fillet 6 in. high.....	" "	1 2					
MASON.				RAIN-WATER GOODS.			
York stone templates fixed	per foot cube	13 0		Half-round plain rebated joints.. ft. run	1/6 1/9 2/- 2/6	4" 5" 6"	2/6 3/3
York stone sills fixed	" "	22 0		Ogee Do. Do. ..	1/9 2/- 2/6 3/3		
Bath stone and all labour fixed	" "	10 6		Rain-water pipes with ears	1/9 2/7 — —		
Portland stone fixed.....	" "	20 0		Extra for shoes and bends..... each	4/4 5/11 — —		
SLATER.				Do. stopped ends	1/11 2/4 3/7 4/-		
Welsh 16 in. x 8 in. 3 in. lap, including nails	per square	72 9		Do. nozzles for inlets	2/2 2/7 3/10 4/3		
Do 20 in. x 10 in. Do. Do.	" "	80 9					
Do. 24 in. x 12 in. Do. Do.	" "	90 0					
CARPENTER AND JOINER.				PLUMBER.			
Fir framed in plates.....	per foot cube	5 0		Milled lead and laying in flashings and gutters....	per cwt.	s. d.	62 6
Do. joists.....	" "	5 6		Do. Do. in flats	" "	" "	61 0
Do. roofs, floors, and partitions	" "	6 0		Extra labour and solder in coated cesspools.....	each	" "	6 9
Do. trusses	" "	8 6		Welf joint	per ft. run	" "	0 6
Deal rough close boarding	per sq.	35/6 40/- 45/-	72/-	Soldered seam	" "	" "	1 6
Flat centering for concrete floor, including struts or hangers	" "	50 0		Copper nailing	" "	" "	0 6
Do. to beams	per ft. sup.	1 0					
Centres for arches.....	" "	1 6					
Gutter boards and bearers	" "	1 0					
FLOORING.				PLASTERER.			
Deal-edges shot	per sq.	44/6 49/- 53/-	60/6 65/-	Render, float and set in lime and hair	per yard sup.	s. d.	2 4
Do. tongued and grooved	" "	45/- 51/-	57/6 65/-	Do. Do. Sirapite	" "	" "	2 7
Do. matchings	" "	45/- 51/-	57/6 65/-	Do. Do. Keen's	" "	" "	3 7
Moulded skirting, including backings and grounds	per ft. sup.	1/6 1/9 2/0 2/6		Add sawn lathing	" "	" "	1 7
SASHES AND FRAMES.				Add metal lathing	" "	" "	2 6
One-and-a-half moulded sashes or casements	per foot super.	1 10		Portland cement screed	" "	" "	2 2
Two Do. Do. Do.	" "	2 1		Do. plain face	" "	" "	3 3
Add for fitting and fixing	" "	0 3		Mouldings in plaster	per 1 girth	0 1 1/2	
Deal-cased frames with 1 in. inner and outer linings, 1 1/2 in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights: average size	" "	3 9		One-and-a-half granolithic pavings	per yard sup.	5 9	
DOORS.				GLAZIER.			
Two-panel square framed	per ft. sup.	2/1 2/4 2/6		21 oz. sheet plain	per foot sup.	0 8 1/2	
Four-panel Do.	" "	2/5 2/8 2/11		26 oz. Do.	" "	1 0	
Two-panel moulded both sides	" "	2/8 2/11 3/2		Obscured sheet	" "	1 1	
Four-panel Do. Do.	" "	2/11 3/2 3/5		1/2 in. rolled plate	" "	0 9	
				1/2 in. rough rolled or cast plate.....	" "	0 10 1/2	
				1/2 in. wired cast plate	" "	1 4	
				PAINTER.			
				Preparing and distemping, 2 coats	per yard sup.	0 9	
				Knotting and priming	" "	0 7	
				Plain painting, 1 coat	" "	0 9	
				Do. 2 coats	" "	1 2	
				Do. 3 coats	" "	1 9	
				Do. 4 coats	" "	2 4	
				Graining	" "	2 3	
				Varnishing twice	" "	1 9	
				Sizing	" "	0 3	
				Flatting	" "	0 7	
				Enamel	" "	1 1	
				Wax polishing	per foot sup.	0 6	
				French polishing	" "	1 2	
				Preparing for and hanging paper	per piece, 2/- to 4/-		

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10 % on the prime cost without establishment charges. A percentage of 1 1/2 should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

A DECISION UNDER THE FACTORY ACT.

A RECENT case under the Factory Act, 1901, in the case *Atkinson v. North-Eastern Railway Company* (*Weekly Notes*, November 21, 1925) should be noted.

The case was heard on appeal from magistrates, and the respondents, the Railway Company, were occupiers of a factory having in the engineers' shop a tube-cutting machine driven by a pulley fixed on a horizontal shaft elevated 13 ft. above the floor level. The shaft had a pulley round which the driving belt passed. On the date in question the driving belt was off the pulley, and a workman employed by the respondents at the request of another of their employees had tried to move the belt from the shaft on to the pulley whilst the engine was running, mounting by a ladder on to a beam 7 ft. from the ground to effect this object. The man sustained injury.

The shaft and pulley were unfenced and the information was laid under section 10 subsection (1) (c) of the Factory Act, which provides, "All dangerous parts of the machinery and every part of the mill gearing, must either be securely fenced, or be in such a position or of such construction as to be equally safe to every person employed or working in the factory as it would be if it were securely fenced." For the respondents it was contended that the shafting was safe from its position, that the man was acting contrary to regulations in attempting to move the belt whilst the engine was running, and that any guard which could have been used for fencing the shaft and pulley must have been removed before the belt could be put on the pulley.

The magistrates had dismissed the information on the ground that from the position of the shaft 13 ft. above the floor level any fencing would have been useless. On the appeal to the High Court the case was remitted to the justices with a direction to convict. The grounds upon which the Judges based their decision were that it was common ground that the shaft and pulley were part of the mill gearing and not fenced, and therefore that an offence would be committed unless it could be shown that that machinery was in such a position or of such construction as to be equally safe to every person employed in or working in the factory as if it had been fenced. The justices had not so found, but had confined their finding to the point that the fencing would have been useless. The Court said it was now being asked to make two assumptions of fact that were not in the case, viz., that this part of the mill gearing was never approached by any person except for the purpose of moving the belt to or from the pulley, and that if there had been fencing no ingenuity could have so constructed it that to carry out that operation it would not have to be removed, but the justices had come to no such findings of fact, but had based their decision on a finding that the fencing would be useless, because the shaft was 13 ft. above the ground.

It is difficult to say why the decision was remitted with a direction to convict instead of being referred back for a proper finding of fact on the present brief report of the case. The finding that a fence would be useless was off the point which the section is aimed at, which is whether unfenced the mill gearing, owing to its position or construction, was equally safe as if fenced to anyone employed or working in the factory, and the case serves a useful purpose in directing the attention of the occupiers of factories to the facts that must be proved.

Obituary.

The death has occurred at his residence in Argyle-road, Dublin, of Mr. George J. Crampton, of Messrs. G. & T. Crampton, Ltd., builders and contractors, Hammernsmith Works, Ballsbridge.

The death has occurred at Kingston, near Kingsbridge, Devon, of Mr. H. Clement Ware, aged fifty-seven, the second son of a former Mayor of Exeter. Mr. Ware was for many years connected with the firm of Ware & Son, architects and surveyors, of Exeter.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes accepted. † Denotes provisionally accepted.

‡ Denotes recommended for acceptance.

§ Denotes accepted subject to modification.

AYLESBURY.—Nurses' home at the Union House, for the B.G. Messrs. Taylor & White, A.R.I.B.A., architects, 7, Bourbon-street. Quantities by the architects:—

H. J. & A. Wright, Ltd., Great		
Missenden	£3,530	0 0
J. Honour & Son, Tring	3,525	0 0
Mayne & Son, Aylesbury	3,497	0 0
Webster & Cannon, Aylesbury ..	3,398	0 0
† Cannon, Breen & Co., Ayles-		
bury	3,210	0 0
‡ Crook & Judd, Aylesbury	3,111	0 5

BALLYTIVNAN.—Plumbing work at the farm-house, for the Sligo Mental Hospital Committee:—

P. J. Healy & Co.	£117
O'Hara & Co.	116
Galloway	113
* J. Langan	110

BANBURY.—Forty-six houses at Grimsbury, for the T.C. Mr. S. Hilton, Borough Surveyor:—

* A. T. Kimberley, Banbury	£19,754
----------------------------------	---------

BARKING TOWN.—Electricity sub-station in Axe-street, for the U.D.C. Mr. C. J. Dawson, Clock House, Chambers. Quantities by Messrs. Gardiner & Axe-street, for the U.D.C.

W. J. Cearn, Stratford	£6,640	0 0
Myall Bros., Ilford	6,400	0 0
A. W. Jaggars & Sons, London ..	6,353	8 4
Hammond & Miles, Ltd., Ilford ..	6,118	0 0
* H. Newell, Poplar	6,000	0 0

BIGGLESWADE.—Foden sheds, for Messrs. Wells & Winch, Ltd., brewers. Messrs. Cockrill & Seller, architects, 7, St. Paul's-square, Bedford:—

Styles & Son, Biggleswade	£1,540
Wrights (Langford), Ltd.	1,360
Wrycroft & Sons, St. Neots	1,250
Bull & Son, St. Neots	1,207
* Bartle & Son, Pottou	1,139

BIRKENHEAD.—Repairs and painting of property in Bentinck-street, Craven-street, Bright-street and Gordon-street, for the Corporation. Borough Surveyor:—

‡ Stott & Ward, Birkenhead	£1,030
----------------------------------	--------

BIRMINGHAM.—Surfacing Bristol-road South, for the Corporation. Mr. H. H. Humphries, engineer and surveyor:—

* W. Shepherd & Sons, Ltd., Rochdale.	
---------------------------------------	--

BOLTON.—Shed for Messrs. Holdsworth Bros., Higher Bridge-street. Messrs. Bradshaw, Gass & Hope, F.F.A.R.I.B.A., Silverwell-street:—

* W. Gornall & Sons, Ltd., Bury.	
----------------------------------	--

BRISTOL.—Electricity extensions, for the Corporation:—

* Vickers, Ltd., in conjunction with the Metropolitan-Vickers Electrical Co., Ltd.	£1,000,000
---	------------

BRISTOL.—Reconditioning six houses in Kingsland-road, for T.C.:—

‡ E. E. Savage	£1,334
----------------------	--------

BRISTOL.—Handicrafts centre in Wick-road, for E.C.:—

* F. Chown	£690
------------------	------

BRISTOL.—Houses at £448 per house, for the T.C.:—

J. Moore—24 non-parlour, Butler-road, Bedminster.	
A. W. Norris—6 parlour and 12 non-parlour, Knowle.	
G. Howell—6 parlour, Knowle.	
A. J. Miller—8 parlour, Knowle.	
Thornton Hall & Co.—12 non-parlour, Bedminster Down.	
C. Zwart—22 non-parlour, Bedminster Down.	

BURY.—Unloading shed at Fernhill-yard. Mr. J. A. Settle, Borough Engineer:—

* J. Greenwood, Ltd., Huntley Brook.	
--------------------------------------	--

CANNOCK.—Thirty-six houses at Hunter-road, for the U.D.C.:—

* Mr. Siddalls, Hednesford	£14,866
----------------------------------	---------

CHELTENHAM.—Lavatory accommodation and caretaker's quarters at Clarence-parade, for T.C.:—

* Amos Wilson & Sons	£1,975 17 7
----------------------------	-------------

COLNE.—Tiling with Beauvais tiles the roofs of six blocks of four houses each, for the T.C.:—

‡ Beaumonts (Manchester), Ltd. £99 4s. per block	
--	--

DONCASTER.—Water tower at Cantley, for the Corporation. Mr. F. O. Kerby, Surveyor:—

* W. & J. Sykes, Ltd., Middlesbrough ..	£8,085
---	--------

DUNMOW.—Houses, for the R.D.O.:—
Woodham Walter, six houses—
* G. C. Sayer, Great Totham £2,634 1
Woodham Mortimer, six houses—
* Mr. Sayer

2,567 15
* Stow Maries, six houses—
* G. Gorton & Son, Great Totham 2,466 2
Mayland, six houses—
* W. Dowsett, Bradwell-on-Sea .. 2,406 0

EXMINSTER.—Four cottages for farm work at the Devon Mental Hospital, for the Devon C. Asylum Committee. Mr. E. H. Harbottle, F.R.C. architect, County Chambers, Exeter:—

Soper & Ayers, Exeter	£2,326 0
Mairs & Tonkin, Exeter	2,159 11 6
A. E. Phillips & Co., Woodbury ..	2,065 0 0
E. C. Lea & Co., Exeter	2,040 0 0
Gould & Son, Topsham	1,963 1 0
Reddaway, Exminster	1,920 1 0
* Mr. Abbey, Ottery St. Mary	1,716 2 0
Mr. Humphries, Starcross	1,700 17 0

GLOUCESTER.—Sixty-eight houses, for the Corporation:—

* Building & Public Works Construction Co., Ltd., Swindon	£30,426 13 0
---	--------------

HARTLEPOOL.—Reconstruction of the Rink the T.C.:—

<i>Fibrous plaster work—</i> * Webster, Davidson & Smiles, Ltd., Sunderland	£387 18 0
--	-----------

Structural steelwork—
* Lamb Hill Ironworks, Glasgow 626 0 0

Central heating—
* Fitton & Co., Ltd., Manchester .. 311 0 0

HERTFORD.—Thirty-two houses, for the R. Mr. A. Gray, F.R.I.B.A., 64, Duncombe-road:—

* F. Dearman, Weston (4)	£1,845 0 0
* Seymour Bros. & Tooke, Stotfold (4)	1,932 15 0
* John Ray, Letchworth (24)	11,074 0 0

HERTFORD.—Alterations, &c., at Woodhall. Mr. A. Gray, F.R.I.B.A., 64, Duncombe-road:—

Miskin & Sons, St. Albans	£2,990 0 0
Ekins & Co., Ltd., Hertford	2,780 0 0
Norris & Son, Hertford	2,740 0 0
* Crook Bros., Ware	2,650 0 0

HORNSEY.—Erection of Rokesly School, E.C.:—

‡ Patman & Fotheringham, Ltd., Islington	£53,219 0 0
--	-------------

HORNSEY.—108 houses at Muswell Hill, for the Corporation. Mr. W. Bowles, architect, Elwick-road:—

R. Mansell, Croydon	£1,170 0 0
C. J. Howland, Wye	1,024 8 0
S. H. Howland, Ashford	983 15 0
* J. B. Sharman, Ltd., Ramsgate	928 0 0

HULL.—Erection of a porter's lodge at the Infectious Diseases Hospital, for the T.C.:—

* Markwell Holmes, Hull	£3,180 0 0
-------------------------------	------------

HULL.—Construction of the Corporation works in Ringrose-street, for the T.C.:—

Yorkshire Hennebique Contracting Co., Ltd., Leeds ..	£15,194 10 4
Peter Lind & Co., London	14,600 0 0
Industrial Constructors, Ltd., London	14,125 11 4

Kettlewell, Son & Co., Ltd., Hull

Hull	12,495 0 0
W. & J. Sykes, Middlesbrough ..	12,330 4 10
J. H. Fenwick & Son, Ltd., Hull	12,004 0 0
H. Arnold & Son, Doncaster	11,437 4 0
E. Quibell & Son, Hull	11,400 0 0
A. J. Darneley & Son, Hull	11,389 0 0
* H. Sugden, Son & Co., Bradford	10,851 13 7
City Engineer's estimate	10,879 16 0

ILFRACOMBE.—Police station for the Devon Standing Joint Committee. Messrs. E. H. Harbottle & Sons, architects, County Chambers, Exeter:—

Western Builders, Barnstaple ..	£10,360 0 0
E. C. Lea & Co., Exeter	9,995 19 10
Holcombe & Sons, South Molton	9,984 0 0
W. Sanders & Son, South Molton	9,965 12 3
E. J. Price & Son, Ilfracombe	9,500 0 0
W. Pearce, Ilfracombe	9,208 0 0
* Robins & Son, Ilfracombe ..	8,616 15 7

ILKESTON.—Sixty-eight houses on the South estate, for T.C.:—

* David Roberts & Son.	
------------------------	--

LAHINC.—Repairs to the promenade, for the T.C.:—

Batt Crowley	£2,700
M. Considine, Miltown-Malbay ..	1,700
J. Gorrilla, Lahinc	1,700
* M. Tully, Lahinc	1,700

LEEDS.—Extensions to factory, New York-road, for Messrs. Heaton's (Leeds), Ltd. Messrs. Bowma & Son, architects and surveyors, 5, Greek-street:—

* Brick and sto e—Wm. Thompson & Son, Leeds	
* Joiners—J. Trickett, Son & Co., Bradley, Leeds	
* Plumber—J. Watson & Son, Leeds.	
* Slaters—Watson & Worsnop, Leeds.	

DEEDS.—For construction of 434 concrete cylinder foundations and the sinking and concreting of 204 cylinder foundation units for the new sewage tanks on the low level site at Knostrop, and for excavating on the site Knostrop, where the cylinders require to be sunk, the sinking of 120 of the first concrete cylinders on site, for the T.C. :—
H. Atkinson & Sons, Ltd.

ONDON.—Public convenience in Forest Hill, at corner of Davids-road and Devonshire-road, for Lewisham B.C. :—

A. T. Peyton	£1,470 0
H. R. Watt	1,247 17
E. C. Christmas	1,208 0

ONDON.—Sheds in Pudding-lane, for the City Corporation :—

N. Lidstone & Sons	£8,310
Kilby & Gayford, Ltd.	7,933
John Greenwood, Ltd.	7,578
Ashby & Horner, Ltd.	7,392
W. Lawrence & Son, Ltd.	7,343
Holloway Bros., Ltd.	7,056
L. & W. Whitehead, Ltd.	6,449

ONDON.—22,000 super yards of asphalt on the new buildings on the Devonshire House site, E.C.2. :—

*T. Faldo & Co., Ltd., Kingsway.

ONDON.—108 dwellings, in four blocks of flats the site of Prince's-road workhouse, for the Lambeth C.C. :—

H. Kent	£79,900	6 11
Wilson Lovatt & Sons, Ltd., Wolverhampton	79,732	15 3
L. & W. Whitehead, Ltd.	77,452	0 0
Leslie & Co., Ltd.	76,533	9 2
—Fosters	76,328	0 0
Holliday & Greenwood, Ltd.	76,049	0 0
Rice & Son	75,690	0 0
Waiter Jones & Sons, Ltd.	75,508	0 0
Hall, Beddall & Co., Ltd.	75,067	0 0
W. J. Mitchell & Son	74,901	0 0
Wm. F. Blay, Ltd.	74,778	0 0
J. Parsons	74,712	0 0
Geo. Parker & Sons, Ltd.	74,443	0 0
Bovis, Ltd.	73,180	0 0
F. & H. F. Higgs, Ltd.	72,875	0 0

(All of London.)
ONDON.—Alterations to the "Earl Russell" house, St. Pancras-road, King's Cross, for Truman, Buxton & Co., Ltd. Mr. A. E. Sewell, J.B.A., architect, 91, Brick-lane, E.C.1. Quantities Mr. Wm. Gilbert, L.R.I.B.A., 74, Broad-street, E.C.2. :—

Knight & Son	£4,357
Johnson Bros.	4,184
Dearing & Co.	4,144
H. V. Clogg	3,955
Snewin Bros. & Co.	3,871
Courtney & Fairbairn, Ltd.	3,717
W. Harper, Ltd.	3,673
*Snelling & Rayment	3,632

ONDON.—Extension of Archer House and erection Arrow House, on the Whitmore estate, for the T.C. :—

Leslie & Co., Ltd.	£19,047	0 0
G. E. Wallis & Sons, Ltd.	17,965	0 0
Griggs & Son	17,580	0 0
Prestige & Co., Ltd.	17,215	0 0
C. F. Roberts & Co., Ltd.	17,054	0 0
Allen Fairhead & Sons, Ltd.	16,714	0 0
Rowley Bros., Ltd.	16,504	0 0
J. E. Billings & Co., Ltd.	16,450	0 0
A. Monk	16,407	0 0
F. & T. Thorne	16,319	0 0
A. E. Symes	16,096	14 10
*R. Woodlason & Co., ...	15,701	19 10

the architect's estimate comparable with the others, £15,873.
 (All of London.)

ONDON.—Alterations to the "Eastern Hotel," house, for Truman, Buxton & Co., Ltd. A. E. Sewell, L.R.I.B.A., architect, 91, Brick-lane, Quantities by Mr. Wm. Gilbert, L.R.I.B.A., Broad Street-avenue, E.C.2. :—

Harris & Wardrop	£16,207
G. Barker	15,560
Courtney & Fairbairn, Ltd.	15,280
Snewin Bros. & Co.	14,750
Knight & Son	14,680
Dearing & Co.	14,449
W. Harper, Ltd.	14,214
Fairhead & Sons, Ltd.	13,959
H. V. Clogg	13,877
T. G. Waterman	13,660

ONDON.—Painting works, for the L.C.C. :—

Southern outfall—	
Vigor & Co. (Poplar), Ltd.	£1,600 0
Griggs & Son	1,560 0
J. Garrett & Son	1,470 0
Sims & Russell	1,144 0
A. H. Inns, Ltd.	1,031 0
Abbey Mills pumping station—	
J. Garrett & Son	1,450 0
Griggs & Son	1,325 0
Vigor & Co. (Poplar), Ltd.	1,089 0
Sims & Russell	843 0
A. H. Inns Ltd.	819 0
*W. Harris, Ltd.	736 0

North Woolwich pumping station—

Griggs & Son	418 0
J. Garrett & Son	335 0
J. S. Fenn	297 13
W. Harris, Ltd.	262 0
Sims & Russell	218 0
Vigor & Co. (Poplar), Ltd.	225 0
A. H. Inns, Ltd.	197 0

Deptford pumping station—

Griggs & Son	847 0
J. Garrett & Son	772 0
Vigor & Co. (Poplar), Ltd.	695 0
J. S. Fenn	648 0
Sims & Russell	473 0
*A. H. Inns, Ltd.	448 0

(All of London.)

MANCHESTER.—Sub-contractors for the erection of the Heald-place centre, for the T.C. :—

Bricklayer—*C. Phillips & Sons, Manchester.
Plumber—*J. Turton & Sons, Manchester.
Plasterer and Painter—*Jones & Jackson, Manchester.
Slater—*Huntingtons, Manchester.

Erection of Levenshulme secondary school for girls—

Mason—*S. & J. Whitehead, Oldham.
Slater—*Kilburn & Son, Manchester.
Plumber—*Turton & Sons, Manchester.
Plasterer and Painter—*Williams & Co., Manchester.
Steelwork—*Robinson & Kershaw, Manchester

Additions and Alterations—Ashton Old-road Municipal School—

Plasterer and Painter—*Horrocks & Hogg, Old Trafford.
Plumber and Glazier—*Ashcroft & Sons, Manchester.

MANCHESTER.—Additions and alterations at Ashton Old-road municipal school, for E.C. :—

*Wm. Thorpe & Son, Ltd., Manchester.

MANCHESTER.—Practical work centre at Heald-place municipal school, for E.C. :—

*Geo. Macfarlane & Son, Ltd., Manchester.

MANCHESTER.—Heating installation, for the E.C. :—

Crumpsall-lane School—

*The Brightside Foundry & Engineering Co., Ltd., Liverpool.

Hague-street Municipal School—

*G. N. Haden & Sons, Ltd., Manchester.

MANCHESTER.—Car shed, Birchfields-road, Fallowfield, for the City Council. Mr. H. Price, A.R.I.B.A., City Architect :—

*General Builders' work—J. Partington & Son, Ltd., Middleton Junction.
 *Steelwork and cast-iron work—Lambourne, Ltd., Openshaw.

MANCHESTER.—Widening of Crescent-road bridge, Crumpsall, for the City Council. Mr. B. Meek, City Engineer :—

*W. Tar & Co., Ltd., Warrington.

MANCHESTER.—Houses on the Moston estate, for the City Council. Mr. H. Price, A.R.I.B.A., City Architect.

*Corralite Construction Co., Ltd., London—140 houses.

MANCHESTER.—Heating installation at Polygon depot, for T.C. :—

*Henry Tattersall, Ltd., Rochdale.

MANCHESTER.—Ironwork for tram shelter at Kingsway, for T.C. :—

*D. King & Son, Ltd., Glasgow.

MANCHESTER.—Construction of bridge over L.M.S. Rly. :—

*W. Storrs, Sons & Co., Ltd., Stalybridge.

MANCHESTER.—Levenshulme secondary school for girls, for the E.C. :—

*Smith & Briggs, Ltd., Old Trafford.

MANCHESTER.—Reslating roof, Platt Hall, for T.C. :—

*R. Crabtree, Manchester.

NEW HOLLAND.—Reconstruction of the New Holland Pier, for the L. & N.E.Rly. Co. :—

*Sir Wm. Arroll & Co., Ltd., Glasgow £84,000

NOTTINGHAM.—Cleaning and painting the male and female sanatoria at the Bagthorpe Institution, for the B.G. :—

*S. Coulton, Nottingham £163 15

OLDHAM.—Extension of technical school, Ashcroft-road, for E.C. :—

Excavator, Bricklayer and Concretor—*Whitworth Whittaker & Co., Ltd.

Mason—*A. Mackay.
Carpenter and Joiner—*S. Ashton, Ltd.
Plumber and Glazier—*Enoch Shaw & Son.
Plasterer—*Edward Pearce.
Slater—*J. Jackson.
Painter—*B. Chadwick & Sons.

OSSETT (YORKS).—Reconstruction of banking premises in the Market-place, for Messrs. Barclay & Co. :—

*Wm. Irwin & Co., Ltd.

PLYMOUTH.—Twenty-four flats, Pottery Quay, for the C.B. :—

*Plymouth Builders, Ltd. £11,291 6 10

PLYMOUTH.—Repairs to 35, Albert-road, for the C.B. :—

*W. Richardson £100

PLYMOUTH.—Reorganisation of the hot-water system, for the C.B. :—

*G. N. Haden & Son, Ltd. £1,349

PONTARDAWE.—Twenty-eight houses on the Ystalyfera site, for the R.D.C. Mr. E. D. Jones, A.R.I.B.A., architect :—

W. Morgan, Ystradgynlais ..	£15,481	18 0
Hopkins & Evans, Ystalyfera ..	14,886	16 3
*J. Morgan, Neath	14,692	0 0

PONTEFRAC.—Six cottages in Knottingley-road for Messrs. W. R. Wilkinson & Co. Messrs. Tennant & Smith, architects and surveyors :—

*Builder—Brown & Lodge, Pontefract.
 *Joiners—Ward & Son, Pontefract.
 *Tiler—Stewart Bros., Pontefract.
 *Plumber—Joseph Woodhead, Wakefield.
 *Plasterer—T. W. Senior & Sons.
 *Painter—R. Wheatley & Son.

PORT TALBOT.—Pile-driving and ferro-concrete foundations to a gas-holder at the Aberavon Gas Works, for the T.C. Mr. A. J. Bond, Gas Engineer :—

J. W. Thompson, Neath	£4,154
Etheridge & Leach, Manchester	3,206
J. Sutherland, Abercynon	3,026
McKenna, Ltd., Swansea	2,990
Gray's Ferro-Concrete Co., Glasgow ..	2,694
F. J. Thomas, Cardiff	2,685
Yorkshire Hennebique Co., Leeds	2,650
Simplex Concrete Piles, Ltd., Westminster	2,500
A. Scott, Port Talbot	2,440
Christians & Neilsen, Westminster ..	2,050
Peter Lind, Westminster	1,990
Industrial Construction, Ltd., Westminster ..	1,860
*K. Holst & Co., Westminster	1,670

ROTHERHAM.—Twenty-six parlour-type houses, for the C.B. :—

*G. Ramsden, Ryecroft £13,780

SANDY.—Alterations to shop, St. Neots-road, for Mr. D. V. Wakes. Messrs. Cockrill & Sellar, architects, 7, St. Paul's-square, Bedford :—

J. Lawson, Sandy	£385	0 0
W. Haynes, Sandy	323	7 6
*J. Bull & Son, St. Neots	291	10 0

SEATON BURN.—Forty-five houses at Seaton Burn, for the Weetslade U.D.C. :—

*H. M. Newell, Stockton £17,389 10 8

SELBY.—Schools in connection with the Abbey Church, for the Ellist Trust. Mr. J. Bilson, architect, 23, Parliament-street :—

*J. H. Carr & Sons £15,000

SLIGO.—Rebuilding Buttermarket sheds, for the Corporation :—

P. Crumney, Sligo	£645
Wm. Costello, Sligo	460
*J. Scanlon, Sligo	390

SOUTH SHIELDS.—Public conveniences in Ravensworth-terrace, for the T.C. :—

*A. Holmes & Co., South Shields. £217 0 4

SOUTH SHIELDS.—Three houses, for the T.C. Borough Engineer :—

*Gustavus Bailey, Ltd. £1,540

SOUTH SHIELDS.—Steelwork for the proposed bridge over the River Don, for the T.C. :—

*Teesside Bridge Co., Ltd., Middlesbrough £1,782

SOUTH SHIELDS.—Construction of abutments and foundations of new bridge over the River Don, for the T.C. :—

*A. Ridley, South Shields £14,747 19 10

SOUTH SHIELDS.—Conversion of 2,000 privy receptacles into water closets, for the C.B. Mr. S. G. Stanton, Borough Engineer, Town Hall, South Shields. Quantities by S. G. Stanton :—

*A. Holmes & Co., South Shields—£4 17s. 6d. per conversion.

SOUTHAMPTON.—Electricity sub-station on the Town Quay, for the Harbour Board. Mr. E. Cooper Poole, engineer :—

Tom Wilkinson, Poole	£1,685	16 10
Playfair, Poole, Ltd., Northam ..	1,450	0 0
H. Cawte, Shirley	1,181	0 0
Jenkins & Sons, Ltd., Above Bar	1,048	0 0
*A. E. Jukes & Son, Ltd., Shirley, Southampton	981	0 0

ST. AUSTELL.—Alterations to the Brewery Stores at Arwenack-avenue, Falmouth, for Messrs. Walter Hicks & Co., Mr. L. Winn, architect and surveyor, 27, Boscawen-street, Truro :—

*P. Williams, Perranwell Station.

SUNBURY.—Twenty-six houses in Cavendish-road, Sunbury Common, for the U.D.C. Mr. H. F. Coales, surveyor :—

*W. A. Aneett, Walton-on-Thames. £11,830

*W. J. Drinkwater, & Sons, Feltham 11,700

SWANSEA.—Extensions and alterations to the municipal secondary boys' and girls' school in Dynevor-place and De La Beche-street, for the C.B. :—

G. Mercer & Sons, Ltd., Llanelly	£85,998	0 0
Lloyd Bros., Swansea	80,283	0 0
Hy. Billings & Sons, Swansea ..	76,400	0 0
J. & F. Weaver, Swansea	72,687	15 0
Humphrey, Ltd., London	71,984	0 0
Bennet Bros., Swansea	71,965	0 0
*Griffith Davies & Co., Swansea ..	70,966	9 7

TORQUAY.—Recreation room at the police station, for the Devon C.C. Messrs. E. H. Harbottle & Sons, architects, County Chambers, Exeter :—

Batten & Sons, Paignton	£521	5 0
T. Guest, Torquay	451	7 2
*W. Dart & Sons, Dawlish	391	7 2

TICKHILL (S. YORKS).—Twelve houses in Doncaster-road, Harworth, for the R.D.C. :—
 *J. Kevill, Harworth £4,000

TRIMDON.—Six aged miners' homes at Trimdon Colliery. Messrs. Hays & Gray, F. and A.R.I.B.A. architects, Central Chambers, Wingate :—
 *Cherry & Walsh, Thornley, Co. Durham £2,070

UPTON (YORKSHIRE).—Sewage disposal works for the Hemsworth R.D.C. Mr. W. T. Lynam, engineer :—
 J. W. Waller £14,988 14 8
 *Bentley & Co. 13,583 2 7

PARQUET & WOOD-BLOCK FLOORING supplied and fixed in any locality.
 Post, or Phone (Park 1885), Particulars of requirements to
TURPIN'S PARQUET FLOORING CO.,
 25, NOTTING HILL GATE, LONDON. W.11
 ESTD. 1866

School & Hospital Stoves
 MAKERS OF
WRIGHT'S IMPROVED and also SHORLAND PATENT WARM AIR VENTILATING PATTERNS.
GEO. WRIGHT (LONDON) LIMITED
 19, Newman St., Oxford St., London, W.1
 Burton Works, Rotherham.

J. GLIKSTEN & SON
 LIMITED
Specialities in
SEASONED HARDWOODS
 MAHOGANY WALNUT
 JAPANESE, AMERICAN and
 WAINSCOT OAK, TEAK,
 WHITEWOOD, &c.
 REGISTERED OFFICE AND WHARF
CARPENTERS RD. STRATFORD LONDON E.15
 Telephone : EAST 3771 (5 lines)
 Telegrams : GLIKSTEN 'PHONE LONDON

WEST ARDSLEY.—Houses for the U.D.C. Mr. E. Brooke, District Surveyor, Tingley :—
 10 Parlour-type houses, East Ardsley—
 *Bricklayer, Joiner and Painter—F. Clough, West Ardsley.
 *Plumber—J. Richardson & Son, East Ardsley.
 *Plasterer—H. Barroclough, Birstall.
 *Slater—G. Rogerson, Ltd., Morley.

24 Scullery-type houses, East Ardsley—
 *Bricklayer—J. S. Bramley, East Ardsley.
 *Joiner and Painter—F. Clough, West Ardsley.
 *Plumber—J. Richardson & Son, East Ardsley.
 *Plasterer—W. H. Crowther, Morley.
 *Slater—G. Rogerson, Ltd., Morley.

10 Scullery-type houses, Western-ton—
 *Bricklayer and Plasterer—J. S. Bramley, East Ardsley.
 *Joiner and Painter—F. Clough, West Ardsley.
 *Plumber—J. Richardson & Son, East Ardsley.
 *Plasterer—W. H. Crowther, Morley.
 *Slater—G. Rogerson, Ltd., Morley.
 *Painter—F. Clough, West Ardsley.

2 Scullery-type houses, Kingley—
 *Bricklayer, Joiner and Painter—F. Clough, West Ardsley.
 *Plumber—J. Richardson & Son, East Ardsley.
 *Plasterer—J. S. Bramley, East Ardsley.
 *Slater—G. Rogerson, Ltd., Morley.

WIGAN.—Extension of the Sacred Heart R.C. schools, for the Rev. Greenhouse. Messrs. Prescott & Bold, architects, King-street :—
 *Frank Orrell £5,000

WISBECH.—Rebuilding of shop property in Bridge-street, for Mr. J. R. Smith :—
 *Wm. Mason & Sons, Ltd., Leeds.

WITHNELL.—Vicarage for the Parochial Council of St. Paul's Church. Mr. R. Martin, Diocesan Surveyor, 90, Deansgate, Manchester :—
 *Leonard Fairclough, Adlington..... £3,029

WOODFORD.—Drawing office at Council offices, for the U.D.C. :—
 *A. E. Sheppard & Sons £371 15

WORSBOROUGH.—Twenty-two houses at Blacker Hill, for the U.D.C. Mr. T. Shield, surveyor :—
 Wm. Guest & Sons, Blacker Hill ... £12,442
 C. P. Unwin, Ecclesfield 12,294
 Wm. Johnson & Sons, Wombwell ... 12,252
 Adam Taylor & Sons, Wombwell ... 11,712
 Smith Haywood & Co., Shepley 11,635
 *E. Oakland & Co., Ltd., Wombwell 10,600

WORTHING.—Reinforced concrete reservoirs at Durrington and High Salvington, for the T.C. Messrs. T. & C. Hawksley, Consulting Engineers :—
 *Playfair & Toole, Ltd. £8,543

WORTLEY.—Six houses at Hagg Stones, Oughtibridge, for the R.D.C. :—
 *Marlow & Sons, Sheffield £356 each.

YORK.—Extension to engine-house at generating station, for T.C. :—
 *W. Birch & Son, Ltd. £5,957 10

J. J. ETRIDGE, J^r.
 Ltd
SLATING AND TILING
 SLATE MERCHANTS
CONTRACTORS.
 Inspections and Reports made on
OLD OR FAULTY ROOFS
 in any part of the country.
 Telephone : Bishopegate 1944/5 or write,
Bethnal Green Slate Works,
 BETHNAL GREEN. LONDON. E.

BEST SEASONED OAK FLOORING
 AUSTRIAN RUSSIAN JAPANESE
 PREPARATION TO ANY SECTION CAN BE UNDERTAKEN AT ONCE
SYDNEY PRIDAY & SON
 WAINSCOT OAK MERCHANTS (EST. 1899)
 Phone CLISSOLD 6254 (2 lines)
 OAK WHARF
 RAVENSDALE ROAD
 LONDON. N.16.

FITZPATRICK & SON
MASONS & PAVIORS
 Secondhand and Redressed (equal to new) Granite Setts and Kerb.
 York Paving, Crazy Paving, Rockery Stones
 Granite Spur Stones made to order.
 Granite Chippings and Tarmacadam.
 Granolithic and Sett Paving.
 WRITE, PHONE or CALL :—
455, OLD FORD ROAD, BOW, LONDON, E.3.
 Phone : EAST 4808.

HIGH-CLASS FLOORINGS
 of every description in
 WOOD BLOCKS. PARQUET
 SEASONED T. & G. WAINSCOT OAK
 TEAK AND MAPLE
 FACTORY AND ROADWAY PAVING
STEVENS & ADAMS
 LIMITED
 VICTORIA MILL, POINT PLEASANT
 WANDSWORTH, S.W.18.
 (Phones : Putney 1700 & 245)

COPPER ROOFING WITH CONICAL ROLLS
 ABSOLUTELY WATERTIGHT. VERY DURABLE
 ESTIMATES FREE
F. BRABY & CO. LTD. 352-364 EUSTON RD. N.W.1.
 AND AT DEPTFORD, LIVERPOOL, BRISTOL, GLASGOW, FALKIRK & BELFAST.

THE BUILDER

JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

L. CXXIX.—No. 4,324

DECEMBER 18, 1925

BUILDING INDUSTRY PROBLEMS

THE paper on the "Condition of the Building Industry," which Mr. Herbert A. Welch read at the meeting of the Royal Institute of British Architects on Monday was a timely and able survey of the present position of the industry and contained some excellent suggestions for consideration. It was fitting that such a paper should be read before the Institute and that so representative a body of architects and builders attended to hear it, though it was unfortunate that time did not permit of a fuller discussion of various matters dealt with by the lecturer. Indeed, the central question of the condition of the industry and the relations between the parties representing it are of such importance that we hope an opportunity will be provided in the near future for another paper and a renewed discussion, for the whole question is explored by architects, builders and operatives the better for the industry. Discussion between all interested parties in the building industry appears to be essential before a really satisfactory condition of affairs can be brought about, and we are convinced that only in this way can a better understanding of different points of view and the difficulties of each be understood. We say this in spite of the ever cheap taunt that matters of great urgency are shelved for discussion in season and out of season, with little or no practical results.

Even the discussion on Monday had at least one satisfactory result in the expression of the willingness of the representative building operatives to sit in council with the architects, though it is not to overlook the reason, "if only to ascertain the truth." Builders tell us that the architects say their clients are prepared to pay the price. Mr. Coppock can be assured that although no doubt he is right that architects, builders and operatives all worked too cheaply for the public in 1914, there is a limit to what the public can afford to pay, and there can be no doubt that much building work has been held up or abandoned altogether on account of what the building public considers excessive cost.

To one who listened to Mr. Welch's paper and the ensuing discussion could very well fail to note the spirit of goodwill, if not of hopefulness, that prevailed and the desire to bring about permanent improvement in the conditions of the industry. The principal representatives of the different interests who were expressed their willingness to co-operate, but they evidently had misgivings as to the possibility of securing a general agreement satisfactory to all parties, not forgetting the building owner and the general community. Architects, at all times, are not lacking in a desire to secure more co-ordination and understanding between the various branches of the industry. They do not lose sight of the difficulties in bringing about improved relations between parties who do not agree on first principles, or who do not realise the change of ideas since the war.

Some indication of what these ideas are was afforded by Mr. Coppock in his frank and good-humoured remarks. If we accept his statement that the operatives "will never go back to the conditions of 1914" as a correct representation of the ideas of building trade operatives, then the suggestion of Mr. Barnes may not be wide of the mark that there is an increasing tendency, not confined to the building industry, to do what is thought to be disagreeable and arduous occupation and take to easier jobs—to devote less energy to work for more time to pleasure. Whether this is a correct explanation of the facts of a shortage of labour in the industry and of a reduction of output—and if it is, how far it applies—we do not know, though the observations of another speaker who should be quoted (Mr. W. H. Nicholls, past-President of the National Association of Building Trade Employers), that the best brains are not coming into the industry, may confirm it; but we do not think that many parents who formerly encouraged their sons to become craftsmen or operatives, now prefer them to follow

a "more respectable" occupation. It would be easy to show the folly of such a desire, but we must not ignore its existence and the inferences to be drawn from it. On the contrary, we should endeavour to understand it, as we no doubt can if our vision and understanding are wide enough.

A good part of Mr. Welch's paper dealt with the "Congress of the Building Industry," which was started in the United States and was inspired, it is interesting to note, by the Industrial Parliament for the Building Industry which was formed in this country at the end of the war, but which, we regret, was terminated after a short existence. It appears that, in the United States, until recent years, "there were various disagreements between the building crafts workers and their employers, the causes of which were unknown to the architects or ignored by them, and indeed it appeared as if neither party to these controversies wished to recognise the interests of anyone else in either the cause or the result of their quarrel. Sometimes when the situation became serious either labour or the employers would call upon the public to support their just (?) contentions; but as a general rule the disagreements were fought out privately, and sometimes the public interest was totally ignored or sacrificed in the terms of the final settlement."

The "Congress of the Building Industry" was started in a preliminary way in 1920, but in the following three years it developed into a group of local organisations in half-a-dozen of the more populous communities: New York, Boston, Philadelphia, Portland (Oregon), Seattle, and the State of New Jersey. Each of these organisations includes within its membership, "the technique of the industry (the architects and the engineers), the labour of all the crafts of the industry, the builders (here called general contractors), the sub-contractors, the building material manufacturers or producers, the building material distributors, and finally, the representatives of finance principally interested in building loans."

The beneficial results of this organisation are given in Mr. Welch's paper, an abstract of which we give elsewhere. "The fundamental principle announced in the declaration of purpose of each of these Congress groups is that the object to be attained is the study of the functioning of the building industry through the joint effort of all the elements that are necessary to the industry, so that the mistakes and the difficulties may be done away with that lie in the way of an adequate service of the industry to the public. . . . The work done jointly on these various committees by architect, engineers, labour men, building trades employers and others interested in building work has established between the individuals thus working together an understanding of and a sympathy with each other's problems, of the functioning of the industry as a whole, and of the relation of any one part to the whole, which unquestionably will result in a willingness to be more reasonable when those difficulties arise."

We welcomed the formation of the Industrial Parliament for the Building Industry referred to, and though we regretted the decision to terminate it, no doubt such a result was inevitable at the time and in the circumstances which prevailed in the industry. But in the light of this American experience, ought we not to try again and establish a similar body, possessed, as Mr. Welch says, with "the will to win." There can be no doubt such a body would do excellent work and would prevent much friction in the industry and reduce misunderstandings and disputes to a minimum. Much, however, would depend on the selection of men to represent the industry, and whether or not they were animated by a reasonable spirit and a desire to serve the community as well as the interests they represented. We are afraid we too often think of the special interests of those who appoint us to office and not enough of the well-being of the general community. If the new spirit in the industry of which we have heard a great deal lately includes this idea of service, then the signs are indeed propitious.

NOTES.

Waterloo Bridge.

WE refuse to believe that the decision of the L.C.C. to construct a new bridge in place of the old Waterloo Bridge will be carried into effect. To their everlasting credit there were some thirty-two members who voted for its retention, but the vote which was hostile to the retention of the bridge was, we venture to affirm, largely founded on ignorance of the real value of the bridge and of the finer issues which the problem has raised. We understand the motives of those who condemn the bridge, but the only solid ground on which they can base their action is a mistaken idea of the public convenience, and public convenience is, of course, a far more important matter than anything like beauty or sentiment!

A.A. Conversazione.

THE annual conversazione of the Architectural Association was held at the premises in Bedford-square last week, the President (Mr. H. S. Goodhart-Rendel), and the Hon. Mrs. Wilbraham Cooper receiving the guests and members. An excellent musical programme was provided by the Keith Prowse Orchestra in the library; this was augmented by dancing in the lecture room. For the non-dancers there was

an interesting exhibition of members' holiday sketches; an exhibition of sketches and photographs of Denmark and Sweden, made on this year's excursion; and a selection of work by students at the School. The large gathering included many well-known architects.

Plea for English Craftsmanship.

At a time when artists and craftsmen are finding it difficult to sell their work, this season of present-giving suggests a way of getting more permanent value for money spent. We are interested to read an account of the purchase of a collection of different craftsmen's work as a christening gift, which suggests a similar direction in the giver. Much money is spent on the ordinary ephemera of the picture shop window, on colour prints, &c., largely of foreign origin, and which spent more wisely in the direction of real craftsmanship would often at the same cost secure something of permanent artistic value endowed with treatment and personality. The public would be well advised to secure this better value for their money, which at the same time is of more advantage to themselves and to the craftsmen whose work they thus promote. We have seen as many pounds spent on some colour print reproduced in countless numbers and of more than doubtful

artistry as would have secured an original piece of work in pottery or painting or other of the applied crafts. It must be remembered that buying is itself an art.

Choice in Public Memorials.

THE further correspondence on this subject, and suggestions made, suggest that one which advocates the placing, in the first instance, of a temporary model on the proposed site, put in hand, has a good deal to be for it, though a considerable addition to the cost. More than this, however, is required and less easy of attainment. It is said that we are not an artistic nation. It would be truer to say we are not as a nation educated to appreciate intimately enough or judge of form, style, imagination and appropriateness, which do not answer to popular apprehensions. Practical in our own day we overvalue reputation and success, surrender to the pressure of fashion and prevailing tendencies. We do not in fact judge intrinsically enough to stand independence to our choice, and so have no anchorage. Nor is it possible to know how there can be much improvement as long as the expert on one side and the public on the other have so much caprice and accident in their choice. It rests on these insecure foundations.



Church of St. Louis, Vincennes : Longitudinal Section. MM. DROZ AND MARRAST, Architects.

[The exterior walls of this church are of stone and brick, the roof being supported by four reinforced concrete arches with a clear span of 73 ft. 6 in. The four arches are built in pairs intersecting at right angles, the distance between each pair being 40 ft. The church, begun during the war, was but recently completed.]

Partition Walls: A New Material.

WE learn from a correspondent that Professor A. T. Laurie, the Principal of the Heriot-Watt College at Edinburgh, who was Chairman of the Buildings Materials Committee in 1918, is paying attention to the problem of devising partition walls that can be completed without the aid of the plasterer. Professor Laurie has been experimenting for some years past in order to find a substitute for the normal partition wall made of brick or breeze slabs that afterwards have to be plastered. He believes that he has succeeded at last in finding a substitute that is rigid, does not conduct heat or sound, and is at least as durable as brick. He has used the asbestos cement sheet and cemented this with asphaltic cement on to a cork core one inch thick. This cork core is made up of fragments of cork dried and compressed. This material has been used for at least twenty years past in building cold-storage factories and has been found to be a non-conductor both of heat and sound. These asbestos cement sheets are supplied in sizes of eight feet by four feet. Thus Professor Laurie has obtained a panel that is portable and of a convenient size, and which is also solid. This, we understand, can be erected between light wooden supports very rapidly. As soon as the bricklayers have finished on the external walls, the joiners can come in and carry out the rest of the work.

Inner Lining of Outer Walls. PROFESSOR LAURIE states, says our correspondent, that in his experiments in providing the inner lining for the outer wall, he has made a variation. In this case, he reverts to the old solid one-inch wall and lines it inside with asbestos cement sheets. A thin layer of compressed cork is cemented to the sheet and forms a lining between it and the brick wall. Upright "T" sections nailed into docks hold the panels to the wall. If the architect desires it, Professor Laurie states that air space can be left by nailing light straps on to the wall, but he does not consider this to be necessary, as cork is an excellent non-conductor. This method of construction has already been patented. We are informed that a commercial company in Scotland is taking it up, and it is attracting north of the Tweed a good deal of attention from architects and builders.

A Walcot Exhibition. THERE has, we suppose, been no exhibition of Mr. Walcot's work quite so interesting in its way that now open at the Beaux Arts Galleries, of some forty water colours and a dozen of etchings and of oils. The drawings are unequal in their appeal, for some are at the highest level of the artist's powers, whilst others seem to convey chiefly an impression of clever technique rather than of pictorial



Church of St. Louis, Vincennes : Interior View. MM. DROZ & MARRAST, Architects.

[A feature of this church is the wall painting, which is in parts done in true fresco direct on a fresh lime coating applied to the concrete surface. Altar screen, choir, pulpit, and other features are decorated partly with ceramic tiles and partly with coloured cements.]

value. Sometimes Mr. Walcot makes buildings look even worse than they are, whilst in some cases the reverse. One cares little enough what he makes of the Tower Bridge if he can give us such an excellent picture of grey liquidity as his Tower Bridge in a fog. He can do what he likes with his architecture without interfering with the pictorial values. His drawing of Westminster Bridge and St. Stephens is quite a pleasing picture, but the impression conveyed of the Houses of Parliament is of a somewhat coarse and stupid mass and far removed from the dainty delicacy which characterises Pugin's work. There are some oils and etchings included in this exhibition, and one at least of the etchings is probably one of the finest of all our modern productions.

Picture Exhibitions. THERE are many picture exhibitions open now, and none surely so exasperating as the International for, with here and

there something worth seeing, there is an abundance of work which one could wish might never be seen in public. We wonder how it is that in an age like the present, with its excessive sentimentality and super-refinement, there can be tolerated so much vulgarity in pictures which is not even clever enough to be entertaining as well as vulgar.

Rural Industries. WE are glad to know that a list of local craftsmen working throughout the country has been compiled, as it is witness to the growth of a movement which should re-act considerably on the character of industry and to the improvement of village life. There are at present over 600 of these craftsmen, working in towns and villages, either in groups, or singly, and every effort should be made to encourage their work. The influence on village life of industries, in which also the county people can participate, should be most beneficial.

GENERAL NEWS

Change of Address.

Mr. J. J. Taylor, F.S.I., has removed to 11, Gayfere-street, Westminster, S.W.1. Telephone number as at present, Victoria 5448.

Artists' Club Prize.

The prize of ten guineas awarded by the Artists' Club for the best work of the year in painting or sculpture, executed by students of the Liverpool City School of Art, has been won by Miss Baldwin Griffiths.

Oxford Town Planning.

An advisory committee of architects has been nominated by the R.I.B.A. to assist the Oxford Council with town-planning proposals. The members nominated are Mr. E. P. Warren, the brother of Sir Herbert Warren, the President of Magdalen; Mr. H. S. Rogers, the President of the Berks, Bucks and Oxon Society of Architects; and Mr. F. M. Elgood, a former Housing Commissioner at the Ministry of Health and a Past-President of the Town-planning Institute.

Dublin Housing and Town Planning.

At a recent Central Housing Council Conference a resolution was passed to set up a £1,000,000 housing fund. Dublin suffers from a shortage of 37,000 houses. Another resolution was passed approving of the principle of town-planning and stating that legislation should be immediately enacted to give necessary powers for this purpose, and that steps should be taken by the authorities, without delay, to prepare a town plan for Dublin and the surrounding districts.

Preservation of Netley Abbey.

Preservation work at Netley Abbey, founded by Henry III in 1239, has gone so far that all the precarious parts of the buildings are now secure. The north, south, and east walls of the chancel have been completely consolidated and made waterproof, and the walls of the south transept nearly so. During the past year the Visiting Abbots' Lodging, a detached building south-east of the church, has been preserved. The west end of the church is now in hand.

Proposed Abattoir at Letchworth.

The foundation stone of a model abattoir has been laid at Letchworth, Herts. The first part will be the pig section, which will cost £10,000. Mr. R. Stephen Ayling, F.R.I.B.A., is the architect.

Middlesex Hospital.

Nearly £250,000 has been subscribed to the Middlesex Hospital Reconstruction Fund towards the £500,000 required.

Bermondsey Housing Scheme.

Plans have been submitted by Messrs. Culpin & Bowers for the erection of 26 new houses in Salisbury-street, Bermondsey, and a revised layout of the whole area. One block will be in the form of a quadrangle, treated mainly in white stucco. The other two blocks will be treated mainly in brick facing, to serve as a foil to the quadrangle. Temporary houses are to be erected on the site of Tanner-street Workhouse, at a cost of £250 per house.

Obituary.

We regret to record the death of Mr. Charles Henry Sampson, F.R.I.B.A., aged 87, of 41, Hillmorton-road, Rugby, and late of Taunton.

We regret also to learn of the death of Mr. Edmund L. Wratten, A.R.I.B.A., late partner in the firm of architects of Messrs. Wratten & Godfrey.

Facilities for Architectural Education and Instruction in Building Construction.

The Board of Architectural Education have appointed a special sub-committee to view and report upon the existing facilities for architectural education and instruction in building construction in institutions other than those exempted from the R.I.B.A. Examinations. This special Sub-committee is now considering the possibility of the development of existing facilities and of the provision of facilities where none at present exist. The Sub-Committee will be glad to receive suggestions or criticisms from

those who are specially interested, together with any information as to existing facilities, stating, if possible, the number of professional students of architecture in attendance at any institution named.

Proposed Cardiff Hospital.

The Cardiff Board of Guardians propose to erect a new hospital at Llandough, at an estimated cost of £300,000. The scheme includes the building of six pavilions, containing 408 beds, at a cost of £177,000.

The Lower Thames Tunnel.

The Traffic Advisory Committee have resolved to urge upon the Ministry of Transport the construction of the Lower Thames tunnel, and ask the reconsideration of a site between the near coast of Tilbury and Gravesend.

A Supposed Tintoretto Discovered.

It is reported from Bellinzona, Canton Ticino, that during repairs in the Cathedral a painting of the Crucifixion has been discovered which some experts attribute to Tintoretto.

Proposed Well at Pontefract.

Pontefract Corporation are seeking powers to enable them to sink a new well and erect the necessary buildings on a site at Eggborough, at an estimated cost of £75,000.

Midlands Electricity Scheme.

An electricity scheme, for which powers are being sought for a capital of £5,000,000, is to be executed in South Staffordshire and a corner of Shropshire. It involves the erection of a super-station at Ironbridge, at a cost of £1,250,000.

Proposed Eastern Church for Hayes.

A new church of the Immaculate Heart of Mary is to be erected at Hayes, Middlesex, by the missionaries of the Order who have charge of the parish. The church will be a unique example in England of the Mudejar style and will cost £20,000.

Proposed New Aerodrome.

The Berechurch Hall Estate at Colchester has been purchased by the War Office. There is a proposal to establish on the estate a new station for the air defence of London. This includes the provision of a large aerodrome and the quartering in Colchester of an anti-aircraft unit. It has been stated that the proposed aerodrome will cost £500,000.

COMPETITION NEWS

Proposed New Parish Church, Newbridge, Monmouthshire.

The Competitions Committee of the R.I.B.A. call the attention of members to the fact that the conditions of this competition are not in accordance with the Regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members are advised to take no part in the competition.

Police and Fire Brigade Station, Newcastle-upon-Tyne.

The assessor in this competition, Dr. Percy Scott Worthington, F.R.I.B.A., has made the following awards:—1st (premium £500), Messrs. Ivor Jones & Percy Thomas, A. and F.R.I.B.A., Cardiff; 2nd (premium £300), Mr. E. Vincent Harris, F.R.I.B.A.; 3rd (premium £100), Messrs. Cackett & Burns-Dick, F.R.I.B.A., Newcastle-upon-Tyne.

Proposed Hospital, Blaydon.

The Blaydon, Ryton and Whickham Joint Hospital Committee invite designs for an infectious diseases hospital of 72 beds. Applications must reach Mr. R. H. Tench, Clerk to the Committee, "Hagghill," Blaydon-on-Lyne, on or before December 22.

Proposed Church, Lynemouth.

The designs prepared by Mr. J. J. Eltringham, L.R.I.B.A., of Blackhill, have been placed first in the competition for the new Primitive Methodist Church and Sunday School at Lynemouth, near Ashington. The church will seat 400 people and the Sunday school 350. The estimated cost of the scheme is about £9,000.

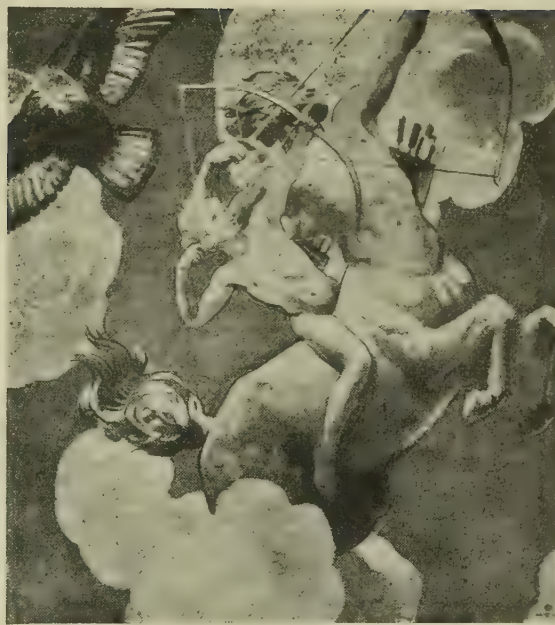
Competitions Open.

	Particulars published in "Builder."	Sending in date
Argentine Institute. Premiums 10,000, 6,000, 4,000, 3,000, 2,000 gold pesos. Apply parties, 35, Old Queen-street, S.W.1	April 24	Dec
New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool	Aug. 7	1926 Jan.
Houses for Smaller Middle-Classes and Intellectual Workers. Held under auspices of International Federation of Building and Public Works. Prizes: 1st, 500 dollars; 2nd, 300 dollars; 3rd, 200 dollars. Write to Director-General of the International Federation, 17, Avenue Carnot, Paris	Oct. 30	Jan.
Branch Library, Gabalfa, Cardiff. Limited to qualified architects in Cardiff. Premiums 75, 50, and £30. Mr. Sidney K. Greenslade, F.R.I.B.A., assessor. Apply, with deposit of £2 2s., to Librarian, Central Library, Cardiff	Nov. 27	Jan.
Art Gallery and Museum, Birkenhead. Limited to competitors practising within 20 miles of Birkenhead since January 1, 1923. Premiums: £250, £175, £100. Sir Robert Lorimer, A.R.A., assessor. £2 2s. deposit. Apply Curator, Central Public Library, Birkenhead	Oct. 16	Jan.
Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London	Aug. 14	Mar.
Royal National Eisteddfod of Wales, Swansea, Competitions: (1) National Parliament House of Wales (Prize, £100); (2) Street Facade to a Large Stores (Prize, £25); (3) Set of Measured Drawings of Architecture (Prize, £25). Apply for programme to publishers, Messrs. Morgan & Higgs, Heathfield-street, Swansea (1s. 2d. post paid). Mr. Arthur Keen, F.R.I.B.A., Assessor	Nov. 6	July 12
Incorporated Architects in Scotland: (1) Rowand Anderson Medal and £100; City Art Gallery and Museum; (2) Rutland Prize (£50) for Study of Materials and Construction; (3) Prize (£10 to £15) for 3rd year Students in Scotland; (4) Maintenance Scholarship, £50 per annum for 3 years. Apply Secretary of the Incorporation, 15, Rutland-square, Edinburgh	Nov. 6	—
Plan for construction of Conference Hall, for League of Nations, Geneva. International Competition, Sir John Burnat being British representative on Jury of Assessors. 100,000 Swiss francs to be divided among architects submitting best plans. Programmes with R.I.B.A., 9, Conduit-street, where intending competitors should apply. Single copies from Secretary-General, League of Nations, Geneva, on payment of 20 Swiss francs.	Jan. 2	—
Public Hall, Topsham. Premiums £50, £40, and £30 respectively. Mr. Walter Cave, F.R.I.B.A., assessor. Last day for questions, Jan. 1, 1926. Designs to be sent in by April 1, 1926. Conditions from the Clerk to the Parish Council, Topsham, on deposit of £1 1s.	Jan. 1	April 1
Secondary School for Girls, Worcester. Premiums 100 guineas and 50 guineas. Mr. Herbert T. Buckland, assessor	Dec. 11	—
Public Memorial, Blackpool. Mr. E. Bertram Kirby, F.R.I.B.A., assessor. Apply to Mr. D. L. Harbottle, Town Clerk, Town Hall, Blackpool. Deposit £1 1s.	Dec. 11	Feb. 13

* Competitions when "warned" or vetoed by the R.I.B.A. are starred.



HERCULES AND THE HYDRA.



CHIRON AND ACHILLES.



reproduced by permission of the Museum of Fine Arts, Boston.

SCIENCE.



PHILOSOPHY.

New Mural Decorations by Sargent in the Museum of Fine Arts, Boston.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

The Incorporated Association of Architects and Surveyors.

SIR,—In reference to the formation of this Association, I quite agree that it would be highly desirable to have no other society than the R.I.B.A., but it seems to me that the R.I.B.A. build with one hand and pull down with the other. I myself have been in practice as an architect and surveyor for over twenty years, and have several times applied to the Institute for admission, and every time have been referred to the ordinary examination. Now, a busy man has not the time at his disposal to prepare for this, which in itself keeps a number of first-class men from joining the Institute.

Again, the very strict and high standard of draughtsmanship demanded at these examinations make the attempt almost impossible for a man over 40 years of age, as usually his hand is not steady enough, and I would suggest that while draughtsmanship is in itself highly desirable, it should not be the great aim and finale of architectural examinations as at present. Personally, if I were choosing an assistant, I should place general knowledge, construction, and knowledge of design before draughtsmanship, and I believe the majority of architects would do the same.

It is also a fact that this state of things at the examinations injures the men themselves (viz., the students). Quite recently I heard of a case where three A.R.I.B.A.'s had been dismissed from their posts owing to their lack of essential knowledge and construction, and this certainly points out the great weakness of the R.I.B.A. examinations and the urgent need of reform. If the R.I.B.A. wishes to remain the only architectural institution, it must revise its methods, especially the examination with reference to men of over 40 years of age who have been in practice as architects for over 10 years, and who have a reputation which cannot be denied.

CRITIC.

SIR,—It is common knowledge that the I.A.A.S. was founded by the recently formed National Association of Auctioneers and Estate Agents with a view presumably to extending its scope of representation in opposition to the proposed Landed Property Practitioners (Registration) Bill, which is, or was, being promoted by the senior representative bodies of auctioneers and surveyors. Possibly the Association also had in mind the Architects' Registration Bill to be promoted by the R.I.B.A.

If your analysis of the personnel of the Council of the newly-formed Association may be taken as indicating its general scope it would seem that its already somewhat unwieldy title ought to be considerably extended in order adequately to display its ramifications, which would appear to extend to auctioneers, valuers, barristers, town clerks and members of other callings.

Indeed, the form of application for admission indicates that it is no bar to membership of the I.A.A.S., but even a recommendation, that a candidate should combine some other calling with that of an architect and/or surveyor, and it remains to be seen whether unattached architects who practise their profession solely and are therefore eligible to qualify for admission to the R.I.B.A. will allow themselves to be drawn into the new Association.

The I.A.A.S. is entitled to every credit for seizing the psychological moment for its formation and for its enterprise in utilising the Registration proposals as a means for augmenting its ranks. Had the R.I.B.A. in pursuit of its Registration policy and when altering its Charter, been equally astute and foreseeing and opened its doors a little wider for a time, until it had absorbed the unattached architects entitled to be registered under its proposed Act, there would

have been no opening for a new architectural society.

The circular on the subject issued by the R.I.B.A. to its members on November 30 may or may not reach those architects who do not belong to it, but who are members of its allied Societies. It would have had greater force if it had been circulated to the whole profession, pointing out that not only can eligible unattached architects join the Allied Societies, but that entrance to the Institute through the usual channels remains open to any eligible candidate. The circular is calculated to give the unattached architect the opposite impression on this point.

The Institute cannot control unattached architects, but it should be able to command the loyal support of the members of its own body and of its Allied Societies, and if, as would seem to be the case, some members of the Institute have joined the new Association for the purpose of protecting their interests in the event of Registration, they are obviously violating their obligations of loyalty to the R.I.B.A. and should be called to account for obstructing and hampering the attainment of one of its objects.

OBSERVER.

The Theory of Architecture.

SIR,—In these days of critical analysis when most new buildings of importance in London and elsewhere are submitted to the fire of criticism, commendatory or otherwise, in the professional Press and more and more so in the lay Press, it would seem a pity that students are not required to pass some test in the theory of architecture pure and simple. It is a moot point whether those students who are passing through the principal schools are conversant with what might be termed shortly "the reason why and the reason why not" certain things are done or not done in academic design. It is true that the student of these schools at the completion of his course may be expected to keep within the canons of good taste and design, having emerged from an environment which aims ostensibly at these ideals, and subjected to a subconscious influence he could not very well avoid. On the other hand, his output of work may be the result of a parrot-like repetition of exercises and fulfilment of what is expected of him or any other student, but it is doubtful if he were questioned on the subject of fundamental architectural analysis, which, after all, is the very quintessence of the art, whether he would not be found wanting. If it could be suggested to the Board of Architectural Education, would it not be preferable to delete from the syllabus of the Intermediate Examination the specialised paper on history, and to substitute a paper on the theory of architecture, and increase the standard of the general history paper in order to make up for the loss of the specialised history? Furthermore, in the Final Examination, if an extra paper on theory were inserted, the result would be rather astonishing. I am not likely to be thanked for prolonging the agony at either of these examinations, and for which, together with any sort of examination, I have a profound terror—though reluctantly at the same time realising the necessity for them. Still, after all, the examiners would be able to obtain a very clear insight into what must constitute a very important part of the make-up of an architect.

Unfortunately, the literature dealing directly with the subject is not very profuse, but what with Mr. Howard Robertson's excellent book, and Cortlandt van Curtis, to say nothing of Guadet's "Elements et Theorie d'Architecture," Mr. Trystan Edwards's "Architectural Style," Van Pelt's "Essentials of Composition," &c., there is sufficient material that would throw a very different complexion on the subject from the point of view of the student.

W. MARTIN KAYE, A.R.I.B.A.
School of Arts and Crafts, Southend.

Tourist Guide Maps.

SIR,—It is now generally reported that the numbers of tourists and travellers to places of interest in this country are steadily growing; and, moreover, it seems that the majority of these tourists are paying more attention to the

historical and architectural features of places they visit than did their predecessors. Here, it would appear, is an opportunity providing a section of the general public with that instruction and guidance on architectural matters which all who are interested in improvement of the art so ardently desire to see given. In this connection, we are constantly hearing expressions of opinion to the effect that there can be no very general improvement in the architecture of our country until the public have a truer and better understanding of the subject.

With the object of contributing in a measure to the achievement of this end, it is suggested that tourist guide-maps should be prepared showing the locations of existing buildings more than ordinary architectural interest or excellence. Buildings erected within some finite term of years could be marked in a particular colour, separate colours being used for each epoch in the architectural history of town or district. The coloured marks could be either small dots or rectangles, adjacent to the buildings which would be placed for purposes of reference the name of the building or its street number. These maps could be produced with but little alteration to existing appliances: the printers of tourist maps.

Two courses are open:—

(1) The maps for each town or district could be issued in the form of sheets folded into a convenient size, accompanied by a book of simple architectural, and perhaps also historical, information, the latter being bound with the map or printed on back of same.

(2) The above-mentioned marks of identification and the information accompanying them could be added to the maps and printed matter which is already issued in the form of guide books for tourists and travellers.

With the object of interesting the greater number of tourists, and hence ensuring a rapid return on the outlay incurred in producing the maps and notes, it is obviously desirable to commence with London and to extend the series to other towns and districts of outstanding architectural importance.

T. W. MACARPINE.

London Underground Schemes.

Schemes designed to facilitate North London traffic are announced by the Metropolitan Railway. Subject to Parliamentary powers being obtained in cases where these are required, the following work is to be put in hand:—New tube and tube to give direct connection between Willesden-green and Edgware-road, and the tube to the City; erection of three stations on the line at convenient points within the boroughs of Hampstead, Paddington and Marylebone; enlargement of Edgware-road Station, with provision of four platforms; and opening of a disused tunnel and a new companion tunnel between Euston-square and King's Cross, and electrification of the steam lines parallel with the Inner Circle track between King's Cross and Moorgate.

Beebles Archæological Discovery.

An archæological find at Beebles includes a vaulted crypt, rectangular in shape, measuring 10 ft. 6 in. across, 6 ft. deep, and about 7 ft. high, the top of the arch, and containing a well-preserved piscina and ambry. The ribs appear to be Perpendicular work of the sixteenth century. They are built of small Tudor brick with chamfered edges, resting on four corbels ornamented with a roll of hollows.

Memorial to Lord Leopold Mountbatten.

At a time when many cathedrals and churches have been disfigured by over-elaborate and unduly large war memorials, the tablet recently placed in the south aisle of the choir of Winchester Cathedral to the memory of Lord Leopold Mountbatten sets a good example. This tablet does not measure more than 22 in. high by 10 in. across. It is made of marble and blends happily with the surrounding walls and the lettering is well chosen. The artist responsible is Mr. C. E. Kempe.



Mr. E. GUY DAWBER (President) occupied the chair at a meeting of the Royal Institute of British Architects on Monday, when Herbert A. Welch read a paper entitled "The Condition of the Building Industry, with Special Regard to the Shortage of Skilled Labour and the Increased Cost of Work."

Obituary.

Before the paper was read, the Honorary Secretary announced the decease of Mr. E. S. (Fellow); Mr. W. H. Harrison (Fellow); Mr. E. L. Wratten (Fellow); Mr. C. A. (Fellow); Mr. E. Garlick (Fellow); and Mr. Arthur Benjamin (Fellow). Mr. Plummer was a Past-President of the Northern Architectural Association and represented that body on the R.B.A. Council during the Session 1907-8. Prior to his Presidency Mr. Plummer had for fourteen years Hon. Secretary of the Northern Architectural Association.

CONDITION OF THE BUILDING INDUSTRY.

In the course of his paper Mr. Welch said that on one previous occasion only, he thought, in recent years had the Council of the Institute considered it opportune that its members and other parties interested should, in those walls, be given an opportunity to draw their attention upon a matter having for its purpose a general survey of the condition of the building industry, with a view to determine whether the existing difficulties with which the industry was beset could be overcome to the lasting satisfaction of all concerned. Resulting from his investigations, he formed the opinion that the chronic troubles from which the industry had suffered in recent years were not so much due to particular incidents or disputes, to special points of difference between the parties regarded, but that at such times appear to be the cause for such disputes, as to the fact that there was underlying these disputes a deeply seated feeling (frequently shared by both employers and men) that hardships and grievances were permitted to continue because no efficient attempt had been made in the past to tackle fundamental conditions. On this point many of the so-called settlements of disputes had in effect been merely a postponement of the matter until such time as the one side or the other considered the occasion favourable to its cause. The result had been that for a long time "feeling"—active or latent—had manifested itself within the industry. In such cases delay had not healed the wound but, on the contrary, caused it to fester with a tendency to become poisonous. The existing agreements between the employers and employees would expire in January of next year. It would seem, therefore, that now was the opportune time to give a quiet and deliberate thought to the subject. For some time past there had been an expressed desire for "a new spirit in industry" generally. Could we continue to view with complacent satisfaction this growing deterioration without ourselves making a serious attempt to encourage this new spirit within the industry?

For the best work there must be an adequate motive, and it would not be forthcoming without a change both in the human and in the economic relationship. The first concerned personal treatment. Authority and discipline there must be in all concerted operations; but they could be exercised in different ways, as they actually were in different establishments. In some there was incessant trouble, in others none at all. In the former case employers put it all down to agitation (and sometimes that was a principal cause), but more often it was due to someone wielding authority and exercising it in a harsh manner. To be effective the change of attitude must be generally recognised and observed. With regard to the economic relationship, what was needed was such an interest in the prosperity of the business as would induce all those engaged in it to do their best, or at least such a direct reward for effort as would elicit the best. A combination of the two was the most complete solution of the problem. It was in this direction that American industry had taken so marked a lead. Effort was encouraged and interest in the common prosperity secured by commensurate reward.

To give and to receive the fullest measure of benefit the industry as a whole should be happy and contented, the crafts sound and skilful; production should be smooth, steady and economic. Could architects play any useful part in creating such conditions? In the past attempts had been made to this end. These attempts, however, had failed to achieve any great measure of success. Trying to forget the past, was the time ripe to make a further and this time a successful effort to get together and pull together in an attempt to improve conditions and remove evils which were known to exist?

The speaker then quoted a long letter by Mr. Robert D. Kohn, Chairman of the Committee on Industrial Relations, American Institute of Architects, in the *Architectural Association Journal*, dated June 19, 1925, which showed how the problem had been tackled by a Congress of the Building Industry in the United States. He could not help feeling, he continued, that if possessed of "the will to win," a similar body set up in this country could and would do much excellent work. He further felt that unless some such body was created, and could be made to work in the right spirit, we must be prepared to face in the future continued trouble and controversy.

He could not speak for his friends the quantity surveyors, but believed he was expressing the feelings of the R.I.B.A. when he said that they now were, as they had always been, ready and willing to play an earnest part in any such movement. Clearly they could not move alone, nor of their own initiative, but if an invitation was extended to them by the other interested parties they should not decline to give of their best to help in a further endeavour to find a way to lasting peace and prosperity in the industry.

The main causes for the difficulties and dissatisfaction within the industry might be comprehensively grouped under five heads:—(1) Shortage of skilled labour; (2) casual nature of employment; (3) wet time; (4) output; (5) high costs. The marked shortage of skilled labour had manifested itself mainly since the war—it had, however, been going on since at least 1901—and was at once the direct or indirect cause of many of the other difficulties in the industry. There were engaged in the industry in 1921, 168,853 fewer skilled operatives than in 1901 representing a general decrease of about 24 per cent. There was a decrease in the various crafts as follows:—

		About
	Decrease.	per cent.
Bricklayers	28,558 ..	24
Masons	42,289 ..	61
Carpenters and Joiners ..	64,735 ..	24
Plasterers	11,500 ..	34
Painters and Decorators ..	5,959 ..	4
Plumbers.....	15,805 ..	24

Where the supply of prospective labour was short the principal reasons given why young men did not enter the industry were stated to be as follows:—(1) The casual nature of employment. (2) The comparatively low level of net wage—having regard to time lost during the year owing to the casual nature of employment, insecurity of tenure, "wet time," and other causes. (3) The small increase of wages of skilled men over the wages paid to unskilled workers, and to the relatively high wages obtainable by unskilled boys in what might be termed "blind alley" occupations. (4) National unemployment pay for persons under 21 years of age. (5) The supposed social inferiority of workers in manual trades generally.

All these objections could with co-operation and determination be mitigated or overcome. In an attempt to discover the most satisfactory solution to the problem of shortage, with which was closely allied the general improvement of conditions within the industry, five possible methods of entry into the industry might be examined:—(1) Apprenticeship to a building trade employer. (2) Tuition in a trade school, including indentures. (3) Over age apprenticeship. (4) Promotion from labourers. (5) Dilution. Of these five methods Nos. 1 and 2 appeared to offer the most satisfactory means whereby the shortage could be overtaken. From the examination of much data he had formed the opinion that hitherto the system of apprenticeship had not been developed to nearly its full extent. The fullest possible development of the apprenticeship system, together with that of training in technical schools was both urgent and vital if the existing shortage was to be supplemented by bringing into the industry the right type of young man.

At the present time there existed between the employers and employees an arrangement by which no employer might engage apprentices in any craft in excess of one to seven of the journeymen employed by him, with a maximum of eight apprentices in each craft. To the credit of the parties to the agreement it should be stated that this limitation had not been too rigidly observed, or the position to-day would be worse than it was. Yet whereas in certain cases a greater proportion of apprentices had been agreed to at the instigation of certain firms—in consequence of which a greater number of apprentices were now being trained than probably at any time during recent years—there existed, nevertheless, a real difficulty in obtaining in sufficient numbers lads to follow the various trade crafts in the industry, with the single exception of the carpentering and joinery craft. So far as could be ascertained there were at present in London about 800 lads serving the usual five years apprenticeship course in the various crafts, 160 of whom (on average) would be available each year as journeymen. In addition there were about the same number of improvers, mainly boys without indentures and others, who were suffering some measure of disability. In addition there were in the various trade schools about 140 to 160 lads being trained for a period of three years. This, on an average, would indicate a total number of about 370 young journeymen likely to enter the various crafts in the London area each year. The wastage from various causes he computed to be about 800 to 1,000 journeymen each year. It would therefore be seen that at the present rate about 33 per cent. only of the normal vacancies could be filled.

In order to increase the number of apprentices with a view to overtaking the existing shortage of labour, it would, he thought, be well to consider—at least for a stated period of, say, 5 years—(a) the advisability of amending the existing rules in order that individual firms might take an unlimited number of apprentices, provided the agreed ratio of apprentices to journeymen (1 to 7) was not thereby exceeded; (b) That the Employers' Federation should bring to the notice of its members in particular and to the industry in general the vital necessity of encouraging the apprenticeship system by urging master builders to train a greater number of young men in the various crafts, in particular those crafts in which from time to time the

shortage of skilled workers was most marked; (c) that the notice of the elementary school authorities be drawn to the prospects in the industry for young lads when nearing the age for leaving school. In this direction stimulus might be provided if suitable propaganda work were undertaken in important centres of population; (d) that greater encouragement be given to apprentices to supplement the knowledge gained in the workshops and on the jobs by attendance at technical schools at least on certain evenings each week, and if possible one whole day a week during, say, the three or four years of their apprenticeship. It was generally acknowledged that operatives who had received technical school training in addition to working in the shops and on the job became far better fitted ultimately to occupy the positions of foremen, clerks of works and master builders. To this end added encouragement would be given if the Federations of Employers and Employees could see their way to grant a suitable sum for prizes and scholarships to students at recognised schools. He would add that in the event of the Federations adopting some such scheme perhaps the Council of the R.I.B.A. might consider the desirability of associating itself with such an educational project. In cases where an apprentice showed marked ability and progress as a result of supplementing workshop training with technical school study, his period of apprenticeship might be accordingly reduced; (e) that wages paid to apprentices should not bear unfavourable comparison with those obtainable by lads in unskilled trades.

(3) Over-age apprenticeship had, he believed, had some measure of consideration as a temporary means of providing additional craftsmen. By this method the prospective craftsman would be bound under a form of indenture providing for a minimum period of three years training. Of this period it appeared to be advisable that one year at least should be spent in a trade school, where a curriculum suited to this special section should be applied. Owing to the comparatively high age—say 19-25 years—for the commencement of such indentures, some system of payment by grant would be necessary, and this might involve a difficulty not easy to overcome, especially in view of the comparatively small numbers of craftsmen likely to be produced by such an arrangement.

(4) and (5). Promotion from labourers and Dilution.—This was a scheme for increasing the number of craftsmen in the industry by introducing into the ranks of the skilled craftsmen a number of semi-skilled men, thereby creating additional numbers of so-called skilled workers, many of whom were not necessarily capable of executing a high standard of work. If such a scheme were adopted on anything approaching a big scale, he feared that the dilutees would fail to get general employment on account (a) of the established tradition for a high standard of workmanship in the industry, (b) the disinclination of architects to produce a specification of works on a lower standard than that to which they were accustomed, and (c) the comparative failure of the scheme of dilution for ex-Service men put into operation a few years ago.

(2) Casual Nature of Employment.

On this point the lecturer asked: (a) Could not a building trade employment bureau be set up in all large centres of population whereby employers seeking men and operatives seeking employment could obtain mutual advantages?

(b) It had become a custom with the public to view with favour the early spring for carrying out all kinds of decorations and jobbing work. These seasonal operations needed adjustment in the interests alike of the public and the industry. Organisation and outlook could do much to reduce casual employment.

(3) Wet time.

For many years this had been a vexed question and the cause of constant irritation within the industry. On the face of it, it certainly seemed a hardship that a section of the community should be penalised because of the misbehaviour of the weather. On the other hand the "dole" had made evident to all clear-

thinking people the ill effect upon human nature of substantial payment for no work. Every good foreman so arranged the execution of his job that there was in reserve under cover certain work which was done at odd times by men who would otherwise be adversely affected by wet weather. Would not a temporary covering over the building at once reduce wet time to a minimum, increase output generally and lessen costs by reducing the time needed to carry out a job?

Feeling that something more equitable might with co-operation be done, a group of architects after extensive enquiries found that a master builder in the London area had put into operation a scheme whereby all men should be paid 1s. per hour when bad weather prevented work. The builder employed on an average between 75 and 100 men. The scheme was arranged on an experimental basis by joint contributions of 6d. per week from every man employed, to which the builder added 3d. per week per man. After more than two years' working it was found that the amount paid out as "wet time" wages did not exceed the 3d. per week contributed by the employer, and during the two years a balance had accumulated amounting to about £185. This money had been used to give the men a holiday of two or three extra days—at Bank Holiday time—drawing their pay from the fund at the rate of 1s. 6d. per hour, thereby providing an unexpected opportunity for the men, together with their families, to get away for a change. He was happy to hear that arrangements acceptable to both parties were nearing completion in regard to an official scheme for dealing with this matter.

(4) Output.

To reach maximum output maximum effort must be made by both sides working in unison. Every facility as well as reward must be given to accomplish this. There must be ample materials on the job—for obvious reasons a scarcity of materials tended to slacken progress. Architects also could help considerably to this end. He doubted if architects realised to what extent the early delivery of their $\frac{1}{2}$ in. and F.S. details, the early placing of orders for specialists and sub-contractors' goods and other matters in their control, helped the builder and in turn the operative in the economic working of the job. In addition, the operations of the various trades must by foresight be made to dovetail into each other on the job without causing waste of time and a few days' "stand off."

(5) The Increased Cost of Building Work.

The main factors in the cost of building work might be set down broadly under four heads:—

(1) Wages, (2) Materials, (3) Overhead Charges, (4) Profit, in the approximate ratio of 48 per cent., 35 per cent., 7 per cent. and 10 per cent. respectively. These figures would, of course, vary in each separate job. The total increase in the cost of building work to-day compared with 1914 was approximately 105 to 110 per cent. The wages of operatives in the various sub-contracting trades might be said to have increased at about the same rate. The general increase over the whole of the trades would therefore be about 93 to 94 per cent. These figures, however, did not indicate the total increase of wages on any particular job, which must clearly be governed by the proportion of labourers, painters, and scaffolders (whose percentage of increase was the highest) in relation to the other workers engaged upon the job.

The following table showed the approximate cost of certain building materials generally in use in 1914 and 1925:—

Materials.	1914.	1925.	Increase per cent.
Blue Lias lime (ton)	21/- ..	58/6 ..	179
Stock bricks (1000)	40/- ..	98/6 ..	146
Deal—Carpentry ft. cube	1/4 ..	3/3 ..	144
Joinery, ft. cube ..	2/6 ..	6/- ..	140
Tiles (1,000 of 1,200)	52/6 ..	120/- ..	129
Bath stone, ft. cube	1/8 ..	3/8 ..	120

Materials.	1914.	1925.	Increase per cent.
York stone, ft. cube	2/10 ..	6/3 ..	120
Fletton bricks (1,000)	28/- ..	60/- ..	114
Portland stone, ft. cb.	2/6 ..	5/3 ..	110
Sheet lead, cwt.	25/- ..	50/- ..	100
Slates (1,000 of 1,200)	225/- ..	430/- ..	90
Sand (yd.)	7/- ..	13/- ..	81
Paint (cwt.)	46/- ..	82/9 ..	81
Thames ballast (yd.)	6/6 ..	10/- ..	54
Steel joists (ton)	170/- ..	260/- ..	35
Portland cement (ton)	48/6 ..	60/9 ..	25

In an endeavour to arrive at a general increase in the cost of materials it would be misleading to take all the above materials into account, for the reason that in an exceptional case one would they all be in use on one job. He had therefore, by a series of calculations, endeavoured to arrive at an equitable figure which showed the increase to be approximately 100 per cent.

They must now proceed a further stage, in order to ascertain the effect of these increases on the cost of work. The table following gives figures compiled by a firm of quantity surveyors showing in detail the approximate prime cost of materials and labour required in a rod of common brickwork in cement in 1914 and 1925:—

1914.	£ s. d.
4,300 Flettons at 28/- per man....	6 0 0
Unloading, &c., and stacking—labourer, 6 hours at 8d.	0 4 0
3 yards sand at 7/-	1 1 0
1 ton cement at 48/6	2 8 0
Labour mixing—10 hours at 8d.	0 6 8
Scaffolding—Use and Waste	0 1 3
Labour, 7 hours	0 5 3
Bricklayer, 43 hours at 11½d.	2 1 2
Labourer, 26 hours at 8d.	0 17 4

1914—Prime Cost£13 5 7

1925.	£ s. d.
4,300 Flettons at 60/-	12 18 0
Unloading, &c., 7 hours at 1/4½	0 9 7
3 yards sand at 15/-	1 19 0
1 ton cement at 60/9	3 0 0
Labour mixing—13 hours at 1/4½	0 17 10
Scaffolding—Use and waste	0 2 6
Labour, 9 hours at 1/5½	0 13 1
Bricklayer, 57 hours at 1/9½	5 2 1
Labourer, 34 hours at 1/4½	2 6 9

1925—Prime Cost£27 9 9

The table showed that labour costs had increased 2½ times, and materials rather less than twice.

It disclosed a further matter of interest viz., that whereas in 1914 the time allowed for these costs for a bricklayer was 43 hours and for labourers (including scaffolders) 49 hours, in 1925 the time allowed for bricklayers had increased to 57 hours and labourers to 63 hours. From the above table it would be further noted that if the bricklayers and labourers would build brickwork in 1925 at the same rate as in 1914 there would be saving of £2 4s. 6d. per rod or 24 per cent.—at to-day's wages, and if addition profit, overhead charges, &c., would accordingly be reduced. This seemed to be a clear indication that there were at least some men in the boat who were not pulling their weight.

DISCUSSION.

In the ensuing discussion MAJOR HARRY BARNES said it was all to the good that the Institute should have shown, by Mr. Welch's paper, that it was alive to the human and economic side of the industry as well as artistic and he hoped the paper would help to bring about real co-ordination between architects, builders and operatives. He would like to see the operatives' Federation approach the Institute with a suggestion that they should form a joint consultative board on which they could discuss their common interests. The outstanding problem of the day was the shortage of skilled labour, and he sometimes wondered whether that position would ever be remedied. It seemed to him that people were more and more tending to keep away from the more

ious occupations and seeking to live in the best way open to them. Attention had been drawn to the fact that the output was less now than in the past, and it might be that that situation also could not be remedied. Output is measured in terms of physical energy, and the operatives showed a desire to spend less energy on their daily work in order to be able to try some over to their leisure time. It might be that this change was inevitable, and that if they wanted increased output they must look for it in improved mechanical methods rather than in increased human physical energy. It had been stated that labour was subject to the law of supply and demand, and he felt sure that so long as labour was looked at in that light, they must expect those who were in control of the organisations of labour to take advantage of that law. If labour were to be considered solely in that light they must expect the supply to be restricted so as to get a better price for what was available. If wages had been regulated during the past few years solely by the law of supply and demand, they might have expected to see the wages of the bricklayer and plasterer increase more than the wages of the painter, but it was found that the painters, who were the most numerous of all the crafts, had received the highest rate of increase. He thought the falling off in the numbers of the bricklayers and plasterers was because neither of them was an attractive trade, and boys would prefer to be carpenters and joiners, yet the statistics showed that the falling off was as great among carpenters as among bricklayers.

MR. W. H. NICHOLLS (Past-President of the National Federation of Building Trade Employers) said throughout the paper there was expressed an earnest desire that architects should take a larger share in the affairs of the building industry. The building employers would have everything to gain from such an arrangement. The building industry had always been very self-contained so far as its government was concerned; the general public heard a great deal about its disagreements, but hardly anything about the very large number of things they had found it possible to agree upon. He was glad architects were realising the need for increasing the volume of labour available. The shortage was not the fault of the builders; architects themselves were largely to blame for not regulating the demand so that work would be of a more continuous nature. When the demand for building work was at one time x , at another time $x+5$, and at another $x-5$, it was extremely difficult for the builder to maintain a constant supply of labour or to indenture apprentices. That hindered the industry more than anything else was the competitive system of obtaining work. They all aimed to produce the best work they could, but the competition of the business world tended to produce the worst. Competition, under which the lowest tender was accepted, thought about the desire to do the least amount of work, and the success of a business was often the result, not of the best effort, but of being able to give the least value for the money received. The problem was a difficult one, of which he could not see the solution under the present system of tendering. As to the figures given in the paper on the cost of brickwork, if they included the increased cost due to legislation they would be about right; but if the on-costs included only establishment charges and profit they would be too high. For a long time the best of the employers in this country had been endeavouring to educate the industry as to the need for encouraging the apprenticeship system, and on this question they had received nothing but goodwill from the operatives. They could not view with unconcern the fact that the best brains of the country were going to other industries, and it was probable that the flat rate of wages in force in the building industry was largely responsible for this state of affairs.

MR. R. COPPOCK (Secretary of the National Federation of Building Trades Operatives), said the operatives believed they were entitled to their little leisure and would never go back to the conditions of 1914. Conditions were so bad in

1914 that it was hardly fair to make a comparison of wages and output then with the present time. In 1914, labour was cheap and the result was that the work of that period looked cheap. The operatives would be very pleased to have the assistance of architects, although the operatives had always held the opinion that architects were opposed to them. For instance, when they were discussing wages, the builders told them that a lower rate was necessary as architects said that the cost of building was too high for work to be put in hand. They had to get away from the bad conditions if they were to attract boys to the industry. There was a tendency for youths to try to get away from arduous occupations, for which the present educational system, which seemed to encourage clerical workers only, was very largely responsible. They had been talking about the problem of "wet time" for five years, and were still talking about it; that was a question the industry had got to tackle; it might add a little to the cost of building, but in comparison with the hardship and suffering it would alleviate it would be cheap. Buildings had, in fact, in the past been too cheap. The operatives wanted to participate in the industry; certainly now, with no voice in the matter at all, they could not be held responsible for any of the things which were wrong in the industry. The operatives believed in the flat rate of payment; they believed that the particular trade in which the operatives found themselves was more or less an accident, and that because a man was a painter he should not receive less wages than a bricklayer. They thought payment by results would be most unfair to the operatives, as they feared the rates would be fixed on the basis of the work of the younger men and the older ones turned adrift. The operatives pledged their faith in increasing the amount of labour by recruiting apprentices between the ages of fourteen and sixteen, as boys of that age always turned out to be the best craftsmen. Every effort had been made by both employers and operatives to add to the ranks of the plasterers, but it had been found impossible to attract boys to that trade on account of its arduous nature; he did not think extra wages would have the desired effect.

MR. GEORGE HICKS (Secretary of the Amalgamated Union of Building Trade Workers), said the casual nature of building work was a great deterrent to young boys, and this was added to by the fact that extra wages were lost

on account of "wet time." The cost of paying for time lost during inclement weather had been found to be ridiculously low, and he was convinced the fears at present entertained would disappear if a scheme were put in operation. In regard to the figures of output given in the paper, these did not appear to be in accord with the facts. In 1924 there were 25,000 fewer bricklayers in Great Britain than in 1914, yet 2,000,000,000 more bricks were laid; in 1914, the number of bricks made in this country or imported was 3,000 million; whereas in 1924 the figure was 5,000 million, so that 25,000 fewer bricklayers laid 2,000 million more bricks. He welcomed any co-operation between architects and operatives that might be possible.

MR. FRED THORNE (President of the London Master Builders' Association), said it had been stated that there was an agreement that builders should only take one apprentice to seven operatives, but as a matter of fact in London there was an agreement that they should have one apprentice to every four operatives. The Building Industries Committee had agreed that the proportion should be one in three, but it was to be regretted that this was not being taken up as well as they had expected.

MR. J. MURREY (Secretary of the London District of the National Federation of Building Trade Operatives), said the figures given in the paper relating to labour were misleading. According to the returns issued by the Employment Exchanges, which were a very reliable guide, there were 20,000 more carpenters in the industry to-day than in 1914. If the facilities for training apprentices were taken full advantage of there would be something like 7,000 or 8,000 apprentices in London to-day; he did not suppose, however, there were 2,000. It was true skilled men did not now come to London from the provinces, but if the facilities already available for training apprentices were taken advantage of the shortage would soon disappear. He thought the cost of building could be reduced if building jobs were better organised, so that work under cover were available for men in inclement weather, and this would also remove to some extent the casual nature of the industry.

MR. MAURICE WEBB outlined a scheme which had been adopted by a London builder for payment during wet time, and stated that it had been found that the sum of 3d. per man was sufficient to pay 1s. an hour for time lost through this cause.



Euston Hall Bridge, Thetford.

This bridge is constructed in reinforced concrete throughout, and spans the Little Ouse, at Euston Hall, being a private bridge forming the approach to the Hall, the seat of His Grace the Duke of Grafton. Mr. Kenworthy, Assoc.M.Inst.C.E., of Norwich and Westminster, was the consulting and designing engineer, and the contractors were Messrs. Christiani & Nielson, also of Westminster. With its wing approaches the structure is

practically 115 ft. long. The foundations gave a considerable amount of trouble as the river bed was found to consist of running sand, and piling had to be resorted to, reinforced concrete piles formed of quick setting ferrocrete cement being used for the purpose. The arched ribs and the parapet itself are covered with, or made solid in, Atlas White cement. The bridge replaces an old oak bridge about 60 years old.

LEADING CONTENTS. PAGE

BUILDING INDUSTRY PROBLEMS.....	869
NOTES	870
GENERAL NEWS	872
COMPETITION NEWS	872
CORRESPONDENCE	874
R.I.B.A.	875
ROYAL ACADEMY STUDENTS' COMPETITION..	886
SOCIETIES AND INSTITUTIONS	886
INSTITUTION OF CIVIL ENGINEERS.....	887
PHILIP WEBB AND HIS WORK—XII.....	888
THE TOWN-PLANNING INSTITUTE.....	890
ARCHITECTS' AND BUILDERS' INQUIRY	
BUREAU	891
REGIONAL PLANNING IN LONDON AND ITS	
ENVIRONS	892
THE BUILDING TRADE	893
THE WEEK IN PARLIAMENT.....	894
NEW BUILDINGS IN LONDON.....	895
ROAD CORRUGATION	897
PROPOSED NEW BUILDINGS AND OTHER	
WORKS	900
TENDERS	905

ILLUSTRATIONS

New General Hospital, Singapore.

The first portion of this hospital, comprising nurses' quarters, bedrooms for sisters, nurses and probationers, together with recreation rooms, sitting rooms and lavatory accommodation, was illustrated in our issue for October 31, 1924. We now illustrate the European section of the Hospital. Major P. H. Keys, F.R.I.B.A., is the architect.



Lady Altar and Reredos, Church of St. Edward the Confessor, Golders Green.
MESSRS. ARTHUR YOUNG & ALLAN D. REID Architects.

Branch Library: Sheffield.

THIS projected building will form part of the Corporation scheme for the extension of permanent library facilities to districts of the city not at present provided for. The library will be mainly single story, with heating chamber and store-room in basement, and repairing, &c., room on mezzanine. It includes reading-room, juvenile library, special study room, and staff accommodation. The lending department is planned on the open-access system, which has been installed and is working successfully at the Central Library and several existing branches. Local stone will be used for the external facing of walls, flat roofs being of reinforced concrete. The estimated cost, including fittings, is about £20,000. The architect is Mr. F. E. P. Edwards, F.R.I.B.A.

Addingham Church, Yorkshire.

ADDINGHAM is situated on the edge of the Yorkshire Moors, about three miles from Bolton Priory. It is an old Roman station (the tribal camp of the family of Adding), and the Roman street and Roman camp may still be seen. The church is on an eminence above the river Wharfe, and is probably on a very ancient foundation, although the oldest part of the existing edifice is not earlier than the fifteenth century. The south wall was taken down and rebuilt about the middle of the eighteenth century. The chancel was built about 60 years ago. One of the most interesting features of the church is the nave arcade, the wall above being thinner than the pillars. Another interesting detail is a wall

3 ft. thick between the chancel and the nave, the upper part of which is reduced to half the thickness. There is a mediæval roof, entirely hidden by a plaster flat ceiling. Our reproduction is from a drawing by Mr. W. Hoffmann Wood.

Low Hill Estate, Wolverhampton.

We illustrate in this issue the first part of a large estate purchased by the Corporation of Wolverhampton, for the erection of houses. It comprises three farms, namely Low Hill Farm, Old Fallings Farm, and Show Farm, with a total acreage of approximately 400 acres. The land is situated just outside the Borough, in the parish of Bushbury, about 2 miles from the centre of Wolverhampton, and is easily accessible by three routes of the Corporation motor bus services. The portion illustrated consists of about 289 acres, which has been divided as follows: 187 acres of houses, 46 for roads, 10 for shops and public buildings, and 47 for open spaces. The total approximate acreage of the entire scheme is 506 acres, number of houses, 4,300 (10 to 1 acre), area of roads 86 acres, and area of open spaces, 84 acres. The contract for the roads, being carried out by Mr. M. A. Boswell, Wolverhampton. Separate foul sewerage and storm water sewers are being laid. The lighting (for roads and houses) will be by electricity. The number of houses to be built on this portion of the estate is 1,600 non-parlour type and 840 parlour type, making a total of 2,526, and the cost of land and roadwork per house is estimated at about £50. The non-parlour type houses consist of two types marked "A" and "B," and the parlour type marked "B." Contracts for 1,500 houses have already been let. Mr. A. M. Griffiths, of Wolverhampton, is building 500 brick houses at £440 per house for parlour type, and £370 per house for non-parlour type. The remaining 1,000 are to be built in concrete by Mr. M. A. Boswell, whose prices are £440 for parlour type and £400 for non-parlour type. All these prices include hot water service, electric lighting, gas service for cookers and gas boilers, fencing, paths, &c. Mr. Wallis Wood is the architect for the scheme, and the whole work is being carried out under the supervision of the Borough Engineer and Director of Housing, Mr. George Green, M.Inst.C.E.

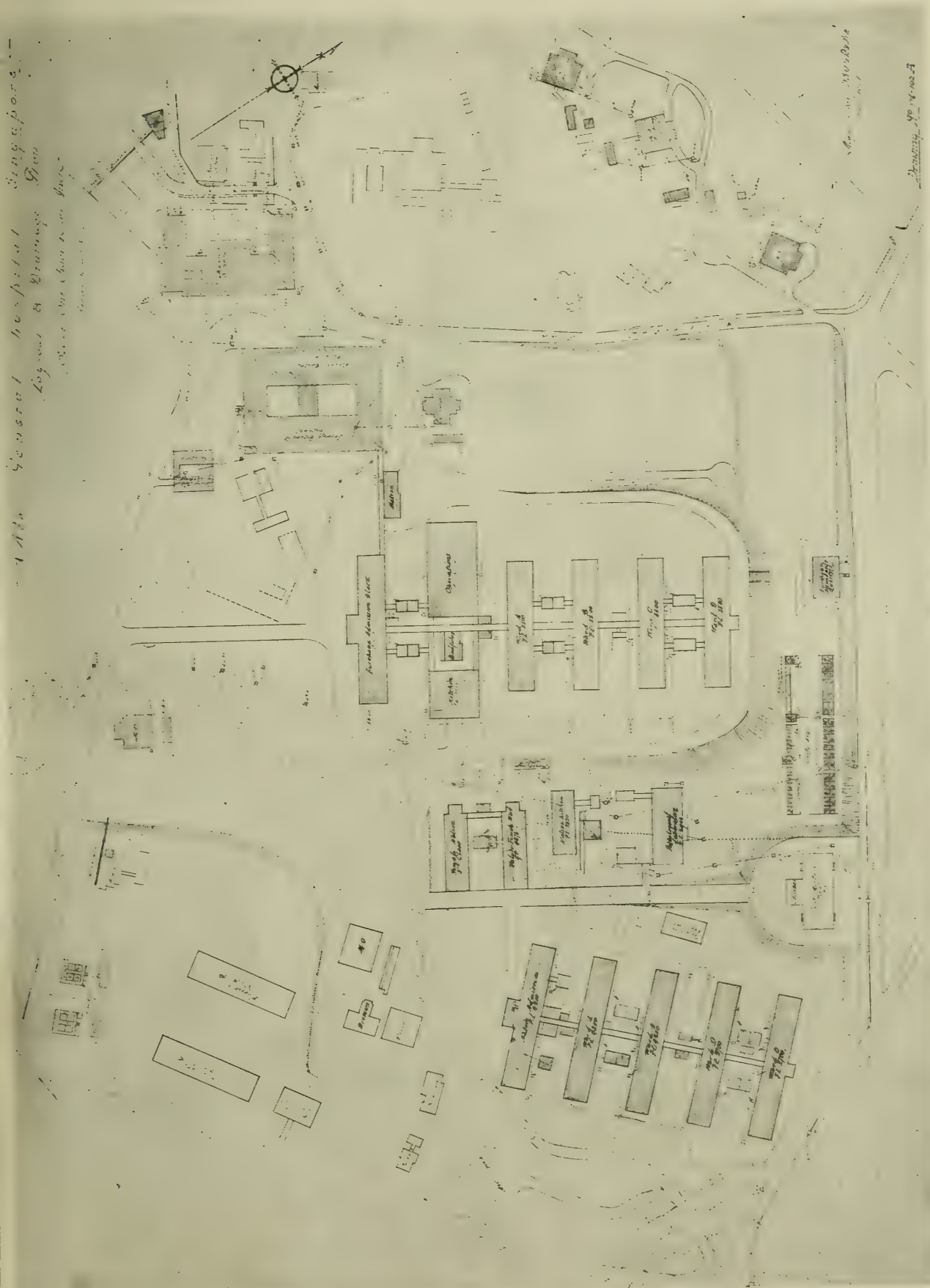
A Colour Front.

This subject was prepared as a study for the treatment of the facade to business premises in terra-cotta tiles and glass mosaic, the predominant colour applied to the upper store being blue and gold. Mr. F. J. Horth, A.R.I.B.A. (Messrs Horth & Andrews), is the architect.

Church of St. Edward the Confessor, Golders Green.

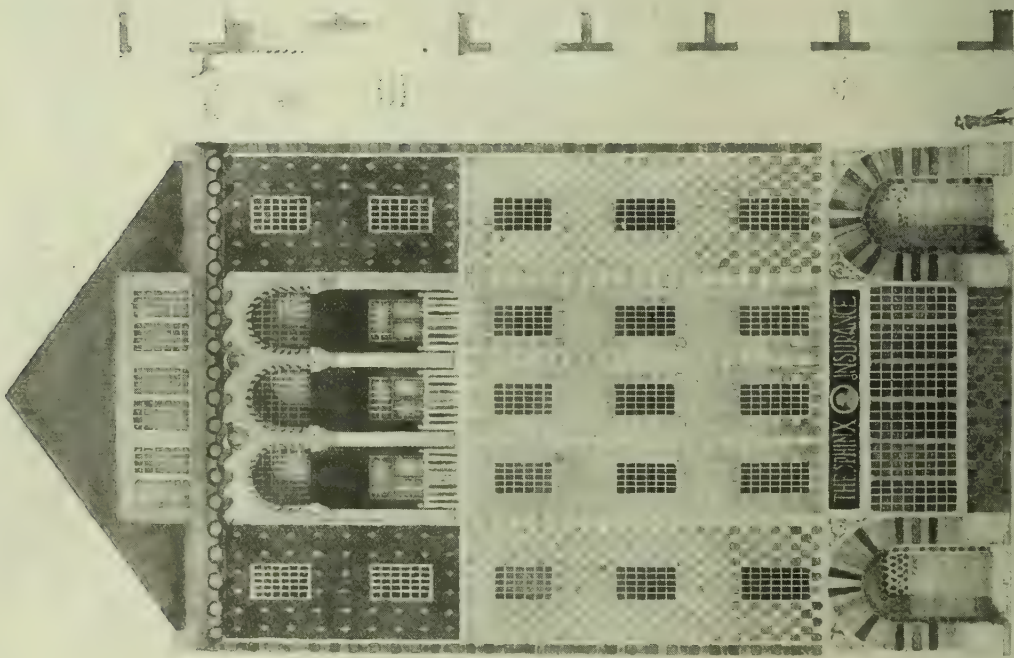
Some recent work in this church is illustrated. The high altar itself is 10 ft. long, and the total length over the Gradine is 12 ft. The front is divided into five panels, and the carvings represent the four Evangelists and the Lamb of God. The work was carried out by the Bath & Portland Stone Firms, Ltd., in Bath stone. The reredos, a memorial to the late Fr. Bendon, is also Bath stone. The central throne and canopy are very richly carved. This work was carried out by Messrs. R. L. Boulton & Sons, of Cheltenham. The Lady Altar and Reredos is the latest addition to the church. The stone work, of Bath stone, was carried out by the Bath & Portland Stone Firms, Ltd. The oak reredos is by Messrs. Robinson, of Westminster. The statues of Our Lady, St. Anne and St. Joachim, and the shields and monogram on the altar front were carved by Mr. James Walker. These figures and the two panels representing the Annunciation and The Visitation were designed by Mrs. Norah E. L. Reid, A.R.C.A., who also painted the panels. The decoration of the statues, &c., is by Mr. Charles Powell, of Highgate. The architects are Messrs. Arthur Young & Allan D. Reid.

Newcastle Police and Fire Station Competition.
We illustrate this week the winning design in this competition, by Messrs. Ivor Jones & Percy Thomas, A. & F.R.I.B.A. The full awards are given on page 872.



New General Hospital, Singapore : Lay-out and Drainage Plan. MAJOR P. H. KEYS, F.R.I.B.A., Architect.

COLOUR FRONT
A TERRA COTTA TILE
MUSEE :

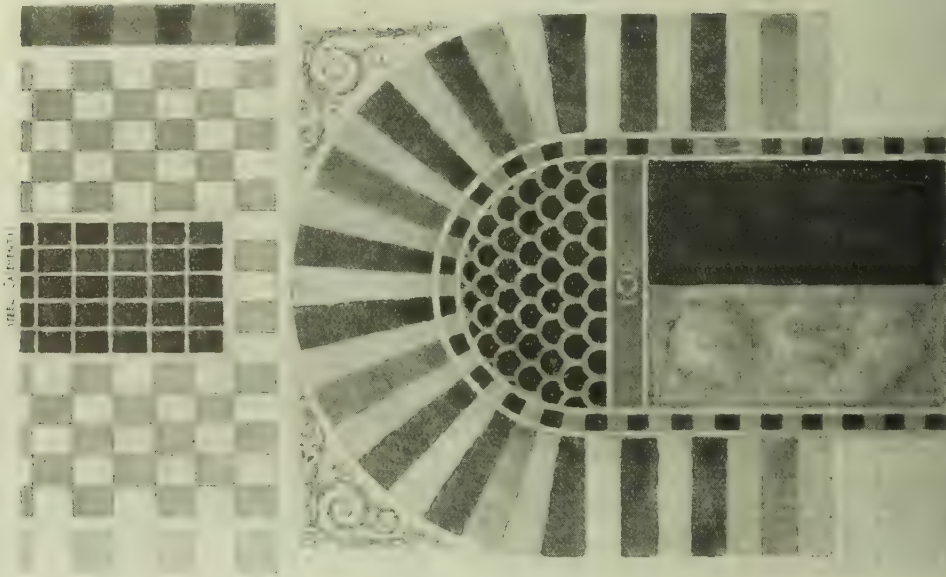


ELEVATION :

FEET 10 20 30 40 MET
SCALE EIGHT FEET TO AN INCH :

SECTION :

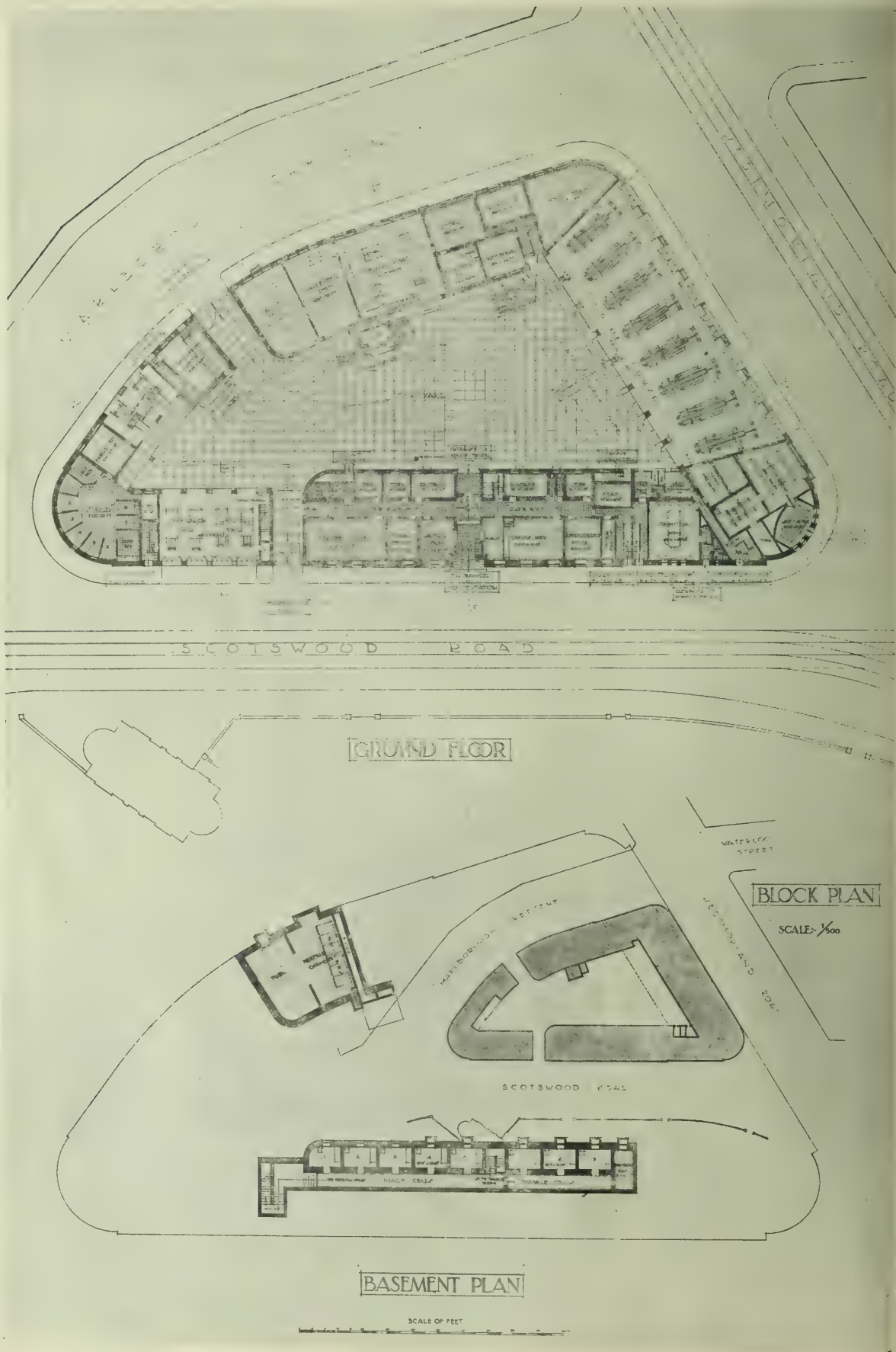
40 MET



DETAIL OF ENTRANCE :

SCALE HALF INCH :

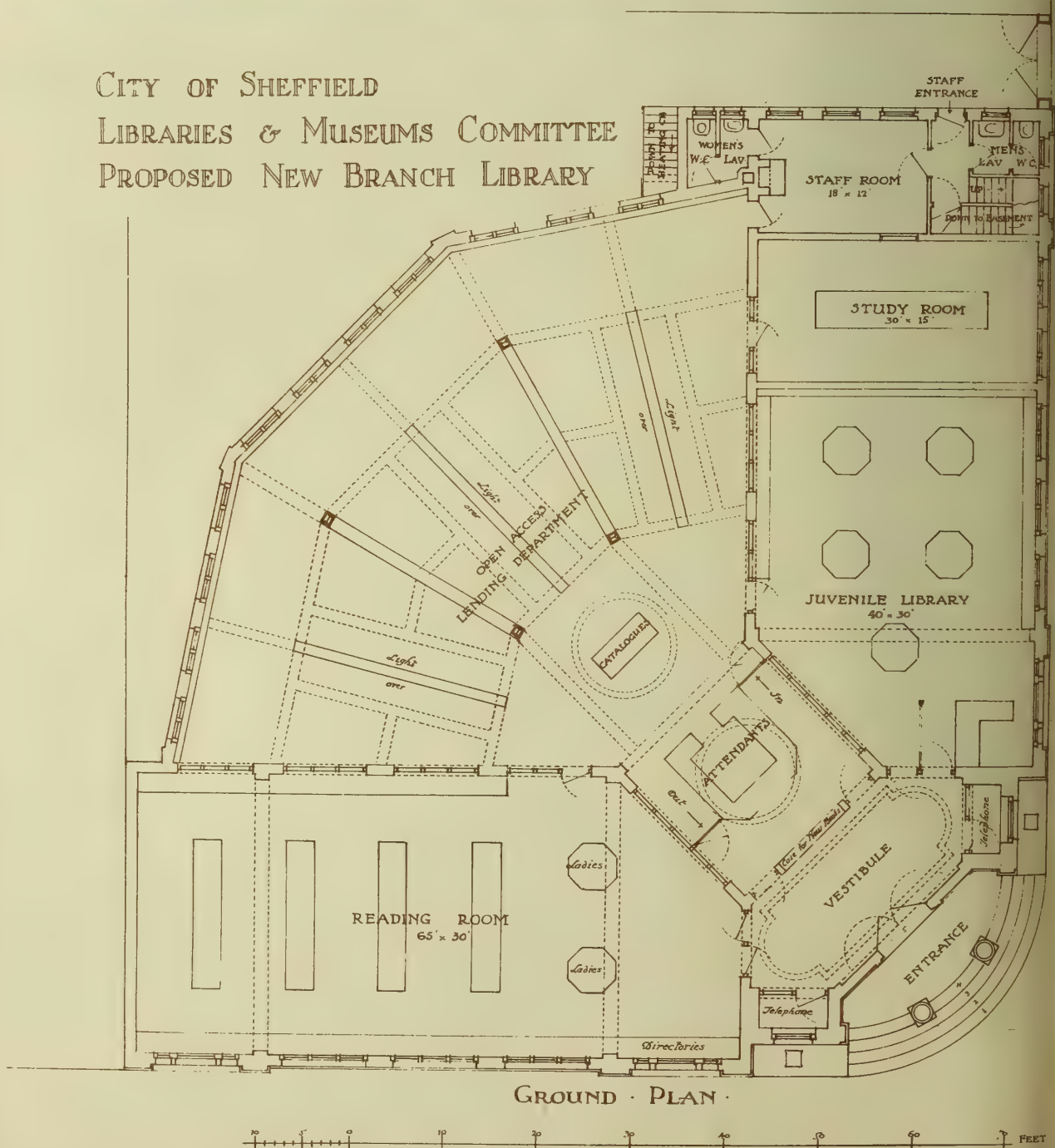
FEET



City and County Police and Fire Station Competition, Newcastle-upon-Tyne : First Premiated Design.
MESSRS. IVOR JONES & PERCY THOMAS, A. & F.R.I.B.A., Architects.



CITY OF SHEFFIELD
LIBRARIES & MUSEUMS COMMITTEE
PROPOSED NEW BRANCH LIBRARY



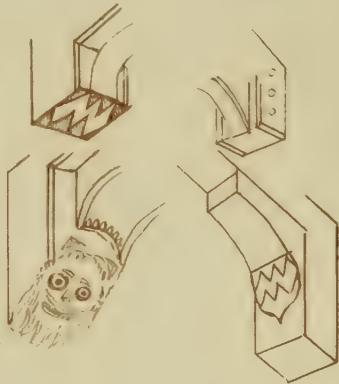
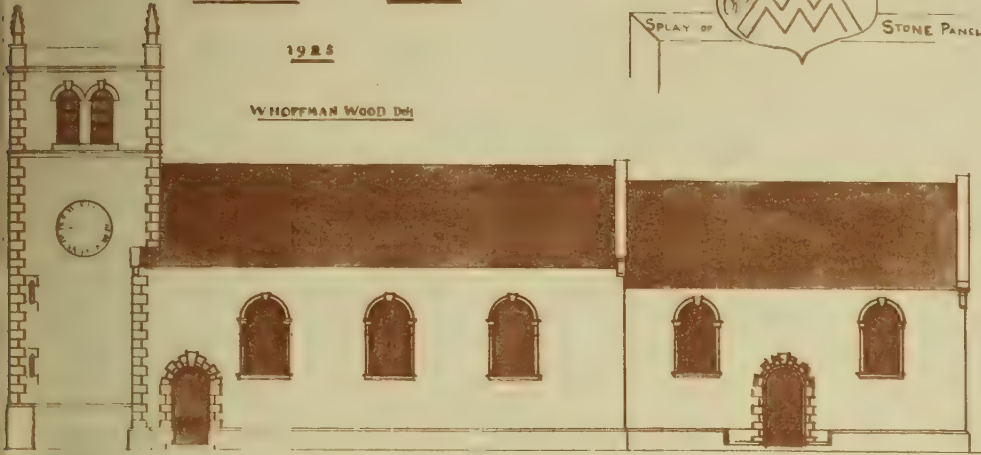
GROUND PLAN

S^T PETERS CHURCH

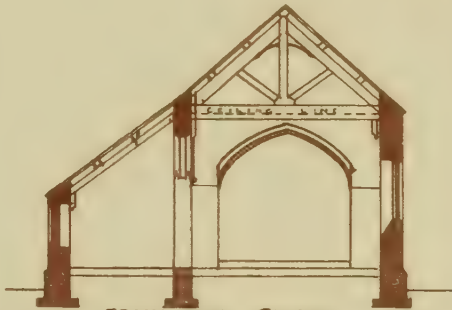
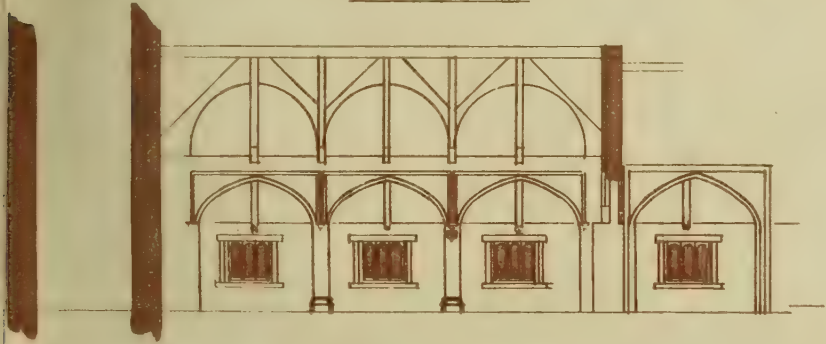
ADDINGHAM YORKSHIRE

1925

W. HOFFMAN WOOD D.M.

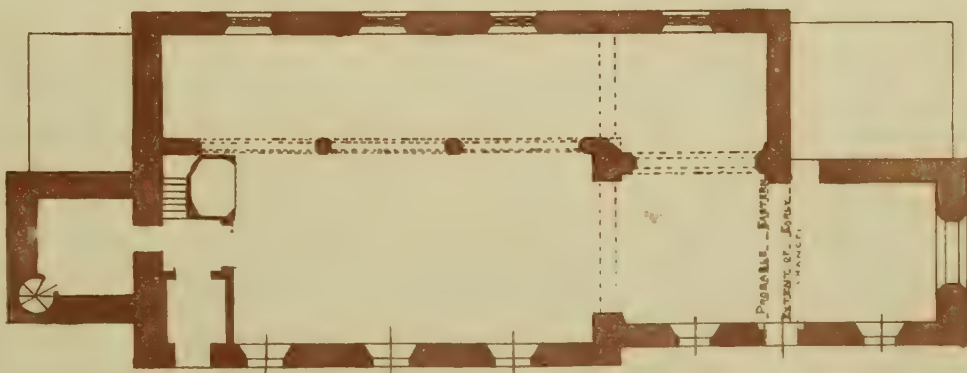
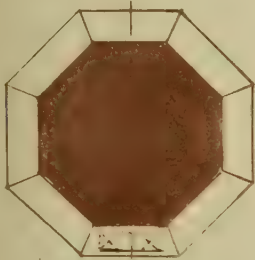
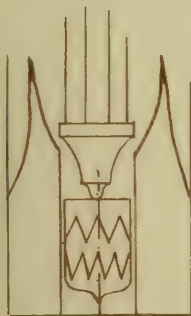


SOUTH ELEVATION

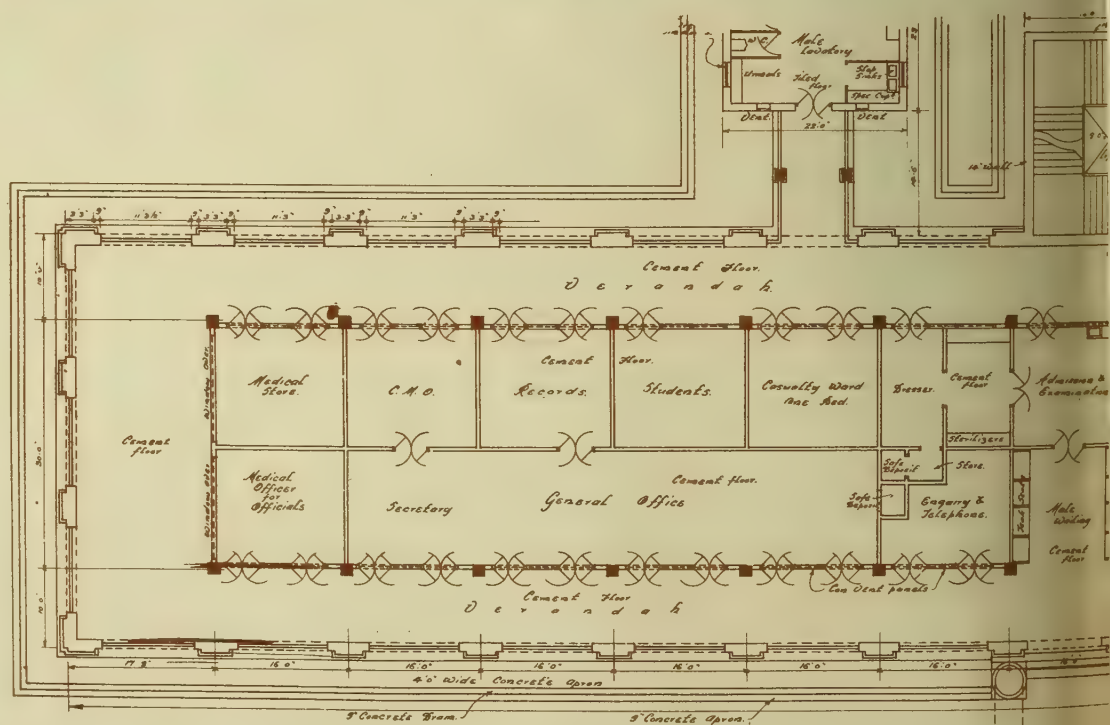


LONGITUDINAL SECTION

TRANSVERSE SECTION

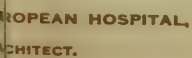
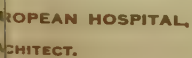


PLAN



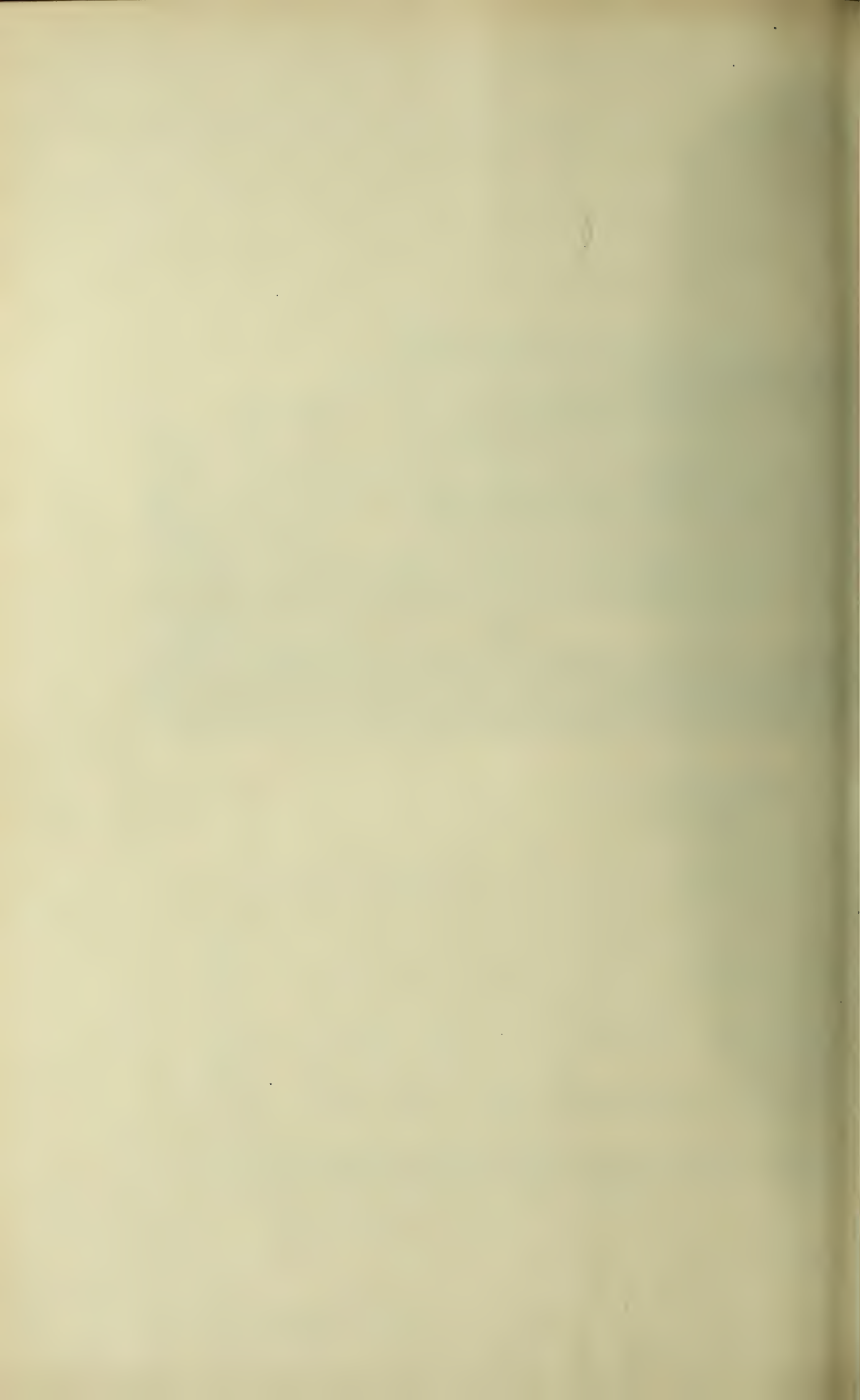
*Admission Block
Ground Floor Plan.*

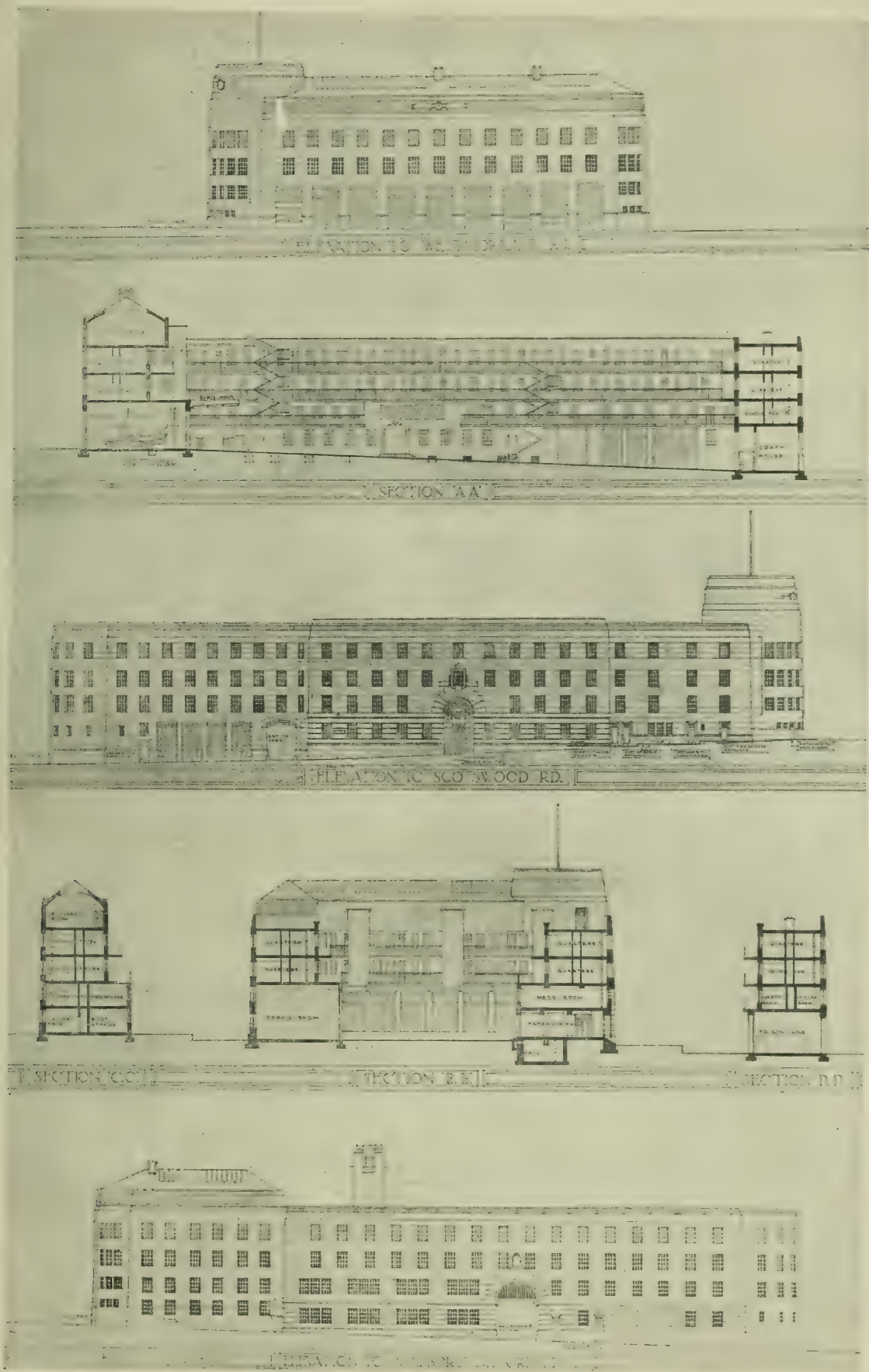
New General Hospital. Singapore. European Hospital.



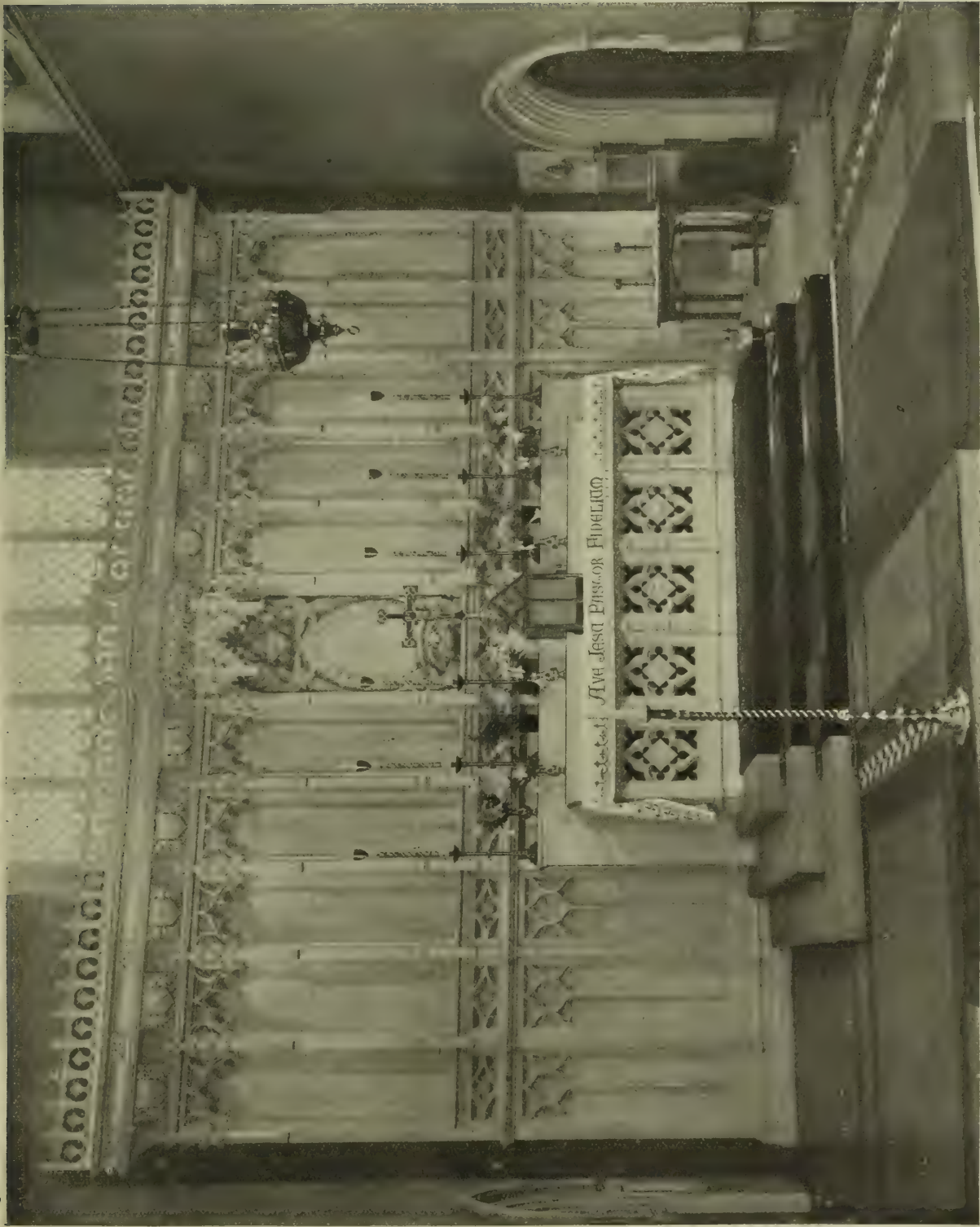
ROPEAN HOSPITAL,
CHITECT.

ROPEAN HOSPITAL,
CHITECT.





City and County Police and Fire Station Competition, Newcastle-upon-Tyne: First Premiated Design.
 MESSRS. IVOR JONES & PERCY THOMAS, A. & F.R.I.B.A., Architects.



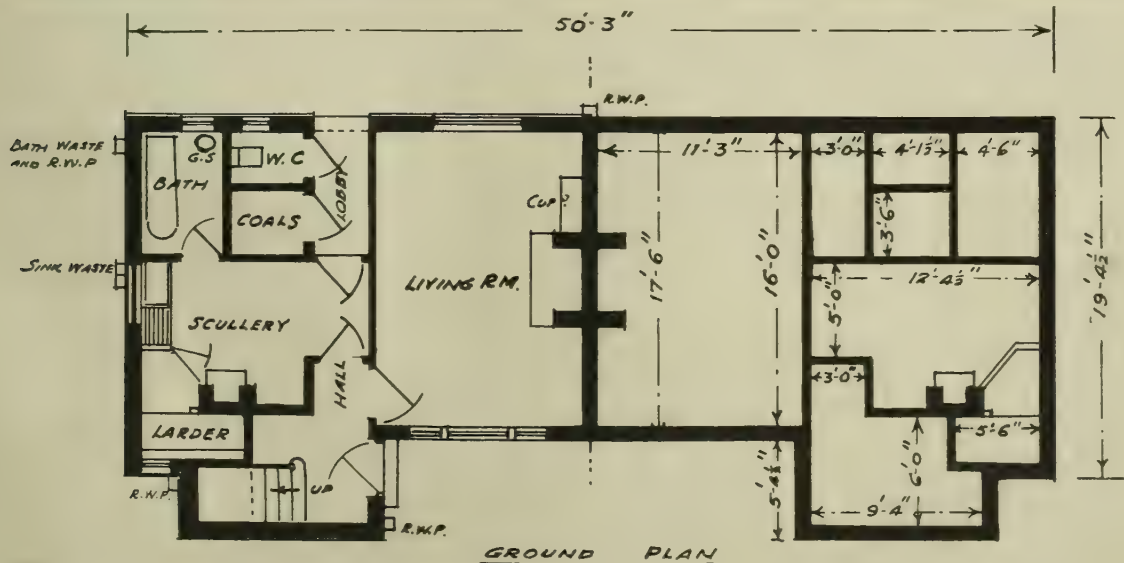
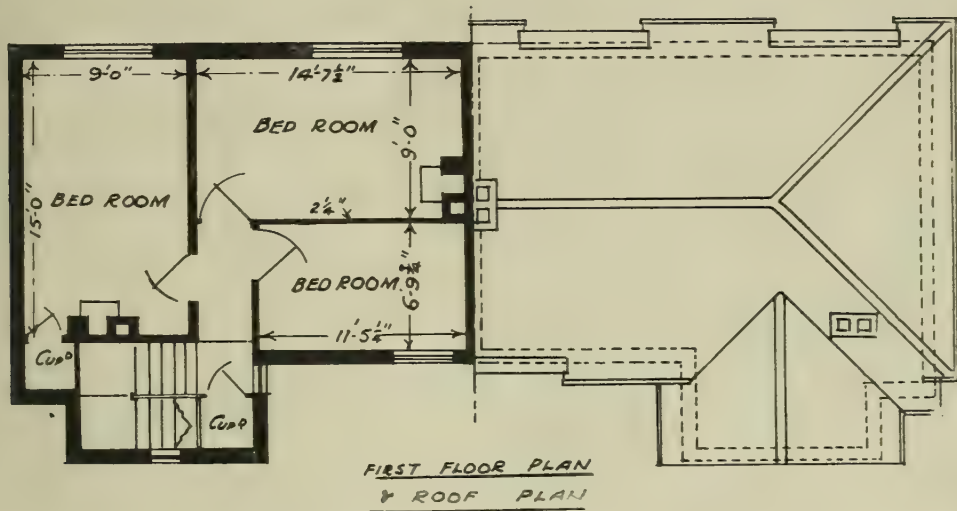
High Altar and Bendon Memorial Reredos, Church of St. Edward the Confessor, Golders Green.
Messrs, Arthur Young & Allan D. Reid, Architects.



Lay-out Plan, Low Hill Estate, Wolverhampton.

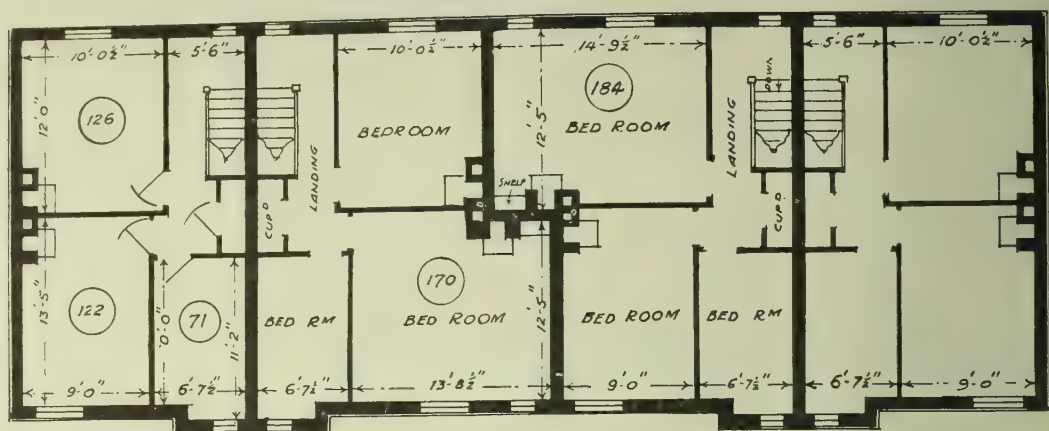
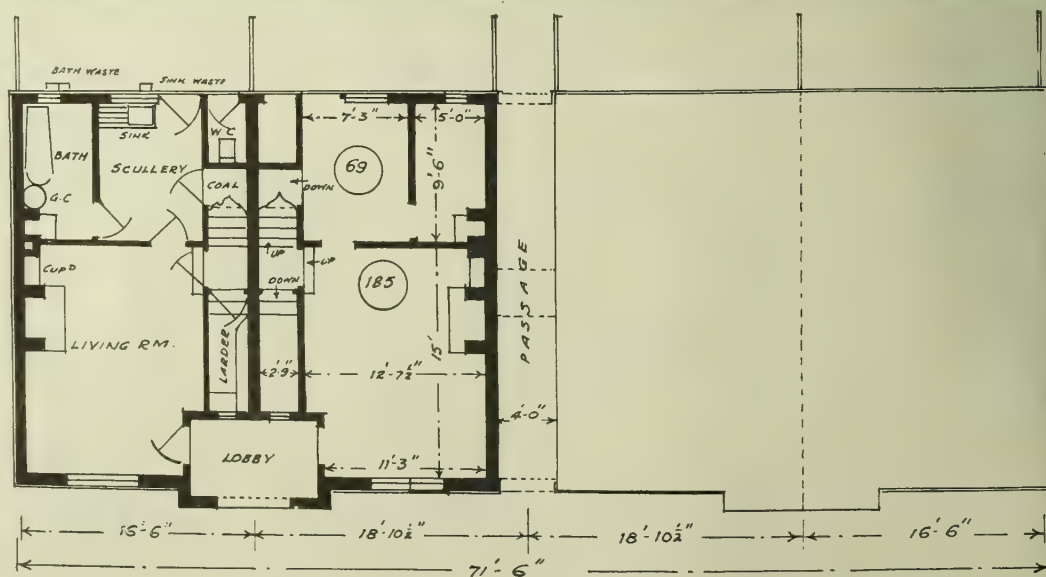
MR. WALLACE WOOD, Architect. MR. GEORGE GREEN, M.Inst.C.E., Borough Engineer and Director of Housing.

[NOTE.—A considerable extension has since been made to this scheme on the north-east.]



Low Hill Estate, Wolverhampton : Pairs of Houses, Type A.

MR. WALLACE WOOD, Architect. MR. GEORGE GREEN, M.Inst.C.E., Borough Engineer and Director of Housing.

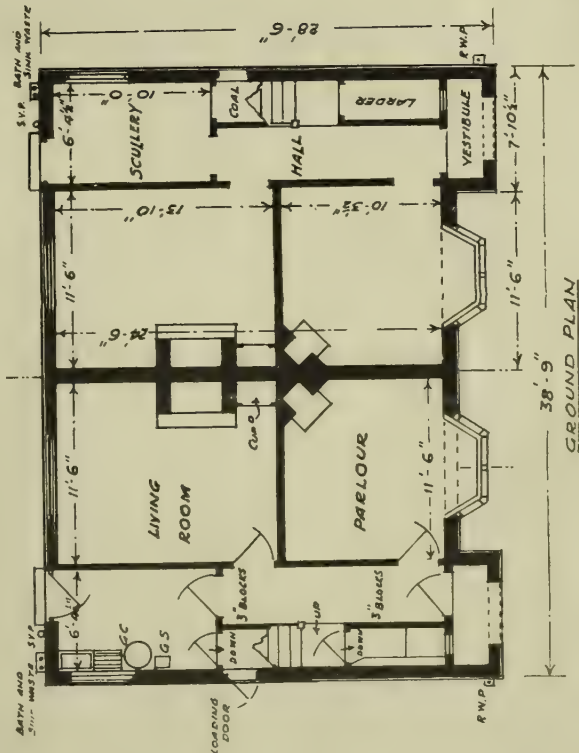
FIRST FLOOR PLANGROUND PLAN.

Low Hill Estate, Wolverhampton: Block of Four Houses, Type C.

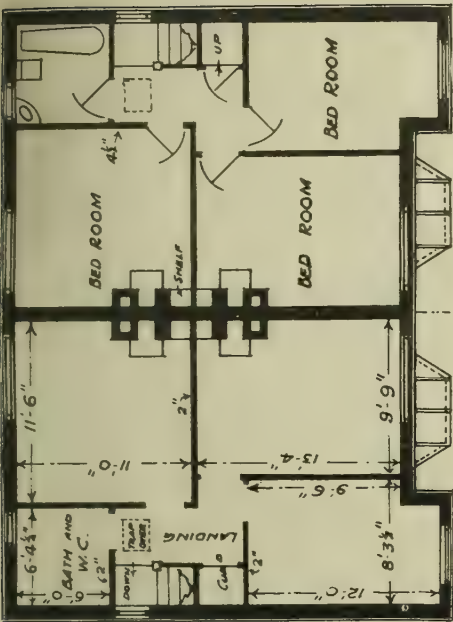
MR. WALLACE WOOD, Architect. MR. GEORGE GREEN, M.Inst.C.E., Borough Engineer and Director of Housing.



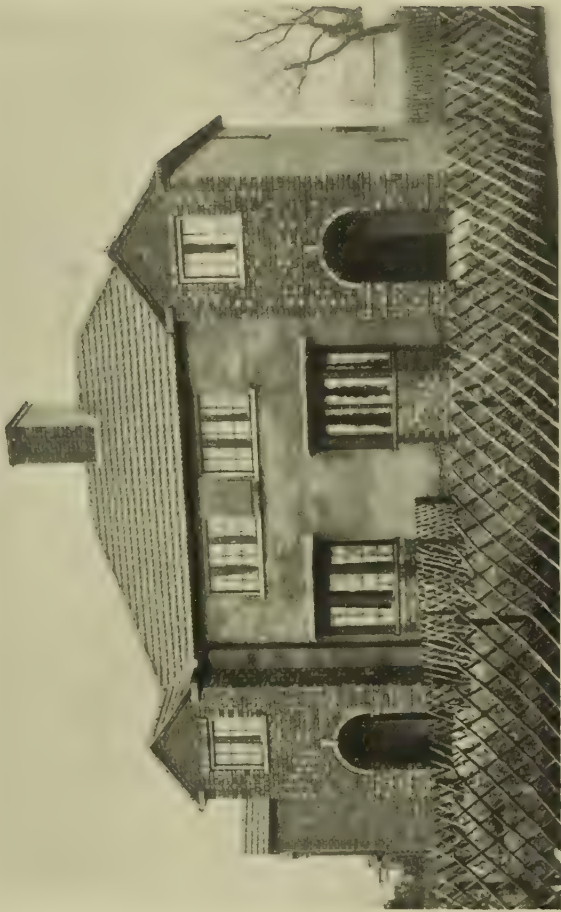
Block of Six Houses, Type B.



GROUND PLAN



FIRST FLOOR PLAN



PAIR OF HOUSES, TYPE B.

ROYAL ACADEMY STUDENTS' COMPETITION

It is a pleasure to chronicle the success of the student who has this year won the Royal Academy Gold Medal and Travelling Studentship, because it is one of the most genuine successes of recent years. A mere success as to beating one's fellow-competitors may not mean a very real and striking success in design; and to tell the truth this has far too often been the case. If we venture to form a judgment on the capacity of the winner of this important prize this year by an inspection of his drawings we should say he has within him the making of a designer of exceptional ability, for the quality of his drawings suggests a genuine feeling for the delicacies and refinements of the Greek type of design he has adopted, and the general effect of breadth and simplicity which he has obtained is allied with some genuine distinction of both plan and elevation. When we follow the design in its detailed exposition we feel that the designer has something of value to say beyond the mere general form and mass of the building. A great asset to the success of the whole is its admirable presentation and we think it is doubtful if ever a better quality of drawing has been shown. Judging by the principal elevation we should hardly venture on any criticism of parts or the whole, but when we look at the perspective we find that what shows an admirable effect in elevation is woefully astray in the perspective of the central block. It is one of the usual mistakes of architects in drawing the elevation to the effect they would like to see in perspective, and do not. The winner, Mr. H. E. Furse, led up to his success by his admirable design which obtained him a first place in the Architectural School last year, and which we then published.

Though the other designs exhibited are not of very outstanding merit, one or two of them do indicate an appreciation of architectural qualities; but here again the perspective reveals an unhappy comparison with the elevations. The architectural designs in the upper and lower schools include some quite pleasing designs, especially in the Parish Hall subject, but we do not feel there is quite the spontaneity which gives generally some note of distinction. The first prize design for a parish hall, by Harold H. Coates, is nicely planned, with loggia entrances on the sides of the projecting flanking wings. The £20 prize goes to Douglas Jas. Fyffe for a memorial tower, which has some good monumental feeling, but suffers somewhat from an over-emphasis of parts which is a very common misfortune in such subjects.

There is some good work amongst the sculpture this year, and it is notable how well women keep to the fore in this difficult art, as one may judge by the charming draped figure of a woman by Winifred Turner, who secures the Landseer first prize.

Prize List.

Historical Painting.—"A Scene at an Inn." R.A. Gold Medal and Edward Stott Travelling Studentship (£200), Patrick Ferguson Millard.

Landscape Painting.—"Clouds Clearing after Rain," Turner Gold Medal and Scholarship (£50), Charles Knight.

Landscape Painting.—"A Scene in London." Creswick Prize (£25) and Silver Medal, Margaret Ida Euler.

Design in Monochrome for a Figure Picture.—"The Sacrifice of Noah," Armitage Prizes, first (not awarded); second prize (£10) and Bronze Medal, George Ernest Lambourn.

Design for the Decoration of a Portion of a Public Building.—Design with Figures for the Decoration of the Vault of a semi-circular apse in a Music Room, first Landseer Prize (not awarded); second Landseer Prize (£10) and Bronze Medal, George Ernest Lambourn.

Two Paintings of a Figure from the Life.—First Prize (£10) and Silver Medal, Eileen Robey; second Prize, Bronze Medal, Violet Evelyn Arnott.

Portrait Study of a Lady in Evening Dress showing Arms and Hands.—Arthur Hacker Prize (£30) and Silver Medal, Winifred Daniels.

Set of Four Drawings of a Figure from the Life and best finished Drawing of a Head in any Set.—First Prize (£10) and Silver Medal, Helen Mary Graham Wilson; second Prize (£5) and Bronze Medal, Thomas Hugo Morahan; Prize (£5), Charles Knight.

Drawing from the Antique.—Prize (£5) and Silver Medal, Thomas Hugo Morahan.

Composition in Sculpture.—"Jacob Wrestling with the Angel" (Genesis xxxii). R. A. Gold Medal and Edward Stott Travelling Studentship (£200), Eva Dorothy Allan.

Model of a Design.—"St. Michael overcoming Satan." First Landseer Prize (£30) and Silver Medal, Winifred Turner; second Landseer Prize (£10) and Bronze Medal, Ethelwyn Baker.

Two Models of Busts from the Life.—First Prize (£5) and Silver Medal, Winifred Turner.

Model from the Antique.—Prize (£5) and Silver Medal, Constance Stella Watson.

Design in Relief, containing Figure and Ornament.—"The Infant Bacchus": Model for a Wooden Decorative Panel. Prize (£10) and Silver Medal, Hubert Donald MacGeoch Gilbert.

Set of Three Models of a Figure from the Life.—First Landseer Prize (£30) and Silver Medal, Winifred Turner; second Landseer Prize (£20) and Bronze Medal, Una Rawnsley.

Design in Architecture.—"A County Hall." R. A. Gold Medal and Edward Stott Travelling Studentship (£200), Hubert Edwin Furse.

Set of Architectural Drawings.—"The Church of All Hallows, London Wall." First Prize (£10) and Silver Medal, Hugh Baldwinne Lyle Horner; second Prize, Bronze Medal, James Frederick Howes.

An Architectural Design.—Landseer Prize (£20) and Silver Medal, Douglas James Fyffe.

An Architectural Design.—First Prize (£10) and Silver Medal, Harold John Coates; second Prize (£5) and Bronze Medal, Sidney Norman Allen.

Landseer Scholarships in Painting and Sculpture, of £40 a year each, tenable for two years, have been awarded—in Painting to Charles Knight, Vsevolod Sozonoff, and William H. Cooper; in Sculpture to Hilda B. Ainscough.

STAINED GLASS

MR. JOHN A. KNOWLES, of York, recently read before the Scottish Ecclesiological Society, in St. Cuthbert's Hall, Edinburgh, a paper on Mediæval Stained Glass, with special reference to the conditions under which the craftsmen of the Middle Ages followed their callings. There was a common impression, he said, that when mediæval cathedrals were being built there were workshops nearby in which screens and altars were carved and gilded service books illuminated and stained-glass windows designed and painted. But it was quite mistaken, for when the fabric rolls or building accounts were examined not a single item of payment of wages for making any of these things could be found. They were made to order by tradesmen in the town. The absence of information concerning where the glass originally came from was explained: Glass making in mediæval times was a nomadic industry. The chief requirement of the glassworks was a plentiful supply of fuel close at hand. The furnace was only a small affair, so that as soon as all the timber within easy reach had been cut down for fuel, the glassworks moved elsewhere where more was to be had. We were very apt to imagine the mediæval craftsman as a man who did all the work himself, or with the aid of a son or an apprentice at most. But that is far from representing the facts of the case; sub-division of labour was the rule, and it was surprising to find into how many parts many trades were split up. We know that at St. Stephen's Chapel, Westminster, in 1351, six draughtsmen, twelve glass painters, and twenty or more glass-cutters and glaziers were at work.

INSTITUTION OF CIVIL ENGINEERS

Pioneer town planning and park-belt reservations in the laying-out of the principal towns and cities of Australia and New Zealand during the early years of the nineteenth century was the subject of an historic survey and illustrated discourse at the Institution of Civil Engineers on December 9 by Mr. Charles C. Reade, Government Town Planner of the Federated Malay States. Mr. Cecil Harmsworth (President of the Garden Cities and Town Planning Association) presided.

The lecturer (who was formerly Government Town Planner of South Australia, and responsible for the organisation of national conferences and passage of town planning and housing legislation in that State) said that both in New Zealand and South Australia extensive park-belts separating the existing town from the open country were laid down and reserved in most cases by instruction from those responsible for the creation of the reform schemes of settlement which originated in London from 1830 onwards. These park-belts originally were reserved for the purpose of public recreation. In the case of the New Zealand towns they were intended not to be built upon, but to remain a wide strip of open land between the central town and the open farmlands beyond. Suburban growths and town extensions of the past fifty years had long passed beyond the original town-belts, which, for the greater part, remained to-day an extraordinary asset and a valuable object lesson in providing means of recreation, pleasure and utility to the urban population of to-day.

Some years prior to the foundation of the first reform settlement in South Australia, between 1836-7, when Colonel Light planned the City of Adelaide, the advocates of the Wakefield system and other pioneers of colonisation reform devoted much time and attention to settling the details of town design. Plans for a model town in Australia, surrounded by a belt of parklands one mile wide and equipped with squares, open spaces, crescents, and other public reservations, were published in London in 1830—the year that witnessed the birth of Wakefield's first colonisation society which exerted such wide influence upon subsequent developments in Australia and New Zealand. It was an important circumstance, however, that although the instructions from London to the New Zealand surveyors in 1839-40 were very definite in respect to the provision of a belt of parklands between the proposed town and the open country, the instructions issued by the South Australian Commissioners from London to Colonel Light for the laying out of the first town in the new British Colony contained no direct reference to parklands. In other respects, however, the instructions relating to the town were similar in character to those given later to the New Zealand surveyors.

The lecturer showed by various examples that for fifty years prior to the foundation of Adelaide, however, there were considerable efforts at town planning in the Crown settlements of Sydney, Hobart and other towns in Van Diemen's Land (Tasmania). Numerous reserves for town sites, together with sites for public and ecclesiastical purposes had been made. Leading towns had been equipped with squares, crescents and park areas under the influence of British ideas and possibly earlier developments in the American colonies and other possessions. The laying down of important streets from 60 to 99 ft. in width in place of earlier standards based on 40 and 50 ft. had also been accomplished but with only partial success.

The lecturer, in conclusion, emphasised the need for outer and inner park systems in most modern towns. Financial and other provisions required consideration in formulating legislation for regional planning or the replanning of existing towns. In this respect he suggested that further attention and study could, with advantage, be given to the legislation and special assessment areas practised in Boston, Kansas City, Denver, and other American cities with such conspicuous success.

SOCIETIES AND INSTITUTIONS

SOUTH WALES INSTITUTE OF ARCHITECTS.

THERE was a large attendance of architects, students and their friends in the Assembly Hall of the Technical College, Cardiff, on December 3, on the occasion of the annual prize distribution and exhibition of students' work in connection with the Department of Architecture and Civic Design, Technical College, Cardiff. Mr. T. Alwyn Lloyd, F.R.I.B.A., presided, and the prizes were distributed by Mr. C. F. Ward, F.R.I.B.A., President of the South Wales Institute of Architects. Mr. W. S. Purchon, M.A., A.R.I.B.A., Head of the Department, gave a brief address on the growth of the School of Architecture since its establishment about five and a half years ago. During the evening comments were made on the high standard of work which had been reached by the students, as shown by the work on exhibition, as well as on the increased accommodation and other facilities which will shortly be available for the Department of Architecture. Votes of thanks to Mr. Ward and the Chairman were proposed by Captain Anthony, Registrar of the University of Wales, and seconded by Councillor Rhoda Parker.

The prizes were awarded as follows:—

Department of Architecture and Civic Design Prizes, Certificates, and Diplomas.

President's Prize for Draughtsmanship, £3 3s. (presented by Mr. C. F. Ward, F.R.I.B.A.), J. B. Wride.

The First Year Prize, £2 2s. (presented by Mr. Percy Thomas, F.R.I.B.A.), C. J. Bartlett. Second Prize (presented by Head of Department of Architecture and Civic Design), Miss O. E. Price.

The First Year Prize for Part-time Students, £2 2s. (presented by Mr. T. Alwyn Lloyd, F.R.I.B.A.), G. L. Price.

The Working Drawings Prize, £2 2s. (presented by Mr. Ivor Jones, A.R.I.B.A.), L. Monroe.

The Architectural Sketching Prize, £2 2s. (presented by Mr. H. Feather, F.R.I.B.A.), P. G. Budgen.

The Essay Prize, £2 2s. (presented by the Architectural Press, Ltd.), Llewelyn ap Gwynn.

The Sketch Design Prize, £2 2s. (presented by Mr. H. Budgen, F.R.I.B.A.), L. Monroe.

The Village Improvement Prize, £2 2s. (presented by Mr. Clough Williams Ellis), J. B. Wride.

Certificates in Architecture (carrying with it exemption from the R.I.B.A. Intermediate Examination), H. Bull.

Diploma in Architecture (carrying with it, under special regulations, exemption from the R.I.B.A. Final Examination, with the exception of the subject Professional Practice), B. W. R. Thomas.

The South Wales Institute of Architects, Central (Cardiff) Branch Prizes.

Design, 5th Year, £3 3s., B. W. R. Thomas; 4th Year, £3 3s., J. B. Wride; 2nd Year, £3 3s., P. G. Budgen; Atelier, £5 5s., E. Tyler. Measured Drawings Prize, £ 5s., J. B. Wride.

DEVON AND EXETER ARCHITECTURAL SOCIETY.

Formation of Design Club at Exeter.

A MEETING to inaugurate an Architectural Design Club for Exeter and district was held at the University College, Exeter, on Tuesday, December 8. The chair was taken by Mr. E. F. Hooper, in the unavoidable absence of the President of the Society, Mr. J. Leighton Fouracre, and in addition to a large attendance of architects and students, there were also present the Chairman and Secretary of the Exeter City Education Committee, Alderman John Stocker and Mr. A. C. Badcoe, and the Registrar of Exeter University College, Mr. A. K. Woodbridge. After formal business, the Chairman welcomed Mr. Howard Robertson, Principal of the Architectural Association School, and Mr. F. R. Yerbury, Secretary of the Association, and thanked the Council of the Architectural Association for their keen interest and great assistance in the formation of the Club. He explained the serious need of facilities for architectural education in Exeter and district, and that, following the remarks in the President's address on this matter at the annual meeting held in March last, a small committee was formed to suggest lines on which suitable action might be taken. With the approval of the Council of the Society, the Architectural Association were approached. They suggested that subjects should be set in accordance with the A.A. School programmes, and offered the

assistance of their masters, who would visit Exeter periodically to advise students and criticise their work.

Mr. F. R. Yerbury conveyed the good wishes of his Council, and said they were very willing to give every assistance in the formation of the Club. The Architectural Association was originally formed in very much the same manner, and in more recent times the Bristol School of Architecture had been established with the help of the Architectural Association, on lines very similar to those proposed for Exeter.

Mr. Howard Robertson described in detail the scheme of training practised in the Architectural Association Schools, explaining how this could be adapted to the requirements of the Exeter students. A collection of students' drawings which he had brought, and which were arranged around the walls, were used by him to illustrate the progress of a student passing through the various years of the school study. He impressed upon the students the necessity of hard work and study, to obtain that flexibility of mind which was essential to the needs of architectural practice. Design must be the logical outcome of the practical requirements of each individual problem, and whilst guidance was given in the various architectural styles, this was always felt to be subsidiary, and assistance would be given on any style which the student might select. Passing to the subject of construction he felt sure that, whilst this was given important consideration in the Architectural Association School programme, here in Exeter the matter might be left with the local architects to whom students were articulated, and to the course in Building Construction established at the College. He joined with Mr. Yerbury in wishing the new venture every success.

The scheme for the working arrangements of the Club was then briefly outlined by Mr. W. J. M. Thomasson, who has been asked by the Committee to act as visiting architect for the first few evenings. After this, Exeter architects will undertake the duty in turn, it being recognised that the guidance so given will in no way interfere with the programme, set by the Architectural Association from London.

Mr. Percy Morris proposed a hearty vote of thanks to Mr. Yerbury and Mr. Robertson for their assistance.

ROYAL ARCHÆOLOGICAL INSTITUTE.

A lecture on the "Sculpture of Monumental Effigies in England during the Middle Ages" was given recently at the Royal Archæological Institute by Mr. J. G. Mann, B.A., B.Litt., F.S.A., who said that until recent years effigies had not received the same attention that had been accorded to the other contemporary and allied form of memorial, the monumental brass. The former had suffered terribly in the past from neglect, wilful destruction and nineteenth-century "restoration." Of the survivors to-day alabasters had probably suffered least. The freestone and wooden figures had lost their original coatings of gesso colour, and were only the core of what they once were. English effigies had suffered little from deliberate destruction compared with those of France, where the Revolution did great damage. In Germany they tended more to execute carving in relief instead of the round; Spain has many wonderful alabasters, though of late date. No effigies were made in this country earlier than the twelfth century. At first our craftsmen were clearly affected by the French figure sculpture such as Chartres and Amiens. They produced the stone figures on the west front of Wells Cathedral, and these inspired the origination of a south-west school of sculpture. King Henry III's quarries at Corfe gave the material for the Purbeck marble effigies which were to be found all over the country, dating throughout the thirteenth century. The lecturer stated that the subject was divided into three chronological divisions which greatly overlapped: (a) Purbeck marble effigies in the thirteenth century; (b) freestone in the thirteenth and

fourteenth centuries; and (c) alabaster from 1350 onwards. By 1400 alabaster completely predominated; the material lent itself to elaborate and delicate work, such as the reproduction of details of costumes and heraldry. A marked change in style took place after the Black Death, corresponding to the architectural change from the Decorated to the Perpendicular style. Geologically England fell into four departments of effigy sculpture, whose styles were greatly affected by the material used. During the freestone period there was a northern school, of which York was the centre, which produced robust figures carved in magnesium limestone. A south-western school carved delicate figures in oolite from Ham Hill and Doulting. The centres of these areas were Wells, Bristol and Exeter. As the beds of the stone used were so shallow, projections had to be kept within their limits, and thus gave slender and restrained figures. The south-west Midland school, using the local soft sandstone, developed a looser, less detailed style. The fourth, the London school, using oolite from the surrounding districts, was the most important. Its influence in good, clear carving extended far afield, and subsequently dominated the alabaster of Nottingham and Derby. This latter was mainly shop work; figures were copied almost identically and transported everywhere by land and water. They were of great finish and richness, even if not of inspired art; the proportions were excellent, and the figure carved in a strong rounded style.

The lecture was illustrated by a series of slides lent by Mr. F. H. Crossley, of Chester.

THE MUSEUM-PALACE OF FRANCE

The Louvre and the Tuileries, Paris.

A recent lecture by Sir Banister Fletcher at the Central School of Arts and Crafts dealt in detail with the Palais du Louvre, on the banks of the Seine, and the ill-fated sister palace of the Tuileries, to which it was once connected. Beginning with a description of the small chateau which stood on the site in the Mediæval period, Sir Banister compared it in those early days with the Tower of London, and then proceeded to describe the gradual building and rebuilding of the romantic palace of Renaissance times, including the buildings round the square Cour du Louvre, and those further westward flanking the Place Louis Napoleon, and the wings along the Quai du Louvre and Rue de Rivoli, leading up to where the Tuileries stood, that project of Catherine de Medici which ultimately perished. The atmosphere of this palace and its Museum and Art Galleries were well presented.

London Ice Rink.

Work has been started on the construction of an ice rink for London on a site near the Houses of Parliament. London will probably have the most complete and up-to-date skating rink in existence when the building is opened next October.

Replanning London.

Commenting in *The Times* on a letter by Mr. Thomas Adams, Professor Adshead writes:—"Before any wide planning of London is undertaken, the question of finance must be seriously dealt with. No funds are at present directly available for sterilising or securing open spaces of wide interest to Londoners. No funds are directly available for assisting in their early struggles in development new outer suburbs or satellite towns. It would seem that powers for imposing contributory rates over wide areas should be given to the county authorities, to the London County Council, or to some properly constituted statutory body, and power to raise loans on the security of betterment that by judicious town-planning will eventually accrue. Until some such financial powers are granted, the planning of London will be half-hearted and anæmic, and every bold suggestion will be entirely dependent upon issues too uncertain to be of any worth."

PHILIP WEBB AND HIS WORK—XII

By W. R. LETHBRIDGE.

CAXTONS AND WHITE HORSE HILL.

Through the intervention of Mr. S. C. Cockerell it was arranged that Mr. Wilfrid Blunt would let Webb a pleasant little old house, Caxtons in the parish of Worth, Sussex, about half a mile from the Saxon church and a mile from Three Bridges station. Mrs. Wickham Flower, the former mistress of Tangley Manor, found him an excellent house-keeper—Mrs. Dickinson—who took good care of him to the end. During the autumn, 1900, he had the cottage (rent £15) repaired as if for the Anti-Scrape, and moved into it on January 4, 1901.

Something more than a cottage in origin, probably a small yeoman's house, it was by the wayside, built of brick with some timber posts and beams. A good hall-like kitchen in the middle, which had windows both back and front, became the living room. At one end was the working kitchen with a brick oven, and at the other a little room where he put up

Years before he had spoken to a friend of mine of how hard it would be for anyone to retire without a hobby, and in his diaries of this time is evidence of his having kept himself in hand by regular drill of working and walking: "I have become a hewer of wood and drawer of water."

"Flocks of 1,000 or 1,500 sheep at a time make the only crowds I look on, and these baaing ones are wending from Sussex winter pasturing to the plains of Romney Marsh."

Mrs. Dickinson tells me some memories of this time and place:

"The well at Caxtons was very deep. You could hardly see the water; it took one hundred and ten windings to pull up the bucket. Mr. Webb used to do fifty and I would do fifty, and he the last ten. Then we helped to carry the bucket to a tank and empty it. He would have a cord of wood from the forest and sort it out—birch, ash, oak—and would saw it up in lots, dating each as it was done.



FIG. 1.—BOOK PLATE.

bookshelves. At the back of the cottage lay a vegetable garden and small orchard. Close in was the well—"74 deep" he noted. In front was a little strip of garden where he grew a few favourite flowers, one being the wild yellow tulip.*

The whole thing was exactly like Webb, and here he settled down to a habit of what his diaries call "doing the necessary things," chopping wood, drawing water, taking long walks, making friends with neighbours in and out of society, doing some residuum of "invention" and welcoming his friends. Miss Morris writes: "He never lost his sympathy with country life and came back to it simply and easily in his latter days." Then of visits to the Worth cottage, she adds:

"You know how he would come to the station to meet one—the pleasant walk up—perhaps a stroll later into the forest, and a talk about the Arab horses—the beautiful hospitality, the sweet homeliness of the spread table, the touching insistence that one should eat heartily of some simple dainty. Then the chairs drawn up in his own inner room, and the long talks."

"He would stand for hours at the backdoor with his gun watching rats, and I don't remember him ever missing one; then he would bring it back by its tail and tell the age of the rat. The apples and quinces were picked one by one, just twisted to find which would come off the bough easily and were ready to pick.

"He helped the children with their lessons and taught them the names of flowers and birds, showing them the pictures in his Bewick. He used to pinch my boy's cheek, saying he was like Oliver Twist—'see the oiliness of him.' He showed him how to draw, and the sheep is one of the drawings [enclosed] he made; the others he gave him to practice from. Sometimes he would ask for a sultana pudding, and say to the boy: 'We will have Benjamin's share.' Then he told the children that Philip means lover of horses, and Webb originated from web, weave and webber. He used to say: 'When you can see a cluster of stars so that you could not put a pin between them you may know you are going to have fine weather!'

"The only time Mr. Webb was ever at a wedding was once when he was looking over a church—I think he said it was Iffley—and the sexton shut the door while the wedding was going on. He used to say he would not have been there then if he could have got out.

"Children would come for the daffodils out

of Mr. Webb's field, and ask for enough for wreath for someone's grave. He used to tell them to pick a dozen and come back and show them to him. Tommy Vallance, the little crippled boy, always told him when he wanted new boots or a new hat, and he used to send him to Peter Brown's and have the things put down to his account, saying: 'Mind, the best he has got.' The carol singers came every year, and he would let them sing for some time. Then he would open the door, saying 'Stop! That's not proper singing.' And he would beat time and sing, making them follow, then give them cake and money."

To A. H. P. [January (?) 1901]: "It is good of you to give me a turn of your hand into my new resting-place, though that is hardly true in these early days of it—for I am 'at it pretty well all day long; either drawing water, cutting wood, blindly searching boxes for things which are seldom found, and running for provisions of various small orders to bakers, grocers, ironmongers, &c., and more than &c., again. For which labours of love 6.30 a.m. rising, the one gain on the day; and now that 6 ft. of snow has fallen 'shank's mare' finds it hard going on the roads. Sometimes I am more cheerful with surroundings such as have been long searched for in the spirit, and have not found in the flesh with just that dash of inequality in their value to make the drama a really imperfect one, giving room for the goal of hope to exercise its calling and beckoning to something other—somewhere. In spite of it being the wrong season for transporting the living soul and dissatisfied body, still the place and its surroundings clearly say—'patience; you will find me very good if you too are good. The scramble has been immense for an old man single-handed; and in spite of my churlish, unsocial nature, I feel the withdrawal from many—yes, many—very real and beloved friends. . . . The chatter of [Mrs. Dickinson's] two children does not annoy me even when the door to the kitchen between this 'keeping room' is open three parts of the day. It is a little more than the ticking of the clock to me. . . . You will note the scrambling hand-writing of this—my hands are sore from labour. . . ."

To S. B., June 25, 1901: ". . . This is a pleasant place, and in most ways very fitting for my need; also it is in its way singularly beautiful, though not quite in the way the more postical district of the Cotswolds appeals to me. . . . My time is more fully occupied than when I was 'professional,' and a 37 year tenant of a flat—message in Gray's Inn, and the muscles (below my brain pan) are very much exercised. S. C. drops in now and again on Saturday afternoons to prove the growth of the dry stick he has planted in Sussex, and looks keenly for some sign of sprouting. Walker and he gave me a bit of drawing to do, but I can only set hand to it on Sundays when the axe, the saw, the spade, shovel, fork, &c., are stabled away and my hand has a chance of not being too shaky. My little front garden between the cottage and the road was trampled to billiard table hardness by the Sussex brick layers, nicknamed 'the Slouches' by me. The working folk about here much run in tribes of names as Dench, Luker, Budgen, &c., but the largest of all the tribes is that of the 'Slouches,' who are mostly bricklayers, and a happy-go-lucky lot they are. Now the Carpenters are fairly ingenious, as are most of the farmers, forest woodmen and others. But, of the little garden—It having been let alone in a masterly way till it could declare itself in Spring time, has itself upsprung, and is gay with pretty, pleasantly smiling and delightful flowers. The orchard at the back is a perfect jungle broken through with apple, pear, plum and quince trees. The whole place has been neglected. . . . All this has to be mended by me single-handed, including the making of paths, and the growing of the smaller edible garden stuff. I never knew how small a way a pair of hands could make in the multitude of ways a neglected place calls—I may say, yellow. I like the work, which does me good, and do not feel inclined to risk employing other hands. This, you see, is all about myself. Now you must fall to and tell me of yourselves

* Mr. Aymer Vallance notes how fond Morris was of the tulip *Sylvestris*, and wonders whether he gathered it into his patterns directly or through Persia. The answer is, direct.

like fashion; and do not spare me anymore in yours, very truly, Philip Webb, has spared

The piece of drawing referred to was a book plate, for which a peacock was desired. For he produced a miracle of a drawing, all the so as the work of a man of seventy—a miracle of a miracle. The original drawing is only a trifle bigger than the reproduction given (Fig. 1).

On August 28, 1901, he wrote: "This is the first time for many years I've had the opportunity of watching the sequence of the seasons in the country. It interests me much. It is fortunate that the humble cottage for your content is not yet findable in the Cotswolds: my mind for a whole year or more was set on finding there myself. . . . My only drawback is being too near London, and that there are more 'carriage folk' than suits my inclination."

To A. H. P., October 21, 1901: "Truly I ought so well of your wood-engraving that I set myself to wishing you might master the petty craft and lift it out of its submerged condition; you will, of course, guess that I should know pretty well what patient practice should be involved in getting mastery. I tried once and found it foreign to my aptitude. . . . 'Shank's mare' always attracted me, especially when looking at gipsies, male and female, riding along as if they were Greek gods from the Archipelago—none of your mincing Misses Mashers, but like the immortal Isopel of the 'big house' of Long Melford. The Cockerell looked in upon me last Friday, to lighten me out, and knocked a year off my life. His 'firm' [Walker & Cockerell] promises more work, and I promise to try to do it gently and to order with the hope of getting the money to pay part of the cost of a work-

shed I am going to put up where a wet day can be better spent in needful jobbing than without it. Am really in excellent health with some chronic rheumatism, the trifling reminder of my rheumatic fever time of 1889. I have it mostly in my arms which a bit of wood clearing relieves for a while. You will not forget to hand on my friendliest remembrance to the good Pinbury folk, men, women and children."

To A. H. P., March 7, 1902: ". . . The good-natured J. R. Holliday, of Birmingham, was weak enough to wish me to undertake designing a mace for the new University of Birmingham. I gave in being a real democrat. . . . well this is occupying much of my too little time now that the spring calls for attention in garden and orchard. . . . That old and pleasantly monotonous singing at the plough stilt—how well I remember it sixty years ago in Berks and Oxon, two counties late and laggard in moving out of the furrows of life. I hope you may have caught the lilt of the old-world tune to bring it back for me. . . . I've looked at Oakridge [Gloucestershire], on the 1 in. Ord., and find your sunny side of the wold. If I had got to that little message of Tunley, the neighbourhood would have been pleasant; but I'm here where aristocrats and their imitators much abound, along with 'bags' of 14 hundred! pheasants at a day's murder. . . . Oh! those stone mullioned houses—so like enchantment to this poor penman of Oxon and Berks! My work-shed is up, and already rather crowded, but 'tis undoubtedly useful: for though I am slow it already saves me half the time in doing the various and constant tinkering here. The S.A.[frican] muddle and godless gamble both wearies and pains me, so good-night, my friend, for I've had a tiring out o' door day, and I've three days (of five hours) a week at the sorrow-dealing mace. Walker looked in on me on Saturday and kept me in touch with the greater world than Worth."

"The sorrow-dealing mace" was one of silver—presented by Mrs. Beale, of Birmingham, to the University, which, through Mr. J. R. Holliday, he had been asked to get made. The first drawing, as delicate in its way as the bookplate, was finished on January 10, 1902, and the final full-sized details were ready in April. It was made by Mr. Catterton Smith with so much sympathy of interpretation that there is not the usual hiatus between "design" and doing. (Figs. 2 and 3.)

To Mr. J. R. Holliday, June 11, 1902: ". . . Of course in less decadent times of the decorative arts, such elaboration of drawings would have been unthought of, as the silversmiths would have designed the work themselves and carried it out with the unbroken growth of their tradition and habit."

To Mr. J. R. Holliday, August 31, 1902, about a projected book-plate: ". . . 'Cannot you think of something in your life or belongings or fancy or fact which would be a hook on which to hang my 'fancy'? I do not like to make such a design which has not some sufficient significance. When I have this it tethers me to some positive course. . . . There is always a load on my spirit of things undone

when undoing to get into bed 365 nights in the year."

During this year Sir Lowthian Bell, now an old man, wrote to Webb: ". . . 'The longer I live here the more I feel indebted to you. . . . I do not like to think that we have never to meet again now that I am in my eighty-seventh year. . . . I have a request to prefer that you would let me hang on my walls a specimen of your drawing. The price of course I leave to you. . . . Would you kindly inform me the usual practice among architects. As an example, I will take this house. After the plans were agreed on a clerk of works was appointed and you visited the scene from time to time. Did you make any charge for this in the way of travelling expenses and time? If so, what were the amounts? . . .'" To the last point Webb replied that "it was the custom in my time to charge for travelling but not for supervision."

Philip Webb to Sidney Barnsley, July 11, 1902: ". . . 'Time goes faster than a 'motor,' but happily without the noise and stink. Also, I've had a piece of designing to do which occupied more than my spare time for three months or so—not professional, for I resist that as belonging to the building colts coming on. Again, 'Antiserape' gives me work. . . The break-up of your combined homesteading rather touches one, for I had got hold of the place in my mind. Naturally, your account brought out my maps of the Pinbury district. The new situation easily recognised by my remembrance of the tumbled ground just N.W. of the churchyard, where a former house had stood; when lodging at Mr. 'Dick's' there was repeated strolling there. I also remember—which I looked at with sighs over such pleasant ground being disturbed by a bigish house for swell-domania. The work to be done is a point of gratification. The following is, I believe, not in the Prayer Book: 'From being without work to do, good Lord deliver us.' I much like the thought of Daneway being turned to such



FIG. 2.—UNIVERSITY MACE.



FIG. 3.—UNIVERSITY MACE.

THE TOWN-PLANNING INSTITUTE

inoffensive account, and the rats banished by cats and industry. . . ."

To A. H. P., August 29, 1902: "The cloud formation here has been heavenly; magnificent, as if just came direct from the Gulf of California with samples of those over Martinique. Never saw such inspiring clouds. The sun going down with fiery dogs on his haunches while in the N.W. a monstrous range of cumulous Dolomite, in stationary forms for half-an-hour on end. Why should I grumble that Tunley [in the Cotswolds] is not my native heath?"

In the diary for the year 1902 is noted: "Cutting dead wood out of fruit trees; Geo. Dench finishing plaster floor of shed; emptied the dung pit; at work on full-size of Birmingham mace; the two children vaccinated; sheared the privet hedge; got the children's garden patches ready; did tinkering, carpentering, puttying, &c. Saw the first swift of the year (May 18); W. S. B[lunt] here with Lady Windsor; to the forest to see the upland mere; Percy Wyndham [of Clouds] and Reginald Yorke [of Forthampton] here; Proctor here [of British Museum]; Lady Mayo here; Mrs. Morris here."

This year a pair of cottages, stout and trim, were built by Mrs. Morris at Kelmescott, as a memorial to her husband. Mr. Jack looked after the building of them and carved a delightful relief panel of Morris looking up at a tree full of birds, from a sketch by Webb—it was suggested by Morris's words, 'the town of the tree.'

Towards the end of 1902 he offered his Kelmescott Press books to Trinity College, Cambridge, and on their acceptance he wrote to the Librarian on December 15, 1902: "All Morris's work was based on an extraordinarily wide knowledge of the rise, decay and fall of the arts; this he was able to assimilate as a foundation for his work, and proceed with real originality; thus avoiding the fatal step of imitation. Making this gift could be from no generosity on my part, for, having been seeking for a long time a safe and congenial home for the books, helped as I have been by quite competent friends, I now feel at rest; I am therefore merely a transmitter to posterity of works too valuable, either to be sold for a profit, or locked from the attention of students in the arts."

In the winter of 1902 Philip Webb had a severe illness. Later Mr. Hale White referred in a letter to "that terrible wave of infected air which caught you when you were gathering fruit years ago." For a long while he had to lie in his bedroom, which was ceiled slanting to the ridge: "This is a perfect bedroom" (he wrote to S. C. C.), "like a tent, and nothing ugly in it. The sun came in so beautifully this afternoon. By the way, here is a note for an architect if there is ever another. Always keep the windows on the south side low, then you can get plenty of sunshine without too much heat and glare. The windows on the other side can be high."

On January 21, 1903, he wrote: ". . . Dreadfully disinclined to commit myself to paper, pain and dozing stolidly reigning supreme in the small back room. The rheumatic-lumbago is an adventurous friend who means to stick till March, I believe." "Stick" it did much longer, and from this time he did very little drawing.

To W. R. L. (1904): "Of South Italian things [the earthquakes], they are too terribly saddening to say more than—the gods are good to let us know we are what and where we are. At this moment in peaceful Sussex 'the Heavens are telling' with great and beautiful and terrible storm clouds with Paradise shining in between the stratification of them. . . . The Cockerell was here with but three-quarters of an hour's whisk of his tail. . . . I would that I might sit up and do some kind of inventions ["designing" crossed out], but my wits are no more trustworthy than the back."

December 5, 1904: "I thought the new things seen the other day in London incumbrances of the ground; they take the heart out of one."

December 21, 1904: "The *Memorials* [of Burne-Jones] is a real story and the letters in it master-work of wit and wisdom."

(To be continued.)

PROFESSOR PATRICK ABERCROMBIE (President) took the chair on Friday last at the rooms of the Institution of County and Borough Municipal Engineers at an ordinary meeting of the Institute, when Mr. I. G. Gibbon (Ministry of Health) read a paper on "The Town Planning of Built Areas."

Mr. Gibbon opened with a criticism of the use by town planners of such phrases as "built-up" and "lay-out," and said that for that night he intended to depose "built-up" and substitute "built," which adequately expressed their meaning. Much had been said and written by those interested in town planning of the necessity for this new power of planning built areas; but singularly little had been contributed in this country to hard thinking on the problems connected with it. They at the Ministry of Health had at times been criticised because they had hitherto refused to allow built areas to be included in town planning, except within narrow limits, especially by those who, not being lawyers, suffered from the amiable infirmity of being sure of what the law was. Having to administer the law, he preferred to take the advice of those whose business it was to interpret it. While, however, they had been strict in observing the limits of the law, and they would be justly open to stern rebuke had they done otherwise, they had in fact been devoting a great deal of attention to the planning of built areas. He was not going to put before them any cut and dried scheme, not because there was none, but because he was genuinely anxious that there should be an independent contribution from outside official circles. In some respects the problem of planning built areas was simpler than that of planning undeveloped land. All town planning had an element of prophecy; that was one of its chief difficulties—and perhaps one of its principal attractions for the unwary. But there was, at any rate, this advantage in dealing with built areas, that development had already taken place, that there were, therefore, very definite facts on which to build a future scheme; further that there would probably be many instances of re-development which would serve as safe pointers to the directions which re-planning should take. These pointers were likely to be far more numerous than in any large undeveloped area. Here they were met with another question—what should be the aim of the re-planning? They knew there were a good many ideas in the air—the decentralisation of industry, open development and the like. How far were these notions, even the tested ones, to be applied to proposals for the re-development of their towns? He suggested that it was of the greatest importance that it should be firmly realised that town planning was a hard-headed business proposition, that its success depended on the strict observance of this fact, and that failure to do so would but discredit and retard the whole movement. That did not mean that considerations of amenity and of beauty and the like were hustled off the map. These had their place, and to neglect them might be the very way to be unbusinesslike, but it did mean that they had to stand the test of hard fact, that they had to be accommodated to practical necessities, which, indeed, usually was the one means of securing the best even of beauty, and that, strive as hard as they might for new Jerusalems, they were not to be gained in a day, and those which might seem easy of achievement were generally by bric-a-brac.

A number of problems arose because of the costliness of the property to be controlled by town planning in built, as compared with unbuilt areas. In zoning, for instance, the setting aside of particular land for industrial or other business purposes may much increase its value. But the reservation of land for general residential purposes (not for particular classes) was not likely to make much difference to value in undeveloped areas. The position

might, however, be very different in built areas, especially in the inner cores of towns and cases would readily come to mind where the reservation of some areas for business purposes and of others for residential might result in a large transfer of values. There was compensation in respect of zoning certificates reasonable, and it therefore behoved those who were planning built areas to be careful that they did not do injustice to private interests. It might well be that, for this reason, proposals might in some cases have to be accepted which were less than were desirable for the general benefit of the district, though, if the benefit be very great, it should always be considered whether it was not worth purchasing some compensation to the interests which would otherwise be unreasonably injured.

The high value of property would be acutely in connection with proposals in town planning schemes for improvements in communications. It might be contended that the right course was to provide that compensation shall not be payable except when the owner of the property wished to do something (re-erect or alter his building, for instance) which would require observance of the new building line or the Local Authority required him to back the building—that was, when there was some actual restraint of action, on the face of it a not unreasonable suggestion. Some would urge, however, that this was not fair to the owner, that the value of the property was reduced, or rather might be reduced, for this was not by any means always any substantial reduction, and that, if he had to sell the property with the restriction, he would get less for it. On the other hand, it had to be remembered that, in a case of this kind, when he would be selling would not be merely the property, but also the right to compensation if at any time the building had to be set back and it might be argued that there would be any reduction, or very little.

If, however, compensation was payable immediately the restriction was fixed, and if long time elapsed before the restriction became effective, the general community might be unfairly mulcted, and, what was of equal importance, a general reluctance might arise to providing ahead for necessary improvements, and at the time and in the way which was likely to be of most advantage to the common good. Such was the problem. It was out that night to set problems, in order to stimulate independent thought on them, and to propound his own solutions.

Hitherto, in the planning of unbuilt areas the experience was that claims for compensation were not heavy, especially if, before plans were definitely formulated, particularly before anything was made public, there was friendly consultation with owners, and their wishes were met so far as was consistent with the public interests. The position, however, might be very different with the planning of built areas. Under town planning the position should be much better than with street improvements, because proposals could be looked at as a whole, and more systematic measures taken to increase property values in the improved areas, and larger sums be raised in partial recoupment. Even then, however, the cost of improvements might be heavy (though the savings in transit, business, convenience and health had to be placed on the other side) and it became a crucial question whence the money was to come. One source of means was from increased values. They were not always easy to prove, even though it be clear that they were there and, hitherto, their importance had been chiefly as an offset in preventing possible claims for compensation. When they came to deal with built areas it was to be expected that increased values would be more important and provide a larger contribution, but present indications made it doubtful how far they were likely to prove a highly fruitful source. The Local Authority

as now enabled to claim only one-half the increased values. It was a good device to leave the share to the private owner, thus removing any sense of grievance and stimulating initiative. It might well be considered, however, whether it was necessary to restrict the share of the Local Authority to as low a figure as one-half, when it was remembered that the only increment of which the Local Authority could claim a share is that shown to be due to their scheme. A practice much adopted in the United States, and growing in favour, was to assess part, or even the whole, of the cost of a public improvement on property which was considered to benefit from it. They had the same principle in their law, notably as regarded private streets, but had applied it but timorously.

The fact that so much of the property in built-up areas was owned in small lots would make more difficult the carrying out of re-development on the best lines. These and other difficulties had inclined some to the conclusion that the only way to be sure of securing the re-planning of their towns to the best advantage was by the ownership of the land by the local authority, a facile suggestion beset with many difficulties. Undoubtedly this measure would ease the situation materially, and it was significant that in recent years there had been a marked growth of feeling in municipal circles in favour of ampler powers, and more use of them, for the acquisition of land, evidenced, for example, by the powers for the general acquisition of land which had been obtained by many towns. Here, again, it was scarcely necessary to point out the magnitude of the proposed solution and the difficulties involved—the huge cost; the problem of municipal management; the political possibilities if, in most, of the land in a town were municipally owned, and the repercussions on municipal life. Alarmed at the cost of complete acquisition, some had suggested that the right of reversion alone, after a period of years, should be acquired, the immediate cost of which might be relatively small. But this would not benefit the present generation; further, though small now, the total sum paid, with compound interest, would, of course, be large; and intermediate developments, and many such would probably be needed, would have to be paid for in full. In Germany the difficulty which had arisen in re-planning because of small, or of inconvenient plots, has been met to some extent by giving the local authority a power (*Lex Adickes*) to pool land and to redistribute it according to the several interests, and a somewhat similar power, but much more limited, could be exercised under our own town-planning law, and had been incorporated in the model clauses (clause 42). There was another line of possible advance which it would be well to explore and to discuss, one scarcely touched in this country—whether, in some of these cases, at any rate, it might not be possible, compulsorily if need be, and the public interests so demand, to pool all the land in what might be termed public utility trusts, continuing under private management and with all the owners having holdings corresponding with the values of their property.

The speaker next touched on what in the United States are termed "blighted districts," i.e., residential districts where the property has deteriorated but which cannot be called slum areas. Manifestly, the town planner of built-up areas should pay particular attention to such districts, for they presented special problems of their own, afforded manifest opportunities for obtaining improved social values, and provided chances of convincing even the most sceptical of the gains which were to be won by systematic planning.

It had been suggested to him by persons of experience that provision might well be made in town-planning schemes by which periods of assured life should be given to different parts of a town, according to the condition of the buildings in them. Thus assuming that the general state of the buildings in an area,

which might be big or small, made it clear that they were not likely to have an effective life of more than twenty-five years, that period would be fixed. Any restrictions imposed by the town-planning scheme would come into full effect only at the end of that period, but until then would not be operated, except that compensation would not be payable in respect of anything done by owners of property in the meantime, unless with express permission, which would render the town-planning proposals more costly to execute. The town-planning authority would not be debarred from carrying out improvements during the intervening time; but, if they did so, they would be liable to pay full compensation, even in respect of matters, such as restrictions on the character of buildings, which would not be subjects of compensation after the expiration of life period. The proposal was a new one, had many apparent attractions, but also was hedged with many difficulties.

The success of zoning in the United States, particularly in New York, should alone be sufficient, in large measure, at any rate, to remove doubts from the minds of practical men. But, while welcoming this confirmation of well-founded hopes, it was essential that they should think out their problems on their own lines and secure solutions adapted to their own conditions, at the same time making full use of the valuable experience which was available to them.

What he was anxious to secure was that, when legislation came, there should have been a thorough investigation of the problems which would arise in order that town planners might be fully prepared. It was a British habit to jump into the sea and learn to swim when in a habit, while not wholly without advantages, was not one much to be encouraged. They would find, in a subject so complicated, plenty of difficulties which could not be foreseen; there was, therefore, the most reason why they should endeavour to master beforehand those which were already manifest.

Considerable discussion followed the reading of the paper, the speakers being the President, Mr. Raymond Unwin, Mr. Lovelock, Mr. C. C. Reade, Mr. Greenwood, Mr. Platt, and Mr. Marsden.

Mr. Unwin suggested that a special committee of the institute should be appointed to consider the whole subject of the planning of built areas and report.

The president promised that the matter should have the consideration of the council.

Mr. Greenwood (city engineer, Chester) pointed out the difficulty the city was in with regard to its town-planning scheme. With the object of preserving its historical and archaeological possessions the whole area of the city would be included in the scheme, but there was a prospect of the built-up areas being left out in the final stage owing to the heavy cost involved in re-planning. He suggested that public notice should be sufficient for all stages.

Mr. Gibbon agreed that the present position was not satisfactory. He saw no reason why public notice should not be sufficient, if backed on to that it was provided that if an owner chose to register himself with the local authority he should receive individual notice. It was for the Institute to persuade the public of the necessity of such changes.

The Cape Institute of Architects.

We have received the Year Book and Journal of Proceedings of the Cape Institute of Architects. We see that Mr. John Perry is now President and Mr. C. P. Walgate, A.R.I.B.A., A.R.C.A., Vice-President. The financial statement shows that the Institute has been run on a loss of over £200 during the last year. This is accounted for by the cost of maintaining the Cape School of Architecture, a responsibility which has now been assumed by the Cape University. The number of members of the Institute is continually increasing.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting!—ED.

Hard Tennis Court.

[REPLY TO W. DRAKE, DECEMBER 4.]

SIR,—Your correspondent's suggestion of 3 in. concrete and $\frac{3}{4}$ in. granolithic would be expensive, the surface unyielding, and it would have to be laid to falls for drainage; in addition, there is the risk of cracks developing. May I draw your attention to the porous type of hard court, the surface of which is made of crushed brick (with particles of dust removed) combined with a special preparation of cement? Such a court has recently been laid in the Royal Botanic Gardens, Regent's Park, and has given complete satisfaction.

H. G. M.

Building Line.

SIR,—I am preparing plans for a house to be erected in a district where the local authority is a rural district council. I believe that in a district which is governed by an urban district council, the authority may compel the owner to erect the new house to "the line of building on either side." I should be glad to be informed whether a rural district council has the same power, as I find it impossible to erect the house to the same front line as other houses in the road.

ENROBSO.

Damp-proofing Walls.

SIR,—Rain percolates through the bricks of a block of houses built in an exposed position. Can any reader inform us of the best treatment for the external surface of such walls to render the bricks impervious to moisture?

INQUIRER.

Penalty Question.

[REPLY TO "P. W. G.," DECEMBER 11.]

SIR,—A penalty is a sum of money payable as compensation.

The penalty clause in a building contract usually fixes penalties or liquidated damages payable, or to be allowed, to the employers by the contractor, in case the latter fails to complete the works by the date fixed in the contract for their completion.

Sometimes the contract provides, by way of inducement, bonuses to be paid to the contractor for earlier or punctual completion, coupled with the penalties or liquidated damages for delay. In order to claim such bonuses, the contractor must complete at the time they become due under the contract; or he must be able to show that he has been hindered by the employer or his architect. In *Leslie & Co. v. Metropolitan Asylums Board* (1901), 68 J.P. 86, there was a contract which included a penalty for delay in completion, and a bonus for punctual completion. Sub-contractors appointed by the architect caused delay to the general contractor, who, it was held, was entitled to the bonus provided for punctual completion.

If the employer himself, or through his architect, prevents performance by the contractor, the latter can recover from the employer damages for any extra cost he has been put to in carrying out his contract. In certain circumstances the contractor can treat the prevention as a breach at the outset, but if he elects to complete the contract, he will be relieved from any liability for delay, and can still sue the employer for the contract price, together with damages for extra cost to him, as indicated. "P. W. G." does not make it clear what the penalty clause in his case includes; and a perusal of the document containing the clauses is necessary to give him a specific answer; but the above will, no doubt, be sufficient to show what claim he can make.

PENALTY.

REGIONAL PLANNING IN LONDON AND ITS ENVIRONS

IN the course of a paper on this subject, given last week before the London Society, Mr. G. L. Pepler, F.S.I. (Past President of the Town-Planning Institute), said that regional planning was now well established in the country: thirty-two Joint Town-Planning Committees had been constituted, embracing, altogether, some 500 local authorities and covering a total area of over 5,000,000 acres, or about 8,000 square miles. The largest region being planned as a unit was that for the Manchester district, which comprised 96 local authorities and covered an area of over 1,000 square miles. This might be compared with the area dealt with by the Greater London Arterial Road Conferences, which covered 1,083 square miles, including the district usually called Greater London, which has an area of 693 square miles (103 Town-Planning Authorities) and in 1923 had a population of nearly 7,500,000 and total assessable value £67,235,000. The London and Home Counties Traffic Advisory Committee covered about 2,000 square miles. This compared with 5,500 square miles, the area now being dealt with in the regional plan being prepared for the City of New York and its environs.

Having referred to the Arterial Road Conferences, summoned by the Right Hon. John Burns, as President of the Local Government Board, in 1913, the speaker said that subsequently the London Society produced a plan that included not only the arterial roads (then suggested) but also a far-sighted scheme of regional open spaces.

There seemed a general consensus of informed opinion (continued the speaker) that a comprehensive plan was required for the London Region, but there was difference of opinion as to the extent of that region. A useful start could be made with the region proposed by the Royal Commission on London Government for the operations of a London and Home Counties Advisory Committee. This roughly extended to a radius of 25 miles from the centre. The Royal Commission recommended that such an Advisory Committee should advise the appropriate Ministers upon the following matters, with a view to co-ordination within their region:—(1) Transport; (2) Town Planning, in relation to transport; (3) Housing, as part of Town Planning in relation to an equitable distribution of population; (4) Main Drainage—new facilities and combination between authorities.

Since the Royal Commission reported, a London and Home Counties Traffic Advisory Committee had been constituted, and had as its chairman Sir Henry Maybury. Its powers were, however, not so wide as was recommended by the Commission and were practically limited to matters relating to traffic.

Although no comprehensive general plan of development was yet under way for the whole region, considerable and encouraging progress had been made in planning large sections of it, by the following Joint Town-Planning Committees, whose constitution was made possible by the Town-Planning Act of 1919:—

West Middlesex.—This Committee was formed, consequent upon a conference held in October, 1921. The area dealt with covered an area of about 72,258 acres or approximately 113 square miles, including that portion of Middlesex extending westward from London County at Chiswick, as far north as the south boundary of Rickmansworth. Eighteen local authorities had combined together for the purpose of preparing a comprehensive plan. Messrs. Adams & Thompson were instructed to prepare a plan and report, in consultation with the local officials. Two reports had been published; the first covered the preliminary survey, including the issue of a questionnaire to the industrial concerns in the region, and the marshalling of data and facts upon which the proposals of the final report were based. The main proposals might be grouped under

two principal headings:—(a) The broad allocation of the use to which the land should be put (*i.e.*, zoning); (b) lines of communication to meet the needs of those uses economically and efficiently. Under the first heading land specially suited for the following five predominant uses was indicated:—Industrial, business, residential, recreational, agricultural.

The principal proposals regarding open spaces were:—Three main concentric belts of open land, namely, along the banks of the Rivers Brent, Crane and Colne and Weyardisbury. This should have the effect of making definite, if rather narrow, breaks in the expansion of London, thus avoiding a repetition of its unending sprawl which made it impossible to disentangle one area of local government from another. Other proposed large park reservations included such places as Osterley, Gunnersbury (now in course of realisation) and Syon Parks. The importance of preserving land for agriculture was also emphasised and suitable areas indicated. With reference to communications, a broad framework of roads was proposed and suitable sections and building lines indicated for each type; recommendations were also made with reference to improved connections that might with advantage be provided in respect to railways.

Thames Valley.—This Joint Committee comprised eleven local authorities, some in Surrey and some in Middlesex, and covered about 30,475 acres in the Thames Valley, from Barnes up to Weybridge, with a gap at Kingston due to the abstention of that Borough. The same specialists were employed as in the case of West Middlesex, and again two reports had been produced. Walton Urban District joined the Committee after the reports had been published. The region was rich in parks and was described as London's greatest playground. The dominant use, therefore, allotted to it was for residence and recreation. Proposals were made for preserving the banks of the River Thames and for linking up the parks by a series of parkways.

South Essex.—This region lay along the Thames, at the opposite end of London, stretching eastward from West Ham to beyond Southend, and extending back to Billericay. Some 10,000 acres, adjoining the river, were available for industrial purposes and a considerable portion of this was already bespoken. In the main, therefore, the industry of the region (into which London, and notably the London County Council, had already made dormitory incursions) would be derived from the River Thames, and one of the objects of the Committee—which is just beginning to get into its stride—was to make the region as self-contained and as little physically dependent on London as possible. The whole area called urgently for a bold, comprehensive plan, or chaos and inefficiency must ensue.

North-East Surrey and West Kent.—This region embraced eleven local authorities, in two counties, including Merton and Morden on the west and Bromley Rural District on the east, with the County Borough of Croydon midway between. It was predominantly residential in character, although it included London's Air Port, and it was the desire of the Joint Committee that this character should be retained. Most of the constituent councils were already well advanced with their town-planning schemes when the Joint Committee was formed, and therefore the function of that body had principally been to co-ordinate proposals and to promote harmony and unity of purpose.

North-West Kent.—This region overlapped the last-mentioned and extended from the boundary of Surrey, in a north-westerly direction up to the River Thames, and southward included Sevenoaks and Sevenoaks Rural District. All the authorities invited had not

yet joined, but eleven of them were co-laborating, covering an area of about 153,000 acres, and had instructed Mr. W. R. Davids to prepare an outline plan and report.

South-West Kent.—Sevenoaks Urban District Rural were also members of this Joint Committee, whose region embraced eleven authorities and included the Rural District of Godstone on the west and the Borough and Rural District of Maidstone on the east, and extended southward into Sussex, in respect to the Parish of Frant. It was the desire of the Committee that the region should be complete the symmetry of the region. The Committee were giving careful consideration to the question of communications, but one of their chief concerns was to preserve the beautiful countryside and the charming villages that it contained.

Hertfordshire.—All the Committees previously mentioned were working in consultation with the officials and representatives of the counties in which they are situated, but Hertfordshire was the first county to take the initiative and, with the encouragement of the Minister of Health, arrange for all the authorities in the county to form a Joint Town-Planning Committee.

The work in hand and accomplished by these Joint Town-Planning Committees was encouraging and in no way prejudicial to the preparation of a composite plan for the whole, for, as the Arterial Road Conferences proved, and as had been found in the Manchester and Midland Regions, in practice the whole would have to be divided into sections of workable size.

It was a little disappointing to find that Greater London, having been first with a regional plan for arterial roads, should be outstripped by New York in respect to a complete general plan; although we could feel some satisfaction that Mr. Thomas Adams was now General Director of Plans and Surveys for the New York Regional Plan covering 5,500 square miles.

Fine as the sectional regional planning round the centre had been, it was clear that the needs of the whole region of London could not be envisaged nor a plan prepared that should meet those needs until the whole, including the centre and the outer fringes, was treated as one unit for the purpose of study and planning. For example, no satisfactory policy of satellite towns or agricultural belts or of decentralisation was possible unless it embraced the whole region and took into account the circumstances, requirements and feelings of each part.

We could no longer afford the immense and continuous waste that was involved in the haphazard use of land. We could not afford to do without an orderly general programme of development. Next year Sir Henry Maybury expected that there would be an additional 500,000 motors on the roads of the country. The prospect was indeed appalling and it would seem that a cumulative catastrophe could only be averted by local authorities, Government departments, business interests, landowners and all progressive agencies and persons getting together immediately to prepare a programme of development and reconstruction that by a process of decentralisation and redistribution would re-sort things into their proper place, that would provide for some elbow room and amenity in the centre, would preserve us some countryside, and would provide for the best conditions for work, for homes and for recreation.

French Chateau Destroyed.

The historic chateau of Preuniers, in the Hautes Alpes, has been destroyed by fire. Built in the thirteenth century, it was subjected to repeated assault during the religious wars in the Savoy against the Bourbons, and later during the 1793 Revolution. Very little of the valuable furniture which it contained was saved and the damage is estimated at several millions of francs.

THE BUILDING TRADE

HINTS TO BUILDERS

By J. H. BARNES, F.I.O.B.

ANKING AND STRUTTING TO TRENCHES.

WHEN trenches have been excavated it is necessary to support the sides by the usual method of planking and strutting, viz., by fixing the poling boards against the earth and keeping them in position with waling and struts. In some kinds of soil the sides of the trench would be sufficiently firm not to need planking, but trenches are usually open for some period till the foundations have been approved, it is advisable to have them strutted so as to obviate any possibility of a slip in the ground should any heavy rains occur, or through the vibration of heavy traffic in the neighbourhood.

In the case of good solid ground the poling boards may be placed fairly widely apart, but where the soil is loose rubbish or sand, the poling boards must be placed more closely together. Where the excavation is in loose rubbish it will be necessary to board the sides with long runners, driven down in advance of the general excavation to prevent the sides from slipping in.

If there is a little water running through the sub-soil, and there is a risk of a certain amount of mud or sand being dislodged, it may be advisable to pack behind the poling boards with sacks filled with shavings so as to keep back the water temporarily. Where excavations have to be made adjoining public thoroughfares, it will be necessary to plank and strut the sides of the excavation and erect a series of heavy raking shores to withstand the thrust caused by the weight of the traffic, &c.

Where there is a large amount of heavy traffic passing immediately alongside the site, greater should be taken to avoid any slip from vibration and such causes, in addition to which there is always the possibility of a water main, the street leaking, which may interfere with the soil under the roadway which is being supported. The safest plan, where the arrangements for the work permit, is not to undertake the whole of the street frontage of the excavation at one time, but to do the work in sections by excavating a portion of the site and planking, strutting, and shoring its vertical face and laying foundations for and building the retaining wall before commencing the next section of excavation, so as not to have the whole of the frontage to the street at hazard. This system could require the use of less timber, as the stuff could be utilised in the other sections as they come along.

Shoring and Underpinning.

It is a very usual occurrence to find in a contract for building work in London or elsewhere some clause relative to the shoring of adjoining buildings during underpinning, demolition, or other operations. Shoring is sometimes described in detail, the number of shores required—whether rakers or flyers—being given, together with the scantlings of the timber, the positions in which they are to be fixed, or the approximate distance apart. Where all the shoring required on a job is the subject of definite instructions, and detailed particulars are given in the specification, it is but a matter of routine for the work to be carried out in accordance therewith.

In many instances the risk and responsibility are placed upon the builder by some clause in the contract documents stating that the adjoining buildings are to be shored, upheld and maintained during the progress of the new building, when the builder or his staff must determine the style and description of shoring required, if any. In some cases it may be found that shoring is not vitally necessary, but all the people concerned would like a few shores to be fixed as a general safeguard to the property.

In another instance the adjacent building

may have a distinct tendency to become dangerous, and in such cases careful shoring is necessary so that the situation may not get out of hand; or the adjoining building may be positively dangerous, and the shoring in such cases must be done with great care and to the approval of the architect and local authorities.

If the job is of an important nature it may be necessary for the engineer or architect to calculate carefully the weight to be carried and design the shoring to suit the building it has to support, but in ordinary cases it is left to the builder to fix such shores as his experience leads him to think will be necessary.

Where there is no obvious necessity for shoring, and such work is only required to exert a beneficial influence on the adjoining structure, some rule-of-thumb methods are all that are needed for determining the sizes of the timbers for raking shores, and the distance they may be required to be fixed apart. The shoring will probably be placed on the site of the operations for the new building, and the point at which they are to be fixed must be settled as far as possible to work in conveniently with the new building and to such a depth as to be on the proper level to work in with the new foundations.

It is usually found that 6 in. by 6 in. or 7 in. by 7 in. square pitch pine would be a sufficient scantling for raking shoring to a building about 30 ft. high, and 9 in. by 9 in. or over square timber for a building 45 ft. high, with 3 in. by 9 in. wall plates and 4 in. by 9 in. or 4 in. by 11 in. sole plates.

The general form of a raking shore is too well known to need description, but if necessary the young builder should consult the text books on the subject for details. The raking shores where possible should have a needle in the wall plate fixed at such a level that it comes just underneath the floor in the adjoining building so as to assist, if necessary, in taking the weight. The foundations for the sole plate of the rakers should be either on firm ground or on a temporary concrete base. The shores should, wherever possible, be of square timber or pitch pine, not deals or planks, as it is considered they may have a tendency to bend should any weight come upon them, although there is no objection to deals or planks being bolted together to form a square section of timber where it is not possible to get a long squared timber into the building.

Arrangements for shoring adjoining premises should be made while the old buildings are being demolished, and care should be taken to deal with each part of the work which upon exposure appears to be dangerous. When ends of old floor beams have been removed from the party wall large holes may be left in the brickwork, and these should be temporarily made good in brickwork. Where possible it is advisable to leave old floor beams in position to act as temporary struts to the walls on which they rested.

Where the building work has to be carried on immediately adjoining a modern building it will usually be found that the brickwork, &c., of such building is in reasonably good condition and will not require any great amount of shoring, unless some definite work such as underpinning is contemplated and/or if it is proposed to construct the new building with one floor below the adjoining premises.

In old buildings the brickwork is sometimes found to be of a rather inferior kind, with little or no bond and very poor mortar, and sometimes the facing bricks are not connected to the brick wall at the back, being only $4\frac{1}{2}$ in. of superior brick but without any proper bond or connection to the common brickwork behind. In such instances there is always a danger of the facing

brickwork bulging out and becoming defective, and if the "needle" to the shore is only inserted to the back of the brick facings this in itself may tend to cause some movement as the thrust of the raker becomes effective.

It is not unusual to find that the front wall of the adjoining house has not been bonded or connected in any way to the return or party wall. This can be dealt with by fixing some iron straps to a timber wall plate on the street front of the building, and by securing the iron bar into the brickwork some six or seven feet away from the front to stop, if necessary, any tendency of the front wall to move outwards.

It will often be found that the old chimney breasts have not been bonded or connected in any way to the adjoining wall, and these had better be removed, otherwise the chimney breast, if substantially built, should act as a pier or buttress to the main party wall.

The defective work indicated above will usually be found in comparatively low buildings where no very great height of shoring will be required. It is sometimes more advantageous to fix flying shores than raking shores, as the flying shore can exert more thrust at the required position and is more likely to be out of the way of the general building operations, although care must be taken not to allow the raker to place too much weight on the wall to be shored, which will sometimes occur if the whole weight of the flying shore is carried on the needle which is morticed into the brickwork.

Needling and Shoring for Underpinning, or Forming Door Openings and Similar Work.

Such work is usually at the risk of the builder. It should be borne in mind that for small openings in a well-built brick wall the brickwork may be cut away without shoring, as the brickwork over the opening would form itself into natural corbels to carry the brickwork over, and exactly how far it may be safely calculated on this being done will entirely depend upon the kind of brickwork to be dealt with. So as to obviate some of the needling and shoring it may be found possible to cut away half the brick wall on one side and insert a rolled steel joist, which will probably be required as a lintol, afterwards cutting away a chase in the wall on the other side to put in the remaining joist as lintol, and the brickwork below can then be cut away and the opening formed.

These, as a rule, are only simple cases and should present no difficulty, but where it is found to be necessary to take out a large portion of the party wall and support the brickwork above on a girder so as to connect one building with another, this may be a more hazardous operation. In such cases shoring would consist of the necessary number of sets of shores, each set consisting of two upright or dead shores and a horizontal beam or needle on top, either of square timber or steel joist. The size of the upright timbers or dead shores and steel joist as needle would depend upon the weight to be carried, of which careful calculation should be made. The advantage of using a steel joist as a needle is that it is possible to pin up the wall between the steel joist and the brickwork over with slates and cement and thus reduce the possibility of any movement in the structure over, which may occur if the "needle" is not properly bedded to the brickwork over.

When the shores have been erected a suitable distance apart and braced where necessary, the brickwork requiring removal may be demolished. Care should be taken in arranging the positions of the shores and needles so that they will not be in the way when inserting the girder or other steelwork carrying the brickwork over. Care should also be taken to relieve wherever possible the wall, which has to be underpinned, of the weight in any flooring which may be bearing thereon. Where any great weight is to be carried it is usual to fix the needles about 4 ft. apart, but this must depend upon the requirements of the job itself.

THE WEEK IN PARLIAMENT

WESTMINSTER, Wednesday.

Result of 1924 Act.

Mr. N. Chamberlain informed Mr. Day that on November 1 last, the latest date for which complete figures were available, the position under the Housing Act, 1924, was as follows:—

	Act of 1924.
1. Number of houses completed.....	15,122
2. Number of houses under construction.....	30,956
3. Number of houses definitely arranged for but not started.....	24,046
4. Number of houses authorised but not definitely arranged for.....	20,202

Total number of houses authorised 90,326

A Conference on Overcrowding?

Mr. Thurtle asked the Minister if he would convene a meeting of representatives of the London County Council and the London borough councils to confer with him on the subject of measures to be taken to deal more expeditiously with the overcrowding existing in the London area?

Mr. N. Chamberlain said that he did not think that such a conference would serve a useful purpose at present. The remedy for overcrowding was the building of more houses. Apart from the provision by private enterprise and by the Borough Councils, the London County Council had adopted a very large programme of house building which they were endeavouring to carry out as fast as the resources of the industry permitted.

Rural Schemes.

Mr. N. Chamberlain informed Mr. C. Edwards that 184 rural district councils had so far received approvals of schemes under the Housing (Financial Provisions) Act, 1924.

Four in One Room.

Mr. N. Chamberlain informed Mr. Thurtle that the number of rooms in the administrative County of London occupied by private families living at an average density of four or more persons per room was 18,847 at the Census of 1921.

Position in East Ham.

In reply to Mr. Barnes, who asked for the number of houses erected for sale and for letting purposes in the borough of East Ham since the war under the various Housing Acts, together with the total amount of the subsidies paid or payable on those built or building under the respective Acts, Mr. N. Chamberlain said that the following table gave the desired information:—

Acts.	Houses Authorised.	Houses Completed.	By Local Authority or Private Enterprise.	Subsidy Paid or Payable.
Housing, Town Planning, &c., Act, 1919	36 ..	36 ..	{ Local Authority ..	{ No subsidy payable, as the estimated annual deficit is covered by the proceeds of a 1d. rate
Housing (Additional Powers) Act, 1919	7 ..	7 ..	{ Private Enterprise ..	
Housing, &c., Act, 1923 ..	1,214 ..	799 ..	{ Private Enterprise ..	{ £1,760 (capital payment) .. £7,284 annually for twenty years

He had no information as to the extent to which the houses provided by private enterprise had been let. The houses built by local authority were let.

Price of Light Castings.

Mr. R. Morrison asked the Minister of Health whether he had yet received the report of the Committee on the prices of building materials with reference to the increase of the prices of articles controlled by the National Light Castings Association; and, in view of the chairman of

the Committee's Report for July, which drew his attention to further increases in the prices of light castings, what action he now proposed to take?

Mr. N. Chamberlain said that arrangements were made by the Committee with the National Light Castings Association for an accountancy investigation. Such an investigation was necessarily a task of considerable magnitude, but he understood that the accountant's report would be submitted to the Committee very shortly. As regarded the last part of the question, there had been no further increase in the price of light castings; the comparison made in the report was between the prices prevailing in August, 1924, and July, 1925.

Smoke Abatement.

Asked by Mr. Erskine whether he was aware that it had been calculated that at least 1,000,000 bushels of soot fell over London on the two days preceding last week's black fog; and would he take steps to bring in a Smoke Abatement Bill at the earliest possible date, in view of the damage to health, property and industry which smoke and fogs created, Mr. N. Chamberlain said he was not aware where his hon. friend got his estimate or on what it was based, but he had already stated that it was his intention to introduce next Session a Bill dealing with smoke.

Unemployment in Southwark.

Mr. N. Chamberlain informed Mr. Day that his information was that while there was unemployment in certain branches of the building industry in the Borough of Southwark, there was practically no unemployment in key trades such as bricklayers, plasterers and slaters.

Housing Position in Scotland.

Sir J. Gilmour, Secretary for Scotland, informed Sir G. Collins that the number of houses in Scotland approved for subsidy to October 31, 1925, under the Housing, &c., Act, 1923, was 14,901. The present capital value of the Exchequer subsidies payable on those houses was estimated at approximately £1,146,100. In addition, slum clearance schemes involving the erection of 7,450 houses had been approved under this Act, fifty per cent. of the annual deficit on which would be borne by the Exchequer. It was not possible at present to give an estimate of the capital value of the subsidy in respect of these houses. The number of houses in Scotland approved for subsidy to October 31, 1925, under the Housing (Financial Provisions) Act, 1924, was 12,291. The present capital value of the Exchequer subsidies payable on these houses was approximately £1,977,800. Information was not available as to the capital values of the additional subsidies granted by local authorities in respect of these houses.

regretted he was unable to give an unequalled undertaking to this effect.

St. Paul's Bridge Scheme.

Mr. Day asked the Minister of Transport if he would state the present position in regard to proposed St. Paul's Bridge scheme.

Colonel Ashley replied that he had referred the question to the London Traffic Advisory Committee and hoped to receive their recommendations as soon as they had had time to study the wider problem of Thames bridges as a whole.

Brigade of Guards Memorial.

Captain Crookshank asked whether the designs of the Brigade of Guards war memorial now being erected on the Horse Guards Parade were submitted to, and approved by, the Fine Arts Commission.

Captain Hacking said that the design of the memorial was selected by two assessors appointed by the Royal Academy and accepted by the First Commissioner on the day before the Royal Fine Arts Commission was appointed. The First Commissioner regretted that at the late stage he was unable to reopen the subject.

Town-Planning Schemes.

Sir K. Wood informed Lady Astor that nine town-planning schemes had been finally approved since January 1, 1920, and eleven other schemes had been submitted to him for approval. In addition, 64 preliminary statements of proposals to be included in schemes had been approved, and orders issued for securing development accordingly, and 60 others had been submitted for approval. The number of local authorities promoting the schemes and preliminary statements approved and submitted for approval was 90, and the total number of local authorities now formally engaged in the preparation of schemes was 310. The Minister of Health had reason to suppose that preliminary surveys were being carried out by a number of other authorities.

Unemployed.

Mr. Betterton, Parliamentary Secretary to the Ministry of Labour, informed Mr. Day that on October 26 the number of insured work people in the building trade of Great Britain recorded as unemployed was as under:—

Carpenters	2,864
Bricklayers	911
Masons	781
Slaters	193
Plasterers	202
Painters	18,230
Plumbers	1,521
Labourers	24,377
Other workers in the Building Trade	20,313

69,392

Deterioration of Structures in Sea-water.

The Committee of the Institution of Civil Engineers, which has been investigating the deterioration of structures of timber, metal and concrete in sea-water since 1916 with the assistance of grants from the Department of Scientific and Industrial Research, has prepared a fifth (interim) report which is now published by H.M. Stationery Office for the Department. This present issue has been edited by Mr. P. M. Crosthwaite, B.A., M.Inst.C.E., Secretary to the Committee, and Mr. Gilbert R. Redgrave, Assoc.Inst.C.E., and contains reports on the comparative corrosion of steel at Colombo, Halifax, Plymouth and Auckland; on the investigations of raft and test pieces at Plymouth; on the painting of steel plates; on defects noticed in Admiralty reinforced concrete structures; on marine pile investigations of the National Research Council (U.S.A.); on the disintegration of cement and concrete in sea-water, and many other similar reports. A copy of this report can be obtained from Adastral House, Kingsway, W.C.2, price 3s. 6d.

The Public and War Memorials.

Captain Crookshank asked the Under Secretary of State for the Home Department, as representing the First Commissioner of Works, whether he would arrange that before any war memorial, statue, &c., was erected in the London area, full-sized models should have to be put up, as was done in the case of the Cenotaph, in order that the views of the general public might be expressed.

Captain Hacking said the First Commissioner

NEW BUILDINGS IN LONDON.

Barking.—Mr. C. J. Dawson, F.R.I.B.A., Lock House Chambers, Barking, architect to the Barking U.D.C., has designed a new central school building in Wilmington-gardens to accommodate 640 scholars.

Barkingside.—In connection with the completion of the Horns-road Estate Housing Scheme, it is proposed to construct new roads and lay sewers, &c. Plans by Mr. H. Shaw, I.Inst.C.E., Town Hall, Ilford.

Barnet.—The Governors of the Queen Elizabeth Girls' Grammar School are to enlarge their premises and have accepted the tender of Messrs. R. Ginn & Son, Hertford, at £14,780. Mr. J. W. Fisher (Messrs. Brown & Fisher), architect, Burystead-place, Wellingborough. Mr. P. J. J. Panter, quantity surveyor.

Bermondsey.—H.M. Office of Works, Storey's Gate, Westminster, S.W.1, have prepared plans for an employment exchange. Messrs. A. Roberts & Co., Ltd., builders, 74, Earl's Court-road, Hammersmith, W.8. Messrs. Somerville-Barnard Construction Co., Ltd., steelwork, Archangel Works, S.E. Messrs. Malcolm McLeod & Co., Ltd., patent stone, Glen-road, E.17.

Bethnal Green.—Tenders are under consideration for the removal of the present roof and the erection of a new flat roof and other alterations at Ward Block E at the Bethnal Green Hospital in Cambridge-road, E.2. Messrs. Meakin, Archer & Co., architects to the B.G., 73-76, King William-street, E.C.4.

Billiter-street.—No. 18, Billiter-street, E.C.3, has been demolished to make way for an office building of six stories. Messrs. F. G. Minter, Ltd., builders, Ferry Works, Putney, S.W. Messrs. Gunton & Gunton, F.R.I.B.A., architects, Finsbury House, Blomfield-street, E.C.

Blomfield-street.—Steelwork is now in course of erection for the office building at the corner of Blomfield-street and New Broad-street, E.C.2. Messrs. Walter Lawrence & Son, Ltd., builders, 9, Finsbury-square, E.C.2. Messrs. Moreland, Layne & Co., Ltd., 80, Goswell-road, E.C.1. Steelwork, Messrs. M. E. & H. O. Collins, architects, 115, Old Broad-street, E.C.2.

Croydon.—A telephone exchange is to be erected for H.M. Postmaster-General to plans prepared by H.M. Office of Works, Storey's Gate, S.W.1. Messrs. Galbraith Bros., Ltd., contractors, 63, Waterloo-street, S.E.5. Messrs. Drew-Bear Perks & Co., Ltd., steelwork, 30, Grosvenor-place, S.W.1.

Devonshire-square.—Messrs. B. Goodman, Ltd., 88, Haggerston-road, E.8, are demolishing old buildings at No. 2, Devonshire-square, E.C.1. Messrs. Trollope & Colls, Ltd., 5, Coleman-street, E.C.2, are to erect new premises on the site.

Duke-street.—Messrs. Horne Bros., Ltd., 90, Oxford-street, W.1, are to build a branch shop, with offices above, on a site at the junction of Duke-street and Oxford-street, W.1. Messrs. Higgs & Hill, Ltd., builders, Crown Works, South Lambeth-road, S.W.8. Messrs. Vimperis, Simpson & Guthrie, architects, 37, Bruton-street, W.1.

East Dulwich.—Improvements and redecoration are to be effected at the hospital in East Dulwich-grove, S.E., for the Southwark B.G. Messrs. A. Saxon Snell & Phillips, architects 9, Entinck-street, W.1. Mr. D. C. Bowyer, milder, Woolwich-road, Belvedere, S.E.

East Finchley.—Messrs. Chessums, Ltd., Imperial Works, Portland-road, N.15, are the contractors for the enlargement of the East Finchley Congregationalist Church, N.2, which to cost £6,500. Messrs. Elcock & Sutcliffe, architects, 21, Northumberland-avenue, W.C.2.

Edgware.—A row of shops with living accommodation above is to be built in the Mall, under the direction of Messrs. Cross & Cross, surveyors, High-street, Edgware.

Edgware-road.—Messrs. Patman & Fotheringham, Ltd., builders, 15, Park-street, Islington, N.1, are erecting a large block of shops, offices and flats on a site at Nos. 45-49, Edgware-road, N.2. Messrs. George A. Lansdown & Brown, architects, 9, Regent-street, S.W.1.

Epping.—Forty-six residences are to be erected by the Epping R.D.C. to the plans of Messrs. Tooley & Foster, F.R.I.B.A., architects, Buckhurst Hill. Mr. C. J. Smith, builder, Abridge, Essex.

Fetter-lane.—Stokes-court, in Fetter-lane, E.C.4, is to be closed by the City of London Corporation, and Messrs. Thomas Wallis & Co., Ltd., Holborn-circus, W.C., are to absorb part of it. The new building is being designed by Messrs. Yetta, Sturdy & Usher, architects, 115, Moorgate, E.C.2.

Fulham.—Additions are to be made at the hospital at St. Dunstan's-road, Fulham Palace-road, S.W.6. Messrs. A. Saxon Snell & Phillips, architects, 9, Bentinck-street, Manchester-square, W.1. Messrs. W. H. Wagstaffe & Son, builders, London.

Great Portland-street.—The site bounded by Great Portland-street, Oxford-street and Market-place, W.1, has now been cleared preparatory to the building of the second section of Messrs. Peter Robinson's premises. Messrs. Higgs & Hill, Ltd., contractors, Crown Works, South Lambeth-road, S.E. Messrs. T. P. & E. S. Clarkson, 17, Burlington-street, W.1, and Mr. H. Austen Hall, 6, New Burlington-street, W.1, are acting as joint architects.

Gunnersbury.—Plans have been prepared by Mr. A. G. S. Lyford, builder, West Lodge, Acton, W.3, for the development of a part of the Gunnersbury Estate at Ealing.

Hackney.—Work is about to commence upon the erection of the proposed Hackney Institute, which is to be built for the L.C.C., at a cost of £60,000. Messrs. L. H. & R. Roberts, builders, 144, Lower Clapton-road, E.5. Mr. G. Topham Forrest, F.R.I.B.A., architect, County Hall, S.E.1.

Hammersmith.—A new elementary school is to be erected by the L.C.C. on a site acquired in Lena-gardens, W. Mr. G. Topham Forrest, F.R.I.B.A., architect.

Houndsditch.—Work is in progress on the vacant site in Houndsditch and Creechurch-lane, E.C., where Messrs. S. Lesser & Co., Ltd., are to erect new business premises. Messrs. Griggs & Son, builders, 100, Victoria-street, S.W.1. Messrs. Lewis Solomon & Sons, architects, 133, Moorgate, E.C.2.

Hounslow.—A group of 70 houses is to be erected on the Lampton Hills Estate in Kingsley-road, which has been acquired by Messrs. Perry Bros., 48, Uxbridge-road, W.5.

Ilford.—Messrs. Haines & Warwick, builders, Vicarage Works, Seven Kings, are erecting seven houses in 94-106, Wards-road East, and 16 houses in 19-49, Vicarage-lane.

Kingsland-road.—Alterations are to be made to the bakehouse, &c., at St. Leonard's House, Kingsland-road, N., for the Guardians of the Poor of the Parish Church of St. Leonards. Mr. F. Danby Smith, F.R.I.B.A., architect, Parliament Mansions, Victoria-street, S.W.1.

Leicester-street.—New premises for display purposes are being erected by Messrs. Staggs & Mantle, Ltd., drapers, Leicester-square, W.1. Messrs. Hall, Beddall & Co., Ltd., builders, Waterloo-bridge, S.E.1. Mr. E. F. Dickens, architect, 6, Warwick-court, Gray's Inn, W.C.

Leicester-square.—Messrs. Vigor, Ltd., builders, Knightsbridge, S.W.1, are erecting the second section of the building in Leicester-square, and Whitcomb-street, W.1, for the Automobile Association. Mr. Andrew Mather, architect, 38, John-street, W.C.1. Messrs. Smith-Walker, Ltd., steelwork, Tothill-street, Westminster, S.W.1.

Lewisham.—Re-decoration works, &c., are to be carried out at the married quarters at the Ladywell Institution, Ladywell-road, S.E., to specifications prepared by Messrs. Newman & Newman, architects, St. Thomas-chambers, Railway Approach, S.E.1.

Lewisham High-street.—Messrs. Lloyds Bank, Ltd., Lombard-street, E.C.3, are to open a new branch at No. 79, Lewisham High-street, S.E.13, as soon as the necessary structural alterations are completed. Messrs. Holliday & Greenwood, Ltd., builders, Stewart's-road, Battersea, S.W.8.

Leyton.—Leyton U.D.C. have decided to build a special school at Knott Green. Mr. John H. Jacques, L.R.I.B.A., architect, 61, West Ham-lane, Stratford, E.15.

Mile End.—The L.C.C. Education Committee recommend the building of a new school to accommodate 1,124 scholars on a site in Cephas-street. Mr. G. Topham Forrest, F.R.I.B.A., architect.

New Coventry-street.—The premises at the corner of New Coventry-street and Rupert-street, W.1, have been acquired by Messrs. Keith, Prowse & Co., Ltd., 159, New Bond-street, W.1. Extensive alterations are to be made.

Newgate-street.—Messrs. Style & Mantle (S. & M.), Ltd., costumiers, 3, Newgate-street, E.C.1, have purchased No. 4, Newgate-street, which they propose to adapt as their new head showrooms and offices. Messrs. J. Bennett, Ltd., builders, 93, Parkhurst-road, N.7.

Oxford-street.—Good progress is being made with the rebuilding of the emporium of Messrs. Bourne & Hollingsworth, drapers. Messrs. F. G. Minter, Ltd., builders, Ferry Works, Putney, S.W. Messrs. Samuel Haskins & Bros., Ltd., shop fitters, Walthamstow, E.17. Messrs. Slater & Moberly, A. & F.R.I.B.A., architects, 46, Berners-street, W.1.

Piccadilly.—A building of shops and flats is to be erected at No. 81, Piccadilly, and 1, 2, 3, Bolton-street, W.1, by Messrs. R. M. Phillips, Ltd., 22, Conduit-street, W.1. Messrs. Griggs & Son, builders, 100, Victoria-street, S.W.1. Messrs. London & Wales Steel Construction Co., steelwork, 44, Bedford-row, W.C. Messrs. F. J. Barnes, Ltd., Portland stone, 25, Nine Elms-lane, S.W.8. Messrs. Trehearne & Norman, architects, Windsor House, Kingsway, W.C.

St. Paul's Churchyard.—The Dolcis Shoe Co. are building a new stores and show-room facing the Cathedral, to the plans of Mr. W. Henry White, F.R.I.B.A., architect, 14a, Cavendish-place, W.1. Messrs. F. D. Huntington, Ltd., Broadway-chambers, Hammersmith, S.W., builders; Messrs. Aston Construction Co., Ltd., steelwork, Eagle Wharf-road, Hoxton, N.1.

Smithfield.—New buildings are to be erected at the London Central Markets, E.C.1, and a contract for sub-structural work has been placed with Messrs. Holliday & Greenwood, Ltd., 11, Buckingham Palace-gardens, S.W.1.

Stamford Hill.—New buildings are being erected at the Stamford Hill Stores Depot, for the L.C.C. Messrs. Allen Fairhead & Sons, Ltd., Enfield, builders. Mr. G. Topham Forrest, F.R.I.B.A., architect.

Teddington.—Steelwork for the new Research Laboratory at the Teddington Physical Institution to be erected for the Admiralty is to be supplied and erected by Messrs. Archibald D. Darnay & Sons, Ltd., Steelworks-road, Battersea, S.W.

Twickenham.—The London Co-operative Society, Ltd., are to acquire premises in York-street for a new drapery stores. New shop fittings and fronts will be installed.

Victoria-street.—An office building with shops on the ground floor is being erected at the corner of Victoria-street and Arlington-street, S.W.1. Messrs. Holliday & Greenwood, Ltd., builders, Stewart's-road, Battersea, S.W. Mr. J. Stanley Beard, architect, 52, Baker-street, W.1.

Waterloo-road.—It is proposed to build a new nurses' home at the Royal Waterloo Hospital, at the corner of Waterloo-road and Stamford-street, S.E.1, to the plans of Messrs. Waring & Nicholson, 38, Parliament-street, S.W.1.

Whitefriars-street.—Large printing works are being erected on the site of the old Whitefriars Glassworks, in Whitefriars-street and Tudor-street, E.C.4, for Messrs. Associated Newspapers, Ltd. Messrs. Allen Fairhead & Sons, Ltd., builders, Sydney-street, Enfield. Messrs. Herbert O. Ellis & Clarke, architects, 3, Old Queen-street, Westminster, S.W.

Willesden.—Mr. F. R. Hipperson, Norwich, is erecting a new nurses' home at Willesden, N.W.10.

Woolwich.—The War Office propose to make additions to the Royal Herbert Hospital, S.E. Mr. F. R. Hipperson, builder, 6, Broad-street-place, E.C.2.

TRADE NEWS

A Quick-drying Cement.

It is often the case nowadays that a whole job is "hung up" for a comparatively considerable time to allow of the concrete setting; it is dangerous to erect any superstructure, fix a facing or veneer, or compel it to perform its function until it has completely hardened. This waste of time, which means a loss of money and possibly reputation, can be partially avoided by using Kaye's cement, which, its makers claim, has in two days a degree of hardness nearly double that called for by the usual specification in one week, and shows a steady growth in strength with age.

Fire-escape and Service Staircases.

To protect the occupants of buildings against the danger of fire it is essential that adequate means of escape should be provided, and such means must be in accordance with the provisions incorporated in the London Building Acts. Messrs. H. & C. Davis & Co., Ltd., of 1, The Pavement, Clapham, S.W. 4, have had many years' experience in the designing, construction, and erection of all types of iron fire-escapes and service staircases, and have carried out work in this connection in all parts of the United Kingdom. Some of their more important contracts include work for H.M. Office of Works, the War Office, the Old Bailey, the County Hall, Westminster; and No. 10, Downing-street.

Woodworkers' Tools and Machines.

We have received from Messrs. Richard Melhuish, Ltd., of 50, Fetter-lane, Holborn, E.C. 4, their new catalogue of woodworkers' tools and machines. This catalogue is most comprehensive, and includes the very latest patterns. There are 1,100 illustrations, and every tool required for the amateur and mechanic is embodied in the list, which latter is very completely yet simply indexed. To the quality of these goods no greater testimony is required than the fact that the firm has been established for nearly a century. Those interested should write for Catalogue 25; the price is 2s. (post free), which amount is returned on the first order of 10s.

An Asbestos Primer.

We understand that difficulty has been experienced amongst builders and decorators in obtaining a satisfactory primer over the various types of asbestos sheeting. The main difficulty has been with oil and water paints flaking off after a time and leaving the sheeting quite bare. Messrs. John Smith & Son, Ltd., have been experimenting with a special primer, which they have called Asbestos. A large firm of builders has recently carried out extensive tests with Asbestos, and we understand that their report more than justifies the firm's claims, in that it adheres to the sheeting, and will not flake off or cause the paint applied over it to flake. Asbestos dries in about fifteen minutes and is easily applied. Full particulars and prices will be sent on application to the firm's City offices, at 23, Leadenhall-street, E.C. 3.

Roofing Materials.

We have received from Messrs. Bell's Poilite and Everite Co., Ltd., an attractive album entitled "Permanence Without Maintenance." This publication illustrates roofing contracts carried out all over the world by these well-known manufacturers of asbestos cement materials. The first part of the album is devoted to illustrations of roofs of factories and similar buildings covered with Everite corrugated sheeting, the Bigsix type of which the makers claim to be extremely strong, and thus allowing of wide spacing of purlins effects a considerable saving in substructure. In the second part of the book appear some illustrations of roofs covered with Poilite pantiles and Poilite straight cover slates; in these Messrs. Bell & Co. have succeeded in producing asbestos cement in a really artistic form. These tiles impart to the buildings illustrated a quiet charm and distinction.

A NOVEL LECTURE SCHEME

THE allied firms of Robt. Ingham Clark & Co. and R. Gay & Co. carried out recently at their works, West Ham Abbey, Stratford, a programme of lectures and practical demonstrations in regard to the manufacture of varnishes, enamel, distempers and other products of the two houses. The scheme was specially designed for the benefit of salesmen of builders' and decorators' merchants who stock the goods of the two firms. More than sixty salesmen were present at the whole, or a portion, of the proceedings which occupied three days, from Monday to Wednesday, December 7-9. Mr. F. W. Fell Clark (chairman of Robt. Ingham Clark & Co., Ltd.), presided at the opening session, Major R. H. Ingham Clark and Mr. R. F. Clark taking the chair at the subsequent meetings.

The Chairman gave a short resume of the history of the firm, which, he stated, was founded in 1846, and had arisen from a very small concern to one with branches in Renfrew, Paris, Barcelona, Milan, New York, Buffalo, Chicago, Bridgeburg (Canada), and Sydney. The works at West Ham covered about 6 or 7 acres of ground and were organised and equipped with the most modern methods for the production of highest grade materials. In addition to the manufacturing of varnish, something like 60 mills were employed in the grinding of enamel and paint. Although they had large works scattered all over the world, and carrying on a large volume of trade in the various countries, they had maintained and even increased their output at West Ham. This had been due in great part to the energy displayed on the selling side. In this respect they had learnt something from their American House, which was represented by 210 salesmen. It had been their policy to send some of their younger men over there to study the methods and especially sales organisation which had made that house the success it was. The sales policy adopted by their American house

was to work the whole of their business through the merchant, or, as it was termed over there through dealers and jobbers. That was the system which they would like adopted here because they considered the manufacturer's business was to supply the merchant and the business of the merchant to distribute the goods.

During the three days a number of lectures were given by representatives of the associated houses on a variety of aspects of the industry. These included lectures on varnishes, enamel, stains, raw materials, salesmanship, advertising and so forth. The visitors were conducted around the works and the plant and processes of manufacture were fully explained.

On Wednesday evening the visitors were entertained to a banquet at the Trocadero, Piccadilly. The chair was occupied by Mr. F. W. Fell Clark who was supported by directors of the allied houses. After the loyal toast had been honoured, Mr. R. H. Ingham Clark, submitting the toast of "Our Guests," said the modern wholesale distributor was a most necessary part of the commercial organisation of this country. It had been often put forward that the middleman was not a good thing in business. People said that manufacturers should sell direct to the consumer. That was absolutely wrong. The wholesale distributor was the only means of economic distribution.

Mr. C. H. Ellison, of Ashworth, Armitage, Ellison, Ltd., of Birmingham, and Mr. H. Glover, of Messrs. H. S. Hiles & Co., of Manchester, replied.

The toast of the Associated Houses was proposed by Mr. John Olby (A. Olby, Ltd., Ramsgate).

In responding, Mr. F. W. Fell Clark said he felt very proud to have such an organisation and such a staff around him. They hoped this new plan would become the big success that it ought to be. For the merchants to disappear must be the most uneconomical way of doing business.

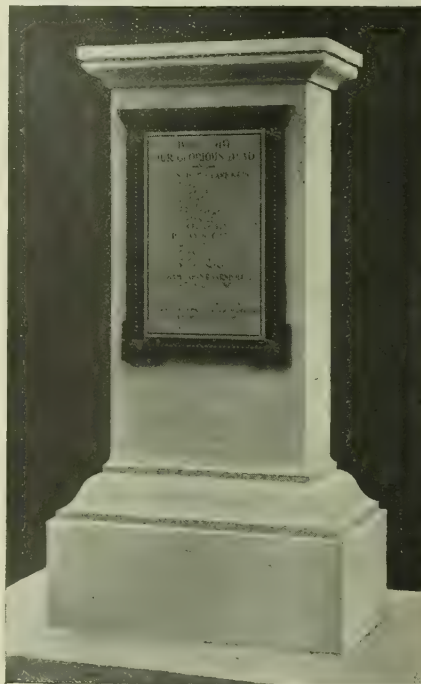
Mr. R. F. Clark, in proposing the toast of "The Press," referred to the National Society for the Preservation of Property, to which manufacturers were subscribing. It was a Society for the benefit of the whole trade. It would benefit the whole Empire and the whole United Kingdom for it was the object of the Society to teach people how and when to use paint.

Mr. Genner, Organising Secretary and Manager of the N.S.P.P., said they issued their first invitations to membership of the Society rather less than four months ago and the result to date was approximately 250 members—a good solid start. The Society was now in a safe position for the next three years, for they had collected contracts totalling £5,600 per annum for the next three years.

The toast was acknowledged by Mr. G. J. Howling, of *The Builder*.

"The Builder" Diary.

The Builder pocket diary for 1926 is now on sale and may be obtained from 4, Catherine street, Aldwych, W.C.2, price 2s. 6d. (2s. 9d. post free). In addition to a well-arranged diary memoranda, and cash account columns, there are 53 pages of notes and tables calculated to be of practical use to architects and builders in their daily work. Details are given of architectural, surveying and building societies, institutions and schools. Very useful information is afforded by the tabulated articles on the building trades, each of which is dealt with in a clear and concise way. Another indispensable item is the table giving the new British Standard Sections of steelwork. Under the title of "Mensuration Notes" ratios are given to enable one to find the area or volume of any geometrical body of which the measurements are known. The page on fire insurance should prove useful, as should also the valuers' table for purchasing leases; other tables include one giving the area of circles, in inches, feet or yards, given the diameter; the decimal equivalents of a foot and an inch; the decimal equivalents to falls in pipes; the scaling of roof timbers; the safe distributed load in cwt., over 1 ft. span for fir beams; the weight of various metals, and the weight in lb. per lineal foot of square and round steel. All these items are set out in a compact form and catalogued in a simple index.



The Abbey Langthorne War Memorial.

[A war memorial erected by the Abbey Langthorne Comrades of the Great War, and subscribed for by members of the allied firms of Messrs. Ingham Clark & Co., Ltd., Messrs. R. Gay & Co., Ltd., and Messrs. the Mitcham Japan and Varnish Co., Ltd., was unveiled recently after a short service. The memorial consists of a 6 ft. Portland stone cenotaph to which is affixed a brass plate bearing the names of the fallen.]

ROAD CORRUGATION

We give hereunder a report of a paper on the above subject read at the Public Works Congress recently held at the Agricultural Hall, Islington.

Mr. E. L. Leeming, M.Sc.Tech., Soc.M.Inst.C.E., said that with the advent of improved road construction and of motor transport there had developed a curious feature wear which was generally known amongst road engineers as "road corrugation." This consisted on sett paving as well as tar macadam in conditions were severe and the paving was not laid on a concrete foundation. Where concrete setts were laid on concrete to cope with exceptionally heavy traffic the setts could be easily move either vertically or horizontally, and if two lanes of traffic existed ruts would be worn in the setts themselves. Road blocks often became wavy, and yet one could find such paving under heavy traffic comparatively free from it.

The motor-bus was a vehicle driven from the front axle and usually equipped with solid rubber tyres, a combination which inflicted considerable damage to the road. The rear-axle drive was perfect only so long as the road was perfectly smooth, but even the best road did not possess this smoothness, with the result that vibration due to the drive was set up, and this vibration created waves in the road, and the solid rubber tyre, quickly, shorn of its resilience by pressure and wear, was incapable of taking up these road inequalities, and made the journey worse.

The road engineer would testify to the increased expenditure incurred at the bends of the road; the road user would testify to the rough surface, potholes and waves which he had to negotiate at curves. There was one remedy for this state of things, and that was to construct the surface levels so that there was a gradual change from the cambered section on the straight to a super-elevated section on the curve. Roads repeatedly tarred and often worked up into waves independently of the original surface; in such cases surfacing would remove the trouble. Large quantities of tar macadam would resist movement better than small aggregate; finishing coats of the tar-mac should be applied sparingly so that it did not leave surplus material without proper key. Bituminous asphalt about 2 in. thick when laid on concrete withstood wear and tear with great success. In regard to construction generally, it was clearly necessary to have thoroughly strong foundations. The suggestions for reducing vehicle damage might be confined to (a) tyre equipment and (b) method of drive. Regarding tyre equipment, solid rubber tyres should be more heavily taxed; in other words, taxed more nearly in proportion to the damage done. A pneumatic tyre was a most efficient spring or cushion and "unsprung weight" was eliminated. If front-axle driving were combined with pneumatic tyre equipment wave damage would be reduced to a minimum. If pneumatic tyres were not to become universal, then some improvement on the present rear-axle drive would be necessary. Actually it would lessen vibration considerably if the load could be pushed from the front axle instead of pushed from the rear. Six-wheel vehicles were a step in the right direction, and particularly those which provided four driving wheels.

New Highway, Bolton.

Forming part of a scheme devised by Bolton Corporation for the relief of unemployment, a new highway, 50 ft. wide and two miles long, leading from Astley Bridge to Breighmet, is now under construction. The road is to be the second section of a circular route which ultimately will be built round the town. Three bridges will be required, and these will be of steel. Messrs. John Booth & Sons, Ltd., Bolton, are carrying out the whole of the work under the direction of the Borough Engineer, Mr. E. L. Morgan, O.B.E., A.M.I.C.E., and Messrs. C. S. Elliot & Son, Manchester.

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

	Masons.	Brick-layers.	Carpenters, Joiners.	Plasterers.	Slaters.	Plumbers.	Painters.	Labourers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Barry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Bedford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Birkenhead	1/9	1/9	1/8	1/9	1/9	1/9	1/8	1/4
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bolton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Bournemouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Brentwood	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Brighton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Cambridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Chatham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Chelmsford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Chesterfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Colchester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Coventry	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Crewes	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
E. Glam. (Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Eastbourne	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/6	1/2
Folkestone	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/1
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1
Grantham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Grays	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Grimsby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Great Yarmouth	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Guildford	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hartlepool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hastings	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/1
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Ipswich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Lancaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Leamington Spa	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Lichfield	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Liverpool	1/9	1/9	1/8	1/9	1/9	1/9	1/8	1/4
Llanelli	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
London { 12 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
{ 12-15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/8	1/4
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Maidstone	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Norwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Oakham	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Rochester	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Rugby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
St. Albans	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Scarborough	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Shrewsbury	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Southend-on-Sea	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stroud	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/5	1/1
Taunton	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Tunbridge Wells	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Worcester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1
York	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3

(For rates of wages in the Building Trade in Scotland, see page 91.)

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

DECEMBER 21.—**Edinburgh.**—PAINTING.—Painter work—Tynecastle school workshops, &c.—outside work; Warriston recreation ground pavilions, &c.—outside and inside work, for the E.C. J. Stewart, Executive Officer, Education Offices.

DECEMBER 21.—**Glasgow.**—ELECTRIC LIGHTING.—Electric lighting works required to be executed at Bellefield Sanatorium, for the T.C. J. Lindsay, Town Clerk.

DECEMBER 21.—**Glasgow.**—ELECTRIC LIGHTING.—Electric lighting works required to be executed at Possil and Balornock housing schemes, for the T.C. R. B. Mitchell, 75, Waterloo-street, Glasgow.

*DECEMBER 21.—**Leytinstone.**—EXTENSIONS.—Extensions to the Relief Offices, Union-road, for the Guardians of the West Ham Union. S. E. Fraquet, Clerk to the Guardians, Board Room, Union-road. Deposit, £1 Treasury Note.

DECEMBER 21.—**Mansfield Woodhouse.**—TIMBER AND JOINERY WORK.—Required for the erection of 40 houses, for the Mansfield Woodhouse U.D.C. The Surveyor to the Council, Council Offices, Station-street.

DECEMBER 21.—**Knarborough.**—WALL.—Taking down and rebuilding 67 lin. yds. of dry wall, constructing culvert, and diverting watercourse, at Whitewall-lane, Felliscliffe, for the R.D.C. Surveyor, 14, Bower-road, Harrogate.

DECEMBER 21.—**Poplar.**—HOUSES.—Erection of 24 houses and 40 flats on a site in Glengall-road, for the Borough Council. Harley Heckford, M.Inst.C.E., Borough Surveyor, Council Offices. Deposit £3 3s.

DECEMBER 21.—**Rotherham.**—STATION.—Police station and court house, for the West Riding C.C. P. O. Platts, A.R.I.B.A., County Architect, County Hall, Wakefield.

DECEMBER 21.—**Treherbert.**—HOSPITAL.—Cottage hospital at Treherbert, Rhondda Valley, for the Trustees. W. D. Morgan, architect and surveyor, 199, Ystrad-road, Pentre, Rhondda. Deposit £3 3s.

DECEMBER 22.—**Bellshill.**—BUILDING.—Post Office at Bellshill, Lanarkshire, for H.M.O.W. Architect, H.M. Office of Works, 122, George-street, Edinburgh. Deposit £1 1s.

DECEMBER 22.—**Eastbourne.**—HEATING AND LIGHTING.—Additions to Nurses' Home, &c., hot-water, heating, and supply, electric lighting installations at new infirmary building, for the Guardians of the Eastbourne Union. F. G. Cooke, L.R.I.B.A., 2, Hyde-gardens, Eastbourne. Deposit £3.

DECEMBER 22.—**Gellygerr.**—WIRING.—Electric wiring and fittings for the following houses:—50 houses, Bargoed; 60 houses, Pengam; 50 houses, Lengoed, for the U.D.C. P. Jones Williams, L.R.I.B.A., architect.

DECEMBER 22.—**Glamorgan.**—REPAIRS.—For (1) Clyne Council school, near Neath, improvements to playground; (2) Barry Training College, two new cottages; (3) Tonyrefail Boys' Council school, levelling playgrounds and erecting walls; and (4) Blaengarw Council School, additions, for the C.C. T. Mansel Franklin, Secretary of E.C.

DECEMBER 22.—**Glasgow.**—EXCHANGE.—Telephone exchange and postmen's office at Govan, for H.M.O.W. Architect, H.M. Office of Works, 122, George-street, Edinburgh. Deposit £1 1s.

DECEMBER 22.—**Nottingham.**—HEATING.—Steam heating apparatus in the Nurses' Home at the City Mental Hospital, Mapperley Hill, for the T.C. T. J. R. Kiernan, consulting engineer, 17, Victoria-street, Westminster, S.W.1. Deposit £2 2s.

DECEMBER 22.—**Southall-Norwood.**—COTTAGES.—Erection of 45 cottages at Montague-road. The cottages are divided into 16 blocks and contractors may tender for one or more blocks. J. B. Thomson, Assoc. M.Inst.C.E., Engineer and Surveyor, Town Hall, Southall.

DECEMBER 22.—**Stafford.**—ALTERATIONS AND ADDITIONS.—To Stafford Employment Exchange. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

DECEMBER 22.—**Stenebridge.**—HOUSES.—Erection of 140 on the Brentfield estate, for the Willesden D.C. F. Wilkinson, M.Inst.C.E., Engineer, Town Hall, Dyne-road, Kilburn, N.W.6.

DECEMBER 22.—**Teddington.**—POST OFFICE.—To be erected. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

DECEMBER 22.—**Windermere.**—KINEMA.—New public hall, cinema, &c., in Lake-road, for the directors. Walker, Carter & Walker, architects, Windermere.

DECEMBER 23.—**Aberdeen.**—HOUSES.—Houses, &c., at H.M. Coastguard Station, Torry, for H.M.O.W. Architect, H.M. Office of Works, 122, George-street, Edinburgh. Deposit £1 1s.

JANUARY 23.—**Forech.**—COTTAGES.—Three pairs of cottages at Spooner-row, Wymondham, for the R.D.C. Wm. Partridge Smith, Council Offices, Wymondham.

*DECEMBER 23.—**Hertfordshire.**—SCHOOL.—Erection and completion of a new County Council school, to accommodate 400 scholars, at Welwyn Garden City, for the Hertfordshire C.C. Architect's Office, Welwyn Garden City, Herts. Deposit £1 1s.

DECEMBER 23.—**Reichale.**—HOUSES.—Sixty-eight houses on the Turf-hill estate, for the C.B. S. H. Morgan, Borough Surveyor. Deposit £2 2s.

DECEMBER 24.—**Glasgow.**—SHOPS.—At Knightswood housing scheme, for the T.C. J. Lindsay, Town Clerk.

DECEMBER 24.—**Redcar.**—PREMISES.—For the Working Men's Unionist Club. J. Jackson, architect, Marske.

DECEMBER 24.—**St. Austell.**—REBUILDING.—Of the "Seven Stars" Hotel, at St. Austell, for Messrs. Walter Hicks & Co., Ltd., The Brewery, St. Austell. L. Winn, L.R.I.B.A., chartered architect, Truro.

*DECEMBER 24.—**Willesden, N.W.**—CLEANING, PAINTING AND MINOR REPAIRS.—Internal and external, and erection of two covered shelters, and for the covering-in of the four bridges connecting the ward blocks with permanent roofs, at the Park Royal Hospital, Acton-lane, N.W.10, for the Guardians. A. Saxon Snell & Phillips, F.A.R.I.B.A., 9, Bentinck-street, Manchester-square, W.1. Deposit £5.

DECEMBER 25.—**Birmingham.**—HOUSES.—Erection of 125 non-parlour two-bedroomed houses on Morcom-road Greet, for the Public Works and Town-Planning Committee of the City. Herbert H. Humphries, M.Inst.C.E., City Engineer, The Council House, Birmingham. Deposit £1 1s.

DECEMBER 25.—**Stapleford.**—HOUSES.—Erection and drainage, &c., of ten pairs of parlour houses, for the R.D.C. G. C. Hardy, architect, 11, Church-street. Deposit £2 2s.

DECEMBER 27.—**Folkestone.**—PAVILION.—Erection of a cricket pavilion at the Sports Ground, Cheriton-road, for the Corporation. A. E. Nichols, M.Inst.C.E., Borough Engineer, 11, Church-street, Folkestone. Deposit £5 5s.

DECEMBER 28.—**Cardiganshire.**—ADDITIONS.—Adaptation and additions to the house and farm buildings at Abertrinant Farm, Llanfihangel-y-Creuddyn, for the Small Holdings Committee of the C.C. J. Lewis-Evans, architect and surveyor, 21, Great Darkgate-street, Aberystwyth.

DECEMBER 28.—**East Preston.**—COTTAGES.—Angmering (12), Durrington (12), East Preston (12), Poling (4), and Warmingcamp (4), for the R.D.C. R. E. Booker, surveyor, Red Roof, Mill-lane, Rustington, Littlehampton.

*DECEMBER 28.—**Doncaster.**—HOSPITAL BUILDINGS.—Erection and completion of the superstructure of the first section of the new hospital buildings on a site adjoining Thorne-road, for the Committee of the Royal Infirmary. William A. Pite, Son & Fairweather, 12, Carters-street, Westminster, S.W.1. Deposit £5 5s.

DECEMBER 28.—**Harrogate.**—HOUSES.—Thirty houses, and the construction of roads, sewers, &c., in connection with the housing scheme at Crab-lane, for the Corporation. C. E. Rivers, Borough Engineer.

DECEMBER 28.—**Sowerby Bridge.**—HOUSES.—Four blocks of houses in Nelson-street, on the Willow-street housing site, for the U.D.C. J. Eastwood, surveyor.

DECEMBER 28.—**Wimbledon.**—CEMETERY EXTENSIONS.—Laying out of the extensions for 1926, including drainage, walling, fencing and gates, for the B.C. Borough Engineer and Surveyor's Office, Town Hall, Wimbledon.

DECEMBER 29.—**Abingdon.**—HOUSES.—Houses at Bayworth, Sunningwell, for the R.D.C. W. W. Earwaker, surveyor, 9, Bath-street. Deposit £2 2s.

DECEMBER 29.—**Carlisle.**—PAINTING.—Complete cleaning and paint work in connection with the steelwork structure forming the coal storage bunkers at the new generating station, Willow Holme, for the T.C. C. W. Salt, City Electrical Engineer, Electricity Offices, Victoria Viaduct.

DECEMBER 29.—**Colchester.**—EMPLOYMENT EXCHANGE.—Erection and completion for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

DECEMBER 29.—**Dublin.**—ELECTRIC LIGHT.—Installation of electric light at the Irish Land Commission Offices, Upper Merrion-street, for the Commissioners of Public Works. J. J. Healy, Secretary, Oifig Oibreach Publi (Office of Public Works), Baile Atha Cliath. Deposit £1.

DECEMBER 29.—**London.**—W.C.—EXTENSION.—To the National Gallery, for the Commissioners H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s.

DECEMBER 29.—**Paulton.**—HOSPITAL.—Isolation hospital at Paulton, near Bristol, for the Bath, Clutton, Midsomer Norton and Radstock Joint Hospital Committee. A. J. Pictor, F.R.I.B.A., 14, Queen-square, Bath. Deposit £2 2s.

DECEMBER 29.—**Pontefract.**—ALTERATIONS.—Alterations and additions to the Love-lane Council School, for the T.C. W. H. Newton, Borough Engineer and Surveyor. Deposit, £2 2s.

DECEMBER 30.—**Hendon, N.W.9.**—ALTERATIONS, &c.—(1) Alterations to Isolation Block A into Operating Block, Western Fever Hospital, Seagrave-road, Fulham, S.W.6; (2) new Gate Office, Colindale Hospital, Hendon, N.W.9, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

DECEMBER 30.—**Hendon, N.W.9.**—NEW ENTRANCE ROADWAY.—At Colindale Hospital, Hendon, N.W.9, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

DECEMBER 30.—**Herne Bay.**—ISOLATION ACCOMMODATION.—To be formed for the Metropolitan Asylums Board, at St. Anne's Home, Kent. G. J. Powell, Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

DECEMBER 30.—**Kiveton Park.**—CONVERSION.—Of pail closets into water closets, for the R.D.C. A. Lewis, Clerk, near Sheffield.

DECEMBER 31.—**Buxton.**—HOUSES.—Twenty-four-type houses and twenty non-parlour houses, Heath Grove estate, for the T.C. F. Langley, Borough Engineer and Architect. Deposit £4 4s.

DECEMBER 31.—**Dublin.**—RESTORATION.—Of Ballybunion ex-R.I.C. barracks, co. Kerry; Ballyduff, co. Kerry; Macroom, co. Cork; Ballymacarberry, co. Waterford; Clonmel, co. Tipperary; Callan, co. Kilkenny; New Inn, co. Tipperary; Ballymore, co. Galway; Leenane, co. Galway; Ardagh Garda St. chana Station, co. Limerick, for the Commissioners of Public Works. J. J. Healy, Secretary, Oifig Oibreach Publi (Office of Public Works), Baile Atha Cliath. Deposit £1 each.

DECEMBER 31.—**Dublin.**—WINDOWS.—Supply, delivery and fixing of timber windows at the east and west pavilions and the central hall of the Four Courts, for the Commissioners of Public Works. J. J. Healy, Secretary, Oifig Oibreach Publi (Office of Public Works), Baile Atha Cliath. Deposit £1.

DECEMBER 31.—**Ipswich.**—HOUSES.—Designs for the erection of houses suitable for the working classes in Samford, for the R.D.C. A. J. Haward, Clerk to the Council, 5, Queen-street.

DECEMBER 31.—**Stockton-on-Tees.**—HOUSES.—100 semi-detached houses on the Grangefield estate, Oxbridge-avenue, for the T.C. Hays & Gray, architects, Wingate, Co. Durham.

*JANUARY 1, 1926.—**Clapham Commcn.**—FENCING.—For the supply and erection of wrought-iron unclimbable fencing at Parliament Hill and Clapham Common, for the Administrative County of London. Chief Officer, Parks Department, County Hall, Westminster, S.W.1.

JANUARY 2.—**Bolton-upon-Dearne.**—PAVILION.—Sports pavilion at the welfare ground, for the Miners Welfare Scheme. Garside & Pennington, architects, Ropergate, Pontefract.

*JANUARY 3.—**Newmarket.**—HOUSES.—Erection of five pairs at Burwell; one pair at Longmeadow, Lode, for the R.D.C. A. E. Austin, 4, Hill's-view, Great Shelford, Cambs.

JANUARY 4.—**Bebington and Bromborough.**—HOUSES.—Seventy-two houses at Bebbington and 28 houses at Bromborough, for the U.D.C. Surveyor, Council Offices, Bebbington. Deposit £2 2s.

JANUARY 4.—**Cannock.**—HOUSES.—Twelve pairs of non-parlour type houses on a site adjoining the main Wolverhampton-Stafford road at Fordhouses, for the R.D.C. H. M. Whitehead, Engineer's Office, Penkridge, Stafford.

JANUARY 4.—**Clutton.**—HOUSES.—Eight houses at Publow, for the R.D.C. Mr. Hawker, architect, Council House, Temple Cloud. Deposit £2 2s.

*JANUARY 4.—**Ham.**—HOUSES.—Erection of 16 terrace houses and eight semi-detached, for the Ham U.D.C. The Surveyor, Council Offices, Lock-road, Ham, Richmond, Surrey.

JANUARY 4.—**Holbeach.**—COTTAGES.—Dog-drove, Holbeach-drive (A. E. Farrow's site), one pair; Ravensgate, Holbeach Fen (Alex. West's site), one pair; Washway-road, Holbeach (Spalding Town Husbands' site), five pairs; Holbeach St. Mark's (A. E. Farrow's site), one pair; Holbeach St. Mark's (H. P. Carter's site), one pair; Leadenhall, Holbeach Marsh (H. C. C. Tinsley's site), one pair, for the U.D.C. S. S. Mossop, Jun., Clerk, Holbeach.

JANUARY 4.—**Newburn.**—PAVILION.—On the Lemington recreation ground, for the U.D.C. H. F. J. Modlin, clerk.

JANUARY 4.—**Todmorden.**—EXTENSIONS.—At Cornholme Council school, for the E.C. J. E. Scott, Lic. R.I.B.A., Bridge-street.

JANUARY 4.—**Winlaton.**—REPAIRS.—To the Winlaton and District Social Club. The Steward, 43, Front-street.

JANUARY 5.—**Belfast.**—LAVATORIES.—Ladies' lavatories at Hazlewood, Antrim-road, Whitewell, for the C.B. General Manager, Tramways Office, Sandy Row.

*JANUARY 5.—**Burton-upon-Trent.**—HOUSES.—Erection of 94 and incidental works on the High Bank-road site, Winhill, for the Corporation. Geo. T. Lynam, Borough Engineer and Surveyor, Town Hall.

JANUARY 6.—**Edinburgh.**—HOUSES.—For (1) Abercorn, 144 houses, extendable to 184 houses; (2) Easter-road, 36 houses, extendable to 60 houses; (3) Lechend-road, 102 houses; (4) Saughtonhall, 100 houses; (5) Wardie, 100 houses, for the T.C. Director of Housing, 329, High-street. Deposit £2 2s.

*JANUARY 7.—**Kingston-upon-Thames.**—SCHOOL.—Erecting additions to the Kingston Grammar School, for the Education Committee of the Corporation. Alan Paul, chartered surveyor, 12, New-court, Carey-street, Lincoln's Inn, W.C.2. Deposit £2 2s.

JANUARY 7.—**Tynemouth.**—BUILDING.—Two receiving wards at the Union Institution Hospital, 50, Preston-road, North Shields, for the B.G. Wm. Stockdale, A.R.I.B.A., 81, Howard-street, North Shields.

JANUARY 9.—**Kiveton Park.**—COTTAGES.—Twenty-four pairs of cottages of "A" type, in Lidgate-lane, Dinington, for the R.D.C. H. L. Paterson, F.R.I.B.A., 19, St. James-street, Sheffield. Deposit £3 3s.

*JANUARY 11.—**Hemel Hempstead.**—HOUSES.—Erection of 12 in pairs, at their Handpost Farm site, for the Corporation. A. Murray-Smith, A.M.Inst.C.E., Borough Surveyor, Market-square.

JANUARY 12.—**Leeds.**—INSTITUTE.—Proposed Institute for the blind, Roundhay-road, for the T.C. Education Offices (Architect's Section), Calverley-street. Deposit £2 2s.

JANUARY 12.—Skelmorthorpe.—ALTERATIONS.—To Skelmorthorpe Council school, for the West Riding Council. The Education Department, County Hall, Wakefield.

JANUARY 12.—Southall, Middlesex.—STORES.—Various, for annual contracts, April 1, 1926, to March 31, 1927, for the U.D.C. J. B. Thomson, Assoc. M.Inst.C.E., &c., Engineer and Surveyor, Town Hall.

***JANUARY 13.—Brentwood (Essex).**—COW HOUSES, &c.—Alterations to the existing houses and the building of a new one and dairy buildings with lavatories, &c., in connection therewith, at the Branch Institution at Brentwood, for the Guardians. Frank R. Coles, Clerk, Hackney Union, 2, Sidney-road, E. 9. Deposit £3 3s.

JANUARY 14.—Bilston.—STATION.—Pumping station at The Bratch, Wombourne, Staffordshire, adjoining the Council's existing pumping station, about quarter-mile from Wombourne Railway Station, for the U.D.C. D. Lapworth, engineer, 25, Victoria-street, West-minster. Deposit £3.

JANUARY 14.—Lerchen.—OFFICES.—Extension of the relief offices, Union-road, Leytonstone, E.11, for the West Ham B.G. S. M. Spoor, F.R.I.B.A., 1, Staple Inn, Holborn, W.C.1. Deposit £1.

***JANUARY 14.—Woolwich, S.E. 18.**—HORSES.—Erection of, alternatively, 100 or 200, on the housing estate at Eltham, for the Metropolitan Borough Council. John Sutcliffe, A.M.Inst.C.E., Council's Architect. Borough Engineer, Town Hall. Deposit £3 3s.

JANUARY 18.—Bakewell.—ADDITIONS.—Isolation hospital, on Monyash-road, for the Haddon District Hospital Committee. Chas. Flint, L.R.I.B.A., The Quadrant, Buxton. Deposit £2 2s.

JANUARY 23.—Forehe.—COTTAGES.—Three pairs of cottages at Spooner-row, Wyomondham, for the R.D.C. Wm. Partridge Smith, Council Offices, Wyomondham. Deposit £1.

NO DATE.—Burton.—BUNGALOW.—Brick bungalow at Burton, Westmorland, for the executors of the late H. Dobson. M. G. Shaw, L.R.I.B.A., architect, 45, Highgate, Kendal.

***NO DATE.—Guildford.**—ALTERATIONS.—Extensive alterations to premises, 39, High-street, Guildford. Timothy White Co., Ltd. (Construction Department), 10, Chandos-street, Portsmouth.

NO DATE.—Leeds.—CLUB.—Pulling down Enmoor Lodge, Chapel-town-road, and erection of club premises for the Grand Order of Israel.—F. Mitchell & Sons, architects and surveyors, 9, Upper Fountaine-street, Albion-street.

NO DATE.—Stocksbridge.—OFFICES.—Proposed new Council offices, for the U.D.C. J. N. Singleton, architect and surveyor.

MATERIALS, etc.

DECEMBER 21.—Chorley.—LIME.—Lime, for the C. Borough Surveyor.

DECEMBER 21.—Edinburgh.—CEMENT.—Portland cement in quantities of approximately 300-400 tons per month, for the U.D.C. Tramways Manager, 2, St. James-square.

DECEMBER 21.—Midhurst.—MATERIALS.—Granite, limestone, tarred macadam, gravel, tar, for the R.D.C. E. C. Cole, surveyor.

DECEMBER 21.—Salford.—BRICKS.—Retorts, fire-bricks, &c., for the C.B. Gas Engineer, Gas Offices, Bloom-street.

DECEMBER 28.—Berkshire.—MATERIALS.—Broken road material, gravel and sand, for the C.C. Lt.-Col. F. Hawkins, County Surveyor, Shire Hall, Reading.

DECEMBER 28.—Rhonda.—MATERIALS.—Bricks, stoneware pipes, iron castings, pavings, kerbs, channels, and pitchings, artificial paving, Portland cement and hydraulic lime, paints, oils, &c., and granite and limestone road macadam, for the U.D.C. E. Taylor, engineer and surveyor.

DECEMBER 30.—Caterham.—CORRUGATED STEEL PAVING.—Supply and delivery to Caterham Mental Hospital, for the Metropolitan Asylums Board. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

DECEMBER 31.—West Riding.—MATERIALS.—Granite and whinstone, tarred and untarred slag, do. limestone, sand and gravel, refined tar, tar and bituminous compounds, bituminous compounds, stoneware pipes, cast-iron gully grates and frames, stone and concrete kerbing, edging, flags and setts, for the C.C. West Riding Surveyor, County Hall, Wakefield.

JANUARY 1, 1926.—Gloucestershire.—MATERIALS.—Clean and tarred road stone and sea gravel, for use on main roads, for the C.C. County Surveyor.

JANUARY 2.—Bexley.—MATERIALS.—Tar and other road surfacing proprietary articles, highway materials, best glazed stoneware socketed pipes, and best Portland cement, for the U.D.C. W. T. Howse, Surveyor.

JANUARY 2.—East Suffolk.—MATERIALS.—Tarmacadam, granite, slag, flint, &c., local materials—i.e., gravel, fine shingle and sand suitable for tarring operations—bitumen and/or surfacing compound, refined tar or other compound for surface treatment of roads, for the C.C. W. Jervis, County Surveyor, County Hall, Ipswich.

JANUARY 2.—Londonderry.—PIPES.—For (a) cast-iron pipes, 12 in., 15 in., and 20 in. diameter; (b) centrifugally spun cast-iron pipes, lined inside with cement, 15 in. and 18 in. diameter; (c) centrifugally spun reinforced concrete pipes, 18 in., 24 in., and 30 in. diameter, for the C.B. M. A. Robinson, City Engineer. Deposit £5.

JANUARY 8.—Middletown.—MATERIALS.—Granite setts, broken granite, granite chippings, limestone chippings, crushed slag, stone kerbs, flags, ballast and setts, concrete flags, Portland cement, stoneware pipes, castings, creosote oil and pitch, tarred slag, dehydrated air, engineering bricks and common bricks, for the C. Borough Engineer.

JANUARY 11.—London.—MATERIALS.—Various materials, including builder's materials, for the Camberwell B.C. W. Bell, Borough Engineer and Surveyor, Town Hall, Camberwell, S.E.5.

JANUARY 19.—Derbet.—MATERIALS.—Tarmacadam, granite, basalt, limestone, refined tar, other surface dressing material, for the C.C. W. T. Fletcher, County Surveyor, County Offices, Dorchester.

NO DATE.—St. Albans.—FITTINGS.—Sanitary fittings at the St. Albans Union Workhouse Infirmary, for the B.G. Mence & Ross, architects, 32, St. Peter's-street.

ENGINEERING, IRON AND STEEL.

DECEMBER 21.—Portadown.—SPURT.—Reinforced concrete engine shed, coal bank, &c., for the G.N.R. (Ireland). J. B. Stephens, Secretary, Amine-street, Station. Dublin. Deposit £2 2s.

DECEMBER 22.—Liskeard.—BRIDGES.—Demolition of two bridges and two culverts, also the erection of two reinforced concrete bridges and two reinforced concrete culverts at Polperro, for the R.D.C. W. L. B. Smale, surveyor. Deposit £1 1s.

DECEMBER 23.—Manchester.—BRIDGE.—Bridge, carrying road No. 10 over the L.M. & S. Rly., near Chorlton, for the T.C. City Engineer. Deposit £3 3s.

DECEMBER 29.—Alderdeen.—RESERVOIR.—Covered concrete reservoir, 54 ft. sq., and ancillary works, at Rosehill, for the Corporation. G. Mitchell, Water Engineer, Water Engineer's Office. Deposit £2.

JANUARY 5, 1926.—Westport.—SHED.—Extension of 100 ft. to the transit shed at Westport quay, for the Harbour Commissioners. T. P. Flanagan, B.E., Castlebar.

JANUARY 13.—Middletown.—CULVERT.—Construction of a proposed culvert, 234 ft. in length, over the Wine Brook, at Kirkway, for the T.C. Borough Engineer.

ROAD, SEWERAGE, AND WATER WORKS.

DECEMBER 21.—Berwick-on-Tweed.—ROADS.—Construction of approach roads to Berwick-on-Tweed bridge, for the Northumberland C.C. J. A. Bean, County Surveyor, Moot Hall, Newcastle-on-Tyne. Deposit £10.

DECEMBER 21.—Bideford.—DEVIATION.—Construction of a deviation of the Bideford-Northam main road, approximately 3,900 ft. in length, to connect the Quay within the Bideford Borough and Raleigh Cross within the Northam Urban District, for the T.C. Borough Surveyor. Deposit £20.

DECEMBER 21.—Edinburgh.—ROAD.—Construction of Section E.F. (Starlaw to Dechmont), Contract No. 5 West, of a new road from Glasgow to Edinburgh, for the T.C. D. A. Donald, engineer, 271, Alexandra-parade, Glasgow. Deposit £3 3s.

DECEMBER 21.—Hendon.—WIDENING.—Surface water drainage widening works, kerbing, concrete carriage-way, footway paving and other works in connection with the widening of Queens-road from Brent-street to near the bridge over the L.N.E.R. (Edgware Branch), for the U.D.C. A. O. Knight, Engineer and Surveyor. Deposit £5.

DECEMBER 21.—Lymm.—RAILINGS.—130 lin. yds. of unclimbable wrought-iron square bar railing, 4ft. 6 in. in height, with standards, stays, bolts and nuts, &c., for the U.D.C. Surveyor.

DECEMBER 21.—Newton Abbot.—ROADS.—Roads and sewers in connection with the first instalment of the Broadlands housing scheme, for the U.D.C. C. D. White, surveyor. Deposit £2 2s.

DECEMBER 21.—Thorne.—SEWERS.—About 7,330 yds. of stoneware and iron pipe sewers (7 in. to 18 in., mostly 9 in.), together with manholes and all appurtenant works, storage tank and pump house, and about 4,300 yds. of 10 in. iron pipe pumping main, and about 3,810 yds. lin. of stoneware and iron pipe sewers (7 in. to 21 in., mostly 12 in. and 15 in.), together with manholes and all appurtenant works, about 2,400 yds. 10 in. iron pipe pumping main, and erection of Dortmund tanks, mud drying beds, small pump house, effluent outfall sewer, and other sundry works, for the R.D.C. W. H. Radford & Son, engineers, Albion-chambers, King-street, Nottingham. Deposit £3 3s.

DECEMBER 21.—Warwickshire.—WIDENING.—Widening and incidental works connected therewith, of about 5½ miles of main road from Stonebridge to Allesley, for the C.C. D. H. Brown, County Surveyor, County Surveyor's Office, 8, Northgate-street, Warwick. Deposit £5.

DECEMBER 22.—Dublin.—PIPES.—1,300 yds. lin. 33 in. internal diameter; 11,500 yds. lin. 24 in. internal diameter; 3,400 yds. lin. 12 in. internal diameter. Alternative tenders and guarantees of delivery may be submitted for (a) steel pipes, bitumen lined; (b) steel pipes, concrete lined; (c) cast-iron pipes, concrete lined; (d) cast-iron pipes, bitumen lined; (e) cast iron pipes coated, for the T.C. Acting Borough Surveyor, 28, Castle-street.

DECEMBER 22.—Farnham.—MAIN.—Provision, laying and jointing of about 2,000 yds. of 9 in. diameter cast-iron pumping main, including sluice valves, air valves and connections, for the U.D.C. John Taylor & Sons, Caxton House, Westminster, S.W.1. Deposit £5.

DECEMBER 22.—Horsham.—SEWER.—Construction of approximately 366 yds. run of 6 in. stoneware pipe sewer, three manholes, &c., in Rusper-road, Ifield, for the R.D.C. W. R. Guilford, surveyor, 42, Albion-terrace.

DECEMBER 22.—South Kensington.—DRAINAGE.—Redrainage work at the Imperial Institute. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 ls. (Cheques payable to the Commissioners).

DECEMBER 23.—Acton.—EXTENSIONS.—Leveling, sowing and fencing extensions to Heathfield Lodge estate ornamental gardens, for the B.C. Borough Engineer.

DECEMBER 23.—Rochdale.—ROADS.—Roads and sewers on the Turf Hill estate, for the C.B. Borough Surveyor.

DECEMBER 28.—Caerphilly.—PAVING.—Forming, ballasting, metalling, sewerage, paving, kerbing, &c., of Princes-avenue, Corbett-crescent, for the U.D.C. T. H. Richards, surveyor. Deposit £1 1s.

DECEMBER 28.—Near Malley.—PIPES.—Laying and jointing about 1,100 yds. of 6 in. cast-iron pipes from Harlaw Reservoir to Malley, and constructing a concrete tank near Malley, with relative works, for the Midlothian C.C. J. & A. Leslie & Reid, C.E., 722, George-street, Edinburgh. Deposit £1.

DECEMBER 28.—Pentefract.—MAINS.—Cast-iron gas mains, for the T.C. Gas Engineer, Gas Works.

DECEMBER 28.—Wimbleton.—EXTENSIONS.—Laying out extensions of Wimbleton Cemetery, including drainage, walling, fencing and gates, for the B.C. Borough Engineer and Surveyor.

DECEMBER 30.—Merton and Morden.—SEWER.—Construction of approximately 512 yds. run of 9 in. and 6 in. stoneware pipe sewer, at Grand-drive, Merton, for the U.D.C. G. Jerram, Surveyor, Council Offices, Merton, S.W.19.

DECEMBER 31.—Belfast.—PAVING.—Supplying, laying, and polishing terrazzo paving, &c., at the Mental Hospital, for the C.B. N. Fitzsimons, F.R.I.B.A., architect, 21, Castle-place.

DECEMBER 31.—Buxton.—SEWERS.—18 in., 12 in., and 9 in. sewers, in all approximately 350 yds., with manholes and other incidental works, in Burlington-road, for the T.C. F. Langley, Borough Engineer, Town Hall, Buxton.

DECEMBER 31.—Whitby.—SEWER.—950 yards of stoneware pipe sewers, varying in size from 9 in. to 12 in. diameter, with manholes and all appurtenant works, for the U.D.C. W. H. Radford & Son, Chartered Civil Engineers, Albion Chambers, King-street, Nottingham. Deposit £3 3s.

JANUARY 1, 1926.—Thornton.—MAKING-UP.—For (1) Alexandra-avenue (from Rossall-road to Cleveleys-avenue), (2) Rough Lea-road (from Rossall-road to Nutter-road), (3) Beach-road (from Rossall-road to Queen's-road, adjoining Council Schools), (4) Thornton-gate (from Rossall-road to Queen's-walk), (5) Hastings-road, for the U.D.C. H. Fenton, Surveyor.

JANUARY 2.—Totnes.—SEWER.—Construction of about 1,061 yds. of 9 in. and 6 in. stoneware and cast-iron pipe sewer, together with manholes, &c., for the T.C. J. L. Davies, engineer and surveyor, 10, High-street. Deposit £3 3s.

JANUARY 2.—Warwickshire.—WIDENING.—The widening, excluding surfacing, of Humber-road from the Humber Motor Works, Coventry, to the London-road, a distance of about 1 mile, and widening in concrete and steel of the L.M. & S. Railway bridge, for the C.C. D. H. Brown, County Surveyor, 8, Northgate-street, Warwick. Deposit £2 2s. each.

JANUARY 4.—Hastings.—MAINS.—Provision, laying and jointing of two lines of 9 in. diameter cast-iron mains of a total length of about 8,500 yds., together with sluice valves and air valves, for the T.C. John Taylor & Sons, Caxton House, S.W.1. Deposit £5.

JANUARY 4.—Watford.—ROADS.—Construction of about 760 lin. yds. of new roads, 1,400 lin. yds. of new sewers and the widening of 200 lin. yds. of existing roads, on the housing estate, Gammons-lane, for the T.C. W. W. Newman, Borough Engineer. Deposit £2 2s.

JANUARY 5.—Harrow-on-the-Hill.—SEWERS.—Construction of sewerage and sewage disposal works in connection with the South Harrow drainage, comprising the laying of about 6,000 yards of stoneware pipe sewers, 5,500 yards of cast-iron air and rising mains, the construction of manholes, ejector chambers, concrete tanks and outfall works, for the U.D.C. J. P. Bennetts, engineer and surveyor. Deposit £3 3s.

***JANUARY 8.—London, N.W.**—SWEEPING AND REFUSE COLLECTION.—From houses on the Regent's Park estate, for twelve months from March, 1926, for the Crown Estate Paving Commissioners. J. W. S. Appleton, Clerk, 1, Whitehall, S.W.1.

JANUARY 8.—Sheffield.—FENCING.—Wrought iron hurdle fencing at Shiregreen Cemetery, for the T.C. E. Partington, Improvement Surveyor. Deposit £1.

JANUARY 30.—Gosforth.—SEWERS.—For laying new sewers and formation of roadways to complete the layout of the Coxlodge housing site, for the U.D.C. G. Nelson, engineer and surveyor.

Competitions.

(See Competition News page 872.)

Auction Sales, Tenders, etc.

DECEMBER 22.—Barnoldsey, S.E. 1.—Charles R. Davis & Co. will sell, upon the premises, 91, Tooley-street (near London Bridge Station) and the Yard, Artillery-street (in voluntary liquidation, re J. A. Renwick, Ltd., by order of the liquidator), the whole of the stock-in-trade, plant and materials of a builder, contractor, and decorator. Auctioneers, 285, Borough High-street, S.E. 1.

Public Appointments.

DECEMBER 21.—Guildford.—Buildings Surveyor, and an Assistant Surveyor required, by the R.D.C. W. S. V. Cuillerne, Clerk to the Council, Commercial-road, Guildford.

***DECEMBER 21.—Llanelli.**—CLERK OF WORKS.—For a period (subject to satisfactory service) of about nine months in connection with the remodelling of the Public Library by the Corporation. H. A. Gold, A.R.I.B.A. architect, 14, Bedford-row, W.C.1.

***DECEMBER 22.—Blackburn.**—TOWN-PLANNING ASSISTANT.—Required by the County Borough. A. T. Gosseman, M.Inst.C.E., Borough and Water Engineer, Town Hall.

DECEMBER 22.—Southall, Middlesex.—Fully qualified store-keeper required by the U.D.C. The Engineer and Surveyor, Town Hall, Southall.

DECEMBER 23.—Cape Town.—Senior Lecturer and Organiser in the Building Trades Department at the Cape Technical College. Chambers, Guthrie & Co., Ltd., 9, Idol-lane, London, E.C.3.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

ARMAGH.—The Ministry of Home Affairs has sanctioned the application of the R.D.C. for a loan of £5,000 for the purpose of making advances under the Small Dwellings Acquisition Act.

ARUNDEL.—The Corporation are obtaining a site for a housing scheme.

BALA.—Merioneth C.C. has decided to reconstruct the Ffrydan bridge at a cost of about £800.

BARNES.—The U.D.C. have asked the Electricity Committee to prepare a scheme for the extension of the electricity works. Plans passed: Seventeen houses Upper Richmond-road, for S. E. Castle; 12 houses, Lowther-road, for A. Harvey.

BARNSELY.—The M.H. has sanctioned the C.B. to borrow £1,943 and £2,952 respectively, for the reconstruction of Beavor bridge and approaches.—The Council has received sanction of the M.H. to the borrowing of the sum of £3,250, for the culverting of a portion of the South Dike.—The Yorkshire Paper Mills, Ltd., has informed the Council that they intend to proceed with a housing scheme for the erection of 400 houses, shops, and other buildings, on spare lands belonging to the Company.—The Water Committee recommended the acceptance of the tender for the building work at the Soughley Pumping Station, at a cost of £1,595 16s. 11d., and that application be made to the M.H. for sanction to borrow an additional sum of £500 on the loan already sanctioned.—The Health Committee has received the following sanctions of the M.H. in connection with the proposed public conveniences: Peel-square, £3,700 and £600; Churchfield, £300; Park-road, £200; and Townend, £1,100.—The M.H. has sanctioned the borrowing of £42,000 for the erection of 100 further houses, under the Pontefract-road scheme.—The Town Clerk has been authorised to make application to the M.H. for sanction to borrow the sum of £33,800, for the erection of 80 houses.—The Town Clerk is also to make application to the M.H. for sanction to borrow the sum of £42,250 for 100 houses.

BATH.—It is proposed to borrow £92,928 for the purpose of development of electric lighting in the city.—A sum of £3,750 is to be expended in roofing the terrace of the Roman Promenade.

BATLEY.—The T.C. has decided to construct a new water main from Cooper Bridge to Staincliffe reservoir via Hartshead, at an estimated cost of £140,000.

BIRKENHAM.—The Plans Sub-Committee of the U.D.C. has approved plans for 120 houses on the Rectory estate, fourteen houses in Queen Anne-avenue, and four houses in other parts of the district.

BECONTREE.—The L.C.C. recommend that, subject to the approval of the M.H., the site at Becontree, having frontages to Green-lane, Dunkeld-road, and Waldegrave-road, be let on lease to J. Kay and B. Cole, for the erection of a cinematograph hall and shop premises.

BIRKENHEAD.—Plans passed: 32 houses, Bluebell-avenue, by the Hamilton Estates, Ltd., and eight houses, Price-street and 20 houses Dawson-avenue, by the Dawson Birkenhead Houses, Ltd.

BIRMINGHAM.—St. Davids Church and schools are to be modernised at an estimated cost of £2,700.

BLACKBURN.—The T.C. has decided to construct a new high level water tank at Eddyholes Farm, at an estimated cost of £8,350, and to reconstruct the canal bridge at Albion-street, at an estimated cost of £10,620.

BLACKPOOL.—The Borough Surveyor submitted draft lay-out of land at the junction of Powell-avenue and Hawes Side-lane, showing how 26 houses could be erected, and the C.B. resolved that the lay-out be approved and that the Borough Surveyor be instructed to prepare plans and specifications, and invite tenders for erection of the houses.—The Borough Electrical Engineer reported that the underground transformer sub-station at Talbot-square had become congested and recommended an extension.—A committee has been formed in connection with the provision of additional railway siding accommodation at Rigby-road East depot.

BLITH.—The T.C. has decided to acquire, subject to the approval of the M.H., seven acres of land, at a cost of £4,200, for the purpose of erecting a new reservoir.

BOSTON (Lincs.).—The T.C. has decided on a scheme for a pavilion in South End Park, also to erect new offices for the Inspector of Cattle, at the Cattle Market.

BRAI FORD.—The T.C. recommend that, for the purpose of providing accommodation for persons of the working classes who will be displaced by or in consequence of the execution of the White Abbey Area Improvement Scheme, the offer of A. Dickinson to erect on land at Leeds-road and Musgrave-road, Eccles-hill, 42 semi-detached houses suitable for the working classes be accepted.—Plans passed: T. Miller, Lodore-road, 12 houses; A. Robinson, Highfield-road and Ley Fleaks-road, 32 houses.

BRIGHTON.—The T.C. are suggesting that ten acres of Kemp Town estate shall be acquired by compulsory purchase for housing purposes.

BRISTOL.—A sum of £60,000 has been given to the Committee of the Bristol General Hospital for expenditure upon the building of a new nurses' home. Messrs. Oatley & Lawrence, 25, Orchard-street.

BURTON.—The Housing Committee of the T.C. has accepted, subject to sanction, a tender for pulling down

a mansion, known as Park House, and building on the site, with the material displaced, sixteen houses, at a cost of £8,150.

BURTON-ON-TRENT.—The Corporation has decided to erect a further 20 houses. Premises in New-street and Lichfield-street are to be purchased for £1,600 for the scheme for the provision of a motor park. Additional works are to be carried out in connection with the Burton Bridge widening, at a cost of £17,000.

CAMLEFORT.—The West Riding E.C. intend to enlarge the elementary council school.

CATERHAM.—The U.D.C. passed plans: Twenty-eight flats, The Grove, Caterham, officers of the Guards' Depot.

CATERFIELD.—The E.C. has decided to invite tenders for the erection of three class-rooms at Eyre-street school in accordance with plans prepared by Mr. P. B. Houghton, architect.—The Corporation has approved the elevation of buildings to be erected in Stephenson-place by Messrs. Eyre & Sons, Ltd.—Plans are to be prepared for houses on the St. Augustine's estate.

CLAYTON.—The D.C. has decided to proceed with a scheme for the erection of another twelve "type A" houses in accordance with plans prepared by Spencer & Sharp, architects, Great Horton, Bradford.

CLITHEROE.—The T.C. has decided that the new elementary school shall be erected on the Brownlow-street site.

CONISBOROUGH.—The U.D.C. are to erect 26 houses by direct labour at an estimated cost of £19,113.

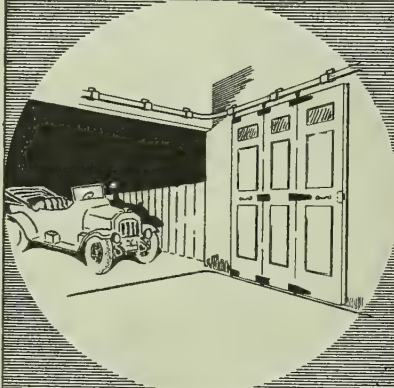
COULS EN.—Mr. P. Holt is inquiring from the Council regarding a site in Banstead-road for the erection of a public hall.—The surveyor is to prepare plans for permanent buildings at the highways depot at Purley Oaks.—Messrs. Richardson & Jones propose the erection of 83 subsidy houses in Portlands-road and Chipstead Valley-road.—Mr. A. Guest is seeking the subsidy for 50 houses proposed to be erected in Farleigh-road and Queenhill-road.—Plans passed: Fifty houses, Seldson Garden Village, for A. Guest; 84 houses adjoining Chipstead Valley-road, for Richardson & Jones.

CROYDON.—The M.H. has sanctioned the borrowing of £1,200 for the erection of a shop at Long-lane, Woodside, and £7,312, the balance of cost of erection of houses at Parchmore-road.—Plans passed: H. E. Davey, 11 garages, w.c. and urinal, High-street, South Norwood, 1-5, Commercial Buildings, at rear; H. Seale, 21 houses, Lavender-road, at junction of Brading road; W. J. Hall, 12 houses and garages, Wickham-avenue; P. Richardson, 10 houses, Canham-road; Polden & Authors, 10 houses, 36-54, Craignish-avenue; J. Midmer, eight houses, 158-172, Norbury Court-road; Paish, Tyler & Crump, 14 houses, Addiscombe-road; Morgan, Baines & Clark, 12 houses and garages, 76-98, Mount Park-avenue; J. B. & W. B. Hemmings, 13 houses, Chartham-road; P. Richardson, pavilion, Morland-road.

THE "HENDERSON" SYSTEM

SLIDING DOOR GEAR

FOR FACTORIES, GARAGES, SCHOOLS, ETC..



"TANGENT JUNIOR" FOR LIGHT DOORS.
"TANGENT SENIOR" FOR HEAVY DOORS.

WRITE FOR BOUND CATALOGUE B.24 TO:-
P.C. HENDERSON, LIMITED,
BARKING, ESSEX. PHONE: EAST HAM 242.

DALTON.—The Dalton and Thrybergh Roman Catholics are urging the Wickersley Area Education Sub-committee to provide a school capable of accommodating 350 children.

DARENT.—The M.A.B. recommend that, subject to sanction of the M.H., the proposed conversion of certain workshops in the pavilions section at Darent Training Colony into isolation accommodation for 18 male patients be approved.

DONCASTER.—The B.E. has approved the plans for the Chequer-road Girls' and Infants' School, to accommodate 400 girls and 350 infants. The scheme would cost about £28,000.

DOUGLAS (I.O.M.).—The Corporation have decided to purchase the Ballakerneen estate of 39 acres.—A site is to be selected on the Queen's Promenade for the erection of a convenience. It is proposed to construct a shelter and conveniences at the junction of Summer Hill and Strathallan-crescent.—The Borough Engineer is to proceed with the provision of additional cloak rooms and lavatories at the Villa Marina, at a cost of £1,700.—The grand stand used at the motor races has been condemned, and plans for a new structure are to be prepared in conjunction with the Auto-Cycle Union.

DURLEY.—The T.C. recommend that application be made to the M.H. for sanction to borrow £4,625 and £1,000 respectively, for the erection of twelve houses.

DURHAM.—The Governors of the Rede College have decided to embark upon a scheme to include the provision of boarding accommodation for 15 students, at an estimated cost of £30,000.

EARBY.—The U.D.C. are considering a scheme for the erection of 50 houses and some shops.

EAST HAM.—The B.C. has received a letter from the Corporation of London stating that the Epping Forest Committee has agreed to the site of the proposed convenience on Wanstead Flats.—Plans passed: Five houses in Sheringham-avenue and four in Der-singham-avenue; nine houses, Elsenham-road, for A. & H. Stokes; eight houses, Brighton-road, for A. E. Batten.

EASTRY.—The U.D.C. passed plans: Pearson & Dorman Long, Ltd., 66 houses at Snowdown Colliery, to be used as safety men's houses.

EPSOM.—The M.A.B. recommend that approval be given, subject to the sanction of the M.H., to certain alterations with a view to increasing the nursing staff accommodation in the north half of D block at The Downs Hospital for Children, at an estimated cost of £255.

FARNHAM.—The U.D.C. have voted the subsidy to T. D. Raper, who is to erect another 110 houses on the Earl's Farm estate.

FOLKESTONE.—The T.C. resolved that tenders be invited and the amended lay-out be approved for the six houses and nine pairs of flats.—Plans passed: A. J. Cook (owner, architect and builder), 24 houses Burrow-road.

GARSTANG.—The R.D.C. are seeking borrowing powers for the erection of 55 houses.

GLASGOW.—Messrs. Mactaggart & Mickel are to erect 174 houses in Clevedon-road. Plans have been prepared by the City Engineer for a welfare centre to be erected at Black-street. Special firms are to be invited to quote for the various works required at the new lavatory block in the quadrangle of the old Municipal Buildings. The Tramways Committee are considering the Consulting Engineer's proposals for the removal of the subway station in St. Enoch-square, and the provision of new station facilities.

GLOSSOP.—The Corporation are negotiating with the L.N.E.R. regarding the proposed railway station at Gablesley.

GOOLE.—The West Riding C.C. propose to erect a new elementary school with accommodation for 600 children.—The U.D.C. has received sanction to borrow £24,348 for the erection of 46 houses on the Westfield-avenue site.

GRAVESEND.—The Corporation are negotiating with the M.H. regarding the suggested provision of new buildings for the isolation hospital.—A committee has been appointed to consider the establishment of a cattle market in the town.—An underground convenience is to be provided at a cost of £2,500.

GREAT OUSEBURN.—The R.D.C. has passed a recommendation of their Housing Committee that, with the approval of the M.H., the Council build 200 houses during the next five years.

HALIFAX.—The T.C. are borrowing for the erection of 60 houses on the Nursery-lane site.

HAMPTON WICK.—The U.D.C. passed plans for seventeen houses on the Wooding Land, by Bushy Park Cottage, in Park-road.

HASTINGS.—Municipalisation of the bathing arrangements, with the provision of concrete bathing cabins, is being considered.

HENDON.—Within the next two years, it is stated, houses to the value of £5,000,000 or £6,000,000 will be erected in the neighbourhood of Hendon, at prices ranging from £750 to £6,500.

HIG WOOD.—The M.A.B. recommend that the provision, at an estimated cost of £375, of verandahs to the infirmary block at High Wood Hospital for Children, be approved, subject to the sanction of the M.H. The Board recommend that the provision at an estimated cost of £150 of an open-air classroom at High Wood Hospital for Children be approved, subject to the sanction of the M.H.

HORNSEY.—The M.H. held an inquiry into the application of the Finchley, Hornsey, and Wood Green Councils for permission to borrow £31,360 for the extension of their joint isolation hospital.

HOVE.—The T.C. passed plans: Messrs. E. E. Brown & Co., for Sir Francis Lowe, 14 houses in flats, St. Leonard's-avenue.

HULL.—Messrs. J. H. Fenwick & Son, Ltd., and A. J. Darneley & Son, Ltd., are asking if the Corporation were prepared to receive competitive tenders for the erection of brick-built houses, and the T.C. resolved that they deem it desirable that a further 500 houses should be erected, and that the M.H. be communicated with in accordance.

* See also our List of Contracts, Competitions, etc.

LEEDS.—Plans for the new church of St. Wilfred, Harehills-lane, has been approved. The estimated cost is £12,000, and the architect is Mr. Sydney Kitson, Messrs. Kitson, Parish & Ledger, of Vicar-lane, Leeds.

LIVERPOOL.—The Electricity Commission has forwarded formal sanction to the borrowing of £136,674 for the provision of main transmission lines, mains, and plant. The Corporation passed plans: R. Vens & Son, for J. Wight, 14 houses, Pinehurst-road, in Lynholme-road, 8 in Dewhork-road, 18 in New-rove; A. Brocklehurst & Co., Wesleyan school, Queen's-lane; A. Heaton, for Neeves & Lanson, 6 houses, Church-road, 3 in Prince Alfred-road; J. Watson Calve, houses each in Bull-lane and Tatton-road; L. J. Hughes, for E. H. B. Hughes, 12 houses, Fairfield-avenue.

LONDON.—The M.A.B. has instructed the provision of an operating block at the Western Hospital, at an estimated cost of £195 by direct labour. The Board recommend that approval be given to the provision of the South-Western Hospital, at an estimated cost of £6,140, subject to the sanction of the M.H., of additional staff accommodation in accordance with a plan prepared by the engineer-in-chief.

LONDON (BATTERSEA).—The L.C.C. recommend borrowing by the B.C. of £4,000 for the erection of a tuberculosis dispensary within the borough.

LONDON (BERMONSEY).—The B.C. has prepared a scheme for erecting 23 wooden temporary houses on the site of the Tanner-street Workhouse for rehousing purposes, at a cost of about £250 per house. Old houses are to be reconditioned at a cost of £1,335, to accommodate seven families. Messrs. Culpin & Dwyers have prepared a lay-out plan for the erection of 26 houses on the Salisbury-street area.

LONDON (CITY).—The Central London School District Committee's report on the scheme adopted in May for converting the probation block into an infirmary, at a cost of £24,750, as now revised, at the suggestion of the M.H., at an additional outlay of £5,170. The Committee considered the plans as revised to be satisfactory, and recommended that they should be submitted to the M.H. for general approval.

LONDON (DOWNHAM).—Another 178 houses are to be built by the L.C.C. on the housing estate.

LONDON (EDMONTON).—The M.A.B. recommend that, subject to the sanction of the M.H., approval be given to the remodelling, at an estimated cost of £30, of the w.c.'s in the male yard at Edmonton Baptist Colony.

LONDON (GREENWICH).—The B.G. are inviting tenders for proposed new workshop extension at their Sidcup home.

LONDON (HAMMERSMITH).—It is estimated that the workhouse and infirmary repairs will cost £10,000.

LONDON (ST. PANCRAS).—The L.C.C. has approved plans for remodelling the Brecknock elementary school, at an estimated cost being £38,500.

LONDON (WESTMINSTER).—The L.C.C. recommend borrowing by the City Council of an amount not exceeding £16,712 for depot purposes.

LONDON (WOOLWICH).—The L.C.C. recommend borrowing by the B.C. of £20,000 for works in connection with street widenings within the Borough.

LONDONDERRY.—Application is to be made to the Northern Ministry of Finance for the necessary loan of £10,000 for the purpose of carrying on the Banagher waterworks undertaking.

LOWESTOFT.—The Sanitary Committee of the T.C. has approved a plan prepared by the Borough Surveyor for the erection of a mortuary at the Isolation Hospital, at an estimated cost of £100.

MALVERN.—The U.D.C. propose to erect twenty-four semi-detached bungalows, for Workers', Ltd., at Poolbrook.

MANCHESTER.—A definite scheme is being launched for erecting permanent church and school premises at an approximate estimate of £7,500, for the Congregational Church Committee, at Moss Side.

MARGATE.—The Corporation are to construct, at a cost of £1,000, an improved approach to the Westbrook pavilion.

MORECAMBE.—The Borough Engineer has prepared plans for the erection of an omnibus shed in Clark-street. A scheme is to be prepared for the establishment of a market on the Poulton Hall estate. The Borough Engineer is to prepare plans for rebuilding the slaughter-houses. The Borough Engineer has pre-

pared plans for a shelter to be erected in Torrisholme Park. In connection with the proposal for the construction of a bathing pool, it is being suggested that in connection with the scheme plans should also be prepared for a concert or floral hall.

NEAR WEST KIRBY.—Caldy Grange Grammar School, near West Kirby, is to be extended at an early date.

NEWCASTLE.—The Town Surveyor of the U.D.C. submitted plans of swimming ponds and provision for hot-water baths on the north side of the Blackrock, the cost being estimated at £4,731. A new bridge is to be erected on the Tullybrannigan road, at a cost of £120.

NEWPORT PAGNELL.—The U.D.C. has approved plans for the erection of a new building for the Newport Pagnell Co-operative Society, in the High-street.

NEWRY.—The U.D.C. has approved a report and estimate for the proposed municipal electricity scheme, at £17,500.

NORTH DUBLIN.—The R.D.C. has adopted a new scheme for 98 cottages, at an estimated cost of £40,120.

NOTTINGHAM.—The County Cricket Club Committee are proposing to provide additional accommodation at the cricket ground at Trent Bridge, estimated to cost £8,000.

OMAGH.—The U.D.C. has decided to erect four blocks of semi-detached houses on the Dublin-road site, at a cost of about £680 each. The engineer has been instructed to prepare the plans.

OSSETT.—The B.E. has approved the plans for the extensions at Ossett Grammar School.

OTLEY.—The U.D.C. has asked the surveyor to prepare a reconstruction scheme for property in insanitary areas. Plans of the surveyor for band stand, convenience, shelter, &c., at Wharfmeadows, at a cost of £2,000, have been agreed to.

PENRYNDEUDRAETH.—Merioneth C.C. are seeking the consent of the Home Office to purchase the market hall for £600 for police purposes.

PENZANCE.—The Borough Engineer has prepared plans for improved lavatory accommodation on the promenade, at a cost of £500. Plans are to be prepared for the provision of additional accommodation at the cattle market by using part of the old reservoir site.

PETERBOROUGH.—The R.D.C.'s second section of the housing scheme comprised: Castor, 12 houses; Northborough, 12; Glington, 8; Maxey, 4; Etton, 4; Fengate, 14.

PLYMOUTH.—The C.B. recommend that application be made to the M.H. for sanction to borrow £11,291 for the erection of 24 flats for housing of the working classes at Pottery Quay.

PONTEFRAC.—The Yorkshire Electric Power Co., Ltd., are to erect a new electricity sub-station at Carleton Green, within the R.D.C. area.

PRESTWICH.—Mr. J. Eastwood is to erect 13 houses on the Greengate Park estate. The surveyor is to prepare a lay-out plan for houses on land at Bent Meadow. Part of the Rectory estate is to be purchased for a housing scheme.

PRUDHOE.—The U.D.C. has decided to erect 112 semi-detached houses on the Prudhoe Castle estate.

SANDERSTEAD.—Coulson and Purley U.D.C. has given consent to Messrs. Richard Costain & Sons, Ltd., to develop Addington-road, Sanderstead, as a shopping area.

SHEFFIELD.—The members of the Blackburn Wesleyan Church, Ellesmere-road, are proposing building a new Sunday school.

SHEPHEL.—The U.D.C. are to make application to the M.H. for sanction to borrow £1,130 for the purchase of land in Charnwood-road and Spring-lane as a site for the erection of working-class dwellings.

SHIPLEY (YORKS.).—The U.D.C. has approved plans for the lay-out of the Wood End estate and Pudding Hall estate, upon which it is proposed to erect 280 houses.

SAREWSBURY.—The R.D.C. decided to make application to the Ministry of Health for sanction to borrow £19,000 for a sewerage scheme at Harlescott. Plans were passed of houses to be erected by the Chatwood Safe Co., who are removing their works from Bolton to Harlescott.

STOKE-ON-TRENT.—Strong opposition to town-planning proposals by the Corporation was offered by the Chatterley-Whitfield Colliery Co. at a M.H. inquiry.

SUNDERLAND.—An inquiry has been held by the M.H. into the application of the Corporation for sanction to borrow £18,000 for the purpose of building a retaining wall under the cliffs of the Cliff Park, Roker.

SWANSEA.—Plans for the erection of new business premises at 1 & 2, Cambrian-place have been prepared. The joint architects are Messrs. Romaine-Walker & Jenkins, 6, Old Bond-street, W. 1, and Mr. E. R. Griffiths, 12, College-street, Swansea.

TANFELD.—The U.D.C. is seeking permission to erect a further 45 houses.

TRURO.—Sanction has been given for a further loan of £4,000 in connection with the conversion of market buildings into a civic hall. The Anglo-American Oil Co. have prepared plans for the proposed depot at the junction of Station Hill and Treway-road.

WALTON-ON-THAMES.—The U.D.C. recommended that Mr. Carvill be instructed to prepare sketch plans showing the lay-out for a further 50 houses of three-bedroom non-parlour type.

WAXDSWORTH.—The B.C. has received from the L.C.C. sanction for the borrowing of the loan of £94,800 for the erection of 16 houses on the Furzedown Housing estate. Application is to be made for sanction to borrow the following: Streatham Bath, erection of superstructure, additional cost, £3,600; Earlsfield Library, furniture and erection of building, £2,000.

The B.C. passed plans: Collett Building Co., Ltd., 34 houses on site bounded by Poynders-road, Clarence-road and Atkins-road, Clapham South; Wates, Ltd., (a) 24 houses in Bridgwood-avenue, Streatham, and (b) 11 houses, Glenister Park-road, Streatham, and four shops, Streatham-vale; F. J. Jee, nine lock-up garages, Viborg-yard, Danemere-street, Putney; R. Kendall, Ltd., 10 houses, Kingsmead-road, Streatham; F. Smith & Co. (Builders), Ltd., printing works, Edgeley-road, Clapham North; H. A. Smith, 18 houses, Atkins-road, Clapham South; R. H. Miller & Son, Ltd., 19 houses, Streatham-vale, 42 houses, Braeside-road, 32 houses, Abercain-road, 20 houses, Cannore-gardens, and 22 houses, Donnybrook-road, Streatham.

WARWICK.—Messrs. F. P. Trepess & Son, architects, have prepared plans for the extension of the hall at Myton School. Mr. Trepess has prepared plans for 60 parlour and non-parlour houses to be erected in All Saints'-road.

WEYMOUTH.—The Borough Surveyor submitted plans and alternative estimates for the provision of a new bowling pavilion at the Melcombe Regis gardens, and the T.C. recommended to approve the scheme providing for a new bowling pavilion with bowls room and caretaker's room, at an estimated cost of £600, and to instruct the Borough Surveyor to invite tenders for the work. The Corporation are arranging for the purchase of eighteen acres for the erection of 200 houses. A bowling pavilion is to be erected at Melcombe Regis Gardens, at a cost of £600, in accordance with plans prepared by the Borough Engineer. Extensions are proposed at the generating station at a cost of £75,000.

WILLINGTON (CO. DURHAM).—The U.D.C. has obtained sanction from the M.H. to erect an additional 30 houses by direct labour at a cost not to exceed £390 per house.

WOLVERHAMPTON.—The Corporation are considering an important scheme relating to the widening of Green-lane, Dudley-street, and Market-street, and the construction of a new road of 60 ft. average width across the Rough Hill, from Thompson-avenue to Willenhall-road. The scheme will entail the widening of two bridges and the construction of a new one. The cost of the new road and bridges is estimated at £41,740. The scheme for the transfer of the electricity generating station, &c., to the West Midland authority for £379,500 has been recommended for adoption by the Electricity Committee.

WORKSOP.—The R.D.C. has passed plans for the erection of 358 additional houses, including two shops, at Langold, in connection with the new Firbeck Main Colliery, near Worksop.

YARMOUTH.—Twelve tenders were accepted for the erection of 98 houses on the Barracks estate. For blocks of eight the prices ranged from £3,312 to £3,360. A loan of £40,500 is to be applied for.

YIEWSLEY.—The U.D.C. has approved plans for the chapel at Padcroft Boys' Home.

FIRE.

COATBRIDGE.—Damage believed to be between £9,000 and £10,000 has been done by an outbreak of fire in Whifflet Foundry, Coatbridge.

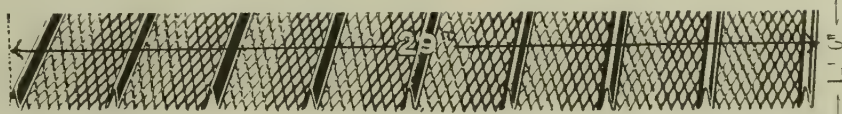
FOR FLOORS, ROOFS
AND ALL KINDS
OF
REINFORCED
CONCRETE WORK.

SELF-ENTERING
EXPANDED METAL

COMPANY

LIMITED

ACTS AS BOTH
REINFORCEMENT
AND
SHUTTERING
COMBINED.



Telephone: CITY 3201.

112, CANNON ST., E.C.4.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by Inquiry.—E.]

BRICKS, &c.

For 1,000 Alongside, in River Thames up to London Bridge.	£ s. d.
Best Stocks	4 3 6
Second Hard Stocks	3 18 6
Per 1,000, Delivered at London Goods Stations.	£ s. d.
Flettons, at	£ s. d.
King's Cross 2 13 3	Best Blue
Do. grooved for	Pressed Staffs 9 5 0
Plaster	Do. Bullnose .. 9 15 0
Do. Bullnose .. 3 8 3	Blue Wire Cuts 7 5 0
Best Stourbridge Fire Brick:—	
2 in. 8 11 0	3 in. 10 3 0
GLAZED BRICKS—	
Best White	D'ble Str'ch'rs 30 0 0
Ivory, and	D'ble Headers 27 0 0
Salt Glazed ..	One Side and
Stretchers .. 21 10 0	two ends .. 31 0 0
Headers .. 21 0 0	Two Sides and
Quoins, Bull-	one End .. 32 0 0
nose and 4 in.	Splays and
Flats	Squints .. 29 10 0
Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours, Hard Glaze, 25 10s. extra over white.	

BREEZE CONCRETE SLABS.

2 in. per yd. super	s. d. 1 11	3 in. per yd. super	s. d. 2 9
2 1/2 in. " "	2 4	4 in. " "	3 6
Thames Ballast	10 6 peryd.		
Pit Sand	13 9 " "		
Thames Sand	14 6 " "	delivered	
Best Washed Sand ..	14 6 " "	2 miles	
3 in. Shingle for Ferro-	12 9 " "	radius	
Concrete	14 0 " "	Padding-	
3 in. Broken Brick ..	11 6 " "	ton.	
Pan Breeze	7 6 " "		

Per ton delivered in London area in full van loads.

Best Portland Cement. British Standard Specification. Test £2 18 0 to £3 3 6

51s. alongside at Vauxhall in 80-ton lots.

Ferrocrete per ton extra on above. 0 10 0

Super Cement (Waterproof) .. 4 8 0

Roman Cement .. 8 15 0

Panman Cement .. 5 15 0

Keene's Cement .. 5 15 0

Pink .. 5 10 0

Plaster, Coarse, Pink .. 3 0 0

White .. 3 12 6

Thin .. 5 12 0

Sirapite, Coarse .. 3 9 0

Finish .. 3 17 0

Grey Stone Lime .. 2 11 9

Chalk Lime .. 2 11 9

Best Ground Blue Lias Lime .. 2 4 6

Hair .. 32 0 0

Granite Chippings .. 1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d. if returned in good condition within three months carr. pd.

Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dp.

STONE.

BATH STONE—delivered in railway trucks at	s. d.
Vestbourne Park, Paddington, G.W.R., or	
South Lambeth, G.W.R., per ft. cube.	2 9 1/2
Do. do. delivered in railway trucks at Nine	
Elms, L. & S.W.R., per ft. cube.	2 11 1/2
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft.	
average, delivered in railway trucks at	
Nine Elms, L. & S.W.R., South Lambeth	
Station, G.W.R. and Vestbourne Park,	
Paddington, G.W.R., per ft. cube.	4 4
Do. do. delivered on road wagons at above	
stations, per ft. cube.	4 5
White baselid, 3d. per ft. cube extra.	
NOTE.—1d. per ft. cube extra for every foot over	
20 ft. average, and 1d. beyond 30 ft.	

HOPTON-WOOD STONE—	
Delivered at any Goods Station, London.	s. d.
Small random blocks, up to 10 ft. cube. P. ft. cb.	7 0
Random blocks from 10 ft. and over ..	17 0
Sawn two sides.	27 0
Sawn three or four sides.	32 0
YORK STONE, BLUE—Robin Hood Quality.	
Delivered at any Goods Station, London.	s. d.
6 in. sawn two sides landings to sizes (under	
30 ft. super.) .. Per ft. super ..	5 6
6 in. rubbed two sides, ditto.	6 0
3 in. sawn two sides slabs (random sizes) ..	2 3 1/2
2 in. to 2 1/2 in. sawn one side slabs	
(random sizes) ..	1 6 1/2
1 1/2 in. to 2 in. ditto, ditto.	1 4
HARD YORK—	
Delivered at any Goods Station, London.	
Scalloped random blocks .. Per ft. super ..	6 3
6 in. sawn two sides landing to sizes (under	
40 ft. super.) .. Per ft. super ..	5 1 1/2
6 in. rubbed two sides, ditto.	6 1 1/2
4 in. sawn two sides slabs (random sizes) ..	2 10
3 in. ditto ditto ..	2 1 1/2
2 in. self-faced random flags. Per yd. super	9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube:—Plain, 8s. 6d.; Moulded, 9s. 6d. Chills, 10s. 0d.

WOOD.

GOOD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 x 11	28 0	3 x 6	21 0
4 x 9	25 0	3 x 11	25 0
4 x 8	24 0	2 x 11	25 0
4 x 7	23 0	3 x 9	24 0
3 x 8	21 0	2 1/2 x 9	23 0
3 x 7	20 0	3 x 4 1/2	22 0
2 1/2 x 7	20 0	3 x 4	22 0

PLANED BOARDS.

1 x 11	27 0	1 x 9	26 0
--------------	------	-------------	------

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
1	20/-	1 1/2	31/-
1 1/4	22/-	1 3/4	34/-
1 1/2	25/-		

TONGUED AND GROOVED FLOORING.

Inches.	per sq.	Inches.	per sq.
1	25/-	1 1/2	16/6
1 1/4	31/-	1 3/4	19/-
1 1/2	34/-	1	24/-

MATCHING (BEST).

Inches.	per sq.	Inches.	per sq.
1	25/-	1 1/2	16/6
1 1/4	31/-	1 3/4	19/-
1 1/2	34/-	1	24/-

BATTENS.

Inches.	s. d.	Inches.	s. d.
3/4 x 2	2 6	1 1/2 x 2	2 6

SAWN LATHS.

Per bundle	0 2 4
------------------	-------

1" AND UP THICK.

Dry Austrian Wainscot, per ft. cube	£ s. d. 0 16 0	to	£ s. d. 0 18 0
Dry American and/or Japanese Figured Oak, ft. cube	0 15 0	to	—
Dry American and/or Japanese Plain Oak, ft. cube	0 11 0	to	0 13 0
Dry sq. edged Honduras Mahogany, ft. cube	0 16 0	to	0 18 0
Dry Log cut Honduras Mahogany, ft. cube	0 18 0	to	0 1 0
Dry Cuba Mahogany, ft. cube ..	1 4 0	to	1 10 0
Dry Teak, ft. cube	0 13 0	to	0 15 0
Dry American Whitewood, ft. cube	0 11 0	to	0 14 0
Best Scotch glue, per cwt.	4 10 0	to	—
Liquid Glue, per cwt.	4 7 0	to	5 10 0

SLATES.

First quality slates from Bangor or Portmadoc carriage paid in full truck loads to London Rate Station. Per 1,000 of 1,200.

24 by 12	£ s. d. 37 12 6	18 by 10	£ s. d. 21 2 6
22 by 12	34 0 0	18 by 9	18 12 6
22 by 11	31 5 0	16 by 10	17 12 6
20 by 12	29 15 0	16 by 8	13 15 0
20 by 10	25 12 6		

TILES.

Best machine-made tiles from Brosely or Staffordshire district	£ s. d. 5 12 6
Ditto hand-made ditto	5 17 6
Ornamental ditto	6 2 6
Hip and valley tiles (per dozen) ..	0 9 6
Hand-made	0 9 0
Machine-made	0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—	£ s. d.
R.S. Joists, cut and fitted	12 10 0
Plain Compound Girders	14 10 0
Stanchions	16 10 0
In 'Roof Work	19 10 0

MILD STEEL ROUNDS.

To London Station, per ton.	£ s. d.
Diameter.	£ s. d.
1/2 in.	12 0 0
3/4 in.	11 10 0
1 in.	11 0 0
1 1/4 in. to 1 1/2 in.	10 15 0
1 1/2 in. to 2 in.	10 10 0

WROUGHT-IRON TUBES AND FITTINGS.

(Discount of List for lot of not less than 7 net value delivered direct from Works, 25 per cent. less above gross discounts, carriage forward if sent from London Stocks.)

Black Gas	60 %	50 %	60 %
Galvanised Gas	45 %	40 %	50 %
Blue Water	55 %	45 %	55 %
Galvanised Water	38 1/2 %	35 %	45 %
Red Steam	50 %	40 %	50 %
Galvanised Steam	32 1/2 %	30 %	40 %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Gutters.	Angles.	Stop Ends.
3 in.	1/2 1/2	1 1/4	3 1/2
3 1/2 in.	1 1/4	1 1/2	3 1/2
4 in.	1 1/2	1 3/4	3 1/2
4 1/2 in.	1 3/4	1 3/4	4 1/2
5 in.	1 3/4	1 5/8	5 1/2

O.G. GUTTERS.

3 in.	1/7	1 3/8	3 1/2
3 1/2 in.	1 1/8	1 3/8	3 1/2
4 in.	1 1/8	1 3/4	3 1/2
4 1/2 in.	1 10/16	1 5/8	4 1/2
5 in.	2 3	1 9/8	5 1/2

RAIN-WATER PIPES, &c.

Per yd. in 6 ft. lengths.	Pipe.	Bends, stock angles.	Branches.
2 in. plain	1 9/16	1 1/2	1 8/16
2 1/2 in.	1 11/16	1 1/4	2 0/16
3 in.	2 1/16	1 1/8	2 6/16
3 1/2 in.	2 10/16	2 1/8	2 10/16
4 in.	3 3	2 1/4	3 6/16

L.C.C. COATED SOIL PIPES—London Prices, ex Works.

Per yd. in 6 ft. lengths.	Pipe.	Bends, stock angles.	Branches.
2 in. plain	2 11	2 3	2 9
2 1/2 in.	3 5	2 6	3 5
3 in.	4 1	2 9	4 0 1/2
3 1/2 in.	4 5 1/2	3 5	4 8 1/2
4 in.	4 11 1/2	3 9	5 5 1/2

L.C.C. COATED DRAIN PIPES—London Prices, ex Works.

Per yd. in 9 ft. lengths.	Pipe.	Bends, stock angles.	Branches.
3 in.	3 3	5 9	7 8
4 in.	6 3	6 11	9 6
5 in.	7 10	12 0	16 3
6 in.	9 6	15 0	20 9

Gasken for jointing, 38/6 per cwt.

IRON—

Common Bars	£ s. d. 13 0 0	to	£ s. d. 14 10 0
Staffordshire Crown Bars—			
good merchant quality ..	14 5 0	to	15 5 0

Staffordshire "Marked"

Bars	£ s. d. 16 5 0	to	£ s. d. 17
Mild Steel Bars	10 0 0	to	11

Steel Bars, Ferro-Concrete

quality, basis price	10 0 0	to	11
Hoop iron, basis price	12 0 0	to	13
Galvanised	27 0 0	to	28

Soft Steel Sheets, Black—

Ordinary sizes to 20 g.	13 5 0	to	14
2 ft. to 3 ft. to 20 g.	14 5 0	to	15
2 ft. to 3 ft. to 22 g.	16 5 0	to	17

Ordinary sizes, 6 ft. by

2 ft. to 3 ft. to 20 g.	15 10 0	to	16
2 ft. to 3 ft. to 22 g.	16 10 0	to	17

No. 1 quality £4 per ton extra.

Flat and Galvanised Corrugated Sheets—

Ordinary sizes, 6 ft. to	18 10 0	to	19 10
--------------------------	---------	----	-------

9 ft. to 20 g.	18 10 0	to	19 10
---------------------	---------	----	-------

Ordinary sizes, 6 ft. to	19 0 0	to	20 0
--------------------------	--------	----	------

9 ft. to 22 g. and 24 g.	19 0 0	to	20 0
-------------------------------	--------	----	------

Ordinary sizes, 6 ft. to	22 0 0	to	23 0
--------------------------	--------	----	------

9 ft. to 26 g.	22 0 0	to	23 0
---------------------	--------	----	------

6 ft. by 2 ft. to 3 ft. to	22 0 0	to	23 0
----------------------------	--------	----	------

20 g. and thicker	22 0 0	to	23 0
-------------------------	--------	----	------

Best Soft Steel Sheets,	22 g. and 24 g.	24 0 0	to	26 0
-------------------------	----------------------	--------	----	------

Best Soft Steel Sheets,	26 p. by 2 ft. to 3 ft. to	25 0 0	to	26 10
-------------------------	----------------------------	--------	----	-------

20 g. and thicker	19 0 0	to	20 0
-------------------------	--------	----	------

Cut Nails, 3 in. to 6 in.	19 0 0	to	20 0
--------------------------------	--------	----	------

(Under 3 in. usual trade extras.)			
-----------------------------------	--	--	--

METAL WINDOWS.—Standard sizes, suitable for

complete houses, including all fittings, painting, coats, and delivery to job, average price ab

1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)

LEAD—Sheet, English, 4 lb. and up.	£ s. d. 46 10 0
---	-----------------

Pipe in coils	48 0 0
---------------------	--------

Soil Pipe	50 0 0
-----------------	--------

Compo. Pipe	51 0 0
-------------------	--------

NOTE.—Country delivery, 30s. per ton extra; lots und	
--	--

3 cwt., 3s. per cwt. extra, and over 3 cwt. and unde	
--	--

cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra	
--	--

Old lead, ex London area, 132 10 0	
------------------------------------	--

at Mills	33 10 0
----------------	---------

Do., ex country, carriage forward	33 10 0
---	---------

COPPER.

Seamless Copper tubes (basis) .. per lb. 1 1/2

Strong sheet .. " 2 3

Thin .. " 2 4

Copper nails .. " 2 3

Copper wire .. " 2 4

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS POS

IRON.	
-------	--

1/2 in. 1 in. 1 1/2 in. 1 3/4 in. 2 in.	
---	--

29/- 45/- 76/- 153/- 246/- 510/- per doz.	
---	--

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND

PRICES CURRENT OF MATERIALS (contd.)

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	Per Ft.		Per Ft.
15 oz. fourths .. 3½d.		32 oz. fourths	8d.
15 " thirds ... 4½d.		32 " thirds	9½d.
21 " fourths ... 4d.		Obscured Sheet, 15 oz.	4d.
21 " thirds ... 5½d.		21 "	5½d.
26 " fourths ... 5d.		Fluted 15oz. 6½d., 21oz. 9½d.	
26 " thirds ... 7½d.		En'led 15oz. 5½d., 21oz. 7½d.	

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
Rolled plate	4½d.
Rough rolled	5½d.
Figured Rolled, Baltic, Oceanic, Arctic, Stip-polyte, and small and large Flemish White ..	6½d.
Ditto, tinted	9d.
Rolled Sheet	6d.
White Rolled Cathedral	5½d.
Tinted do.	7½d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

	Per Gallon.
Oak Varnish	Outside 0 14 0
Fine ditto	ditto 0 16 0
Fine Copal	ditto 0 18 0
Pale Copal	ditto 1 0 0
Pale Copal Carriage	ditto 1 4 0
Best ditto	ditto 1 12 0
Floor Varnish	Inside 0 18 0
Fine Pale Paper	ditto 0 18 0
Fine Copal Cabinet	ditto 1 2 6
Fine Copal Flattening	ditto 1 0 6
Hard Drying Oak	ditto 0 18 0
Fine Hard Drying Oak	ditto 0 19 0
Fine Copal Varnish	ditto 1 0 0
Pale ditto	ditto 1 2 0
Best ditto	ditto 1 12 0
Best Japan Gold Size	0 12 6
Best Black Japan	0 10 6
Oak and Mahogany Stain (water)	0 12 0
Brunswick Black	0 7 6
Berlin Black	0 14 6
Knottling (patent)	1 5 0
French and Brush Polish	0 17 0
Liquid Dryers in Turbine	0 9 0
Cuirass Black Enamel	0 7 0

Mersey Tunnel.

Messrs. Edmund Nuttall, Sons & Co., Ltd., engineering contractors, of Trafford Park, Manchester, have obtained the contract for sinking two preliminary shafts and boring two headings under the Mersey in connection with the Mersey Tunnel scheme. Their tender was for £443,079, and they are to complete the work in twenty-five months. The two headings, or advance borings, will each be 15 ft. by 12 ft. in diameter, and will run one above the other. They will be widened eventually to form the complete tunnel, which is to be 44 ft. in diameter. The two shafts will be sunk simultaneously, one on each side of the river, at Liverpool and Birkenhead.

Portsmouth Road Schemes.

Portsmouth Borough Council have decided to float a loan of £750,000 for public works, including the remaking of roads and bridges and the building of new schools.

Fireproof Building in Canada.

The High Commissioner for Canada reports that Montreal will shortly have an industrial property valued at nearly a million dollars, on which not a cent. of fire insurance will be placed, as a result of confidence in the absolute invulnerability to fire of the material used in the construction of the property. The Ontario Gypsum Co., Ltd., started the construction of their branch in Montreal East last July. One of the buildings is 705 ft. long; the other, 160 ft. long, the latter being 40 ft. high and two stories, and the former, one story. The material used for the construction, namely gypsum, has been shown to be absolutely fire-proof. It was stated that an attempt to burn a gypsum building down in Toronto had failed. Products of the plant will be Gypso wall board, wall plasters of all kinds, as well as plaster of Paris, also Insulex, which is used in wall construction. Raw materials used in the manufacture of the products are to be brought from Nova Scotia. Ontario, which already has four plants of the company, produces the raw material within its own provincial borders.

Death of Mr. Harry Margrie.

The death has occurred at the age of 57, of Mr. Harry Margrie, of the firm of Margrie & Son, builders and decorators, Camberwell.

THE SCOTTISH BUILDER
NEW BUILDINGS IN SCOTLAND

Elgin.—BATHS.—The Town Council has instructed the burgh surveyor to prepare a site plan for the erection of public baths on a site at North Lodge.

Hawick.—HOUSES.—The Public Health Committee has received from the Burgh Surveyor lay-out plans for eleven blocks of three-roomed houses, eight blocks of two-roomed houses, three blocks of three-roomed houses, and three blocks of two-roomed houses—a total of 100 houses. The Town Council has recommended that this scheme be proceeded with at once.

Airdrie.—HOUSES.—The Airdrie Town Council has accepted, subject to the approval of the Board of Health, offers for an instalment of 32 four-apartment cottage houses at the Cairn-hill site. The average costs work out at £487 7s. 7d. per house. Offers were also accepted for erecting 28 slum clearance houses on the Chapelside site. These are estimated at £.96 per house.

Causewayend.—GYMNASIUM.—The Aberdeen E.C. propose to build a new gymnasium at Causewayend School.

Aberdeen.—ROAD.—The Aberdeen Town Council has adopted the report of the Streets and Roads Committee on the proposed outer ring road round the city from the Bridge of Dee to Great Northern Road, which is to be constructed at a cost of £140,500.

Torry.—SCHOOL.—The Finance, Law, and General Purposes Committee of the Aberdeen E.C. has approved of the final plans of Torry Intermediate School.

Kintore.—HOUSES.—The Town Council agreed to appeal to the Board of Health for the necessary permit to build three blocks of houses, each block for four tenants.

Glasgow.—HOUSES.—The Town Council approved the recommendation of the Sub-Committee on Sites and Buildings that an order for 500 three-apartment houses, half in concrete blocks and half in terrazzo blocks, to be erected at Govanhill, Lochburn, Maryhill, and at

Knightswood, be given to the Balshagray Building Company, subject to the adjustment of the details of the Company's offer.—The Council approved the reconstruction of Kelvin Hall, in connection with the amended lay-out plans submitted by the City Engineer. The acceptance of the offer, amounting to £162,115, exclusive of heating and lighting, and the design by Sir William Arrol & Co., Ltd., were also approved.

St. Giles' Christian Mission.

Founded in 1860 in the centre of London's slums, St. Giles' Christian Mission has for sixty-five years been in daily touch with the wants and woes of the poorest of the poor. Christmas dinners are distributed to deserving families every year, coals and blankets given in poverty-stricken homes, and toys and winter treats provided for the little ones. Such a work carried on day by day all the year round needs constant and liberal support, and further particulars can be obtained from Mr. William Wheatley, 4, Ampton-street, Gray's Inn-road, London, W.C.1, to whom all contributions should be addressed.

Mersey Tunnel Contract.

The first contract for the £5,000,000 Mersey tunnel scheme has been placed by the Mersey Tunnel Joint Committee with Messrs. Edmund Nuttall, Sons & Co., Ltd., a Manchester firm of engineers. The contract is for the preliminary sinking of shafts and erection of headings. The amount of Messrs. Nuttall's tender was £443,079. The work is to be completed in 25 months.

South Yorkshire Architects.

We have received the thirty-seventh annual report of the Sheffield, South Yorkshire and District Society of Architects and Surveyors. A very successful year is recorded, under the presidency of Mr. H. L. Paterson, F.R.I.B.A. We notice that Rotherham Bridge, one of the few ancient bridges with a chantry chapel, was threatened with demolition to make way for a new bridge during the year, and mainly owing to the representations made to the Ancient Monuments Department of the Office of Works by the Society it has been saved.

BUILDING TRADE WAGES IN SCOTLAND.*

THE following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers—Masons', Bricklayers', Plasterers'.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/7	10½d. to 1/1
Airdrie	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	—	1/2½ to 1/3½
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3
Blairstown	1/7	1/7	1/7	1/7½	1/5	1/7	1/4	10d. to 1/-
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Coatbridge	1/8	1/8	1/8	1/8	1/8	—	1/6½	1/3 to 1/3½
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dumfries	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Falkirk	1/7½	1/7½	1/7	1/8	1/7	1/7	1/6½	1/2
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Greenock	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hamilton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Hawick	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/3
Helensburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Inverness	1/5	—	1/5	1/4	1/5	1/5	1/4	1/- to 1/2
Kilmarnock	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Kirkcaldy	1/5	1/5	1/5	1/5	1/5	1/5	1/4	1/3
Kirkwall	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Lanark	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Motherwell	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Perth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Stirlingshire (Eastern District)	1/8-1/10	1/8-1/10	1/8	1/8	1/7	1/8	1/6½	1/3
Wishaw	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 897.

CURRENT PRICES FOR BUILDING WORK IN LONDON

EXCAVATOR.

	s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep.... per yard cube	11	0
Add if in clay..... " " "	1	0
Add for every additional depth of 6 ft..... " " "	0	6
Planking and strutting to trenches..... per foot super	0	5
Do. to sides of excavation, including shoring " " "	1	0

CONCRETOR.

	s.	d.
Portland cement concrete in foundation 1 to 6... per yard cube	32	6
Add if in underpinning in short lengths..... " " "	7	0
Add if in floors 6 in. thick..... " " "	3	3
Add if in beams..... " " "	3	9
Add if aggregate 1:2:4..... " " "	10	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft..... " " "	2	6

BRICKLAYER.

	£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks..... per rod	30	0	0
Add if in stocks..... " " "	7	10	0
Add if in Staffordshire blues..... " " "	22	0	0
Add if in Portland cement and sand..... " " "	1	10	0

FACINGS.

	s.	d.
Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks..... per ft. super	0	0 1 1/2

POINTING.

	s.	d.
Neat flat struck or weathered joint..... " " "	0	0 3

ARCHES.

	s.	d.
Extra only to the price of ordinary brickwork :—		
Fair external in half brick rings..... " " "	0	0 10
Axed in stocks..... " " "	0	1 9
Rubbed and gauged jointed in putty camber or segmental..... " " "	0	6 0

SUNDRIES.

	s.	d.
Damp course in double course of slates breaking joint and bedded in Portland cement..... " " "	0	1 0
Setting ordinary register grates and stoves.... each	1	0 0
Setting kitchener, including forming flues, &c., with all necessary fire bricks..... " " "	4	15 0

ASPHALTER.

	s.	d.
Half-inch horizontal damp course..... per yard sup.	4	3
Three-quarter-inch vertical damp course..... " " "	8	6
3/4 inch on flats in two thicknesses..... " " "	6	3
Angel fillet..... per foot run	0	3
Skirting and fillet 6 in. high..... " " "	1	2

MASON.

	s.	d.
York stone templates fixed..... per foot cube	13	0
York stone sills fixed..... " " "	22	0
Bath stone and all labour fixed..... " " "	10	6
Portland stone fixed..... " " "	20	0

SLATER.

	s.	d.
Welsh 16 in. x 8 in. 3 in. lap, including nails.... per square	72	9
Do. 20 in. x 10 in. Do. Do..... " " "	60	9
Do. 24 in. x 12 in. Do. Do..... " " "	60	0

CARPENTER AND JOINER.

	s.	d.
Fir framed in plates..... per foot cube	5	0
Do. joists..... " " "	5	6
Do. roofs, floors, and partitions..... " " "	6	0
Do. trusses..... " " "	8	6

	s.	d.
Deal rough close boarding..... per sq. 3/8 1" 1 1/4 2"	35/6 40/- 45/-	72/-
Flat centering for concrete floor, including struts or hangers..... " " "	50	0
Do. to beams..... per ft. sup.	1	0
Centres for arches..... " " "	1	6
Gutter boards and bearers..... " " "	1	0

FLOORING.

	s.	d.
Deal-edges shot..... per sq. 3/4 1" 1 1/4 1 3/4	44/6 49/- 53/- 60/6	65/-
Do. tongued and grooved..... " " "	45/- 51/-	
Do. matchings..... " " "		
Moulded skirting, including backings and grounds..... per ft. sup.	1/6 1/9 2/0 2/6	

SASHES AND FRAMES.

	s.	d.
One-and-a-half moulded sashes or casements..... per foot super.	1	10
Two Do. Do. Do..... " " "	2	1
Add for fitting and fixing..... " " "	0	3
Deal-cased frames with 1 in. inner and outer linings, 1 1/2 in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights; average size..... " " "	3	9

DOORS.

	s.	d.
Two-panel square framed..... per ft. sup.	2/1 2/4 2/6	2/6
Four-panel Do..... " " "	2/5 2/8 2/11	2/11
Two-panel moulded both sides..... " " "	2/8 2/11 3/2	3/2
Four-panel Do. Do..... " " "	2/11 3/2 3/5	3/5

CARPENTER AND JOINER—continued.

FRAMES.

	s.	d.
Deal wrot moulded and rebated..... per foot cube	14	0
Plain deal jamb linings framed..... per ft. sup.	1/7 1/8 1 1/11	
Deal shelves and bearers..... " " "	1/4 1/6 1/9	
Add if cross-tongued..... " " "	2d. 2d. 2d.	

STAIRCASES.

	s.	d.
Deal treads and risers in and including rough brackets..... 1" 1 1/4 1 1/2 2" 2 1/2	2/1 2/4 2/9 — —	
Deal strings wrot on both sides and framed..... 1/8 2/- 2/2 2/8 —		

	s.	d.
Housings for steps and risers..... each	0	11
Deal balusters, 1 in. x 1 1/4 in..... per ft. run	0	9
Mahogany handrail: average 3 in. x 3 in..... " " "	6	0
Add if ramped..... " " "	11	10
Add if wreathed..... " " "	23	9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

	s.	d.
6 in. barrel bolts..... 8 3/4		
Sash fasteners..... 11 1/2		
Casement fasteners..... 1/5		
Casement stays..... 1/2		
Cupboard locks..... 1/5		
Rim locks..... 2/-		
Mortice locks..... 4/6		
Patent spring hinges and letting into floor and making good..... 19/-		

FOUNDER AND SMITH.

	s.	d.
Rolled steel joists..... per cwt.	16	3
Plain compound girders..... " "	19	0
Do. stanchions..... " "	21	9
In roof work..... " "	27	6

RAIN-WATER GOODS.

	s.	d.
Half-round plain rebated joints..... ft. run	1/6 1/9 2/- 2/6	2/6 3/3
Ogee Do. Do..... " "	1/9 2/- 2/6	3/3
Rain-water pipes with ears..... " "	1/9 2/7 — —	
Extra for shoes and bends..... each	4/4 5/11 — —	
Do. stopped ends..... " "	1/11 2/4 3/7 4/-	4/3
Do. nozzles for inlets..... " "	2/2 2/7 3/10	4/3

PLUMBER.

	s.	d.
Milled lead and laying in flashings and gutters..... per cwt.	61	6
Do. Do. in flats..... " "	60	0
Extra labour and solder in coated cesspools..... each	6	9
Welf joint..... per ft. run	0	6
Soldered seam..... " "	1	6
Copper nailing..... " "	0	6

	s.	d.
Drawn lead waste per ft. run	1/2 1/9 2/- 3/4 4/-	—
Do. service..... " "	1/8 2/2 2/7 3/10 —	6/9
Do. soil..... " "	— — — —	8/2
Bends in lead pipe..... each	1/2 1/8 2/1 2/10 3/6	—
Soldered stop ends..... " "	11d. 1/- 1/3 1/11 2/4 4/10	9/9
Red lead joints..... " "	2/10 3/6 4/- 4/11 6/6	9/9
Wiped soldered joints..... " "	— — — —	—
Lead traps and cleaning screws..... " "	— — — —	14/7 19/6
Bib cocks and joints..... " "	6/4 9/7 15/4 41/-	—
Stop cocks and joints..... " "	15/4 17/2 25/8 64/-	—

PLASTERER.

	s.	d.
Render, float and set in lime and hair..... per yard sup.	2	4
Do. Do. Sirapite..... " " "	2	7
Do. Do. Keen's..... " " "	3	7
Add sawn lathing..... " " "	1	7
Add metal lathing..... " " "	2	6
Portland cement screed..... " " "	2	2
Do. plain face..... " " "	3	3
Mouldings in plaster..... per 1 girth	0	1 1/2
One-and-a-half-granolithic pavings..... per yard sup.	5	9

GLAZIER.

	s.	d.
21 oz. sheet plain..... per foot sup.	0	8 1/2
26 oz. Do..... " "	1	0
Obscured sheet..... " "	1	1
1/2 in. rolled plate..... " "	0	9
1/2 in. rough rolled or cast plate..... " "	0	10 1/2
1/2 in. wired cast plate..... " "	1	4

PAINTER.

	s.	d.
Preparing and distempering, 2 coats..... per yard sup.	0	9
Knotting and priming..... " "	0	7
Plain painting, 1 coat..... " "	0	9
Do. 2 coats..... " "	1	2
Do. 3 coats..... " "	1	9
Do. 4 coats..... " "	2	4
Graining..... " "	2	3
Varnishing twice..... " "	1	9
Sizing..... " "	0	3
Flattening..... " "	0	7
Enamel..... " "	1	1
Wax polishing..... per foot sup.	0	6
French polishing..... " "	1	2
Preparing for and hanging paper..... per piece, 2/- to 4/-		

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10 % on the prime cost without establishment charges. A percentage of 1 1/2 should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes accepted. † Denotes provisionally accepted.
‡ Denotes recommended for acceptance.
§ Denotes accepted subject to modification.

ALTON.—New infirmary, for the B.G. Mr. J. A. Smith, F.R.I.B.A., architect, 8, Cross-street, Basingstoke:—

Goddard & Son, Farnham	£22,687	0	0
W. J. Harris, Basingstoke	21,673	0	0
Mowlem Co., London	21,323	0	0
Chapman, Lowry & Puttick, Hindhead	20,956	0	0
D. J. Kemp, Alton	20,950	0	0
Marden, Ball Co., Farnham	20,249	11	6
W. H. Tigwell, Basingstoke	19,998	0	0
Caesar & Sons, Liphook	19,652	0	0
Goodall & Sons, Basingstoke	19,190	0	0
Pool & Son, Hartley Wintney	19,042	0	0
*Musselwhite & Son, Basingstoke	18,992	0	0

(Accepted subject to approval of M.H.)

ASHTED.—Gymnasium at Ashted Park School, for the City Corporation:—

*Cromptley Bros. £1,530

BARNSELEY.—One hundred houses in connection with the Hunningley-lane, Ardsley, scheme, for the C.B.:—

Per house.	
Beaumont & Marshall—50 houses	£420
C. K. Taylor—50 houses	420

BARNSELEY.—Eighty houses in connection with the Pontefract-road scheme, for the C.B.:—

†Fairhurst Bros. each £420

BARNSELEY.—Building work at the Soughley pumping station, for the C.B.:—

†Loudley Bros., Stocksbridge ... £1,595 16 11

BARNSELEY.—Pump house and attendant's bungalow, at Soughley-lane, near Wortley, for the C.B. Waterworks Engineer, Doncaster-road:—

A. Squire, Barnsley	£1,947	0	0
D. Brearley & Sons, Deepcar	1,680	0	0
Smith & Heywood, Shipley	1,655	4	4
†Lindley Bros., Stocksbridge	1,595	16	11

BERKHAMSTED.—Repairs to the exterior of the Council cottages at Northchurch, for the R.D.C.:—

*Bunn & Green.

BLACKPOOL.—Construction of proposed terrace walls, steps leading from the Italian gardens, and the construction of proposed walls, and steps to harbour terrace in the public park, for the C.B.:—

†Atherton Bros. (Blackpool), Ltd.

BROMLEY.—Thirty-six houses in Link-way and on the south side of Mosul-way, for the T.C.:—

†C. J. Ward & Co.

BURTON-ON-TRENT.—Alterations to certain property in Bridge-street, consequent upon the widening of Burton bridge, for the T.C.:—

*G. Hodges & Son, Burton-on-Trent ... £449

CAMBRIDGE.—Timber-frame houses for the T.C.:—

Coulson & Sons, Ltd.	£1,380	0	0
J. R. Bennett & Sons	1,247	0	0
Philo & Berry	1,235	0	0
Johnson & Bailey	1,168	0	0
H. W. Hunt	1,160	0	0
Clark & Sons	995	0	0
†J. Brignell	925	10	

CASTLEFORD.—For the alteration of canopies in Princess-street, for the U.D.C.:—

*W. Townsend.

CHARTHAM.—Cinema operating room at a site situated at the Kent County Mental Hospital, for the Committee:—

*G. Browning, Canterbury ... £120

CONWAY.—Strengthening and extension of the embankment adjacent to the Conway Suspension Bridge, for the Commissioners of Conway Suspension Bridge:—

*Yorkshire Hennebique Construction Co., Leeds.

DEWSBURY.—Wiring of 179 houses on the Ravens Lodge housing estate, for the Corporation:—

*W. Angus.

DODWORTH.—Detritus pits and screening chambers in duplicate, Dortmund settling tanks, circular filter beds and humus tanks, &c., for the U.D.C. Messrs. W. H. Radford & Son, engineers, Nottingham:—

*J. Bentley & Co., Bradford ... £6,900

DUNMOW.—Houses, for the R.D.C.:—

†T. Harris, Aythorpe Roding ... £850

Four houses—

†Mr. Martin, Bambois Green, Takeley ... £1,630

Two houses—

†Mr. Martin, Hole Hill, Takeley ... £825

EAST BARNET.—Practical instruction centre at Victoria-road C.C. girls' school, for the Herts C.C. Lieut.-Col. A. E. Prescott, County Architect and Surveyor, County Offices, Hatfield:—

R. Ginn & Sons, Hertford	£3,350	0	0
W. & T. Briers, Borehamwood	2,862	15	9
Frank Parvin, Ltd., Mill Hill	2,745	9	10
Mattcock Bros., Wood Green	2,729	0	0
Kempster & Williams, Watford	2,469	0	0
†C. J. Newby & Bros., Southgate	2,209	12	4

EAST HAM.—Convenience on Wanstead Flats, for the B.C.:—

†W. J. Cearns ... £1,989

EAST HAM.—Block of eight double tenement houses, on the Central site, for the B.C.:—

†S. E. Moss ... £9,420 0 8
(Subject to the consent of the M.H.)

ELLAND.—Painting the District Secondary school, for the Governors. Quantities by the West Riding C.C.:—

*Ramsden Collins & Sons, Stainland ... £235

FOLKESTONE.—Women's convenience in Beach-street, for the T.C.:—

†T. Cole ... £265

FROME.—Twenty-four houses, for the U.D.C.:—

*E. Loxley ... £10,251

GOLBORNE.—Twenty houses on the Edge Green-lane housing site, for the U.D.C. Mr. J. Ford, architect:—

Per house.

W. Bridge & Co., Warrington—

Parlour type (4 houses) ... £720 0 0

Scullery type (16 houses) ... 705 0 0

R. & S. Smith, Warrington—

Parlour type (4 houses) ... 525 0 0

Scullery type (16 houses) ... 475 0 0

P. McLachlan, Warrington—

Parlour type (4 houses) ... 523 14 7

Scullery type (16 houses) ... 456 10 3

W. Peak, Warrington—

Parlour type (4 houses) ... 545 0 0

Scullery type (16 houses) ... 477 10 0

Clough & Gaskell, Ltd., Wigan—

Parlour type (4 houses) ... 540 0 0

Scullery type (16 houses) ... 470 0 0

A. Bywater & Sons, Wigan—

Parlour type (4 houses) ... 590 0 0

Scullery type (16 houses) ... 530 0 0

*Byron Bros., Hindley—

Parlour type (4 houses) ... 529 0 0

Scullery type (16 houses) ... 473 0 0

GLASGOW.—Wellfare clinic at Elder Park, for the T.C.:—

†Brodie Campbell & Co., Ltd. ... £2,534 2 2

GLASGOW.—Iron railings for (a) Hamiltonhill extension; and (b) Springfield and Kinnear roads housing schemes, for the T.C.:—

†A. & J. Main & Co., Ltd. ...

(a) ... £1,686 1 4

(b) ... 1,333 3 11

GLASGOW.—Five hundred steel and timber houses, for the Corporation:—

*Messrs. Cowieson.

GOOLE.—Forty-six houses on the Westfield-avenue site, for the U.D.C. Mr. J. H. Castle, engineer and surveyor:—

†Platt & Featherstone, Goole ... £24,331 8 4

GRAVESEND.—Boiler house building extension for the T.C.:—

†Hopkins & Sons ... £1,300

HARROGATE.—Church tower at St. Peter's Church, for the Trustees. Mr. Gibson, F.R.I.B.A., architect:—

*A. Hyman, Harrogate ... £5,800

HIGH WOOD.—Structural alterations to The Rowans, 1 and 2, and Infirmary at High Wood Hospital for Children, for the M.A.B.:—

C. H. Boyd & Son, Ltd., Paddington ... £272

W. Simms, Stepney ... 195

†Harris Bros., Billericay ... 160

HECKMONDWIKE (YORKS).—New Wesleyan Sunday schools at Robertstown. Messrs. R. Castle & Son, architects, Cleckheaton:—

*Masons—Shepley Bros., Roberttown.

*Joiner—J. Greaves, Liversedge.

*Plumber—J. Bancrofts, Liversedge.

*Plasterer—F. Boothroyd, Robertstown.

*Slater—Amos Thompson, Liversedge.

*Painter—F. Akers, Cleckheaton.

HEMSWORTH.—Construction of a new sewerage works in connection with the Upton and Elmsall sewerage scheme. Mr. W. T. Lynam, Engineer to the Council, Market-street, Cross Hill:—

*J. Bentley & Co., Bradford ... £13,533 2 7

LEEDS.—Repairing lightning conductor and pointing the chimney to the boiler house at the Bramley Institution, and also for similar work at the Holbeck Institution, for the B.G.:—

*Waring & Tomlinson, Leeds.

LEYBURN.—Reservoir, intake chamber, compensation tank, and cast iron pipes, for the R.D.C. Mr. F. J. Rodwell, engineer, 37, Prudential Buildings, Park-road, Leeds:—

*R. May, Leyburn ... £2,898 15 2

LINCOLN.—Sixty-nine non-parlour type houses and 37 parlour type houses on the Doddington-road site, for City Council:—

†S. & R. Horton & Son, Ltd. ... £53,275

LONDON.—New convenience, Flat Iron-square, for the Southwark B.C.:—

F. Green & Sons ... £2,095

W. Downs, Ltd. ... 2,048

†G. Marsland ... 1,975

†G. Newton & Hill ... 1,920

LONDON.—Alterations at St. Margaret's Hospital, for the M.A.B.:—

A. H. Inns, Ltd. ... £170 0 0

J. Hocking & Co. ... 157 0 0

W. S. Sharpin ... 151 18 4

J. Darch, Ltd. ... 144 10 0

†H. A. Thomas & Son ... 124 0 0

(All of London.)

LONDON.—Remodelling of infants' department at Waldron-road, Wandsworth, for the L.C.C.:—

James Carmichael (Contractors), Ltd. ... £8,784

B. Colley & Sons, Ltd. ... 8,747

Leslie & Co., Ltd. ... 8,480

G. E. Wallis & Sons, Ltd. ... 8,276

G. Parker & Sons, Ltd. ... 8,270

Holliday & Greenwood, Ltd. ... 8,212

J. Garrett & Son ... 8,167

H. H. Hollingsworth & Son ... 8,098

W. S. Barton & Co. ... 7,947

J. & C. Bowyer, Ltd. ... 7,893

A. Roberts & Co., Ltd. ... 7,679

†Lole & Co. ... 7,484

W. Akers & Co., Ltd. ... 6,946

The Architect's comparable estimate is £7,714 (All of London.)

LIVERPOOL.—Warehouse, Cunliffe-street, for the Pierles Refinery Co. Messrs. Campbell & Honeymell, architects, 51, North John-street:—

*Builders work—R. Waring & Sons, West Derby.

*Steelwork—Rooinson & Kershaw, Manchester.

*Plumbing—W. Pearsey, Liverpool.

LYME REGIS.—Church hall, for the parish of St. Michael's, Church-street. Mr. J. H. Blizard, F.R.I.B.A., Lansdowne House, Castle-lane, Southampton:—

Wort & Way, Salisbury ... £3,987

Jesty & Baker, Weymouth ... 3,655

Bird & Pippard, Yeovil ... 3,650

Wise & Lansell, Winchester ... 3,649

A. & F. Wiscombe, Lyme Regis ... 3,598

Spiller, Chard, Somerset ... 3,298

Warren Bros., Lyme Regis ... 3,265

Caddy & Sons, Lyme Regis ... 3,228

*Halle, Lyme Regis ... 2,875

MACCLESFIELD.—Alterations and additions at the Union Offices, Prestbury-road, for the B.G. Messrs. Whittaker & Bradburn, architects, 19, King Edward-street:—

Cooper Bros. ... £1,088 0

Cooke ... 1,078 0

E. & A. Tuth ... 1,073 10

J. Wellings & Son ... 1,070 0

G. Roylance & Co. ... 1,060 0

N. Cumberbrick ... 1,052 0

S. Bull & Son ... 1,022 0

*Gorton & Wilson ... 998 0

(All of Macclesfield.)

MALDON.—Twenty-four dwellings, for the R.D.C. Mr. W. Almond, Surveyor and Engineer:—

Six houses, Woodham Walter—

P. C. Sayer, Great Totham ... £2,634 1 1

Six houses, Woodham Mortimer—

P. C. Sayer, Great Totham ... 2,567 15 0

Six houses, Mayland—

W. Dowsett & Sons, Bradwell-on-Sea ... 2,406 0 0

Six houses, Stow Maries—

H. Gurton & Son, Wickham Bishops ... 2,466 2 4

(Subject to approval of M.H.)

Unfortunately this tender was published in our last issue under the title of Dunmow.

MALDON.—Bungalow on the recreation ground, for the T.C. Borough Engineer:—

A. Baxter, Maldon ... £735 0

*A. G. Smith, Maldon ... 552 15

OSWESTRY.—Eighteen houses at Weston Rhyn site, for the R.D.C. Messrs. Berrington & Son, architects, Prudential Chambers, Lichfield-street, Wolverhampton:—

W. A. Sherratt, Church

Stretton ... £10,626 15 0

Shrewsbury Building Contractors, Shrewsbury ... 10,584 0 0

W. H. Woodhouse, Hanwood ... 10,360 12 0

J. C. Vaughan, Oswestry ... 10,036 10 0

Miles Bros., Rhos, Wrexham ... 9,074 0 0

Francis Roberts & Sons, Trevor, Wrexham ... 8,828 13 0

*Wm. Griffiths & Sons, Ellesmere, Salop ... 8,568 18 6

SEAHAM HARBOUR.—Fifty-six houses on the Carr House estate, for the U.D.C.:—

†W. Tomlin ... £22,288

(In lieu of Cairns & Son.)

SHEFFIELD.—Painting and repairing the interior and exterior of offices, in Commercial-street, for the T.C.:—

*Francis A. Tinker & Sons, Ltd., Sheffield ... £257 8

SOUTHEND-ON-SEA.—Public conveniences at Chalkwell Park, for the C.B. Mr. R. H. Dyer, Borough Engineer:—

*J. O. & H. Matthews, Southend-on-Sea ... £1,994 5 4

SURBITON.—Fifty houses at Tolworth, for the U.D.C. Mr. Joseph Hill, F.R.I.B.A., architect. Quantities by Mr. Henry Riley, F.S.I.:—

*Thorogood Bros. & Son, Surbiton ... £21,249

SUNDERLAND.—New business premises in High street West and Bridge-street corner. Mr. J. Eltringham, architect, 69, John-street:—

SUTTON-IN-ASHFIELD.—Twenty parlour and 28 non-parlour type houses, for the U.D.C. Messrs. Warner & Boccock, architects and surveyors, Mansfield-road:—

R. Moore, Mansfield	£24,280	0	0
W. & J. Bains, Kirkby-in-Ashfield	23,968	0	0
Saunt & Barton, Langwith	23,700	0	0
J. Harvey, Mansfield	22,723	0	0
G. H. Brentnall, Riddings	22,330	0	0
H. Taylor, Sutton-in-Ashfield	21,915	14	6
Bodill & Sons, Hucknall	21,783	0	0
J. Keeling, Sutton-in-Ashfield	21,585	0	0
T. G. Walton, Sutton-in-Ashfield	21,461	0	0
J. Evans, Sutton-in-Ashfield	21,350	0	0
G. Hutchinson & Son, Ltd., Sutton-in-Ashfield	20,670	0	0
J. Searson, Sutton-in-Ashfield	19,815	0	0
H. E. Whitehead, Mansfield	19,450	0	0
*C. H. Hill, Mansfield	19,140	0	0

TOOTING.—Alterations at Tooting Graveney School, for L.C.C.:—

J. Garrett & Son	£459	0
J. Potterton & Sons	454	19
W. Hammond	450	0
H. S. Lee, Ltd.	436	0
J. & C. Bowyer, Ltd.	410	0
Bridge & Co.	399	0
Triggs & Co.	394	0
Snelling & Rayment	387	0
*T. Brown & Son	380	0
Architect's comparable estimate	£454	0

VIRGINIA (CO. CAVAN).—New roof, plastering, &c., at Lurgan R.C. Church, for the Rev. B. Gaffney, Mr. Michael Grace, M.Inst.M. & C.E., Oldcastle:—

M. McPartland, Cavan	£3,246
D. Cole, Newry	2,414
T. Corrigan, Virginia	2,287
T. McManus, Cavan	2,235
Jno. J. D'Arcy, Clonmellon, co. Westmeath	2,142
F. Delaney, an Uaimh, co. Meath	2,093
*Michael Reynolds, Eslin Bridge, Mohil, co. Leitrim	1,899

WANDSWORTH.—Erection and fitting up of the Streatham public swimming bath, for the B.C. Borough Engineer:—

†E. D. Winn & Co., Ltd.	£37,750
-------------------------	---------

WATFORD.—For (a) twelve cottages at Batter's Green, near Radlett; and (b) sixteen cottages at Sarratt, for the R.D.C. Mr. E. Lailey, architect, 9, Market-street:—

(a) Batter's Green.

E. Taylor, Bushey	£10,380	0	0
Margetts & Co., Elstree	7,210	0	0
W. J. Wiggs & Co., Radlett, Herts.	7,195	0	0
Payne Bros., Watford	7,122	0	0
Kempster & Williams, Watford	6,239	12	4
W. E. Ellis, Watford	6,180	0	0
E. W. Manders, Watford	6,180	0	0
*F. P. Bliss & Son, Bushey	5,936	0	0

(b) Sarratt.

Margetts & Co, Elstree	£	s.	d.
(A)	4,500	0	0
(B)	3,950	0	0
W. E. Ellis, Watford	(A)	4,020	0
(B)	3,840	0	0
Payne Bros., Watford	(A)	4,577	10
(B)	3,199	10	0
E. W. Manders, Watford	(A)	4,172	0
(B)	3,388	0	0
H. J. Matthews, Berkhamsted	(A)	4,195	0
(B)	3,282	0	0
E. J. Waterhouse, King's Langley	(A)	3,920	0
(B)	3,383	0	0
F. P. Bliss & Son, Bushey	(A)	3,956	0
(B)	3,147	0	0
*Kempster & Williams, Watford	(A)	3,946	6
(B)	3,051	15	2
R. Burgin, Boxmoor	(A)	3,909	16
(B)	3,007	0	0

WOMBWELL.—Fifty-six type "A" and 20 type "B" houses, on a site near King's-road, for the U.D.C. Mr. D. H. Roberts, L.R.I.B.A., architect, Park-street:—

56 houses type "A"	
*Thomas Barker & Sons, Loughborough	£22,344
20 houses type "B"	
*F. Switt, Wombwell	8,720

J. J. ETRIDGE, J^r Ltd
SLATING AND TILING
SLATE MERCHANTS
CONTRACTORS.

Inspections and Reports made on
OLD OR FAULTY ROOFS
in any part of the country.

Telephone: Bishops-gate 1944/5 or write,
Bethnal Green Slate Works,
BETHNAL GREEN, LONDON. E.

HIGH-CLASS
FLOORINGS
of every description in
WOOD BLOCKS. PARQUETRY
SEASONED T. & G. WAINS. OT OAK
TEAK AND MAPLE
FACTORY AND ROADWAY PAVING
STEVENS & ADAMS
LIMITED
VICTORIA MILL, POINT PLEASANT
WANDSWORTH, S.W.18.
(Phones: Putney 1700 & 2457)

FITZPATRICK & SON
MASONS & PAVIORS
Secondhand and Redressed (equal to new)
Granite Setts and Kerb.
York Paving, Crazy Paving, Rockery Stone,
Granite Spur Stones made to order.
Granite Chippings and Tarmacadam.
Granolithic and Sett Paving.
WRITE, PHONE or CALL:—
455, OLD FORD RD.,
BOW LONDON, E.3.
Phone: EAST 4808.

School & Hospital Stoves
MAKERS OF
WRIGHT'S IMPROVED and also SHORLAND PATENT
WARM AIR VENTILATING PATTERNS.
GEO. WRIGHT (LONDON) LIMITED
18, Newman St., Oxford St., London, W.1
Burton Weir Works, Rotherham.

OGILVIE & CO.,
Many years connected
with the late Firm of
W. H. LARCHELL & Co.
of Bunhill Row.
Mildmay Works, Mildmay Avenue, Islington, N.
EXPERTS IN HIGH-CLASS JOINERY.
ALTERATIONS AND DECORATIONS. ESTIMATE
FREE

Telegrams: 'Frolie, Liverpool' 'Phone 228 Bank
E. B. BURGESS & CO.
6, CASTLE ST., LIVERPOOL.
WOOD BLOCK FLOORING
AND PARQUETRY.

TERRAZZO & MOSAIC PAVINGS
Post or 'Phone (Park 1885)
details of requirements to
TURPIN'S PARQUET FLOORING CO.,
29, NOTTING HILL GATE,
LONDON. W.11.

J. GLIKSTEN & SON
LIMITED
Specialities in
SEASONED
HARDWOODS

MAHOGANY WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.

REGISTERED OFFICE AND WHARF
CARPENTERS RD.
STRATFORD
LONDON E.15

Telephone: EAST 3771 (5 lines)
Telegrams: GLIKSTEN 'PHONE LONDON

Wheatly & Co.,
SPRINGFIELD TILERIES, NEWCASTLE, STAFFS.
'Phone: Newcastle, Staffs, 101. Estd. Over 50 Years.
'Grams: "Wheatly, Trent Vale." Brand: TRITON.

SPECIALITIES.

Rustic, Sand Faced and Hand Pressed Tiles in Blue, Blue Brindled, Red, Light Brindled and Dark Brindled Colours. Extensive stocks held of many varieties of Flooring Quarries, Ridge Tiles, Garden Edging Tiles, Air Bricks, Blue Bricks, Copings, etc., etc.

Price List and Catalogue, or Illustrated Brochure of Roofing Tiles free on demand.

N.B.—ALL our products are Hand-made by the Plastic Process.

HOWELL J. WILLIAMS Ltd.
Builders
High-Class Building
and
Joinery Work
11/17, BERMONDSEY STREET,
LONDON BRIDGE, S.E.1
Telephone: HOP 202

Builders of very many well-known Banks, Office and Business premises. Our works especially convenient for City Building and fittings.

THE BUILDER

A JOURNAL FOR THE ARCHITECT AND CONSTRUCTOR.

VOL. CXXIX—No. 4,325

WITH WHICH IS INCORPORATED "THE BRITISH ARCHITECT."

DECEMBER 25, 1925

DILAPIDATIONS AND WASTE

THE law relating to dilapidations and waste, although somewhat intricate in its more minute details, is a subject which the energetic architect or surveyor of to-day recognises as of the utmost importance, and as calling for his personal and serious study. Truly, there are still those who confidently assert that they are satisfied to rely on the exercise of common sense when called on to deal with any claim for dilapidations, either in preparing the claim, checking it, or opposing it.

However, there is a growing tendency to regard the architect or surveyor as having a responsibility to foresee and, as far as possible, provide against dispute in connection with work entrusted to his supervision; and the exercise of common sense (in this as in many other matters where there is any intricacy where one, or both, of the parties is inclined to stand on his rights), likely to pave the way for, rather than to avoid, difficulties. Recent measures, such as the Housing of the Working-Class Acts, the Housing and Town-planning Acts, and the Rents Restrictions Acts, have introduced new definitions of the respective liabilities of landlord and tenant; and in cases where any of the provisions of these Acts may apply, exact knowledge is the only safe guide.

It may be said that the law relating to dilapidations is at present very much in the making, and there are many of our readers and others whose practical or professional work is affected, who would welcome more exact definitions than it is now possible to tabulate from a comparison of the rulings in recent cases.

It is clear that an architect or surveyor who is commissioned to draft the repairing covenants of a lease should be able to formulate the clauses thereof in lucid and unambiguous terms, and in the accepted phraseology of existing Acts, so as to prevent misunderstanding between the parties, or disappointment to either of them.

Familiarity with the laws in operation is yet more essential when he is commissioned to oppose or settle a claim based on any schedule of dilapidations under an existing covenant, express or implied; or to deal with such a claim where there is no particular covenant. He must be able to give full weight to each word of the written covenant in conformity with the Acts, and to bring his knowledge of general principles of law to bear on an unwritten or implied covenant. Also he may be asked to prepare a dilapidation survey report on an old building, for the purpose of putting on record its condition, so as to define the liability of the landlord and tenant as to repairs, prior to the signing of a new lease or the renewal of an existing one.

In Scotland and in Ireland, the laws differ in details, and although corresponding for the most part with those operating in England, appear on the whole to be more favourable to the tenant than the landlord.

The Ecclesiastical Dilapidations Act of 1871 and the more recent Act—the Ecclesiastical Dilapidations Measure of 1923—set

forth extensively the principles controlling the settlement of claims for dilapidations in Church properties; and these principles diverge considerably at times from those applied to the control of lay property.

At present, as a matter of fact, there is very little specific statutory law of lay dilapidations, excepting the clauses, when applicable, which occur in the Housing of the Working-Class Acts, the Town-Planning Acts and the Rents Restrictions Acts above referred to, and therefore it is all-important that all leases should contain unambiguous repairing covenants. Since 1890 the case of *Proudfoot v. Hart* was the accepted guide and precedent in the vast majority of cases; but in 1924 the decision in *Calthorpe v. McOscar*, considerably modified the law, and distinguished between the cases which were thereafter to be ruled by the one or the other of these cases.

Not infrequently the so-called dilapidation survey report of some practitioners is nothing more than an ordinary specification of works which, it is claimed, should be carried out in order to put the property surveyed in a suitable condition of repair, and no account is taken of the legal liabilities of the parties as defined by the nature of the covenant existing between them; or, where there is no covenant, the general principles of law are similarly disregarded.

Having considered these circumstances, we have concluded that it will be of interest to our readers—and certainly to all interested in the management of property—to hear that we intend in the New Year to begin the publication of a series of articles on this subject. The articles will endeavour to present the matter in a lucid manner with the minimum of legal technicality consistent with concise explanation, in order that the articles may be of practical use to the busy man, and, we hope, on occasions save time which he would otherwise spend in searching for guidance through exhaustive treatises written by lawyers for the use of lawyers—most of which are admirable as such—though not of practical use to the practising architect or surveyor.

The articles will also deal shortly with the Ecclesiastical Dilapidations Acts and the Ecclesiastical Dilapidations Measure; the various Acts, and the general principles of law operating in the interpretation of covenants of different natures in regard to lay dilapidations; the modifications of these laws in respect of various classes of property; fixtures; the liability of a tenant for life, a mortgagor and a mortgagee respectively; and the effect on the covenants of bankruptcy of one party; dilapidations in dangerous structures and in party walls and party fence walls; and many other minutiae of practical interest to our readers. The articles, the first of which will appear in our New Year double number, to be published on January 8, have been written by Mr. W. T. Creswell, Lic.R.I.B.A., Barrister-at-Law, whose articles in *The Builder* on "The Law Relating to Building" and "Arbitration in Building Disputes" will be remembered.

NOTES.

Waterloo Bridge.

If there is one feature which gives to London some real distinction as a city it is the combined effect of Somerset House and Waterloo Bridge, which form together a group of architectural value hardly to be excelled the world over. The two structures could hardly have been more harmonious and impressive had they been designed by the same hand. Looking over these and the fine line of embankment in the foreground, we see the dominant mass of St. Paul's and numberless other city churches giving charming points of distinction to the city view; amidst all the change and spoliation which is everywhere going on, this view at least is a source of continual pleasure and charm. Now, whilst we are lamenting the loss of a Regent-street which in simple dignity was one of the finest streets in the world, we are threatened with the spoliation of what is probably the one chief note of distinction in London. We do not think it is right that such a fate should be permitted by the Government of our nation.

City Development.

We protest that the fate of Waterloo Bridge should be judged as a thing apart from the general scheme of City development, of roads and bridges, and town planning generally. How can the future of London be rightly envisaged until the future of railways and tramways has been properly considered and provided for? Whether an increased volume of traffic over Waterloo Bridge is desirable or not—whether we are going to have a new bridge both east and west of it—whether the south side of the Thames is ever to have its roads and building spaces properly adjusted—whether we are really going to prevent the erection of any sort of building anywhere and for any purpose—whether we are determined to insist on something like law and order in the growth of London—these are questions which come in the forefront

of everything and demand the consideration of practical councillors. If Waterloo Bridge goes it will be an everlasting slur on the intelligence of our administration to-day, which can not only destroy a great work of art but is unable or unwilling to face the greater problem of city development and plan of which the bridge is only a part.

London Bridges.

THE reason why the record of our London bridges is one of failure and incompetence is because we have suffered from the same isolated standpoint which still actuates our councillors. Is there no one of courage and influence who can inspire our authorities with broader and finer ideals? The London Society was founded for this express purpose. Perhaps it might show a little light on our difficult and troublesome path.

Intellectual Opinion.

Is it not somewhat extraordinary that numbers of the cultured and intellectual public can accept the possible destruction of Waterloo Bridge with favour or at least with indifference, whilst at the same time they do feel a

certain sympathy with artistic ideals in a variety of other directions? We cannot but think that the indifference to the art of architecture is due to the lack of guiding influences which are so rarely exerted by those who do know and appreciate the importance of architectural art. We believe everyone is influenced by the buildings which are part of our daily life and vision, but this influence is largely subconscious, and its reality has little force when issues like those of Waterloo Bridge are presented. Amongst the many protests which have been raised, we feel nothing has touched quite so high a level as Professor Beresford Pite's letter, which we print to-day. Amongst many suggestions for the alleviation of the situation, there is, perhaps, something to be said for the adoption of Waterloo Bridge as an avenue for exclusively pedestrian traffic, which would save one of our most cherished and dignified possessions.

ON behalf of the building trade unions, opposition is aroused against the Government's decision to erect

Steel Houses for Scotland.

2,000 houses of the Weir type in Scotland. The old question of engineers' wages is again to the fore, and the claim is advanced that engineers employed in the work of housing should receive the same wages as building trade operatives, in lieu of the lower rates payable to them as engineers. Apart from the relative merits of brick, steel and concrete houses, we fail to see why engineers, when doing engineers' work, whether in connection with housing or anything else, should be paid higher wages than those with which they are ordinarily satisfied. As has been stated by employers, if the conditions demanded by the building trade unions were granted, it would mean that two sets of men working in an engineering shop would be receiving different rates of pay. This would certainly cause discontent amongst the engineers, and might lead to further disputes.



Old Half-Timber House, Chartham, Kent.



House of the late Lord Milner, Sturry.

The Dignity on the Lambeth Borough Council's housing estate at Gipsy Hill are reported to

have struck work as a protest against a statement by Alderman Edward Rice to the effect that each bricklayer takes one minute and twelve seconds to lay a single brick. It is somewhat refreshing to learn that the men resented this statement as conveying an imputation of dishonesty in restricting output, and that the motive of the strike was the vindication of their dignity. According to Alderman Rice, one of these workers would lay 50 bricks in an hour or 400 in an eight-hours' day, and if their actual performance exceeds this amount it is all to the good.

The Royal Sanitary Institute.

THE Royal Sanitary Institute, which has been working for fifty years in the cause of public health, will celebrate its jubilee by holding an Imperial Congress in London next year, from July 5 to 10. The Right Hon. Neville Chamberlain, M.P. (Minister of Health), has accepted the Presidentship of the Congress. The Congresses held by the Institute during the past fifty years have given opportunities for representatives and officers of sanitary authorities to meet and discuss the many problems

that arise in the public health administration of the country, and have also dealt with subjects of a Colonial and international interest. These meetings are of great value in stimulating public health work, and are much appreciated by members of sanitary authorities and the officers engaged in public health administration. The Lord Mayor and Corporation of the City of London are co-operating in the Congress by granting the use of the Guildhall for the opening meeting.

An Experiment in Smokeless Houses.

ANOTHER experiment is about to be made for the abatement of smoke in domestic buildings. A scheme is being prepared by the City Engineer of Leeds for nearly a hundred houses to be fitted with only gas or electricity for all heating and lighting purposes. If the experiment proves successful, future housing schemes will provide all gas, or all electricity, for streets and houses alike. The concession of one open fire for kitchen purposes is, we are told, being made for the present scheme. Should this mean more sunshine and less fog, improvement both to the health and spirits of the inhabitants should result as the method extends itself, and the buildings of our industrial cities will suffer less defacement. Leeds Town Hall, now almost black, gives



Brick Chimney Stack at Wye.

startling witness to the disastrous effect arising through smoke pollution. If the factory, in addition to the domestic house, would adopt these more sensible and hygienic methods the benefits to our cities would be almost incalculable.

Glass from Wells Cathedral.

THE overhauling of the stained glass at Wells Cathedral has given an opportunity for exhibiting in London, for a short period, two representative specimens of the glass, which have been lent for the purpose to the Victoria and Albert Museum by the Dean and Chapter. These are a panel with a figure of a trumpeting angel, which must at one time have formed part of a "Last Judgment," from the Lady Chapel, and a round of grisaille glass from the tracery of one of the windows on the Chapter House staircase. Both are good examples of English glass-painting of the first half of the fourteenth century. They will remain on view for a few weeks in Room 110 on the first floor of the Museum.

R.A. Gold Medal Sculpture.

WE illustrate on this page the sculpture group "Jacob Wrestling with an Angel," by Miss Eva D. Allan, which has been awarded the R.A. Gold Medal and Edward Stott Travelling Studentship. The group is inspired by Genesis xxxii, and represents the conflict between the spirit and the flesh. The author of this spirited group entered the R.A. Schools in December, 1922. She won both the Landseer Scholarship and Silver Medal in 1923, two silver medals in 1924, and was selected as one of the four finalists in the Prix de Rome Competition in 1925.



Jacob Wrestling with an Angel.

By MISS EVA D. ALLAN (Sculpture Group awarded R.A. Gold Medal and Edward Stott Travelling Studentship).

GENERAL NEWS

Change of Address.

Mr. R. Langton Cole, F.R.I.B.A., is retiring from the Stock Exchange on December 31. After that date, correspondence relating to those premises should be addressed to Mr. G. J. Buckingham, Surveyor of Works, at 23, Throgmorton-street, E.C. 2. Mr. Cole's address will be Abbey House, Westminster, S.W. 1. Telephone number, Victoria 6678.

Proposed Kingston Hospital Scheme.

The Kingston Board of Guardians propose the extension of Kingston and District Hospital and the addition of a nurses' home, at a cost of £100,000.

Grecian Alabaster Exhibit.

The Greek and Roman Department of the British Museum will exhibit next week a piece of Grecian alabaster representing six horsemen riding to pay homage at a shrine where a sheep is being sacrificed. The date of the work is estimated at between 600 and 500 B.C.

Mobberley Mount Everest Memorial.

A stained glass window is to be placed in Mobberley parish church to the memory of Mr. George Leigh-Mallory, who lost his life in the Mount Everest expedition.

Birmingham Art Gift.

Mr. J. A. Kenrick, of Birmingham, has given seventy-two water-colours by David Cox to the City Gallery.

Restoration of a Chantry Chapel.

The Chantry Chapel in Winchester Cathedral, built to the memory of Bishop Richard Foxe, the founder of Corpus Christi College, Oxford, has recently been restored in appearance to that of Nash's drawing, once in the possession of Dean Stephens. Instead of being solely a place to be gazed at by tourists, it is now used as a place for preparation for Holy Communion.

Sheffield City Architect.

Sixty-four candidates applied for the position of City Architect to Sheffield, at a salary of £1,000 per year, on the retirement of Mr. F. E. P. Edwards, who held the post for seventeen years.

Proposed Channel Island Church.

The Bishop of Portsmouth proposes to build a church to accommodate 300 on the island of Alderney, in the Channel Islands. Plans are being prepared by Messrs. J. H. & W. C. Mangan, architects, of 18, Guildhall-street, Preston.

A Rubens Discovered.

In an unfrequented landing of Cole Orton Hall, near Ashby-de-la-Zouch, has been found a portrait asserted to be by Rubens, and to be a better example of his work than is possessed by the National Gallery. The picture has been insured for £25,000.

Welsh National Museum.

The National Museum of Wales, Cathays Park, Cardiff, are appealing for £100,000 in order to complete the present structure.

University College.

University College, Gower-street, is appealing for £500,000 for extensions.

London Hospital Extension.

The Hospital for Diseases of the Throat, Golden-square, W., which, except for its out-patient department, has been closed for two years for reconstruction and extension, was reopened recently. Mr. Harold Goslett was the architect.

Architect's Estate.

Mr. Edgar Cronk, architect, of St. John's-road, Tunbridge Wells, left gross estate of 13,861.

Mr. James Jerman, architect, of "Coomroye," Topsham-road Exeter, has left net estate of £2,727.

COMPETITION NEWS

The Council of the Institution of Heating and Ventilating Engineers offer the following prizes for original papers on subjects connected with heating and ventilating, during 1926:—Lumby premium, £10 10s.; Sirocco premium, £10 10s.; London premium, £5 5s. The winning of an award may carry with it a medal of the Institution. The prizes will be awarded as follows:—The Lumby Premium for the best paper dealing with, or any subject connected with heating or hot water supplies. The Sirocco Premium for the best paper dealing with ventilation and the general application of fans; air washing, air conditioning, dust and fume removal, mechanical draught, &c. The London Premium for the next best paper on any subject included in the above. Competitors must be either students attending a technical institute or assistants actively connected with the business or profession of heating and ventilating in Great Britain and Ireland, and not principals or employers. Papers to be posted to Competition Committee, c.o. the Secretary of the Institution of Heating and Ventilating Engineers, not later than May 1, 1926.

Pleasure Buildings, Aberdeen.

Aberdeen Town Council propose to invite competitive designs for a dancing hall, restaurant, variety pavilion, and shops to be built at the Beach, with provision for a concert hall (not yet to be proceeded with), at a cost of £20,000. Premiums of 100 guineas and 50 guineas are to be awarded. The President of the Incorporation of Architects in Scotland will act as assessor.

Colombo Kochchikadde Slum Scheme.

The design of Messrs. Booty & Edwards, F.R.I.B.A., has been placed first in this competition.

Australian National War Memorial, Villers Bretonneux, France.

Designs are invited for the Australian National War Memorial to be erected at Villers Bretonneux, France. The competition is limited to (a) Australian architects or designers, resident in any country, who enlisted for service in the war with the sea or land forces of the British Empire; (b) Australian architects or designers resident in any country, whose sons or daughters enlisted for service in the war with the forces above-mentioned. Conditions may be obtained on application at the following offices:—(1) Military Headquarters in the capital city of each State of the Commonwealth; (2) High Commissioner's Office, Australia House, Strand, London. Designs must be delivered by April 30, 1926, to The Secretary, Department of Defence, Victoria Barracks, Melbourne; or The High Commissioner for Australia, Australia House, Strand, London. Premiums will be awarded. A deposit of two guineas (returnable) for each set of plans and conditions must accompany the application.

Designs for Marble Memorials.

Following are the awards in the third competition promoted by the Marble Merchants' Association:—

Mr. A. Stokely, 7, Tissington-street, Rotherhithe, S.E.16, second prize, £3.

Mr. A. F. B. Seares, 35, Cowper-road, Wimbledon, S.W.19, second prize, £3.

Mr. Wm. H. Bennett, 19, Collins-place, Edinburgh, third prize, £1 10s.

Mr. Chas. R. King, "Ailsa," 2, Clifton-road, S.E.25, second prize, £3.

Mr. H. G. Towndrow, 4, Wareham-street, New North-road, N.1, first prize, £5.

Fifty-six designs were sent in. We are informed that the merchants will always be pleased to receive designs and suggestions for memorials, and where such designs can be adopted they will be pleased to pay a reasonable sum for them. Designs may be sent to The Secretary, Marble Merchants' Association, Monument House, Monument-street, E.C.3.

Competitions Open.

Particulars published in "Builder."	Sending in date.
New Buildings for Liverpool College, Mossley Hill. Sir Giles Gilbert Scott, R.A., Assessor. Premiums: £500, £300 and £200. Apply to J. H. Lintern, Secretary, Liverpool College, Sefton Park-road, Liverpool.	Aug. 7 .. 1926 Jan. 1
Houses for Smaller Middle-Classes and Intellectual Workers. Held under auspices of International Federation of Building and Public Works. Prizes: 1st, 500 dollars; 2nd, 300 dollars; 3rd, 200 dollars. Write to Director-General of the International Federation, 17, Avenue Carnot, Paris.	Oct. 30 .. Jan. 14
Branch Library, Gabalfa, Cardiff. Limited to qualified architects in Cardiff. Premiums £75, £50, and £30. Mr. Sidney K. Greenslade, F.R.I.B.A., assessor. Apply, with deposit of £2 2s., to Librarian, Central Library, Cardiff.	Nov. 27 .. Jan. 16
Art Gallery and Museum, Birkenhead. Limited to competitors practising within 20 miles of Birkenhead since January 1, 1923. Premiums: £250, £175, £100. Sir Robert Lorimer, A.R.A., assessor. £2 2s. deposit. Apply Curator, Central Public Library, Birkenhead.	Oct. 16 .. Jan. 30
Australian War Memorial, Canberra. Open to architects of Australian birth. Apply High Commissioner, Australia House, Strand, London.	Aug. 14 .. Mar. 31
Royal National Eisteddfod of Wales, Swansea, Competitions: (1) National Parliament House of Wales (Prize, £100); (2) Street Facade to a Large Stores (Prize, £25); (3) Set of Measured Drawings of Architecture (Prize, £25). Apply for programme to publishers, Messrs. Morgan & Higgs, Heathfield-street, Swansea (1s. 2d. post paid). Mr. Arthur Keen, F.R.I.B.A., Assessor.	Nov. 6 .. July 12
Incorporated Architects in Scotland: (1) Rowand Anderson Medal and £100: City Art Gallery and Museum; (2) Rutland Prize (£50) for Study of Materials and Construction; (3) Prize (£10 to £15) for 3rd year Students in Scotland; (4) Maintenance Scholarship, £50 per annum for 3 years. Apply Secretary of the Incorporation, 15, Rutland-square, Edinburgh.	Nov. 6 .. —
Plan for construction of Conference Hall, for League of Nations, Geneva. International Competition, Sir John Burnet being British representative on Jury of Assessors. 100,000 Swiss francs to be divided among architects submitting best plans. Programmes with R.I.B.A., 9, Conduit-street, where intending competitors should apply. Single copies from Secretary-General, League of Nations, Geneva, on payment of 20 Swiss francs.	Jan. 2
Public Hall, Topsham. Premiums £50, £40, and £30 respectively. Mr. Walter Cave, F.R.I.B.A., assessor. Last day for questions, Jan. 1, 1926. Designs to be sent in by April 1, 1926. Conditions from the Clerk to the Parish Council, Topsham, on deposit of £1 ls.	Jan. 1 .. April 1
Secondary School for Girls, Worcester. Premiums 100 guineas and 50 guineas. Mr. Herbert T. Buckland, assessor.	Dec. 11 .. —
Public Memorial, Blackpool. Mr. E. Bertram Kirby, F.R.I.B.A., assessor. Apply to Mr. D. L. Harbottle, Town Clerk, Town Hall, Blackpool. Deposit £1 ls.	Dec. 11 .. Feb. 13
Infectious diseases hospital, Blyden, for 72 beds. (Date of application for particulars now passed)	Dec. 18 .. —
*Proposed new church, Monmouthshire	— .. —
*Proposed new school, Gosport	— .. —
*Proposed new hospital, Guisborough	— .. —

* Competitions when "warned" or vetoed by the R.I.B.A. are starred.



ROYAL ACADEMY EXHIBITION, 1925.

House Inverchapel, Loch Eck, Argyll.

MESSRS. GERALD WELLESLEY & TRENWITH WILLS, Architects.

PROBLEMS IN THE CONSTRUCTION OF BUILDINGS CONSIDERED EXPERIMENTALLY

PROFESSOR E. G. COKER, M.A., D.Sc., F.R.S., M.Inst.C.E., Professor of Civil and Mechanical Engineering, University College, London, read a paper on this subject at University College on Thursday, December 17, to members of the R.I.B.A. Mr Arthur Keen, V.P., R.I.B.A., occupied the chair.

Professor Coker said it was probably the experience of most architects, when designing a new building or altering an old one, that constructional problems arose for which no ready means of solution were known or could be devised from fundamental principles, and reliance must be placed on existing precedents in order to deal with a stress problem of a new type. Such difficulties were not likely to be less in the future, since buildings tend to increase in complexity, and especially so in cities where the business community found it necessary to concentrate in a comparatively small area, and accommodation was needed for a very large number of people who required all the conveniences of modern life for the quick dispatch of business. In recent years the want of such accommodation at a reasonable cost had been felt in the City of London and in many other places. This had led to suggestions for tall buildings in which constructional problems arose of great complexity. In a sense we were fortunate in that many of these problems had already been solved for us in other parts of the world, although new factors were bound to occur if very high buildings were constructed here similar to those found in New York and many other American and Canadian cities. Attention was drawn to some apparently simple problems during a recent alteration and extension of the Engineering Building at University College. These had to be settled at once, as they arose, but references made at the time to standard works on building construction appeared to give little precise information concerning these problems, and if a solution was indicated it was generally either a rule of thumb method, of which the origin was difficult if not impossible to trace, and often of such simplicity that it seemed unlikely to have a very substantial basis.

Direct experiments on masonry, brickwork and concrete structures were in general costly to carry out, and the results were often not capable of exact interpretation, since the probable distribution of the stresses was usually unknown beforehand and was extremely difficult to observe during the experiments. Whatever information could be gleaned was therefore obtainable from the final condition of the structure after failure had taken place. Fortunately it was not difficult to make experiments on models of walls, floors, pillars and like elements of buildings, in which the distribution of stress caused by loading could be followed with ease and accuracy nearly up to failure, and there appeared to be a considerable field of work awaiting the investigator in this direction.

In order to illustrate a procedure which might be adopted for the examination of the stress distribution in buildings, it would be convenient to illustrate the general principles of the mode of investigation followed by reference to a specific case of a brick wall, say 18 in. thick with a footing spread out to give a base of 36 in. width in three steps of 3 in., horizontally and vertically. If a short length of this wall be taken resting on a flat surface below and loaded uniformly all over its upper surface above, it would be subjected to stress throughout very similar to that experienced in a long wall loaded in the same fashion, and at and near the footing the state of stress was sure to be somewhat complicated because of the cross sectional area changing suddenly at definite intervals. If a model of this wall were constructed of transparent material and was viewed in a beam of polarised light, it was possible to find the average stress in any

part of this structure, because the loading caused the transparent material to become doubly refractive. This temporary double refraction produced by loading was a valuable means of finding the state of stress in the interior of a transparent body, especially as the stresses found could be measured with an accuracy of, say, ± 2 per cent., if sufficient care was taken, and it was moreover capable of proof for bodies which conform to the elastic law that the stresses found in such models were the same as those experienced in similar monolithic structures of similar shape loaded in the same fashion.

Turning to the problem of determining the distribution of stress in a monolithic footing for a wall taken for convenience as 18 in. thick, spread out to 36 in. by stepped intervals of $4\frac{1}{2}$ in. horizontally and vertically, the speaker said the most important matter was to determine the maximum intensity of stress and its position, and the maximum stress occurred at the ends of the junction of the wall with the footing. Indeed, nowhere else did the stress intensity approach that found at these points. In order to determine the distribution here, advantage was taken of the fact that one principal stress was zero at the contour, and in order to trace the variation in intensity of the other the movement of the purple blue band was observed for different loads, and where it intersected the contour the stress for a definite load was obtained by simple proportion. A total load of 44 lb. on the specimen, giving an average distribution on the upper part of the model of 587 lb. per sq. in. was found to produce a maximum intensity of 1,785 lb. per sq. in. at a point just below the line of junction of the wall with the footing, and on the curved fillet of 1.32 in. radius.

It would be of interest to examine the question of the effect of cutting away the stepped footings to give a sloping contour of 45° , as this problem was the starting point of this investigation, as described above. The projecting angles of the steps were under no stress, although the re-entrant angles were under stress which diminished in intensity with the spread of the base. It seemed probable, therefore, that the removal of the parts under no stress would not alter the distribution very much, even although this process involved a cut along a line tangential to the re-entrant angles. Even in a footing so drastically modified, only slight changes took place in the directions of the lines of principal stress. With a slightly increased average stress of 585 lb. per sq. in. the maximum stress fell from 1,785 lb. per sq. in. to 1,640 lb. per sq. in. In order to put this beyond all doubt, other models were made and the general result confirmed that cutting away a footing in this manner lowered the stress at the join; but this was accompanied by a modification of the stress along the contour below the join, in which there was at first a very rapid diminution of stress intensity which ultimately became almost negligible when the contour again became horizontal.

Although the chief interest in the problem was in the place of maximum stress, there were various other stress distributions which might claim attention, and one of these was the stress distribution along the longitudinal central section of the wall footing.

The effect of the external contour upon this was unlikely to be very great, although it might be appreciable, while the more or less abrupt change of section tended to produce cross stress. In the stepped footing, cross-compression stress began to appear in the wall well above the footing, and attained its maximum value at or near the junction; it then decreased in value, and ultimately became zero at a point rather below the junction of the footing with the base. The main longi-

tudinal stress showed a gradual diminution of stress as it passed through the region of discontinuity from 587 lb. per sq. in. to values which were influenced and raised by the end contact pressures.

In the case of modified footing, distributions were found of much the same kind, thus confirming the view that for this longitudinal section the influence of the contour was practically negligible and that the cross stress, although small numerically, extended a considerable distance into the wall itself. The stress distributions at other horizontal sections of the stepped footing were also of interest, but were more difficult to determine, as their average values were low. It was found necessary to increase the load on the model to give an average value of 1,470 lb. per sq. in. on the upper section in order to determine the stress intensity at the lower sections. In the stepped footing this produced some relative change at the lower section, as the maximum stresses tended to produce some permanent deformation which would tend to alter the stress distribution in its neighbourhood. The resulting distribution showed the interesting result that the vertical stress p_n across the section rose to a maximum inside the model, due to the sudden discontinuity of the contour at $\pm .5$ in. and its serrated outline. The cross stress was relatively small.

Stress Distribution in an Unsymmetrical Footing.

In some cases it was desirable and necessary to increase the basal area of a wall by footings on one side only, and this gave a cross section of an unsymmetrical character, which was of interest and importance in practical construction. It was evident that in such a case the effect of loading one end uniformly would cause a non-uniform contact loading at the other, and in general an unsymmetrical stress distribution. An opportunity was taken of examining one case by cutting off one side of the stepped footing, giving a model with end faces plane and truly parallel, and loaded in a testing machine with metal end pressure plates also kept truly parallel. The conditions of loading were therefore not such as to give uniform pressures at either end, but were rather such as to tend to the production of strains in the model which, when summed vertically, shortened the model by equal amounts at any vertical section provided contact was maintained over the end faces. This condition of loading was no doubt affected by the length of the model and the position of the change of section with reference to the ends, so that the applications of these stress measurements to practical problems of a similar nature were strictly limited, but the results were useful in forming a general idea of this type of wall problem. Under this system of load, or rather strain, the isoclinics and lines of principal stress differed a good deal from the symmetrical case, and an optical examination indicated that the greatest intensity of stress was still found at the join of the wall to the footing where a break of section occurred. As this cross section was clearly the most important one, it had been examined somewhat carefully, and measurements showed that for a mean average stress of 587 lb. per sq. in. the maximum stress was 1,450 lb. per sq. in. on one side and fell to 460 lb. per sq. in. on the other, but the fall from the maximum was very rapid and was practically complete in a horizontal distance of .2 in., measured along the section. The cross stress was not very important, since it only reached a maximum value of 160 lb. per sq. in. at .05 in. from the left hand contour.

These illustrative examples were probably sufficient to give an idea of a form of investigation on the stress distributions in buildings, which was capable of great extension, since there were any number of still more complicated problems other than the types selected which could be solved, and which would probably repay examination. It might therefore be of interest to outline the possibilities of

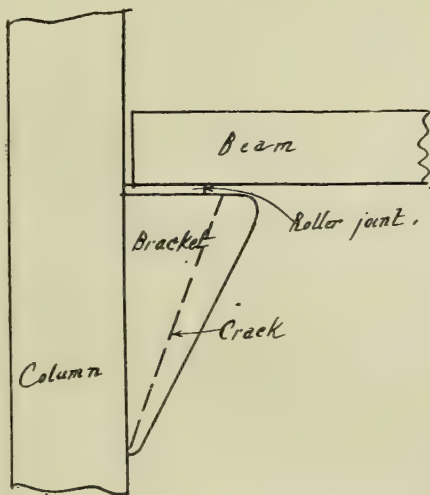
further work in this direction. No attempt had been made to reproduce the features of the construction of building made by assembling bricks or masonry blocks bonded together in various familiar ways, but it would not be difficult to construct models in which such units were cemented together, and since there was a considerable range of transparent bodies available it was also possible to build up composite structures to represent the use of materials like brick, stone, cement and steel in combination.

In particular, the question of stress distribution in reinforced concrete structures offered a very promising field of work, as experiments showed on the union of transparent materials with thin rods of organic substances of superior elasticity or of metal wires. In another direction it was found that the shaping of sections used in steel frameworks, and the riveting of these together, was quite a feasible operation, and had, in fact, been accomplished for a roof. We might, therefore, hope that further investigation of this kind on models of buildings may afford some help to architects in providing economical structures suitable for modern necessities. In conclusion he wished to express his warmest thanks to his research assistants, Mr. R. Miyasima and Miss Janet Harris, B.Sc., who had made nearly all the detailed observations described in the paper.

MR. VERNON CROMPTON (chairman of the Science Standing Committee of the Royal Institute of British Architects) said he often thought architects gave too little attention to the scientific side of building. In the medical profession doctors from time to time visited hospitals and kept in touch with the very latest developments of the science, and were, therefore, more efficient in their profession than they would be otherwise. So far as his experience went, it was very rarely that architects attended lectures such as they had had that evening to keep in touch with what the engineers were doing. It was becoming more and more necessary that architects should keep abreast of the engineering side of their profession; but as building became more and more complex it was increasingly difficult for them to deal with all the problems arising out of the erection of a large building. They could only tackle present-day building problems by going hand-in-hand with engineers, but it was absolutely essential that the whole of the engineering side of a building should not be left entirely to the engineer. Generally speaking, architects should know sufficient of the engineering side to be able to follow the engineer even in his intricate calculations so as to some extent to be able to keep control of the whole of the building operations. He thought the experiments conducted by Professor Coker would be very valuable with work such as that now going on at St. Paul's Cathedral. The results would certainly be valuable in everyday practice. Such problems as the reason for the cracks which usually appeared at the bottom of a window-jamb had, he thought, been explained that evening. The experiment which proved that the effect of stresses on an opening in a wall was much reduced if the corners were rounded seemed to put architects in somewhat of a difficulty, suggesting that all angles, whether external or internal, should be rounded if the building were to be as safe as it was possible to make it. If that were so, it seemed that reinforced concrete would be a particularly suitable material for the purpose.

DR. OSCAR FABER, O.B.E., said people did not always realise to what extent progress was due to the work in the laboratory. It was common to find the feeling that so long as an architect or engineer did sufficient work in practice he would get to know enough about any branch of his work. Up to a point that was true, but the factor of safety they had to employ in actual practice, necessary as it was, had the effect of obscuring scientific truths which underlay the experiments carried out on a large scale in the course of their everyday work. They built a certain size wall with a certain size footing, and found that they carried their load perfectly, so they were satisfied,

but they never really knew whether that wall had a factor of safety of 4 or 40. They could thus make very considerable errors in calculations without those errors ever being revealed. It was only in the laboratory that they were able to make experiments in such a way as to leave something definite. He rather preferred a different method of testing from that used by the lecturer, namely, testing to destruction. It would be found that an ordinary reinforced concrete beam would carry two or three times the load for which it was calculated, owing to the changes in the distribution of the stresses that took place due to the difference between the tensile and compressive strength, and that factor should be taken into account in making experiments. He would like to put this question: On, say, a 14 in. wall which would safely carry 30 tons to the sq. ft. the lecturer had shown that there would be two or three times the normal stress on the footings; but could they imagine in actual practice that the wall would be very much weaker at the footing than higher up? That was a point that should be considered; he did not think a wall provided with a footing would fail at any similar load, in spite of the higher stress shown in the experiments to occur at the corner of the footing. The speaker then demonstrated on the blackboard an example of the effect of compression on a projection. The case was the construction of about fifty reinforced concrete stanchions with brackets supporting beams. The beams



were supported on the brackets, and provided with metal roller joints to allow for movement due to expansion and contraction of the beams. The first stanchion to be loaded showed a fine hair crack nearly parallel with the outer face of the bracket (shown by a broken line in the diagram). To prevent this occurring in the other brackets they were heavily reinforced in a direction at right angles to the face; but this proved of no avail, as the cracks still appeared. He ultimately found that the cracks were caused by the weight of the beams being applied over about the inner two-thirds of the bracket only. The effect of this was that the part of the bracket under load was subject to compression while the other part was not, with the result that there was shear along the line between the part of the bracket under compression and the part on the outer face. The difficulty was solved by using smaller brackets, so that the whole was under compression; the cracks were caused solely by using an excess of material.

MR. E. FIANDER ETCHELLS said architects had so many problems to deal with that they were compelled to turn to simple methods, but such methods often proved misleading. It was, for instance, common to take a uniform load over the whole of a floor, but that would hardly ever be the actual condition under which the floor was used. Although they often

adopted compromises in order to avoid complexities, it was necessary to call in the specialist designer for works of any importance. The experiments described by the lecturer would have been of the greatest value to Wren in the design of St. Paul's, and had they preceded Wren St. Paul's would not have been in the condition it was in to-day. Wren assumed that all his pressures were central; that was the common practice of that time, and was in fact still used by some architects to this day, and one of the consequences was the appearance of cracks. To talk of a factor of safety of 4 was misleading, because the factor of safety was more often 2 than 4. No structure was perfect; every simple stress was affected by secondary stresses, and might affect the strength of the building by 100 per cent. The factor of safety of 4 was rather a figure of speech, and had often no relation to the facts. In connection with the experiments on the effect of compression on projections, this chiefly applied to cornices, and they need not have much fear on that account. The higher the projection, the less the weight, and therefore the less the liability to shear, so that a high cornice would be less likely to be affected in this way than a projection low down on a building.

MR. ARTHUR KEEN said they were all conscious of the tremendous progress made within recent years as a result of the work of scientists, both in materials and structure, and they were very much indebted to the lecturer for his exposition that evening.

A hearty vote of thanks to the lecturer terminated the proceedings.

THE COLLEGE OF ESTATE MANAGEMENT

The Economics of Rent.

In a recent lecture at the College of Estate Management, Professor Douglas Knoop, M.A., of Sheffield, examined the subject of situation as a determining factor in rent payments. He said that the real importance of situational rents came in connection with buildings and building sites. The shopkeeper paid this situational rent for a site which was not only accessible but was familiar to the shopping public. In the case of offices, again, it was necessary that these should be fairly central, though not necessarily in main streets, and an important factor appeared to be that an office should be in the neighbourhood of other offices where the same kind of business was carried on. It was not quite easy to see why banking offices should congregate in one quarter of a city, offices of consulting engineers in another quarter, and so on, but this was, apparently, an advantage, for which a situational rent was paid.

With the demand of the public for favourable and central sites came a demand for higher buildings; in this country height was generally conditioned by municipal regulation, but in New York the only limit to the height to which a building could be carried was determined by the deprivation of light and air in the lower portions.

The lecturer explained the meaning of ground rents. At first glance these might be regarded as economic rents—payment in respect of natural advantages of the site. But the advantages of certain urban sites could be increased by human effort, and in these cases some part of the ground rent represented interest on capital outlay or reward for risks taken.

Surveying by Air.

The Aircraft Operating Company has just completed the first aerial survey to be commissioned by the Ordnance Survey Department. The Eastbourne district was chosen for the experiment, because the uneven and varied country presents many difficulties to the aerial photographer. It is probable, if the Ordnance Survey Department is satisfied with this preliminary experiment, that aerial photography will be employed for re-mapping the whole of Britain.

CORRESPONDENCE

[While we are glad to publish letters on professional and other matters of interest to our readers, it must be understood that we do not necessarily endorse the remarks of correspondents, who will oblige us if they will express their views as briefly as possible.]

The Theory of Architecture.

SIR,—Mr. W. Martin Kaye's letter in your last issue on the theory of architecture is an admirable and well-timed analysis of the present defects in our system of architectural education. They are so obvious that one is surprised that they need to be stated at all.

It is a curious fact that in spite of all the talk about new styles for new materials our best men are still producing most scholarly work which is a real development of the best traditions of British Renaissance. From the time of Arnolfo di Cambio and Nicolla Pisano down to the time of Norman Shaw nearly all the outstanding men in the architectural, sculptural and decorative world were men who studied the masterpieces of their predecessors. Measuring and sketching of old work seems to have fallen into disfavour among students of the present day, but it is obvious that an intelligent analysis of "the reason why and the reason why not" in the design of the best examples of old work is the surest method of acquiring a sound instinct for the proper treatment of new materials in new work.

Such work by modern writers as Mr. Martin Kaye has named, have done much to prove the truth of his assertions. If the men trained under this system during the last 25 or 30 years do not seem to have justified the system, it must be remembered that since the South African War, and more so since the Great War, they have had little opportunity of using their knowledge in high-class work. One might safely say that for every real work of architecture erected there are at least 20 men qualified to undertake the work if the work could be properly distributed.

History proves that in all ages when architecture, the crafts and arts decline, a nation is on the down grade. What we have to do is to fight against the spirit of the times, and stem

the flood of economic twaddle by proving that we cannot escape the law of cause and effect.

The Premier spoke the truth when he said recently that housing in Scotland had become a national scandal (we have seen some appalling schemes south of the Tweed also), but anything the Government is likely to suggest will not be likely to improve matters. It is doubtful if the man in the street ever knew much about architecture, and it is doubtful if his so-called education would ever improve matters. What he has got to learn is that he knows nothing about it, and is never likely to know enough even to plan or criticise the design of his own house. Why everybody is supposed to know about the arts (the most subtle and complicated of all professions) will ever remain a mystery.

Ferro-concrete has come to stay, but it will have to pass through the evolution of design from being a purely structural medium to a work of art like all other materials. It took several centuries for the Romanesque to evolve into the glories of the Decorated, and the process must be repeated by natural evolution if it is to take its place permanently as a contribution to the world's art. Mr. Martin Kaye is to be congratulated on the clearness and insight shown in his letter, and it is to be hoped that it will lead to a simplification of the methods of arriving at a decision as to whether a man is or is not qualified for the status as an architect.

WILLIAM DAVIDSON.

Edinburgh.

The Incorporated Association of Architects and Surveyors.

SIR,—It is good to read that you are not in sympathy with the suggestion of Mr. Woodcock that you should not give publicity to the affairs or transactions of the newly-formed Incorporated Association of Architects and Surveyors. Mr. Woodcock's belief that, if you acted on his peevish suggestion, the new association would cease to exist is absurd. If he knew the strength of this lusty infant, and the

hundreds of architects who have joined it, he would have hesitated before making such a suggestion.

High-handed autocratic methods, if practised nowadays, invariably recoil upon the heads of the practitioners, and because many architects have sampled these methods, and have as a consequence been filled with suspicion and mistrust, they are joining an association which will guard its members' interests and treat its members as members rather than as pawns. Much has been written of the methods that have been sponsored by the body to which Mr. Woodcock belongs, and it would not serve any useful purpose to add to an already displeasing list.

Because the new association is business-like, and because it believes in its convictions that its existence is necessary for the safety of architects who are not members of the Big Body, it is bound to continue along the road of prosperity upon which it has made such a splendid start.

G. PUGH.

Durban's War Memorial.

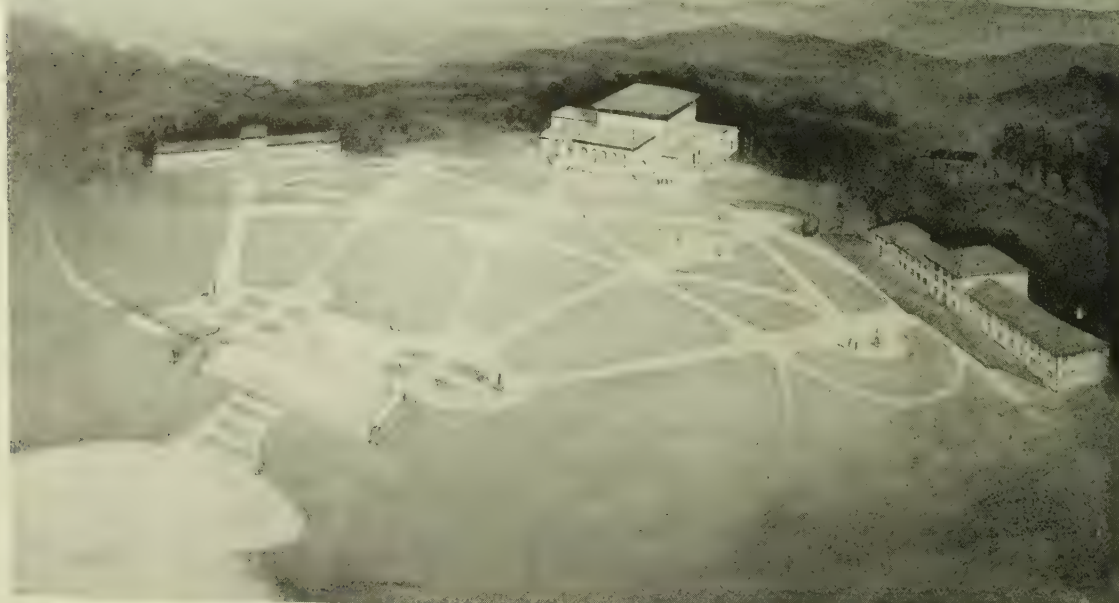
Durban's war memorial consists of a granite cenotaph, 56 ft. high, of which the architect is Mr. H. L. G. Pilkington. At the base lies the figure of a warrior, and above it sculpture representing his soul being received by two angels; this has been executed in glazed terracotta, of which there is fourteen tons, by Mr. Harold and Mrs. Phoebe Stabler, in conjunction with Messrs. Carter, Stabler & Adams, pottery makers.

American Colossal Monument.

The *Christian Science Monitor* states that a bas-relief monument is to be carved on the face of Stone Mountain. Mr. Augustus Lukeman, the sculptor, selected by the monument Association, has prepared a design showing a body of galloping horsemen, one of which, that representing General Lee, is over 153 ft. high.

A Don Quixote Memorial.

The Provincial Cervantes Committee propose to erect a 170 ft. figure of Don Quixote, mounted on Rocinante, together with Sancho and Rucio, on the Toboso plain. It is estimated that the building of this monument will take seven years, and that it will cost over £1,000,000.



Design for a Summer School for a Political Party.

By MR. F. N. ASTBURY. (Fifth-year work (Liverpool University School of Architecture).)

WATERLOO BRIDGE

MR. RONALD P. JONES, F.R.I.B.A., L.C.C., writes:—It would serve no useful purpose to give a detailed report of the speeches at the debate on Tuesday, December 15, but some account of the proceedings should be given, and in justice to the thirty-two members who voted for preservation, their names should be placed on record. As I have been a member of the Council only since last March, I could not judge beforehand how opinion would be divided, but it was evident from the moment that Mr. Gatti began his speech to move the amendment for the destruction of the bridge, that the result was a foregone conclusion. The important point which emerged from his arguments was that the 'destroyers' have not faced the problem of how to deal with the increased traffic when it reaches the Strand, and he touched vaguely on the alternative of a Strand subway, or bridge, without committing himself to either (as indeed he could not, because a few moments' inspection of the model for the subway which exists at the County Hall, will convince anyone that it would only create more difficulties than it solves).

Lord Falmouth, in seconding, emphasised the obstacles to the Charing Cross Bridge as the real solution of the question, and the dangers of underpinning as an engineering operation, which Mr. Culpin later pointed out were no greater than the dangers involved in demolition.

Mr. Norman, in opposing the amendment, argued that the Bridge Committee in their present recommendation were really consistent, and that the Council does habitually resort to outside expert opinion in deciding technical matters. He also recalled many other recent cases where the 'claims of art' (as the Report puts it) have been held to over-rule those of 'utility,' e.g., the Whitgift Hospital. Following him I claimed the privilege of a 'maiden speech,' and called in aid every argument which has been used in support of preservation, both positively on the 'claims of art,' and negatively against the 'claims of utility,' which I maintain are a complete fallacy, as in fact no one dared to assert that the six-line bridge would be of any use until the whole of the surroundings on both sides of the river have been reconstructed.

Mr. Morrison, leader of the Labour Party, made use of the curious argument that it would be impossible to find a technical tribunal, because all the available engineering talent had already declared itself on one side or the other; and repeated his claim made a few weeks ago that modern architects are quite able to produce as fine a bridge.

Mr. Culpin (of the Architecture Club, and a member of the 'Conference of Societies') dealt with this latter point, and others arising out of previous speeches. There also spoke, for the amendment, Mr. J. D. Gilbert and Mr. Tasker, M.P., and against it, Dr. Scott Lidgett, Mr. Meinertzhagen and Captain Swinton, the last in a few beautifully-phrased sentences, which he called the 'swan-song' of the bridge.

It should be noted that while the division cut across the party system and the whips were taken off, as they say in Parliamentary terms, the Labour Party at the last moment decided to insist on its members voting solid for destruction, and only one refused to be bound—Mr. Culpin, who voted for preservation. The result, however, was not affected by this, and was decided by the fifty-seven Municipal Reform members who supported the amendment.

The names of the thirty-two 'preservers' are as follows:—

Municipal Reformers: Sir F. Anderton, Miss Cazalet, Sir Cyril Cobb, M.P., Captain C. E. Cobb, E. M. Dence, Mrs. Emmet, Lady Eve, T. C. Goff, H. C. Gooch, W. W. Grantham, K.C., H. J. Greenwood, M. Hays, Miss Hill, Mrs. Hopkins, Sir G. Hume, M.P., Colonel Levita, T. Littlejohns, W. F. Marchant, E. L. Meinertzhagen, R. C. Norman, Sir L. Pound,

Dr. Adeline Roberts, H. V. Rowe, Captain Swinton, Admiral Taylor, Mrs. Worsthorne.

Progressives: H. A. Baker, Percy Harris, M.P., W. C. Johnson, R. P. Jones, Rev. J. Scott Lidgett, D.D.

Labour: E. G. Culpin.

The list includes five past-Chairmen of the Council, and the present Chairmen of the Housing Committee, Improvements Committee and Bridges Sub-Committee.

We quote the following from *The Times*. In a letter Professor Beresford Pite writes:—

"An outrage on national sentiment, that would have been considered absurdly impossible a year ago, has now become imminent, as the London County Council have decided to abrogate the most beautiful group of classical buildings now existing in the world. Ancient Rome, in its glory, never possessed such a composition as that of the masses of the Embankment walls curving under Waterloo Bridge, crowned by the majestic lines of the stories of Somerset House, with the Dome of St. Paul's as its distant peak of vision.

"As this wonderful accident of gracious art is to be sacrificed, to a necessity that is assumed rather than proved, may not the nation appeal for a judicial consideration of the whole circumstances and for a fuller elucidation of the possibilities of architectural resource? It is the opportunity for a Royal Commission. The factors of the problem, of public convenience, of scientific construction, of artistic and monumental value, as well as of economy and cost, all need educating and judgment. . . .

"No widely-conceived plan for London traffic across the river has yet been made, though the disposition of future bridges in view of modern traffic developments should be determined. The confusion, which permits St. Paul's Bridge to be promoted and abandoned, Southwark Bridge to be rebuilt and but partly used, the widening of Charing Cross Railway Bridge to be defeated, and Lambeth Bridge to be reconstructed in a *melange* of materials, is sufficiently ridiculous, though entirely characteristic, to support the plea for a new attempt to examine the whole problem and to save London from the time-lasting reproach of destroying the chief architectural beauty of its wonderful river."

Mr. F. L. Griggs, A.R.A., in the course of a letter to the same newspaper, says:—"With the recent spoliation of New London Bridge and the destruction of Waterloo Bridge, London, will not possess one of real beauty, instead of having—as it ought, with the opportunity so noble a river affords—the finest series in the world. . . . It looks as if Waterloo Bridge is to be sacrificed because a majority of the London County Council, blind to its beauty and deaf to the national appeal for its preservation, wish to demonstrate their power."

Mr. H. H. Dalrymple Hay writes:—"The question is still open as to whether it is possible or not to underpin the bridge at a reasonable cost. We say that it can be done. The Council's engineers apparently say that it cannot be done. The London County Council, as a lay body, cannot decide such a question, and the reasonable thing that ought to be done is to ask some outside, absolutely independent and impartial body to go thoroughly into the question."

Mr. W. R. Davidge, in an interview, said:—"The following points in particular require most careful consideration:—

"(1) That the east and west traffic in the Strand would be most seriously hampered by any great increase of traffic across Waterloo Bridge.

"(2) That the London and Home Counties Traffic Advisory Committee have not yet had an opportunity of considering the effect of the proposed new bridge at this point.

"(3) That it has not yet been proved that a new bridge is necessary at this point to meet the traffic needs.

"At least two-thirds of the existing bridge is in sound condition, and that only two arches out of nine actually need to be taken down."

Mr. A. R. Powys, in a statement, said:—"That the bridge can be maintained by strengthening the foundations has been proved, but there is, as yet, no conclusive evidence as to the needs of traffic, though there are very many opinions. I cannot believe that this decision is final, that a way will not yet be found to retain the bridge. If one thinks of the fine buildings that no longer add grace, beauty, and distinction to London, no single one of them, not even Newgate Prison, has hurt London and the pride of its citizens as will the destruction of Waterloo Bridge."

In his speech in the Council Chamber Mr. E. G. Culpin said that the opponents of destruction urged their claim on the following grounds:—(1) Economy: Their scheme would save an enormous amount of money. (2) Traffic: Mr. Gatti's proposal would accentuate and perpetuate traffic difficulties. A bridge with six lines of traffic would create chaos in the Strand. The solution of the Waterloo Bridge problem was a new bridge at Charing Cross. (3) Beauty: Waterloo was the only fine bridge in London. It stood a conspicuous example of architectural design, particularly "in the wonderful distinction of its junction with Somerset House." The destruction of the bridge would be an artistic tragedy—an offence against the educated opinion of the world which would never be forgotten against them. The recommendation of the Committee did not commit the Council to any immediate plan. It asked that on a matter where there was a distinct cleavage of professional opinion, they should take the calm judgment of an independent tribunal, free from the prejudices on either side; weighing judicially that evidence when brought before them. It asks that there might be this considered judgment before the verdict was given. He said that in their judgment underpinning was practicable; that the repair of the bridge would be less costly, less dangerous, and attended by less interference with traffic than the proposals for rebuilding.

AMERICAN OFFICE PRACTICE

THE conditions of architectural practice in England and America differ so widely that it is impossible to reduce them, so to speak, to a common denominator. Mr. Frederick J. Adams' little "Manual of Office Practice" is a survey of the routine of a typical American Office—is, in fact, revised and enlarged from the version compiled by the same author for use in the office of McKim, Mead and White. Hence it contains much information that, while showing the extent and intricacy of detail in American office practice, has mainly an academic interest for the British architect. The sections dealing with Ordinances and Building Code for work in and outside Greater New York, have, for all practical purposes, purely a local interest, but most of the other sections, especially those that deal with Office Administration, Hints for Draughtsmen, Checking List, and Forms, indicate directions and ways in which our own methods are perhaps susceptible to improvement. The average English office, with its one principal and two or three assistants, is not to be compared with the typical American office, with its three or more principals, its many specialist assistants, and small army of draughtsmen, and, national prejudices being what they are, it is doubtful whether the American system will ever come into force on this side of the Atlantic. Many of the working processes of architectural design are, however, common to both countries, and it is perhaps in the efficiency of its routine that the American system has most to teach the English practitioner. As a careful record of American office practice, this little book deserves a place on the bookshelf of any architect who is keen to improve or tighten up his own office organisation.

**American Office Practice*. By Frederick J. Adams (London: B. T. Batsford). Price 7/6.

BOOK REVIEWS

Florence and the Medici.

The Golden Age of the Medici. By SELWYN BRINTON, M.A., F.R.S.A. (Methuen.) 15s. net.

Those of us who have visited Florence will no doubt have seen the Botticelli, Angelico, Masaccio, and Lippo Lippi canvases and frescoes; the fictiles of the two Della Robbias and the bronzes and marbles of Donatello; to say nothing of the wondrous Lorenzo Ghiberti gates of the Baptistery, which, as Michaelangelo himself said, were worthy to be those of Paradise. All these are of the golden age of Cosimo, Piero, and Lorenzo de Medici—three generations of the Merchant Princes who ruled the destinies of Florence throughout the sixty greatest years of Florentine story, the last sixty years of the *cinque-cento*. It is of this period (1434 to 1494), in the history of the Florentine Republic, that Mr. Selwyn Brinton's well-written and illustrated book mainly treats. Amongst the thirty-two photographic illustrations of Florentine buildings and other works of art he gives us one of "The Palace and Piazza of the Signoria of Florence," "that centre and symbol of civic life" (to quote the author), where dwelt "the Supreme Magistracy who guarded her liberties and wielded her power, never leaving her walls during their term of office." Two other pictures show Filippo Brunelleschi's little gem of the early Renaissance, "The Chapel of the Pazzi"; and his masterpiece, "The Cupola of the Duomo." Another shows Cosimo's "House that Caps the Corner"—the munificent house which harboured Fra Lippo Lippi, "a painting for the great man, saints and saints and saints again." The reproductions of Sandro Botticelli's "Madonna of the Magnificat," in the Uffizi Gallery, and his "Sleeping Mars and Venus," in our own National Gallery,

are about as good as possible in black-and-white renderings.

It is a pleasure to read the author's "Golden Age of the Medici," with its lucid word pictures of the civic life of Florence, her arts and crafts, her poets, scholars, painters and sculptors, from the advent of Cosimo Pater Patrie to the exit of his grandson, Lorenzo Il Magnifico. It is a book that will appeal to the historical student, and for the merest Philistine will put life into the cold clays of the Della Robbias at South Kensington, and help him to see behind the mere paint of the Botticellis in Trafalgar Square. The final chapter, "The Fall of the Casa Medici," is a critical and judicious piece of writing, with its conclusion finishing, "Yet the message of art and scholarship which she in those days had given was, like fertilising pollen, to break forth throughout Europe into new forms of human thought; and that in the North, in those heroic states of Holland and in our own island, set in the silver sea, the torch of liberty had been caught from the dying hands of these old Italian Republics to be kept alight through the ages, and carried to new and mighty nations across the western seas."

Old English Houses. By J. ALFRED GOTCH, M.A. (Hon.) Oxon, F.S.A. P.P.R.I.B.A. With numerous illustrations. (Methuen.) 16s.

THIS book, coming from such an authority as Mr. Gotch, contains information that is authentic. The reader can be assured that the labour has been thorough, for the researches have been undertaken at first hand. This is the sixth book from the author's pen dealing with English architecture. The book opens with a description of mediæval houses; thence the reader is conducted through the succeeding centuries down to the beginning of the Victorian

era. It is a welcome change to read about old houses as laymen. To the making of books on architecture there is no limit. There are some examples of compilation consisting of a few photographs and some introductory matter. Other books are all text and no sermon; and some others exhibit that marked personal bias which is negative. When an architect with the author's ability undertakes to write for the public, professional men begin to see the value of simple statement, and wonder why books with the human touch are so few. The description of the mediæval house is written to include the materials used in the construction. The habits of the time and the standard of living then thought desirable are dealt with. There are illustrations of castles like Oakham, Warkworth, Stokesay, Bodiam, and Penshurst. As the pages are turned, it is made clear that the features of St. James's Palace in London in some part reflect the earlier tradition. Who, may we ask, even among architects, gives a thought to such matters in the press of modern life? But there is the evidence of St. James's Castle front, in the midst of London. The Tudor house has been taken by the author as reliable evidence of the social system of the Tudors as well as marking the sequence of building. From thence the reader is told of the courtyards and halls of Shakespeare's time. As the author states, "The dwellings were, of course, the product of what had gone before them; a development of much earlier houses." He writes of the classic invasion which manifested itself in the increase of horizontal lines and in the detail applied to doors and windows. Mention is made of the buildings in the University cities—the fireplaces, stairways, and furnishings. In this regard, we would draw the author's attention to the illustration of Bradninch Manor—a very old photograph which hardly does justice to the efforts of the late Mr. Locke Radford, who had been at great pains to place the original furniture in the room. The Jacobean house is summarily dismissed by Mr. Gotch, who writes: "The houses of James I's time were essentially the same as those of Elizabeth's. They had to satisfy similar wants; they were subject to the same influences in their architectural treatment." Mr. Gotch, from his vast store of knowledge, might have treated his readers to something a little fuller. As was to be expected, there is a full account of Inigo Jones, who is the hero of the first Carolean régime. We read of his early travels, of the memorable quarrel with Jonson, and of his influence on contemporary surveyors of the time, to whom must be attributed many of the minor works. Mr. Gotch might have led us a little further behind the scenes and have shown the smoke-grimed countenance of old Inigo, as he appeared when taken prisoner at Basing House in company with Wencelous Hollar. Jones passes; the way is paved for Webb; and later Christopher Wren directs the royal works and organises the rebuilding of London. Mr. Gotch skilfully interweaves his plain tale of the development of the house with statements of social life. At all stages he avoids as far as possible the tiresome introduction of dates and the equally tiresome specification manner. In treating of the small house, the author is sure of sympathy. Such examples as at Woodford, Northamptonshire, and others, recording the "broad belt of stone running from Somerset in a north-easterly direction up to Rutland," call attention to the geographical statement which is not the least attribute of old building practice. The concluding chapter treats of the Georgian house, but here we are aware of a slight disappointment. This section of the subject is so modern that every layman understands the meaning of the later houses. Whereas the older houses, except in certain districts, are few, there is a wealth of Georgian building still serving for all grades of society. We should like to see the author continuing his plain unvarnished tale in a further book to include the Victorian house and the new houses of the last fifty years. The layman wants to know the present position, and he is best helped to that viewpoint by architects who write in Mr. Gotch's humour.



Capital and Detail of Cornice, Chapel of Madonna, SS. Annunziata, Florence.

By MICHEL ZZO MICHELOZZI.

LEADING CONTENTS. PAGE

DILAPIDATIONS AND WASTE.....	907
NOTES	908
GENERAL NEWS	910
COMPETITION NEWS	910
PROBLEMS IN THE CONSTRUCTION OF BUILDINGS CONSIDERED EXPERIMENTALLY	912
CORRESPONDENCE	914
WATERLOO BRIDGE	915
BOOK REVIEWS	916
PHILIP WEBB AND HIS WORK.—XII.....	922
WEEK IN PARLIAMENT	924
LEGAL SECTION	925
ARCHITECTS' AND BUILDERS' INQUIRY BUREAU	927
THE BUILDING TRADE	928
TENANT'S LIABILITY IN RESPECT OF MAKING-UP STREETS	928
CONGRESS OF THE BUILDING INDUSTRY	929
L.C.C. HOUSING ESTATES	931
NEW BUILDINGS IN LONDON	931
CONTRACTS, COMPETITIONS, &C.	933
PROPOSED NEW BUILDINGS AND OTHER WORKS	935
NEW BUILDINGS IN SCOTLAND	937
PATENTS	937
TENDERS	939

ILLUSTRATIONS**Design for a County Hall.**

This design, by Mr. H. E. Furze, has been awarded the R.A. Gold Medal and Edward Stott Travelling Studentship (£200). A criticism of it was given in our last issue.

Design for a Parish Hall.

This design, by Mr. H. J. Coates, was awarded the first prize (£10) and silver medal in the recent Royal Academy Students' Competition for an Architectural Design.

Summer School for a Political Party.

We illustrate this week an example of recent fifth-year work, by Mr. F. N. Astbury, in the Liverpool University School of Architecture.

New House, Fourth-avenue, Hove.

This house is built in a South Water facing brick with old rustic Broseley pattern tiles on the roof. The front boundary fence consists of an oak paling mounted on a dwarf brick wall. The general contractors were Messrs. Kirk & Randall, of London, and the contract price was £3,670. The principal sub-contractors were: C. S. Jackson & Co., hot water supply, sanitary goods, and mantels; Williams & Williams, steel casements; Catchpole & Co., electric fittings; Carter & Aynsley, Ltd., ironmongery; and Pinchin, Johnson & Co., paint and distemper. Mr. F. W. Rees, A.R.I.B.A., was the architect.

Inverchapel Lodge, Argyll.

This illustration shows alterations and additions proposed at Inverchapel Lodge, Argyll. The house was originally built in 1921, the requirements of the client being for a fishing lodge for the accommodation of two or three fishermen and one or two servants. In 1923 this accommodation was found to be inadequate, and a servants' wing was added to the north-east corner of the house containing three additional servants' bedrooms and other offices. Recently, owing to the abandonment of a scheme for a larger house on the same estate, the further additions embodied in the illustrations were under consideration. The new work consists of everything to the right of and including the gable on the west front, and the house will then provide accommodation for a large drawing-room, dining-room, smoking-room, and eight best bedrooms, with six servants' bedrooms and offices. The exterior of the house is roughcast and colour-washed primrose with stone dressings; the roof is covered with small black Ballachulish slates.

The architects are Messrs. Wellesley & Wills. The general contractor, who carried out the existing work, was Mr. E. Cameron, of Dunoon, Argyll, N.B.

THE INCORPORATED ASSOCIATION OF ARCHITECTS AND SURVEYORS

Lectures on House Construction.

COLONEL PROBYN, D.S.O., M.B., B.S., D.P.H., of Lincoln's Inn, Barrister-at-Law, for some time Sanitary Specialist Officer, South China Command, and one of the Readers of the new Association's College, recently delivered a series of lectures to members of the Association on house construction from the sanitary point of view. In one of these he discussed the question of a site from a geological point of view. Soils, he said, had a great effect upon the health of a locality, and they should be considered from the point of view of their power of retaining moisture, air and heat. Porous soils (gravels, sands and sandstones) were said to be the healthiest, as they were the driest, but unfortunately they were easily polluted by leaking drains and cesspools. The presence of organic matters in the soil increased its capacity for retention of moisture. Granites, metamorphic rocks, dense clays, hard limestones and dolomites were not wholly non-absorbent, but for practical purposes might be considered waterproof. Pure chalk formed a healthy site, but there was danger of subsidence in very dry seasons. Gravel beds, if very thick, were good, but useless when shallow.

Reclaimed or alluvial lands should be avoided always, as they were notably damp. Artificial or made soils in towns should also be avoided, as they were often mere rubbish heaps full of decomposing organic matter. It was unsafe to build on such made soils unless they had been exposed to the sun and air for at least three years, and trees should be grown on such soils.

Ground air always filled the space in surface soils not occupied by water or solid particles. It was generally moist, but always impure by reason of the decomposition of vegetable and occasional organic matter and of possible contamination by sewage gases and emanations from cesspools. Sometimes these emanations were the conveyors of disease germs. We had the three great requirements present for the growth of microbes: (1) Oxygen in ground air; (2) the moisture in ground water; and (3) heat, except in winter time or in very cold climates.

Sub-soil drainage was resorted to for the purpose of carrying off ground water, when it rose to the level pipes were laid. Moisture ascended in houses by capillary attraction and showed itself on the walls of rooms. When it evaporated it would absorb the heat of the surrounding atmosphere, leaving the room cold, with perhaps a feeling of dampness which was often associated with the production of rheumatism, catarrh, bronchial and pulmonary affections, neuralgias, besides predisposing to diptheria, scarlatina, measles, and whooping cough. Pthisis or consumption was closely allied to moist soils, and this was markedly reduced in incidence when subsoil was well drained and efficient sewers were laid down. Marshy lands, which were the breeding places of the disease-carrying mosquito, were rendered healthy by drainage and the planting of trees—the latter by transpiration absorbing a lot of water. An oak tree would evaporate eight-and-a-half times the amount of rainfall over the area it covered. The eucalyptus globulus was the best tree to plant in marshy and malarious districts, because it absorbed eleven times the amount of rainfall over its area, and when mosquitoes were deprived of moisture they could not propagate, and micro-organisms could not exist without moisture.

If building was necessary in marshy districts, then houses must be erected on arches to allow air to circulate beneath; or, if made of wood, they should be built on piles. It was always better to fill in moist ground, and grass should be grown on the surface and kept closely cropped, all excessive vegetation being got rid of. Ground water should preferably not reach within 10 ft. of the surface of any site on which a house was to be built. The best means of draining the sub-soil was to use unglazed agricultural pipes laid

in trenches, filled in above with pebbly grave which allowed free percolation through the pipes and into their ends. These ends were not jointed but laid in apposition to each other and discharge took place into some ditch or stream, but never into sewers or house drains unless disconnected by a trap.

Excessive planting of trees was not good, because it favoured dampness by checking the evaporation of moisture, causing stagnation of air and cutting out the rays of the sun. They were useful as shelter from north and east winds. A south or south-east aspect for living and sleeping rooms was the best, and preferably on a gentle slope which favoured the natural drainage of the surface and subsoil water. Valleys lying in the direction of prevalent winds were drier and more healthy than those lying in other directions.

Houses without basements, when the site was not concreted over, should be raised two feet above the surface of the ground, and the intervening space ventilated by using ventilating bricks or having air grids in the outer walls. Foundations should always be protected from the access of water, otherwise they would be damp. There should always be a uniform bed for the foundation, and it should not be partly of gravel and partly of clay. Chalk foundations were not too good as cavities, &c., might lead to subsidence. Clay sites had a tendency to shrink and crack after prolonged drought; or they swelled or softened after much rain and thus injured the building.

Walls constructed of building bricks and mortar were very porous and could absorb large quantities of water. A brick would hold 16 ozs. of water and so prevent damp rising from the ground up a brick wall. A damp-proof course of slates bedded in cement or $\frac{1}{2}$ in. layer of asphalt, or slabs of perforated glazed stoneware, should be placed in the wall just above the level of the adjoining ground. We might have a layer of perforated bricks, which acted as a damp-proof course, permitting circulation of air under the floor, which would help to prevent dry-rot in timbers and joists. If damp-proof courses did not exist already, they could be inserted under old walls by removing a series of bricks piecemeal, after under-pinning the walls, and inserting perforated bricks in sections. Brick and mortar walls might be coated with cement to prevent dampness caused by driving rains. Where mortar became rotten, pointing with cement should be done after digging out the rotten mortar.

Damp walls might be temporary, as in new houses, due to evaporation of water from new bricks and mortar. They might also be due to damaged rain-water pipes or defects in gutters which allowed water to drip down the walls, soaking through bricks and mortar. Concluding, Colonel Probyn stated that on a future occasion he would deal with questions of ventilation, warming and lighting.

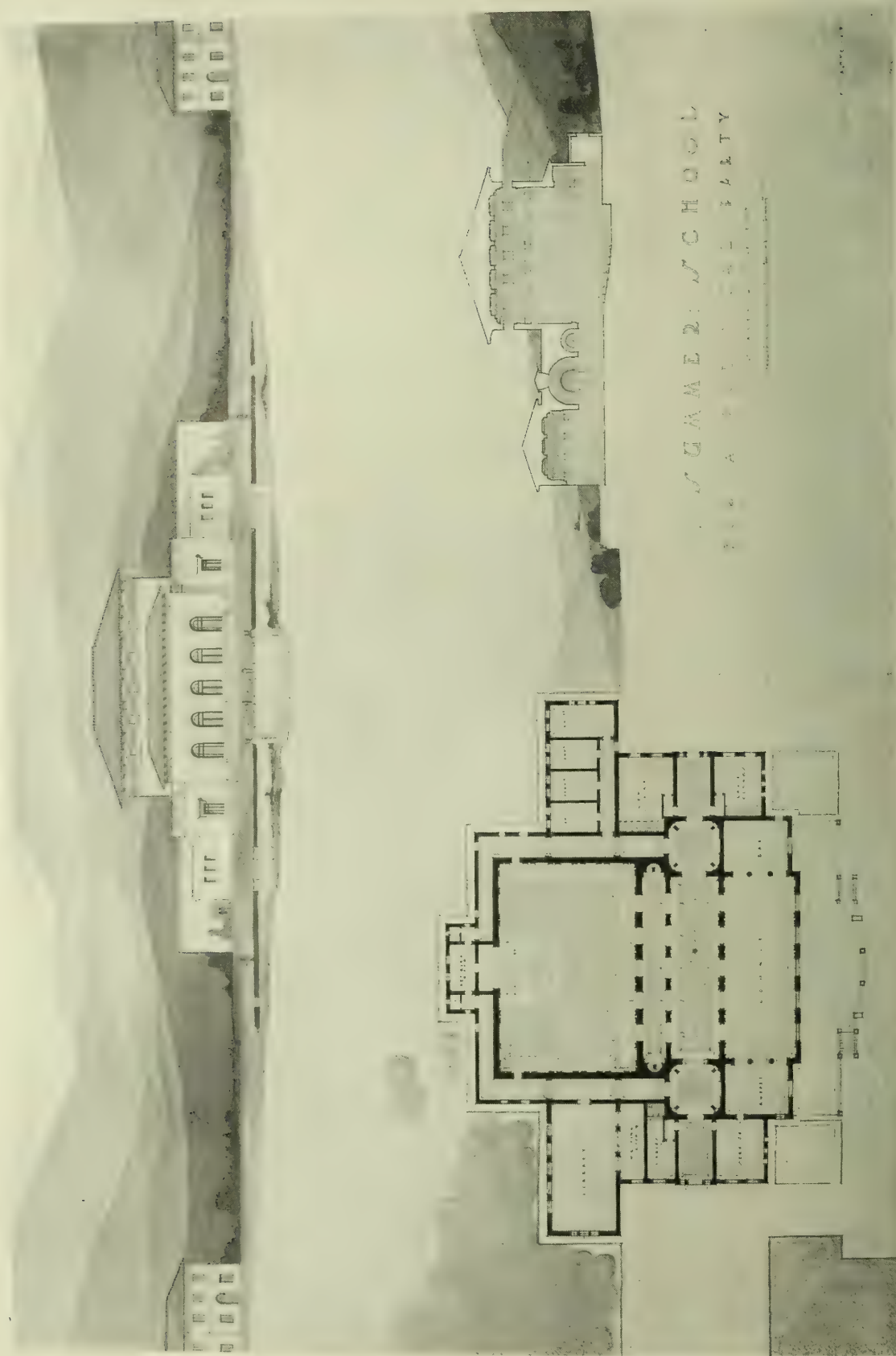
Southwark Cathedral Extensions.

The Bishop of Southwark proposes a scheme for reviving three chapels in the retrochoir or Lady Chapel of Southwark Cathedral.

Obituary.

We regret to record that the death occurred recently of Mr. James Forbes, architect, of Middlesbrough.

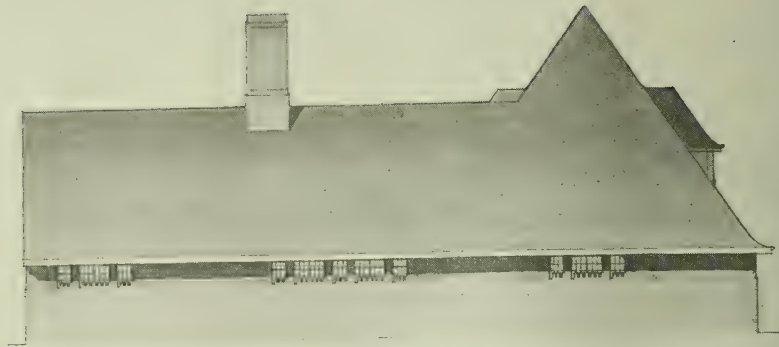
We regret to announce that Sir Hamo Thornycroft, R.A., sculptor, died at Oxford on Friday night, aged seventy-five. Among his works are the Boadicea group near Westminster Bridge; the national monument to General Gordon in Trafalgar-square and in Melbourne; John Bright in Rochdale; Lord Beaconsfield; Thomas Gray (the poet), for the hall of Pembroke College, Cambridge; the Cromwell statue at Westminster; Queen Victoria Memorial in Karachi; and the National Memorial to Gladstone in the Strand. Mr. Thornycroft, who was elected a Royal Academician in 1888, was also an honorary member of the Royal Academy of Munich, and received a Medaille d'Honneur at the Paris Exhibition in 1900. He was Knighted in 1917.



Design for a Summer School for a Political Party.

By Mr. F. N. Astbury (Fifth-year work, Liverpool University School of Architecture.)





SIDE ELEVATION



FRONT ELEVATION



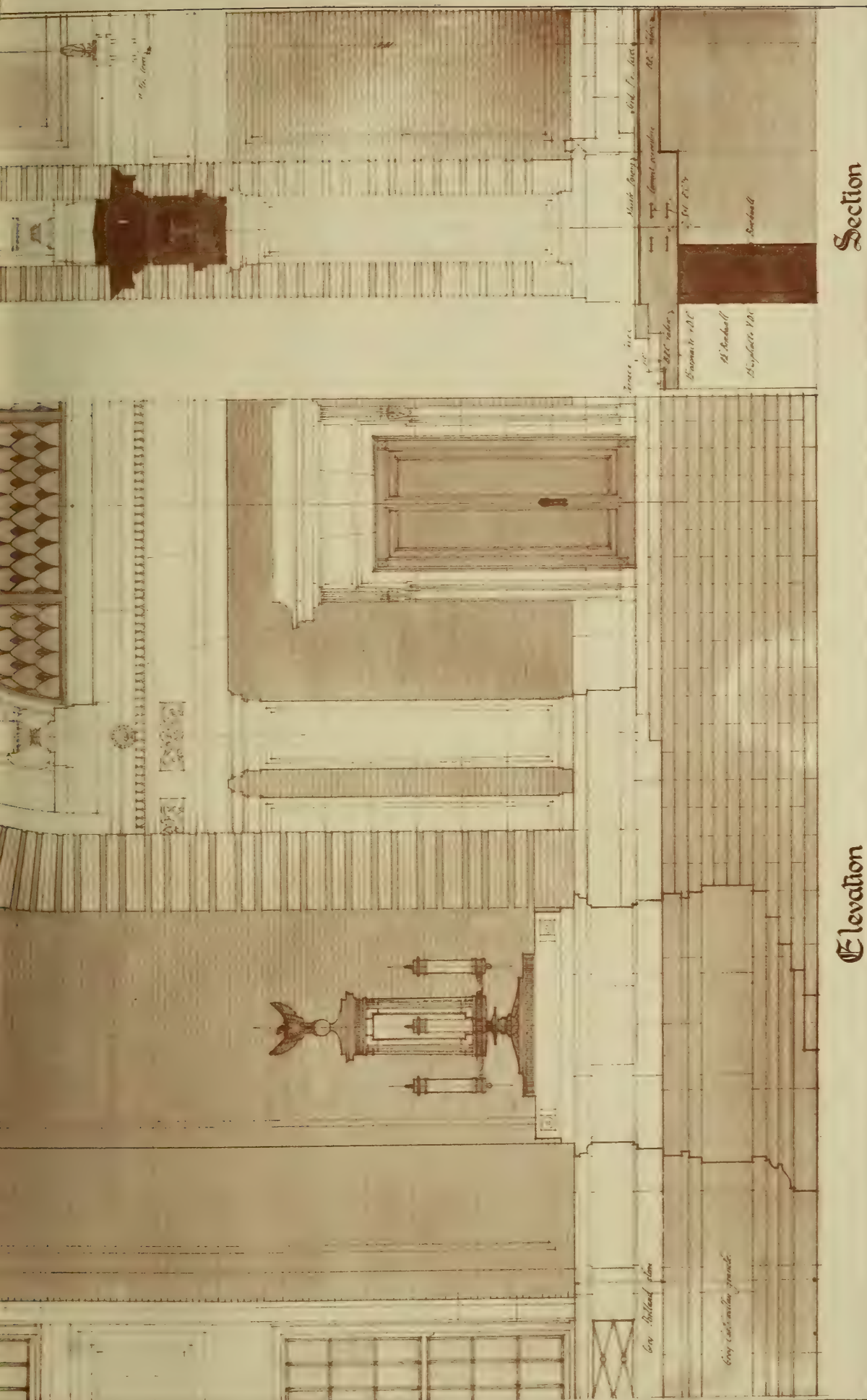
BACK ELEVATION

Design for a Parish Hall.

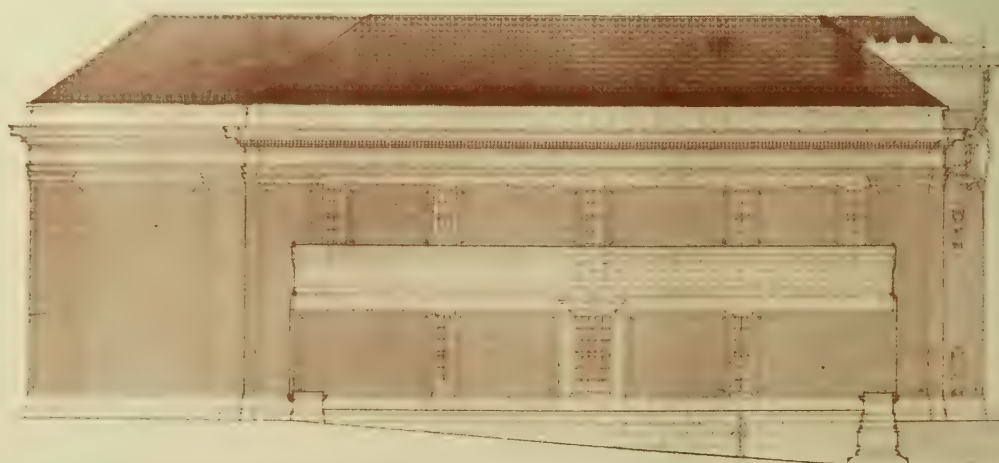
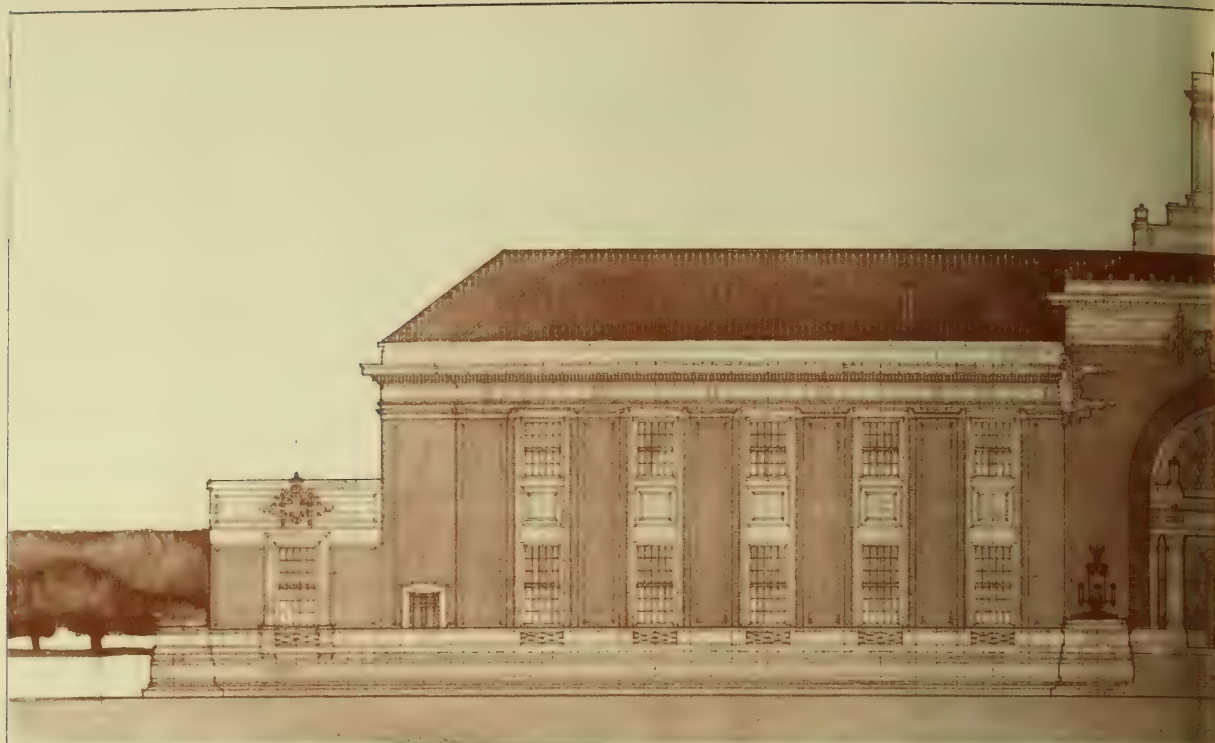
By MR. H. J. COATES (Awarded R.A. Prize and Silver Medal for an Architectural Design).

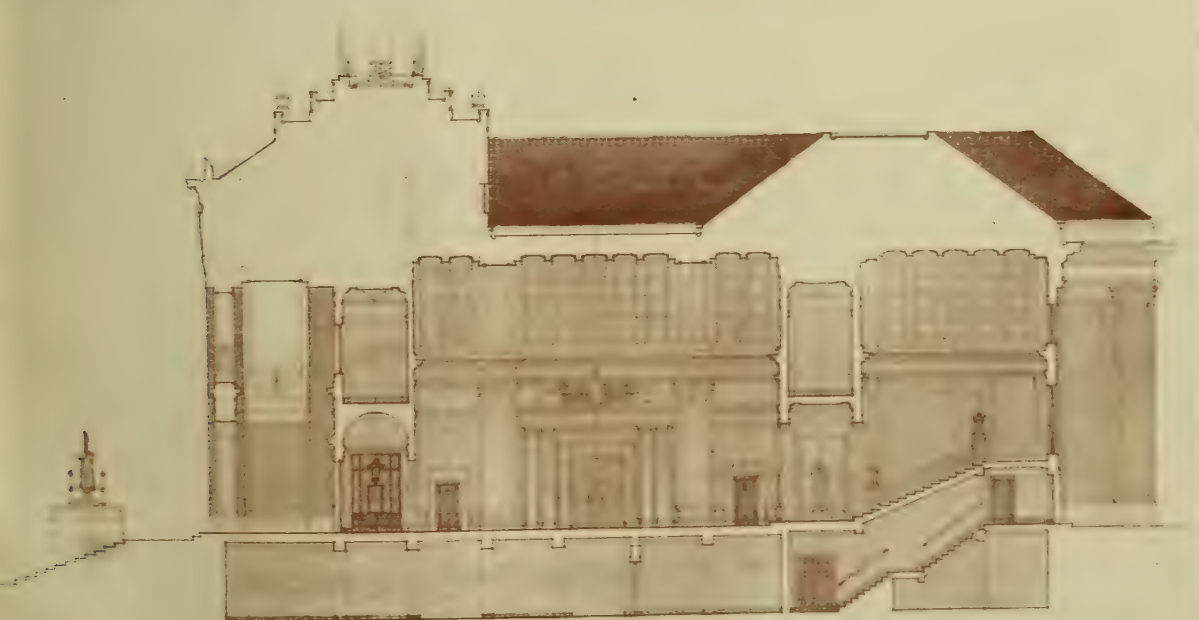
A County Hall.





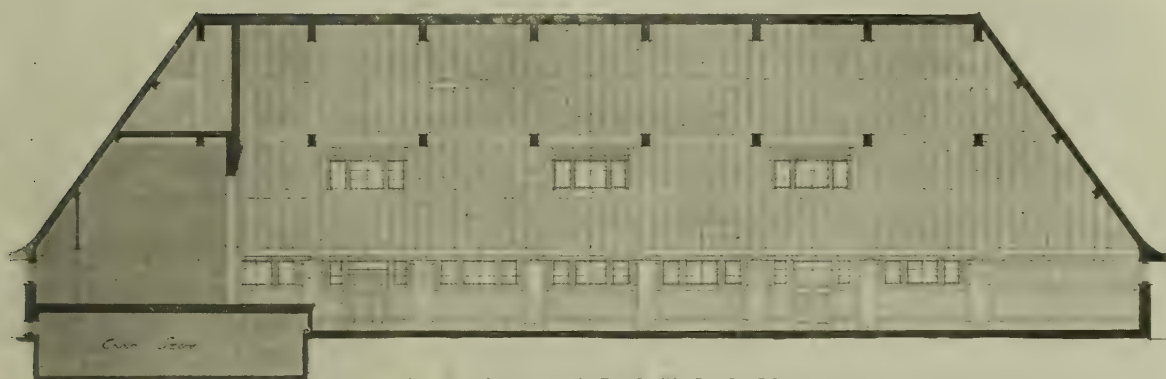
ROYAL ACADEMY GOLD MEDAL AND EDWARD STOTT TRAVELLING STUDENTSHIP:
WINNING DESIGN FOR "A COUNTY HALL." BY MR. H. E. FURSE.



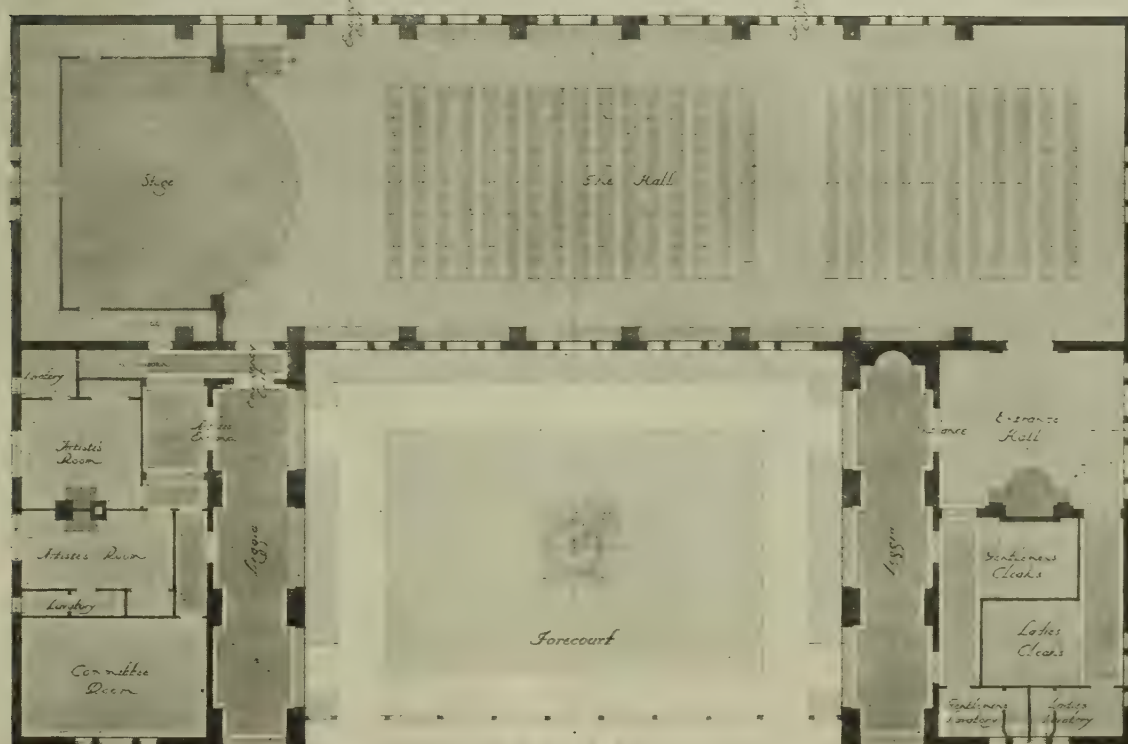




C R O S S S E C T I O N



LONG SECTION



11

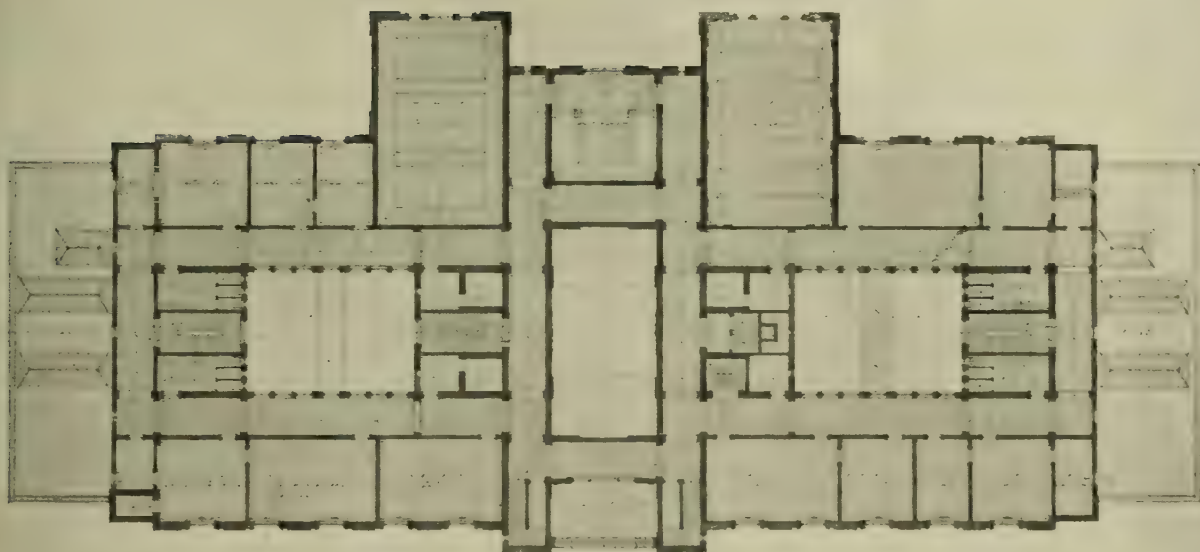
Design for a Parish Hall.

BY MR. H. J. COATES (Awarded R.A. Prize and Silver Medal for an Architectural Design).

A County Hall.



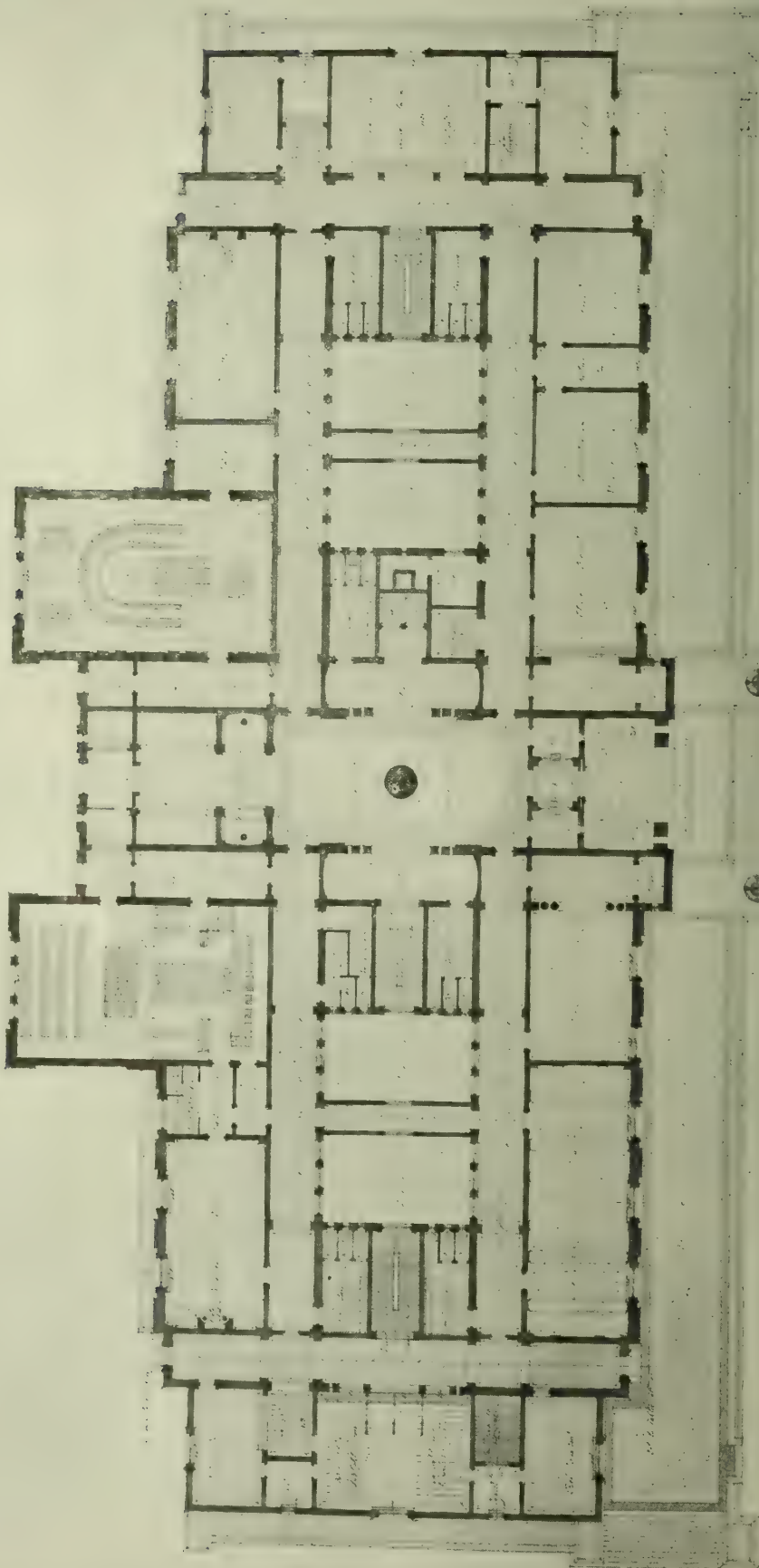
A County Hall.



Design for a County Hall: Perspective and First-Floor Plan.

By MR. H. E. FURSE. (Awarded R.A. Gold Medal and Edward Stott Travelling Studentship).

A County Hall.



Design for a County Hall. Ground Floor Plan.

By Mr. H. E. Furse. (Awarded R.A. Gold Medal and Edward Stott Travelling Studentship).



House and Garden, Fourth-avenue, Hove.

MESSRS. F. W. REES & ARCHER-BETHAM, Architects.

PHILIP WEBB AND HIS WORK.—XII

By W. R. LETHABY.

CAXTONS AND WHITE HORSE HILL.

To W. R. L., January 17, 1906.—“... If as you feel the thing's backbone is finance rather than righteousness, can anything you may hope for come out of it? Certainly I have my doubts, but then I've had a good many in my life, and some of them proved unsubstantial. I so truly long with you for some quite serious and substantially simple public buildings being set up in place of the usual unintelligent masses of Portland stone which have been done lately, and are still doing under Government ignorance... I have your volume of Venturi, which is a book of many wonders of delight to me.”

To W. R. L., May 29, 1906.—“... Oh, you should have seen the merry-go-round of *all* the apple trees in the fullest of full bloom *this* year. Even my lack of enthusiasm was stirred to tedious exclamations of joyfulness at this wonder of our earth. If Methuselah had the like every year 'twould account for his living so long. ... Green is a remarkable colour in these parts in May! I saw a *green* of pasture grass to-day so astonishingly powerful in conjunction with pure brown brick earth and still the two went together harmoniously.”

On June 12, 1906, he had a little outing in Kent with Mr. Hale White (“Mark Rutherford”)—the author of “The Revolution in Tanner's Lane,”—meeting him at Etchingham. In his sketch book are these notes: “The church of fine fourteenth-century work complete even in design. Local sandstone; central tower, no transepts; flying buttress-arches over aisles to tower. All the nave and aisle windows have best kind of painted glass in the tracery, of the same date as the building, except E. window of south aisle, where it has been taken away for the insertion of miserable modern memorial stuff. Masonry inside has had its surface destroyed by retooling, and the church generally (inside) has been dealt with by dull unsympathetic hands. Could not get up into tower; as entrance to stair turret is high up in chancel. Man in church said there was one bell, which he just sounded—of fine tone—which he asserted was inscribed of same date as church about 1365. Three brasses, two in choir and one in S. aisle of nave; to the Etchingham family, the earliest to the founder. Outside, the church is an upstanding piece of noticeably fine proportion and generally in good condition—rough ashlar-faced walls. On to

Burwash, about 2 or 3 miles west. Little of interest remains in the church except the Norman tower and shingled spire—very pretty this. There is a fourteenth century iron sepulchral plate in N. aisle of nave—said to be cast-iron. But to me it looked to be of malleable metal, with the cross and inscription raised by lowering the plain plate round it. About half-mile beyond Burwash in the lower ground, near the small stream, is a very interesting house of James I's time, in good condition. Large house faced with scabble-tooled local sandstone ashlar, brick chimneys, good large rooms. Some panelling of oak in several of ground floor rooms.”

To W. R. L., August 30, 1906.—“... Art cannot be created at will, it must be a discovery, and you would be likely to add that any advance on it would be another discovery which could not have been disclosed without its predecessor—and so on to infinity; which is altogether different to following a fashion as long as it will hold together. Of course, craftsmanship is a hard qualification for an architect in our own blind-guided days.”

To W. R. L., November 5, 1907.—“... And so poor old Bodley's gone away; hardly a surprise to me on learning of his killing journey overseas [to America] at his age—must have been three or four years older than me. He was a man of some taste and discrimination, and for a while I had at one time pleasure in his companionship; it died away under the ‘Restoration,’ separator of friendly familiarity, his respectability increasing and mine going—going—gone!”

June 28, 1907: “I rejoiced at your going to Italy and on to Rome. ... It laid hold of me, and in a way peculiar to itself and against reason in fact. Often the magical effect comes back when really other places in Italy have bigger claims from their beauty and surroundings. Middleton and I got on well together there in spite of my resisting his strange fanaticism in labelling the truly structural brickwork as a sham. To me it is undoubtedly a very important part of strength in combination with concrete. ... I never got to see that beautiful dome ruin misnamed Minerva Medica; its umbrella ribs of tiles must have been the cause of its keeping nearly whole. Giacomo Boni good-naturedly came down to

see me [at Caxtons]. He was affectionate as ever, and though he be as hard as nails* he was bright and free when here. This country of woodland struck him strongly.”

To W. R. L., February 8, 1908: “... The Brit. Mus. and S. Kensington retreats on Saturday afternoons have faded from my memory like an old and ill-fixed photograph so that my eyes get an old kind of gleam in them while turning over your pages. ... O, dear me, is there any hope of real invention in the design for the County Hall? There was a rough outline sketch in my *Tribune* [a daily paper of the time] “which might mean anything for there was no plan—the plan, the plan, and all the *plan* is all one's help for making out what the effect of such a building would be on the excellent site. ... It seems to me that this long thing as in the newspaper might do if the planning were good, and O, dear me again, the detail should not be of the commonplace. Architects in these days are given to that order of detail, ain't they? ... You see that I am a bit worn thread-bare in mind and body at 77, and perhaps the leafage of me is rather sere and yellow—never mind, I'm not over melancholy.”

March 11, 1908: “Now is the time for really designing it [the County Hall] and taking the competition parts out of it—holding like grim death on to those which have the salt of ‘design’ in them. ... Were you not content that S.C.C. should drop anchor in the Cam and give up roaming on the treacherous four seas? Why four?—the ‘Four Want Ways’ to be sure.”

November 2, 1909: “... My old and very dependable friend, Hale White, has had a bad time of it in his old age with operation to follow. He has been very low since. ...”

January 6, 1910: “... I can understand the feeling in rude tribes of beating their gods, as I can mine of calling Ruskin and Carlyle savages. ... I am believing that the shaking of the British constitution now going on will do that venerable but just now besotted institution a refreshing good.”

To W. R. L., September 19, 1910: “... Cards of Alfreton have stirred the pool of indolence and made me wish to see the place before it is too late. I'm not quite sure if ever there was a spire set down on its tower with greater refinement than that example of conjunction. Who knows but that I might borrow an aeroplane and circle round the weather cock. I forgot to post the above written yesterday, and now I am touched by learning from Mrs. [Wickham] Flower that George Wardle died at a nursing home in Plymouth, September 11; he had been living at Fowey, in Cornwall, the last year or two. I had great regard for him and his remarkable abilities.”

In 1911 he went to Rottingdean to see Lady Burne-Jones, and also to Groombridge to visit Mr. Hale White.

To W. R. L., January 22, 1912: “I much want steadying in old age; for example, my memory fails and leads me into ugly bogs.”

This summer, however, he was wonderfully himself and he came to London twice. On May 10 I met him, and we went together and saw Watts's bronze *Physical Energy*, which he admired, remarking that Watts knew about horses and rode very well; then we walked on to Kensington Museum.

To W. R. L., June 22, 1912: “I cannot explain how I have so almost wholly forgotten London and Kensington Gardens. ... Do you know anything of Oliver W. F. Lodge who has boldly stepped in, and backed up, the otherwise unknown William Morris with a not-so-bad lecture he gave at Birmingham? I had almost to hold my breath as I read lines of the Great Fellow whom we know! I at once got the big book down of the gigantic Sigurd—Ah. Yes.”

September 14: “... I am minded that Sta. Sophia is in danger; I hope exaggerated by the carrion crows hovering over it.”

To W. R. L., November 1, 1912: “The last visit to London was alone. Walked from



Lion at Dawn. Pen Drawing, 1867.

* This said in admiration of his intellectual keenness

Victoria Station across the Park to Marble Arch, which was being signficanted, and noticed the certainly improved Wellington Arch, with its horses and wings triumphant, and did not look amiss to me some distance off. To get towards home I walked from Marble Arch east, all along Holborn to Paul's and London Bridge direct to station and came home."

Mr. Jack tells me of other London visits. "He usually began at the watchmaker or shoemaker or other dispensers of common comforts. All the shops he visited were of an old-fashioned kind—that ordinary mortals don't as a rule enter. His watchmaker was up a turning off, I think, Threadneedle-street, in a little square, and the shop had only one or two fine watches in the window. The shopkeeper greeted him in a friendly way. After a good gossip they came to business, and W. left for some other shop. His bootmaker was somewhere near the British Museum, and did no business in ready-made things. I remember once things in the boot way had 'gone up,' and his poor purse had gone down. He had sorrowfully to say he could not have his periodical pair of shoes. He went to another shop where ordinary mortals get their boots. He loathed anything that had the remotest taint of shoddy, and would rather do without his snuff than cut down good necessary things. This reminds me of the excited way he used his snuffbox when on the 'jobs'; he would talk to the foreman, explain and expostulate, continually shovelling up snuff. Poor old chap, he cut off one box a week at Caxtons, then both, and did without. When the shopping was done we had some tood, then after a prow to see any new thing, we wound up at St. Paul's. It was inspiring to see his heartfelt enthusiasm for the work of a man whose form of expression was so opposed to his own. His criticisms were generous; he lost all thought of 'style,' but he enjoyed the romantic abandon of Wren's compositions when compared to the pedantic stuff which goes by the same style name. For Wren's abrupt changes, his spontaneous introduction of inventions of his own and for all creative experiments Webb had the profoundest admiration and sympathy. It was now time to go home. Once we went from Charing Cross to London Bridge by boat, and I shall not forget his delight at the sparkle of the water under the Bridge (all the visits were on fine days), he was quite boyish. We had barely time to catch the train, and took a 'Hansom,' a thing he never did of his own account, and it added a touch of wickedness which made it a red-letter day.

"He disliked to have more than one visitor at a time. One day Weir and I walked from East Grinstead without any warning. He was on a ladder, putting up boards, and said abruptly, 'Go home, who asked you two villains to come here?' then came down and made the best of it by giving us a nice tea.

"In his later years of office work he seemed to be depressed and easily irritated by his work. When he got into the country free from the routine, he recovered quickly, and regained his old restfulness of mind. Talking at Worth, I happened to say that I felt the power of Gothic buildings mostly in the smaller ones, especially certain village churches. We agreed that where a whole building is considered, the smaller ones were oftener perfect, the greater ones being marred by official ambition and interference. In looking through some old letters I was struck by his reference to 'that invaluable madman of Coniston.' He always spoke in this way of Ruskin—high respect for the man and humorous acceptance of his extravagance of expression."

To W. R. L., Jan. 27, 1913: "... The thrushes are just tuning their instruments, these one or two early days of promise. ... I am got to be so old that I am tedious even to myself. ... I had thought that the old and trustworthy friend, Norman Shaw, would have held on as long as myself, but no. And he had done good and serious work."

July 2: "... George Jack came to see us last Saturday—good and helpful over the roughs of time, always. The weather here looks as if it would hold out to the end of the week, when

the hay-harvest will be ricked in and finished."

October 7, 1913: "... You have sent cards with pleasant things on them which have helped me out of myself, the last being the great circle of stones of South Avebury. Bless me! and you had not forgotten that our Morris had been together with me, which was no small thing, and those Marlborough days with Kelmscott, &c. I am somewhat down in the mouth now, from the discomfort of my memory having failed me to keep company with 84 or 85 years on this earth—if so be. The harvesting was fine this year and ricked easily and well."

February 25, 1914: "... The weather lately having been too savage in its winter's tail I dared not ask you to come, but to-day has been beautiful."

"Caxtons, July 24, 1914: Dear Friend,—Please to come on Saturday by train as you note, and cheer me, and see the yellowing cornfields.—PHILIP WEBB."

On one of the last walks I went with him, it may have been at this time, he called attention to "the rustic delicacy" of a cottage home we were passing—a phrase illuminating the sort of things he cared for.

He remained courageously strong up to the time I saw him last, in November, 1914, but was afflicted with gloomy horror by the war that had "broken out." Even at this time, he insisted on walking part of the way to the station with me in the dark. On one of these walks at Christmas-time, he fell, and we heard from Mrs. Dickinson: "He does not sleep, but keeps talking and laughing, and all the time wanting to go home"—that was to Oxford. This wishing to go home to Oxford became so insistent that Mr. Walker went with him part of the way, but they had to turn back.

Mr. S. C. Cockerell writes: "He continued to receive his friends, myself among the number, and to talk of old times until his death, at which I was present, on April 17, 1915. On July 10, Emery Walker and I scattered his ashes on the wind-swept turf of the White Horse Hill in Berkshire, a spot very dear both to himself and to Morris. Morris once declared that he was the best man that he had ever known, and there are very few of those who were privileged to know him who would not say the same."

In writing to a friend whom he introduced to Webb in 1903, Mr. Cockerell used some words which must be quoted: "I am delighted that nothing interfered with your visit to Philip Webb and that you came away refreshed. He is the most valiant and strenuous man I have known, a man who has never done the smallest thing with less than his might, and who has continuously despised both money and fame, when he might have had both by swerving ever such a little from the narrow path along which he has travelled. The high aim that he set before himself as a young man has led to a degree of success that very few men have attained to—though it is not of a kind to be measured in guineas." Mrs. Dickinson tells me: "I consider the fifteen years I was with him the best spent of my life; I can always see his happy face." Mr. Jack says in a letter: "Webb's life was remarkable for its harmony, the unrest which makes history seldom appeared; he seems like something for private circulation only." I will not add any formal words to these accidental expressions of reverence for a great man. It was by his own wish that no memorial stone was set up and he did not possess any portrait of himself.

A little while ago the writer asked a contemporary of Webb if he had not known him: "Yes a little; I had some correspondence, with him—very eccentric; from some Socialist sort of ideas he would not invest enough money and then nearly miscalculated how long he would live." That I suppose must be the final verdict—"Very eccentric!"

Sometimes, however, when I am a little disappointed with professional architecture and formal art teaching, the thought comes with comfort that the existence of Ruskin, Morris and Webb must have had some meaning.

In an earlier chapter I have tried to summarise what were the architectural movements, eddies and stagnations when Morris and Webb came to

London. I should like now in a few final words to suggest how far their influence has reached in our own time and to question our hopes and fears for the future.

Mr. George Jack writes of Webb: "Of direct and recognisable imitation of his work there has been very little, but of a subtle, permeating influence due to it there has been a great deal. The wholesome change from vulgar and ostentatious display of sham costliness, or the dullness of mere utilitarian house-building, to a free use of homely material, notably rough-cast and whitewash, is directly attributable to Webb's influence. His use of these materials has been parodied, but nevertheless it is a step forward, from a vulgarity of vice to one which is more or less innocent. None but those who are well acquainted with his work can form an idea of the deep impression which it makes when studied. When seen for the first time it may be a kind of a shock to conventional ideas, but—this passed away—the way is open to sincere admiration and reverence. Admirable as is the work he actually did, and deep as was his influence it was little compared to what lay in him to do and to teach. Philip Webb was in essence a spark of the creative spirit. He was, before everything, a born craftsman, and might have been a great master builder and sculptor, but he found himself imprisoned in an "office" with no other use for his hands, with their unappreciated cunning and skill, than to make heart-breaking attempts to convey his ideas of design and execution through the irritating medium of a lead pencil. The way in which he turned this pencil into a fairy wand, and by its means dealt with so many crafts at second-hand and at a distance, is little short of a miracle. Fairy wands of this kind are not transferable and Philip Webb was probably the very last architect who could design buildings in the Gothic spirit, true to facts of construction, true to ideas of beauty founded upon love of noble living, and true to himself, however conscious of hampered hands and a narrow field. There is compensation in the fact that such a man has lived his life among us."

Webb's contemporaries already began to learn of him; Norman Shaw knew him well. I have already mentioned his admiration and there are many Webb traces in his earlier work, notably in Lowther Lodge. Robson, the designer of the first School Board buildings in London (after 1870), obviously drew largely from a study of Webb's results; he had some connection with Warrington Taylor in the days of the Morris firm, and must have known Webb personally—indeed, all architects know one another in a way. The best of these buildings are largely common-sense brick structures, with little stylistic pretence. E. W. Godwin also knew Webb, and must have been influenced by him. Bentley, the gifted architect of the Roman Catholic Cathedral at Westminster, certainly admired and was affected by Webb's work. I happen to know that some time before his death Bentley, doubting whether he would live to complete his beloved Cathedral, called on Webb to ask if he might recommend him to finish the work in case of his own death. Webb explained that he had nearly come to the end of his strength, and that it could not be. He sympathised very fully with Bentley's fine effort. A few months before he died, Thomas Colcutt, another architect of Webb's time, told me: "I only met him twice, to my great loss, but I heard a great deal of him and know intimately some of his work, for which I cherish great admiration. There were three men in my earlier days—Webb, Nesfield, Shaw—all of whom I thought in the forefront of their generation. I remember being impressed by the lofty view held by Webb of the calling of an architect."

The whole modern arts and crafts development had its origins and implications in the ideals and experiments of the Morris firm. There is in this a general lesson of the uses of group work which it is desirable for all artists clearly to see. Art is essentially a social activity and it requires incessant cross fertilisation. No one individual is sufficient ground for it to spring from and flourish. The members of the Morris group seem to have been the first among modern educated and well-to-do people to feel the

impulse towards workmanship. There is probably something significant in this and in the further fact that many other men have been impelled to follow them in trying to *do* something. Perhaps it is, and I hope it is, a reaction in the very nature of things against what has seemed the irresistible steam-rolling of machinery—but the days are too few to say.

As time goes on Webb's work affects a wider and wider circle, and thousands of buildings, even the small houses erected under various housing schemes—mere rational structures, but pleasant—carry on the impulse. Indeed, I may venture to say that every piece of building work done in England during the last generation which has any life in it, is either the direct, if bungling, attempt of some practical builder, or it derives in some way from the experiments of Webb. Any work that has a soul of good in it must have been thought of, not as architectural style and grandeur, but as sound and expressive building—there is no persistence in anything else.

THE WEEK IN PARLIAMENT

WESTMINSTER, Wednesday.

Town-Planning Schemes.

Lady Astor asked how many town-planning schemes had been approved in England and Wales, respectively, since January 1, 1920, and how many local authorities in each country had carried out the statutory procedure preliminary to the actual preparation of such schemes.

Mr. N. Chamberlain said that the required particulars were shown in the following table:—

From January 1, 1920, to December 1, 1925.	England (excluding Monmouth).	Wales (including Monmouth).	Total.
Number of Town-Planning Schemes finally approved ..	9	..	9
Number of other Town-Planning Schemes submitted for approval	11	..	11
Number of Preliminary Statements of proposals approved for inclusion in Town-Planning Schemes..	62	..	64
Number of other Preliminary Statements submitted for approval	55	..	60
Number of Local Authorities with Schemes or Preliminary Statements approved or submitted for approval	88	..	90
Total Number of Local Authorities now formally engaged in the preparation of Schemes.....	292	..	310

Demonstration Houses.

In reply to a number of questions as to the special subsidy given to houses other than those built of brick in Scotland, Sir J. Gilmour, Secretary for Scotland, said that the final selection of types of houses was made after careful consideration of all the relevant facts, and the Atholl house, among others, had to be ruled out on the ground of cost. The basis on which the rates per foot of superficial area were arrived at varied inversely with the size of the house, because certain fittings were common to all sizes and were not appreciably affected by an increase in superficial area. With regard to the Corolite house, he was advised that the roof as tendered for was satisfactory. It was correct that the inclusion of additional items would increase the cost of Corolite house, but he saw no reason for insisting on these.

Asked by Dr. Shiels whether the Scottish Board of Health was bringing pressure to bear upon different municipal authorities in Scotland to persuade them to accept one of the four types selected for the special subsidy after certain authorities had intimated their unwillingness to accept either of the types in question and expressed their preference for other types, Sir J. Gilmour said he was bringing no pressure to bear on Scottish local authorities in favour of any particular type. He was, however, doing his utmost to induce them to co-operate in the provision of additional housing by alternative methods, but it must be clearly understood that an essential factor in such schemes must

be the provision of a house at a rent within the reach of the mass of the population.

St. Stephen's Hall.

Sir M. Conway asked whether, in view of the approaching completion of the mosaics in St. Stephen's Hall, there was any probability of carrying to completion the general decoration of the Hall.

Captain Hacking, replying for the First Commissioner of Works, said that thanks to the generosity of a number of Parliamentarians, a scheme was well under way for the decoration of St. Stephen's Hall by a series of paintings of scenes in British history. Eight artists, under the leadership of Sir David Cameron, R.A., were now preparing sketches of the pictures which would eventually be placed in the panels of the Hall. The subjects of these had been selected by Sir Henry Newbolt, in consultation with the painters, and with the approval of the First Commission, the Chairman of the Royal Fine Art Commission, and the Speaker, to whom the preliminary sketches would shortly be submitted.

The Government's New Housing Policy.

SCOTTISH SUBSIDY WITHDRAWN.

On the motion for the adjournment of the House of Commons on Friday, Mr. T. Thomson, a Liberal member, called attention to the housing question, and complained that the position to-day, so far as the shortage of houses was concerned, was no better than it was in 1919. At the present rate of building it would be at least ten years before the shortage was wiped off. He also urged that the Government should launch a great crusade against the slums.

After several other members had taken part in the debate, Mr. N. Chamberlain, the Minister

authorities had submitted 92 schemes, of which 83 had been confirmed. They were moving faster in this respect now than at any other time in history. An enormous number of repairs, alterations, and renovations to the slums were also going on all the time under the Act of 1890. In the last year for which complete figures were available, 1923, 256,000 houses were made habitable after the serving of statutory notices by local authorities. To that must be added another 253,000 houses which were rendered fit in consequence of informal notices. In a single twelve months 512,987 urban and 49,520 rural houses had been put into habitable condition. He did not feel he could refuse to assent to the erection of blocks of high flats in crowded areas, although he might personally object to them as not being the ideal thing. The problem of the slums was not only a matter of bricks and mortar; it was a social problem. In order to make more rapid progress in ameliorating slum conditions, it might be necessary for local authorities to be given the power not merely of compulsorily acquiring slum property, but of holding it until such time as they were ready to reconstruct it on properly considered lines.

Surprising progress had been made in building houses in rural areas. Since 1919 the total number of houses built in rural districts was 161,460, of which about 39,000 were built by local authorities and 122,000 by private enterprise. The question as to whether houses as they stood could be improved on so that they could be added to the common stock of agricultural houses was receiving very close attention from him, and it was one on which he might be able to devise some scheme. Under the 1924 Act he was bound next October to review the conditions of the subsidy given under both Acts. Apparently a mistaken impression had arisen that the Ministry would not guarantee any subsidy on any house which was not completed on October 1, when the revision took place. It was quite obvious that if that were so, there would be a gradual drying up of the placing of new contracts. No such proceeding as had been suggested was contemplated. If any house was substantially started by October 1, that house, if it was part of a scheme already approved, would be eligible for the subsidy.

In conclusion, Mr. Chamberlain referred to the success that had attended the mobilisation of the forces of private enterprise, and in congratulating the building industry, he included the manufacturers of material, who had enormously increased the supply.

Later in the debate, Mr. Baldwin, the Prime Minister, dealt with the gravity of the housing situation in Glasgow and throughout Scotland, which he described as a "national scandal." Under the 1923 Act, in the last 13 months, only 426 houses were built in Glasgow as compared with 2,550 in Birmingham, and under the Wheatley Act 18 houses were built in Glasgow as compared with 1,839 in Birmingham. The total during that period, including replacements of certain cleared slum areas, was 1,100 houses in Glasgow and 4,389 in Birmingham. For some reason or other the offer of the £40 special subsidy which he made in September at Glasgow had failed, and that being so, he had to announce that that special subsidy scheme lapsed "here and now." "But," proceeded the Prime Minister, "of course we cannot leave it like that. The local authorities have not seen their way to take up this offer, and we must proceed ourselves. We intend, therefore, to proceed forthwith with the erection of 2,000 houses by alternative methods. We propose, in the first place, to utilise the Scottish National Housing Company. We will finance the development, and we will take every step to secure its accomplishment.

Sir J. Gilmour, Secretary for Scotland, said they would probably proceed by giving an order for 1,000 houses to the firm of Messrs. Weir, who could give early delivery. Rapidity of construction was another fundamental part of the scheme. The Atholl house had been ruled out on account of price, but if the Duke of Atholl could bring his prices down the Government would be glad to do business with him.

The motion for adjournment then lapsed.

of Health, agreed that the idea of demonstration houses had been a failure because the building industry had deliberately set itself against the adoption, even, of demonstration houses, and they had gone so far as to threaten any local authority which put up even a pair of houses, so that people might see what it was which was being offered, that the whole labour would be taken off on houses of any other type. Had it not been for the opposition of the trade unions and the employers in the building industry, these demonstration houses would have been erected in a great number of places, and once people had seen the kind of thing they were they would have insisted on having them. If they were not going to have new methods they must wait longer for the houses. If they wanted houses at once they had better try new methods.

Dealing with the number of houses built, Mr. Chamberlain said that in the five-year period ending 1904, the "peak" period of house building in this country, the average number built in England and Wales per year was 116,370, of all kinds of houses. In the years 1905-1909 the number was 102,706, and in the next five years, 1909-1914, the average dropped to 60,648. If one compared that with the 159,000 odd houses built this year, and if one remembered that the latter represented a gradually rising figure, then there was something to take heart about. They did not require any fresh legislation now to get houses. They were also making some progress in regard to slums. In the 24 years from 1890 to 1914, only 43 local authorities put forward 71 schemes; in the six years 1919 to 1925, 71 local

LEGAL SECTION

NOTES ON CURRENT CASES

The Liabilities of Landowners.

Two cases at present only briefly reported in the *Weekly Notes* illustrate the liabilities of landlords and landowners. The first case was *Booth v. Thomas* (*Weekly Notes*, November 28, 1925). It related to a certain site which in 1875 belonged to one Davies, which consisted of a slag heap, through part of which ran a natural stream. To the east of this site was a footbridge, and in 1878 the Local Board had taken away this bridge and culverted the stream, and conducted a road over the culvert. The site could not be used for building unless the stream were culverted, so in 1879 Davies had culverted the stream from this road to the west for twelve yards, and at some later date to the limit of his property, and in 1886 erected a building about 2 ft. from the culvert and had leased the building and that portion of the land to certain persons for a term of 99 years. In 1904 this lease had been assigned to the plaintiff in this case, and the land retained by Davies and the reversion in that portion the subject of the lease had in 1907 become vested in the defendant. The lease provided that the building should only be used for religious worship, and it contained an express covenant by the lessor for quiet enjoyment. The southern wall went 4 ft. into the slag heap, but did not reach the natural soil, and on December 22, 1923, during a severe storm the brook broke through the side of the culvert and washed the slag away from the southern wall so that it collapsed. The storm was not so exceptional that the bursting of the culvert could be attributed to *vis major* or the act of God, but the culvert had never been repaired and was in bad condition. The culvert was on the land retained by the original lessor now vested in the defendant.

The plaintiff claimed damages and relied upon the covenant for quiet enjoyment; he also alleged that there had been a derogation from his grant; and thirdly, relied upon the principle laid down in *Rylands v. Fletcher* (1868 L R 3 H L 330), which relates to persons bringing a dangerous element upon their property.

The defendant, in defence, alleged that he had done no act of commission, and the omission to keep the culvert so that the water could not escape was not a breach of the covenant for quiet enjoyment.

The Court did not consider the third ground of claim, *Fletcher v. Rylands*, because it held the plaintiff entitled to succeed on the two first grounds, which stand or fall together. The learned judge held that the covenant for quiet enjoyment might be broken by an act of omission if it were the omission of a duty (*Cohen v. Tannar*, 1900, 2 Q.B. 609 per Lord Justice Vaughan Williams; *Hargroves, Aronson & Co. v. Hartopp*, 1905, 1 K.B. 472; *The Builder*, February 4, 1905), but in this case the defendant had done an act of commission by confining the water in an artificial structure incapable of retaining it. We may point out that it was the defendant's predecessor in title who had actually confined the brook in the culvert, and the defendant had been guilty of non-repair. The case at present is very shortly reported, and we do not know if anything turned on this point. But, in any case, it would only affect the subsidiary finding that there had been an actual act of commission. Somewhat similar questions have arisen in connection with flats where the landlord retains control of part of the premises, and an example of such cases will be found in our note to *Cockburn v. Smith* (1924, 2 K.B. 119) in our issue, August 29, 1924. *Hargroves v. Hartopp* was cited in that case.

The second case we referred to is *Clayton and Others v. Sale Urban District Council* (*Weekly Notes*, November 28). In this case

the Urban District Council had proceeded under Section 94 of the Public Health Act, 1875, against the appellants, who were owners of land adjoining the River Mersey to abate a nuisance caused by a breach in the flood bank on the appellants' land which made the water flood neighbouring land. In this case the land on both banks of the river was protected from it by artificial flood banks constructed of earth, clay, stone, gravel, etc., to a height of about 12 ft. above the normal level of the river, but these banks had been constructed so long ago that no record could be found of their construction. Before the water reached the appellants' land large quantities of sewage and industrial effluent passed into it. Other riparian owners repaired parts of the banks on their land, but the bank on the appellants' land was out of repair, and in February, 1920, during a heavy rainfall, the bank had given way, causing some 349 acres of adjoining land to become flooded. The breach in the bank had gradually increased in size until at the date of the hearing (12 November, 1925) it was co-terminous with the appellant's land and the flooding caused a nuisance.

The appellants contended that they were under no obligation either at common law or by statute nor by agreement to repair the bank; that the nuisance did not "arise or continue their act, default or sufferance" within the Section; that the flooding was not caused by the flooding of their land, and they could not be ordered to repair the said breach, as to carry this out they would have to trespass on land not belonging to them.

The justices had found that the nuisance was caused by the act, default, or sufferance of the appellants in failing to repair the said breach, and in suffering it to remain unrepaired, and they ordered the appellants to repair the breach by reconstructing the bank on their land.

The Court affirmed the justices, holding that the appellants' contention that as there had been no agreement by the appellants there could be no default on their part in failing to maintain the bank was erroneous. The section referred to default or sufferance in reference to the particular nuisance, and that could impose a liability apart from agreement. This case is also at present only shortly reported. It may be of interest to see how far, if at all, the new Public Health Act, 1925, will bear upon the questions raised in these two cases.

As regards the first case, where a stream had been culverted by the predecessor of the defendant, Sections 51, 52 and 53 will have a distinct bearing on such cases in the future, and they occur in that part of the Act which is adoptive.

Section 51 relates to land laid out for building and enables the urban authority, if in their opinion any watercourse or ditch situated upon such land or upon which such land abuts requires filling up or covering over, to call upon the owner, before any building operations are begun or proceeded with, to execute such works as may in their opinion be necessary for effecting the objects aforesaid or for substituting for the watercourse or ditch a pipe drain or culvert with all necessary gullies, pipes, and means of conveying surface water through the same. Subsection (2) imposes a penalty and subsection (3) provides that nothing in this section shall authorise the urban authority to require the execution of works upon land in other ownership or which without consent shall prejudice the rights of any person not being the owner of the land.

Section 52 will have even a more direct bearing upon such cases as that we first noticed above, where the owner had culverted part of the

stream, for it provides that in urban districts it shall not be lawful to cover over or culvert any stream or watercourse except in accordance with plans and sections approved by the urban authority.

Section 53 also bears on that case, as it enacts that the owner or occupier of any culvert situated in an urban area shall from time to time repair, maintain and cleanse the culvert, and if any owner or occupier fails to comply with the requirements of a notice served upon him, requiring him to execute such operations, the urban authority may execute such works and recover the expenses as a civil debt.

As regards the second case, which related to the artificial banks of a river, it is doubtful whether Section 54 would have any application to that case. It provides, as regards watercourses, for exactly what occurred in that case, but not in respect of a breach in the bank. "Any part of a watercourse which is situated within the district of an urban authority and is so choked or silted up as to obstruct or impede the proper flow of water along the same, and thereby to cause or render probable an overflow of the watercourse on to land and property adjacent to the watercourse or to hinder the effectual drainage of water through the same shall be deemed to be a nuisance within the meaning of Section 91 of the Public Health Act, 1875, notwithstanding that the same may not be injurious to health."

This section has no application to a watercourse ordinarily navigated by vessels employed in the carriage of goods by water.

Although this section may have no application to the above case, the decision delivered in that case may have application to this section. The section contains a proviso "that nothing in this section shall be deemed to impose any liability on any person other than the person by whose act or default the nuisance arises or continues," and is narrower than Section 94 of the Public Health Act, 1875, under which proceedings for nuisance are taken, for under that section, if the person by whose act, default or sufferance the nuisance arises cannot be found, notice can be served upon the owner or occupier of the premises on which the nuisance arises.

In *Clayton's case* (*ubi sup.*), however, it was held that the person who allowed conditions to arise which caused a nuisance was a person by whose "act, default or sufferance" the nuisance arose, quite apart from any agreement or undertaking in relation to the property. Therefore to this extent that decision appears to bear upon this section. It is to be noted that in Section 54 the word "sufferance" has been omitted; this may make no difference in the effect of the section, but where statutes have been the subject of a long course of decisions we think it is unfortunate that the terms should, as in this instance, be unnecessarily altered, as it encourages litigation to ascertain the distinction, if any.

The Public Authorities Protection Act.

The case of *Huyton and Roby Gas Company v. Liverpool Corporation* (*Weekly Notes*, November 28) should be noted, as it decided an important point under the Public Authorities Protection Act, 1893.

The Corporation, acting under a special Act which incorporated the Waterworks Clauses Act, 1847, relating to the breaking up of streets, had laid a water main in certain roads in which were gas pipes belonging to the plaintiffs. Section 32 of the Waterworks Clauses Act contains provisions requiring the undertakers, when they open or break up a road, with all convenient speed to complete the work for which the road is opened and "fill in the ground and reinstate and make good the road."

The defendant Corporation, when filling in the trench they had made for their main, had neglected to ram the earth sufficiently, and the

gas pipes were left without sufficient support, and owing to subsidence of the soil sustained a series of fractures in the months of June and December, 1923, and July, 1924.

On December 12, 1924, the action was instituted, and the defendants in defence set up the Public Authorities Protection Act. Section 1 provides: "Where after the commencement of this Act any action . . . is commenced in the United Kingdom against any person for any act done in pursuance or execution or intended execution of any Act of Parliament or of any public duty or authority, or in respect of any alleged neglect or default in the execution of any such Act, duty or authority (a) The action . . . shall not lie unless it is commenced within six months next after the act, neglect or default complained of, or in the case of a continuance of injury or damage within six months next after the ceasing thereof."

The Court of Appeal, affirming the Court below, held that under Section 32 of the Waterworks Clauses Act there was a continuing duty upon the defendants to remedy the neglect in the improper filling in of the trench, and thus there was "a continuance of injury or damage" under the above paragraph (a), and all the damage sustained could be recovered, including that which had been sustained more than six months before the action was instituted.

The operation of the Public Authorities Protection Act appears inequitable in cases of personal injury as compared with cases such as the above. In the same number of the *Weekly Notes* will be found a case where a man injured by a motor car, owing to the negligence of the medical officer who had treated him in the workhouse infirmary to which he had been taken, had become permanently affected, a dislocation not having been discovered, but an action was held barred which was commenced more than six months after he had left the doctor's care.

Similarly in *Williams v. Mensey Docks and Harbour Board* (1905, 1 K.B. 804; *The Builder*, May 13, 1905), where a man had sustained injuries through the negligence of the defendants but had survived two years and then died, an action by his widow under Lord Campbell's Act was held barred because the right of action by the deceased himself would have been barred by the Public Authorities Protection Act. Both these are decisions of the Court of Appeal.

The distinction between the two classes of cases is obvious; in the case we have first considered, the duty was held a continuing duty, whereas in the personal injury cases the negligence is a single act, although the consequences may be continuous. The distinction in law is clear, but so is the inequitable operation of this Statute.

THE RENT ACTS: DE-CONTROL

A DIVISIONAL Court, but constituted of two Lords Justices of Appeal, has given an important decision in the case *Dunbar v. Smith* (the *Times*, December 15), on section 2, sub-section (1), of the Rent Act, 1923, which de-controls houses when a landlord comes into possession. The sub-section is as follows:—"Where the landlord of a dwelling-house to which the principal Act applies is in possession of the whole of the dwelling-house at the passing of this Act, or comes into possession of the whole of the dwelling-house at any time after the passing of this Act, then from and after the passing of this Act, or from and after the date when the landlord subsequently comes into possession, as the case may be, the principal Act shall cease to apply to the dwelling-house: Provided that, where part of the dwelling-house to which the principal Act applies is lawfully sublet, and the part so sublet is also a dwelling-house to which the principal Act applies, the principal Act shall not cease to apply to the part so sublet by

reason of the tenant being in or coming into possession of that part, and if the landlord is in or comes into possession of any part not so sublet, the principal Act shall cease to apply to that part, notwithstanding that a sub-tenant continues in or retains possession of any part by virtue of the principal Act."

The case came before the Court on an application to apportion rent. In or about August, 1914, the rooms on the first floor had been let to one of three separate tenants of various floors in the house, the ground floor and top floor at that time having been continuously let to two other separate tenants. In November, 1923, the first floor became vacant, and the owner, the defendant Smith, who was treated as "owner" by the Court, went into possession and did some repairs, and then re-let the floor to the applicant in this case.

The County Court Judge appears to have held that the sub-section did not apply because the landlord was at no time in possession of the whole house after the Act came into operation.

On the Appeal the Court pointed out that there could be no question of apportionment in this case, for this floor had been a separate dwelling-house ever since the Acts had come into operation, with a separate standard rent, and this really sufficed to dispose of the case, but applying the sub-section to this case, the Court held that the County Court Judge was wrong in holding that the whole structure must come into the possession of the landlord:—"The whole scheme of the Rent Acts contemplated one structure comprising more than one dwelling-house, and the words in the sub-section 'the dwelling-house' and 'a dwelling-house,' had a similar meaning. Thus the Court held that the plaintiff had come into possession of a dwelling-house within the meaning of the Acts, and it was de-controlled.

The case is at present only shortly reported, and it appears to us it must be read with considerable caution. It will be seen that this structure was, in fact, divided into separate dwelling-houses before the Rent Acts applied, and therefore no question arose as to its having been a single dwelling-house within the Acts, as in *Woodward v. Samuel* (*The Builder*, Feb. 27, 1920); or subsequently reconstructed into separate dwelling-houses when the difficult questions raised in such cases as *Abrahart v. Webster* (1925, 1 K.B. 563; *The Builder*, August 14, 1925), and *Barrett and Evans v. Hardy Brothers* (Alnwick), Limited (1925, 2 K.B. 220; *The Builder*, August 28, 1925), as to conversion arise. Where the building has once come within the Rent Act, then the difficulties begin, as was shown in those cases as to whether the house has since lost its identity as first laid down in *Sinclair v. Powell* (1922, 1 K.B. 393; *The Builder*, April 28, 1922). We only desire in this note to caution our readers from accepting this case as applying where such considerations arise.

There have been very few decisions on this sub-section, but in *Hall v. Rogers* (*The Builder*, April 17, 1925) the question was discussed as to what would amount to "coming into possession."

LAW REPORT

Death from Falling Ladder.

A claim under Lord Campbell's Act of the Fatal Accident Act, was heard in the Southwark County Court, recently, before Judge Sir Thomas Granger and a jury. The plaintiff in the action was William John Rutter, of 145, Northcote-road, Clapham Junction, S.W., and he claimed damages for the loss of his wife, due, he alleged, to the negligence of the defendants, Messrs. Hall, Beddall & Co., Ltd., builders and decorators, of Pitfield Wharf, Waterloo-road, S.E.

Counsel for the plaintiff, in opening the case, said that the claim was under what was known as Lord Campbell's Act, which enabled persons who were dependent upon certain deceased persons to claim for damages if it could be proved that the death of the person was due to the negligence of the defendants. In the case that was before the Court, the plaintiff alleged

that his wife met her death through the negligence of the defendants. He said further that his wife was one of the supports of his old age, and he was therefore, in a measure, dependent upon her earnings. Mrs. Rutter was employed by Messrs. Staggs & Mantle, of Leicester-square, where she had been earning 34s. 2d. a week as a dressmaker. The deceased woman died as a result of a ladder, which the defendants were hauling up, falling down and striking her. The ladder was over 60 ft. in length, and he submitted that the ladder was not being hauled up with proper skill and with proper appliances, and that it was wrong that ladders should be pulled up in such a busy thoroughfare as Leicester-square without giving pedestrians underneath warning.

The plaintiff gave evidence and bore out counsel's opening statement.

William Crookshank, in the employ of Messrs. Staggs & Mantle as doorkeeper, said he witnessed the accident. He warned Mrs. Rutter of the danger of passing under the ladder, but the defendants should have had a man there or in the roadway. The ladder was on the footway, and was raised and dropped when the deceased woman passed under it.

Further evidence submitted proved that the rope used was frayed, but it was contended for the defence that the rope had been put to the test of 900 lbs.

The jury returned a verdict for the plaintiff for £1 a week for six years—£312. Judgment was accordingly entered for the plaintiff for £312, and costs.

CHANCERY DIVISION.

(Mr. Justice Astbury.)

Infringement of Trade Description.

Courtrai du Nord Tile Co. v. Dennis, Ltd.

ON December 15 Mr. Hunt Mond, on behalf of the plaintiffs asked for an injunction to restrain the defendants from using the description *Courtrai du Nord* in connection with their tiles. He said that the defendants were willing to submit to an injunction as claimed and to deliver up any tiles as to which complaint was made.

Counsel for the defendants assented, but stated that his clients had accepted no orders for these tiles.

Mr. Justice Astbury made an order as agreed between the parties.

MANCHESTER SOCIETY OF ARCHITECTS.

Mr. Guy Dawber, P.R.I.B.A., at the recent annual dinner of the Manchester Society of Architects, appealed to members of his profession to aid the movement to preserve the amenities and old-world charms of our towns and villages. It was terrible to see the charm of our villages spoiled by ugly motor garages, with great blank sheets of glass and their trade signs and symbols. The whole countryside was being littered with architectural horrors in the shape of small houses built of inferior materials. They did not want State control, but the time had come when some authority should be constituted in each district to prevent that kind of thing happening. It was largely due to work being put into the hands of ill-trained architects and of local officials who had not had the proper training and who had no local sympathies.

The Lord Mayor of Manchester (Councillor M. E. Mitchell), said large buildings, eight, nine, and ten storeys' high, were being erected in the centre of the city, thus causing a greater congestion of people in the central area, and adding difficulty to the Tramway Committee's problem. If this tendency, for which architects were partly responsible, were to increase, the Corporation would have to face the question of widening the streets to accommodate the growing traffic. The City Surveyor's department had been authorised to prepare a kind of civic plan of the centre of the city, in order that the Corporation should know what was happening and where present-day tendencies were leading. If the architects of Manchester would give special consideration to the town-planning side of their work, he was sure they could help the administration of the city very greatly.

ARCHITECTS' & BUILDERS' INQUIRY BUREAU

We are glad to give questions and answers, but cannot accept responsibility for contributed replies, especially on legal matters.

May we appeal to our correspondents to submit their queries on paper of a size easily filed, and written as legibly as possible, or, better still, in typewriting!—Ed.

Salary for Services.

SIR.—Would a builder be justified in charging up a weekly salary when acting as architect, surveyor and builder in the development of a small housing estate? He is receiving a fixed percentage of profit on costs, in this case 12½ per cent. Should this percentage include anything other than net cost of labour and materials? One member of the firm's time would be solely devoted to the work in question. W. E. B.

Contracts.

[REPLY TO "QUERY," DECEMBER 11.]

SIR.—An invitation to tender is an offer to negotiate—an offer to receive offers—an attempt to ascertain whether an offer can be obtained within a certain margin of cost. If the tender, or offer, has in it the essential elements of a legal contract, and the acceptance of it is absolute and identical with the tender, or offer, and is communicated to the offerer within the prescribed time, or, where no time is fixed, in a reasonable time, then the tender or offer is binding and there is a legal contract set up. In *Croshaw v. Pritchard & Renwick* (1899), 16 T.L.R. 45, an "Estimat" was accepted; subsequently the builders wrote that they had made an error in their figures and must withdraw their "Estimat." It was held that the "Estimat" was a binding offer and being accepted by the employer became a legal contract. Therefore the contention by "Query" is correct. (See chapter II, Creswell on "Building Contracts.") CONTRACT.

Four-flatted Blocks.

SIR.—Could you advise me as to whether it is possible for me to commence in business as a builder? I am a bricklayer by trade and have £250. I propose to build two-story four-flatted blocks to rent, each flat at 12s. Do you consider this to be a paying proposition? Each flat would be self-contained with living room, two bedrooms, and the usual offices. What is the approximate cost of erecting a block? The fittings are the usual council house type. Which subsidy would you advise me to work under if a subsidy is payable? W. D.

Contract Documents.

[REPLY TO "T. L. W.," DECEMBER 4.]

SIR.—The usual procedure under any contract is to visit the architect's offices after having received the bills of quantities and conditions of contract. You then take particulars by tracing plans, if the architects do not supply separate copies; visit site; price quantities or estimate lump sum; attend the opening of tenders or await result by letter from architect. This covers all the contract documents until tender is accepted, when, no doubt, the contractor will enter into bond and sign the R.I.B.A. form. G. W. H.

Fixing Gutter.

[REPLIES TO "REGULAR READER," DECEMBER 11.]

SIR.—Querist does not say what his instructions were. It is no. usual and certainly not safe to put a duck-board on to any gutter, unless the duck-board is fixed at the ridge. Furthermore, the screws, however fixed, have to face weather conditions—swollen wood in wet weather and dry weather shrinkage. Why not bolt the ironwork supporting the gutter into the rafters? Any calculation would be a risk; one is not sure if every blocking is so well nailed as it appears to be. G. W. H.

SIR.—Unless querist is dealing with some very fusty theorist of an official, let him stick to his guns. The method he shows is perfectly sound until the fascia is rotted, and the alter-

native method is perfectly sound until the plate is rotted, and as the amount of timber to rot is much the same in each case there is nothing in it, beyond the fact that the rotting of the fascia will be apparent long before that of the plate, which is in his favour.

JOHN BULL.

Measuring Stonework.

[REPLY TO "Q. S.," DECEMBER 11.]

SIR.—It is very difficult to say whether the method of measurement quoted would be universally taken to follow the standard method. In tendering it would be well to qualify the total with an explanation of the method adopted in this case, in order to protect against misunderstandings.

ABSTRACT.

Making of Special Bricks.

[REPLY TO "BRICKS," DECEMBER 11.]

SIR.—In a simple box mould shaped to the cant or bullnose, as required, the raw pressed brick can be cut with a knife to the required shape before burning. One labourer can turn out about 2,500 of such specials in a day with ease at a cost of about 10s. or 11s., and an extra of 5s. per thousand for specials is likely to be obtained and so show a good profit.

Z.

Hard Tennis Court.

[REPLY TO MR. W. DRAKE, DECEMBER 4.]

SIR.—A tennis court laid with a coarse gritted grano surface on a suitable concrete bed, is likely to be neither cheap or satisfactory. Wear on shoe leather would be enormous, jar to the tread severe, and bounce of ball far too quick for even the fast game of to-day. A very good cheap surface may be obtained by levelling the ground, laying and rolling thereon a bed of clinkers about 6 in. to 4 in. thick, and rolling thereon fine binding ashes. The best type I have met with are those obtainable from a brick kiln, which are composed of well-burnt coal dust and burnt clay dust mixed, and this sets to a very true, fine surface.

DEUCE.

Plans of Adel Church, near Leeds.

SIR.—An American architect requires plans and particulars of Adel Church, near Leeds, and I am informed that such exist. If any reader could give me information I should be obliged.

W. A. D.

Damp-proofing Walls.

[REPLIES TO "INQUIRER," DECEMBER 18.]

SIR.—Thoroughly rake out the joints of brickwork and rough hack all over to form a key. Then apply two coats of Portland cement and sand mixed 2 and 1, with the proper quantity of waterproofer. If querist will look on page lxxxv of your last issue under the heading "Waterproofing Cement," he will find a dozen firms who would tell him the quantity to be used.

G. W. H.

SIR.—There are many reliable solutions on the market for waterproofing brickwork, but in nearly every case the damp wall must be first dried out, and that presents some difficulty. A good and inexpensive method of dealing with a damp wall is to treat the outer surface with several coats of Portland cement wash. The more damp the wall is the better will the cement wash adhere. The work should be carried out in cold, damp weather, but avoiding frost.

JOHN H. HARE.

Building Line.

[REPLY TO "ENROBSO," DECEMBER 18.]

SIR.—By Section 3 of the Public Health (Buildings in Streets) Act, 1888, it is not lawful in any urban district without the written consent of the urban authority, to erect or bring forward any house or building in any street,

or any part of such house or building, beyond the front main wall of the house or building on either side thereof in the same street. If a rural district council desires to have the powers under this Act, application to the Ministry of Health is necessary, for an order under Section 276 of the Public Health Act, 1875. "Enrobsa" should enquire whether the rural authority concerned has in fact acquired the powers of the Act of 1888. If it has, then he will come within the Act and should obtain the consent of the local authority to his plans before attempting to bring the building forward. C.

THE A.A. PLAY

IN the R.I.B.A. Galleries, on Wednesday, Thursday, and Friday of last week, students of the Architectural Association gave their annual theatrical performance with customary success. This year it took the form of a *revue* in eleven scenes, entitled "The Touchstone, or Architectural Explorations," and started well with the "President" and "Secretary" of the R.I.B.A. endeavouring to find an answer to the question: "What is Architecture?" They fail, and appoint a commission of enquiry, whose efforts to solve the riddle were shown in succeeding scenes. Now and again the quest was entirely forgotten, but nobody minded, for what was lost in thematic continuity was more than compensated for by the humour of the unrelated numbers and the high spirits of the performers. The last scene but one showed the "President" and the "Secretary" of the Institute reduced to despair at the failure of the commission to discover what architecture is. After an unsuccessful attempt at suicide they receive a message to say that the answer is to be found in Bedford-square, where they immediately adjourn, and plunge ecstatically into the revels which happen to be proceeding.

Apparently some old-fashioned members of the profession have criticised the spirit of gaiety which is alleged to prevail in the architectural schools, for in one clever sketch entitled "Three Characters," we found an architect father reproving his would-be architect son for taking part in the A.A. Play, and not devoting himself with sufficient seriousness to the study of his chosen profession. The father says, angrily, that he never did such things in his young days, and the son retorts: "Of course not; look at Regent-street!" If cause and effect are related in the way implied, then the present enthusiasm for amateur theatricals ought to ensure a great improvement in the architecture of the future.

The *revue* was full of good things, but special mention should be made of an ingenious sketch entitled "Decoration *a la Carte*," in which a West End "decorative specialist" proposes to remodel an Adam house on "period" lines for an ill-informed masculine client, and to resell the original decorations to a lady client at a greatly enhanced price. The lady happens to discover the intended swindle, and punishes the "decorative specialist" by going off with his assistant. Another good thing was a clever representation of a cinema film entitled "The Leaven of Love," complete with "captions" in the best Hollywood manner, showing how a young man "found through architecture a way to love."

Lack of space prohibits a full description of the *revue*, which was uniformly excellent. The "book" prepared by a number of skilful hands, was pointed and witty, while the musical side included several tuneful numbers specially written for the occasion. Good work was done by the whole cast, which included Mesdames Prudence Bateson, Anne Brinton, Joy Wall, Agnes Blades, Marion Pepler, Francis Buckland, Marjorie Spencer, Kathleen Winter, Janet Fletcher, and Messrs. R. Walker, I. B. Jeffcott, J. D. Beloe, E. G. S. Elliott, H. S. M. Carver, R. S. Lavers, S. N. Bertram, L. H. Roberts, D. D. Robinson, E. G. Gardner, R. F. McQuistan, J. Waddington. A small orchestra performed well under the conductorship of Dr. Oscar Faber. The scenery, too, painted by A.A. men, was excellent.

THE BUILDING TRADE

TENANTS' LIABILITY IN RESPECT OF MAKING-UP STREETS

THE recent case *Lowther v. Clifford* (*Weekly Notes*, November 14, 1925) again draws attention to a point which was the cause of much litigation several years ago—the liability of tenants under certain terms in their leases to bear the expenses of making up new streets.

By lease dated May 14, 1885, the plaintiff's predecessors in title had demised certain land to the defendant for seven years at a rent of £46. This land fronted what was then known as Ferry-lane, at Barnes. The lease contained a covenant by the defendant to pay during the said term all "assessments impositions and outgoings" now payable or thereafter to become payable by either the landlord or the tenant in respect of the premises. At the end of the demised term the defendant continued to hold over, and had remained as a tenant from year to year.

In the year 1924 the plaintiff under the Private Street Works Act, 1892, had been served with a notice to pay £188 in respect of expenses incurred by the Urban District Council in doing certain work on that lane under the above Act. No particulars are given in the report as to this, but presumably the usual procedure had been followed calling upon the owners to make up the road, at this date called in the report "Ferry-road." The plaintiffs, the landlords, had paid this sum but were seeking to recover it from the defendant under the above covenant in the lease.

The Court held that the words "impositions and outgoings" in the lease covered the payment in this case, and the fact that the tenant was holding over as tenant from year to year did not affect his liability, as he was holding over on the terms of the lease.

The importance of the decision lies in the fact that the plaintiff cited the cases of *Batchellor v. Bigger* (1889, 60 L.T. 416); *Foulger v. Arding* (1902, 1 K.B. 700; *The Builder*, March 22, 1902); *in re Warriner* (1903, Ch. 367); and *Stockdale v. Ascherberg* (1904, 1 K.B. 447; *The Builder*, June 27, 1903).

In the first of the above cases the expression "outgoings" was held to include the owner's proportion of paving a street under the Metropolitan Management Acts. In *Foulger v. Arding* the word "impositions" was held to include a structural defect which rendered the premises insanitary which the owner had been called upon to remedy under Section 4 of the Public Health (London) Act, 1891. In *Stockdale v. Ascherberg* the word "outgoings" was held to embrace complying with a notice under the Public Health Act to abate a nuisance which required relaying a drain. In *in re Warriner* the word "imposition" was applied to reconstructing a drain to comply with an order made under the Public Health (London) Act, 1891.

In these two latter cases the tenants upon whom the burden was held to fall were holding the premises under agreements for three years, but in *Foulger v. Arding* the term was 16 years.

We may add to these cases a case not mentioned in this report, *Greaves v. Whitmarsh, Watson & Co.* (1906, 2 K.B. 340; *The Builder*, July 7, 1906), where the word "outgoings" rendered the lessee liable to pay the expenses of making up a road incurred under section 150 of the Public Health Act, 1875, and there can be no question that expenses incurred under the Private Street Works Act, 1892, are upon the same footing.

The defendant cited *Valpy v. St. Leonards Wharf Company* (1903, 67 J.P. Ch. 402) and *Harris v. Hickman* (1904, 1 K.B. 13; *The Builder*, November 21, 1903), two cases heard by Judges of first instance in which it was held in a lease from year to year (*Valpy's case*) or where a tenant was holding over from year to year (*Harris's case*), it ought not to be imputed

that the tenant intended to make himself liable for an expenditure exceeding his rent.

The learned Judge in the case we are noticing considered that these two last decisions were inconsistent with the cases cited by the plaintiff; *Foulger v. Arding* and *Stockdale v. Ascherberg* being decisions of the Court of Appeal.

We may also notice that this view had already been adopted by some text-book writers, but now the case we are considering will afford a definite authority. It certainly does appear hard, to say the least of it, that a tenant at a small yearly rent should find himself saddled with a liability possibly far exceeding his annual rent, but it must be remembered that this is not the fault of the law, but the result of the terms of an agreement into which he has voluntarily entered.

For some 25 years at least from some of the decisions we have cited above it has been known that the use of certain words in leases will have the effect of imposing burdens of this kind on tenants if they accept leases in that form, and it is now too late for them to expect the law to deliver them from their own acts. In short leases it is certainly inequitable that the burdens we have indicated above should be removed from the shoulders of the landlord and be imposed on those of the tenant; but a stand should be made by tenants or their legal advisers against executing documents which will have this obvious result. The liabilities can be dealt with equitably between the parties in any lease, but a common form is too often accepted without due consideration of its effect. In sanitary questions the landlords may prove recalcitrant as an insanitary condition may well be contributed to or even caused by neglect on the part of the tenant, and the extent of the operation required can neither be foreseen nor defined; but in the case of a man who rents houses or land on what is obviously a private road the case is otherwise. It must be apparent that at some date the local authorities may require that road to be made up, and few landlords granting a short lease would fail to see that such a liability could not fairly be imposed by the agreement upon the tenant. We have often dealt with this question before and urged upon tenants the necessity of looking before they leap.

THE RATING BILL

THE Minister of Health through his Private Secretary has issued a reply to various petitions that have been lodged against the proposals contained in the Rating and Valuation Bill. This has proved a highly contentious measure not merely in the "party" sense, as it has aroused opposition throughout the country from persons of various political opinions, and apart from "party" (the Government having pledged itself to carry it through and therefore having the support of loyal members), it is difficult to say whether it has the real support of the majority of the electors. Whilst never expressing an opinion on the merits of the measure as a whole, we have always doubted whether a contentious measure such as this was one which the Government need have put forward in its first year of office when matters of graver importance appeared to call for prompt attention.

The reply of the Minister (which appeared in *The Times* on November 7) can be compared with the paper read by Mr. P. Michael Faraday at the Auctioneers' and Estate Agents' Institute two days previously, and it will be seen the reply does not, as published, cover all the points raised by Mr. Faraday. The reply of the Minister, as reported, seems addressed to the following points:—That the Bill will reduce the rating authorities from 12,892 to 688 and thus simplify bookkeeping, &c., and reduce expense, and that the Bill will not create an army of new and highly-paid officials. That the statement that the Bill would transfer the preparation of valua-

tion lists from an impartial body to a spending body is also ill-founded.

The suggestion that the district council might manipulate the assessments so as to make the poundage appear low is met in the reply by two statements: (1) The ratepayers would consider the amount they had to pay and they were not likely to be persuaded that a low rate on a high assessment was more favourable to them than a high rate on a low assessment. We do not follow this statement. To the bulk of the ratepayers the word "persuasion" is unknown in this connection, and a "demand" in the form of a "note," is all they are conscious of experiencing. There may, however, be more in the second reason given, which was, that the precepts of the county councils would be in the form of a uniform rate in the pound and any district council which was foolish enough to make its assessment artificially high would be merely taxing itself for the benefit of its wiser neighbours. The objection that the Bill deprived the parish of its present participation in the basis of local taxation through the preparation of the valuation list by the overseer was met in the reply by referring to the undertaking given by the Minister to introduce an amendment whereby parish councils could appoint a person to act as an additional member of the valuation committee in respect to the valuation of properties in the parish. The reply further pointed out that the Bill made the assessment committee representative of the various classes of local authorities.

Turning to Mr. Faraday's paper we find the first point he made was that it was becoming evident that the main object of the Bill was the transfer of the duties of assessment from the present assessment committees to committees of the county councils in order to abolish the guardians and he argued that centralisation of management always had the effect of increasing expense, and he instanced the transfer of education from the School Boards to the Education Authority, and also referred to the Metropolitan Water Board.

He also argued that the county councils and borough councils already are sufficiently burdened with what they have to do and the increased burden could not make for efficiency. He also referred to the undesirability of appeals under the Bill to the assessment committees as constituted under the Bill representing the direct spending authorities as unsatisfactory—meaning, we presume, by "appeals" "objections" under the Bill—and he referred to the temptation to increase rateable value to decrease apparent poundage. He also considered that the Bill would tend to abolish equality of rating as between class and class and property and property.

This is only a brief summary of some of the points contained in both the above documents, but we may conclude by quoting from Mr. Faraday's paper a passage in which he outlined what legislation he considered was required: "A short measure compelling periodical valuations within time limits, the consolidation of rates, the synchronisation of county valuation lists with local valuation lists, and the abolition of gross value altogether."

Obituary.

The death has occurred of Sir Ernest Edward Pearson, of Brickendonbury, Hertford, director of the firm of contractors, S. Pearson & Co., Ltd.

Mr. W. Holt, builder and contractor, of Midland-road, Swinton, near Rotherham, died recently at the age of 76.

The death has occurred of Mr. Walter Dunk, aged 72 years, a retired builder and contractor, of Barnsley.

At the age of 85 the death has taken place of Mr. Charles Geen, J.P., builder, of Okehampton.

A CONGRESS OF THE BUILDING INDUSTRY

In the paper which he read at the R.I.B.A. last week, on "The Condition of the Building Industry," Mr. Herbert A. Welch, F.R.I.B.A., quoted a letter by Mr. Robert D. Kohn, Chairman of the Committee on Industrial Relations, American Institute of Architects, which appeared in the *Architectural Association Journal* under date June 19, 1925, showing what has been accomplished by the "Congress of the Building Industry" in the United States. In view of the importance of this matter to all who are in any way concerned in the building industry we quote the substance of the letter hereunder:—

"We are glad to acknowledge our indebtedness to Mr. Malcolm Sparks" (writes Mr. Kohn), "for the plan of co-operation between the various elements of the building industry upon which we have embarked in the United States was primarily inspired by his efforts to organise the Parliament of the Building Industry in England during the war. As far as I can discover, his war-time effort has left no permanent organisation of similar character in England. It inspired a movement, however, in this country which is carrying on with great success.

"I refer by this to the 'Congress of the Building Industry' which was started in 1920 in a preliminary way in this country, and which in the last three years has developed into a group of local organisations in half a dozen of our more populous communities; New York, Boston, Philadelphia, Portland (Oregon), Seattle and the State of New Jersey. Each of these organisations includes within its membership what we call the technique of the industry (the architects and the engineers), the labour of all the crafts of the industry, the builders (here called general contractors), the sub-contractors, the building material distributors, and finally, the representatives of finance principally interested in building loans.

"We are therefore gradually developing here through these local organisations a medium of co-operation between the various elements that jointly render a certain service to the public, and this co-operation enables each different function within the building process better to understand all the other functions within the process. Already each of these local groups has developed a system of apprenticeship training in the building crafts. This enlistment into and training for the industry is one of our most important problems as it is with you. Time and again in different places efforts have been made to start systems of apprenticeship training through either the joint efforts of the labour organisations and employers or by these two groups with the co-operation of the local education boards. Frequently these efforts have failed. Since the Congress of the Building Industry has been formed renewed efforts in this direction have been undertaken under the guidance of the architects and with the co-operation of the other elements previously mentioned as being part of these groups (and with the local education boards).

"Just as an illustration of the results attained in three brief years of work I may cite that in New York City alone the number of apprentices being trained in various crafts has increased from a few hundred to two or three thousand. Here, too, there are restrictions by unions upon the number of apprentices to be introduced into any craft, but the neutral investigations conducted by our 'Congress' groups have shown that, as with you, there were in no trade as many apprentices being trained by the employers as were permitted by the union rules. Nor have we yet, even with our large increase above recorded, reached the maximum permitted by the unions. Time enough to discuss these rules when this limit has been reached. Indeed, it is only fair to say that we frequently find a more ready response from labour in the matter of starting apprenticeship training than we get from the employers.

"Apprenticeship training is only one of the many educational efforts undertaken by the Congress groups, educational in the sense that they educate the participants in the efforts rather

more than those ostensibly to be benefited. Seasonal unemployment; unfair practices on the part of builders or of labour; inadequate performance on the part of the architects; industry codes of ethics; surveys of likely shortages of materials or labour, are all topics that engage various Congress committees in the different cities.

"It must not be supposed that what we have done here has been all plain sailing or that we have solved the problem of industrial relations in the building industry in the United States. We have hardly scratched the surface of the problem. But we are certain we have started in the right direction. The fundamental principle announced in the declaration of purpose of each of these Congress groups is that the object to be attained is the study of the functioning of the building industry through the joint effort of all of the elements that are necessary to the industry so that the mistakes and the difficulties may be done away with that lie in the way of an adequate service of the industry to the public.

"The results of our three or four years' effort have already proven that this scheme of building industry organisation in which the architects have taken a hand has produced what we may call a by-product even more important than apprenticeship training, the doing away with seasonal unemployment and the correction of unfair practices within the building industry. This more important thing which has been accomplished, and which is recognised by hundreds of architect members of those Congress groups, is that the work done jointly on these various committees by architects, engineers, labour men, building trades employers and others interested in building work has established between the individuals thus working together an understanding of and a sympathy with each other's problems, of the functioning of the industry as a whole and of the relation of any one part to the whole, which unquestionably will result in a willingness to be more reasonable when those difficulties arise. This realisation of a common purpose is in itself the most important thing that we think we have accomplished. It is the recognition of the fact that the architect needs this kind of education as much as anyone else that has caused the American Institute of Architects to instruct the committee of which I happen to be chairman to encourage its members to invite the co-operation of others in the building industry to help in the formation of 'Congress' groups, such as I have described, in every part of the country."

Institution of Public Lighting Engineers.

At a Council Meeting of this Institution, held at Leeds at the termination of the second Annual Meeting and Conference, Mr. S. B. H. Langlands, J.P., the retiring President, was thanked for the able manner in which he had carried out the duties of President during his year of office, and for his valuable services at the inauguration of the Institution. The Council also expressed their thanks to Mr. W. J. Liberty (Hon. Secretary) for services rendered, and presented him with a cheque.

Mr. Leon Gaster, Hon. Secretary of the Illuminating Engineering Society (England), was admitted an Hon. Member of the Institution.

It was confirmed that the third Annual Meeting and Conference be held in September, 1926, in Newcastle-upon-Tyne, under the presidency of Mr. R. Davison, Superintendent of the Public Lighting of that city.

Widening Bishopsgate.

The L.C.C. has agreed to contribute one-half of the cost to widening Bishopsgate to 60 ft. in front of No. 87 to St. Botolph's Church on the west side, and Nos. 106 to 126 on the east side, at an estimated cost of £141,113.

NEW COMPANIES

The particulars quoted below have been compiled by Messrs. Jordan & Sons, Ltd., Company Registration Agents, of 116 and 118, 'Chancery-lane, W.C.2, from the documents available at the Companies' Registry.

PAPER-STUCCO DECORATIONS, LTD. (209,593). Registered November 10. 52, Rathbone-place, Oxford-street, W.1. House decorators, sanitary engineers, &c. Nominal capital, £1,500.

BARGMAN & SON, LTD. (209,475). Registered November 2. Bank Chambers, 80A, High-street, Dorking. Builders, contractors, &c. Nominal capital, £4,000.

SILVERTOWN TARMACADAM CO., LTD. (209,470). Registered November 5. Salisbury House, London Wall, E.C.2. Dealers in slag, stone or other materials, &c. Nominal capital, £10,000.

LIGHTWOOD BRICK & TILE CO., LTD. (209,662). Registered November 13. Brick and tile manufacturers. Nominal capital, £20,000.

GILBERT & HALL, LTD. (209,640). Registered November 12. General builders and contractors, &c. Nominal capital, £12,000.

R. B. GIBSON, LTD. (209,648). Registered November 12. Painters, decorators, &c. Nominal capital, £5,000.

CONSTRUCTORS UNION, LTD. (209,655). Registered November 13. Builders and contractors, &c. Nominal capital, £5,000.

LANGLEY LONDON, LTD. (209,694). Registered November 14. Dealers in bricks, tiles building materials, &c. Nominal capital, £25,000.

MIDDLETON & CO. (BLACKPOOL), LTD. (209,738). Registered November 17. Contractor and builder. Nominal capital, £5,000.

IDRIS TILE & SLABBING CO., LTD. (209,628). Registered November 12. 20A, Wilderspool Causeway, Warrington. Manufacturers and merchants of slabbing tiles, &c. Nominal capital, £200.

NOVOCRETE & CEMENT PRODUCTS CO. (NORTHERN AREA), LTD. (209,200). Registered October 2. 3, Regent-street, S.W.1. To enter into an agreement with Novocrete and Cement Products Co., Ltd. Nominal capital, £20,000.

STEYNING LIME & BRICK CO., LTD. (209,619). Registered November 11. Lime and cement manufacturers. Nominal capital, £10,000.

REINFORCEMENTS, LTD. (209,487). Registered November 5. Westminster Chambers, 28, East-parade, Leeds. Reinforced concrete or structural steel engineers, &c. Nominal capital, £1,000.

ENGINE FOUNDATION & CONCRETE CONTRACTORS, LTD. (209,242). Registered October 26. 27, Soho-square, W.C. Builders in concrete, brickwork, &c. Nominal capital, £5,500.

WILLIAM JAY (WESTCLIFF), LTD. (209,265). Registered October 26. 107A, Hamlet Court-road, Southend-on-Sea. Builder and contractor. Nominal capital, £2,500.

T. H. PALMER, LTD. (209,847). Registered November 21. Quarry masters and stone merchants. Nominal capital, £2,000.

COLLARD & SON, LTD. (209,877). Registered November 23. Monks-road, Exeter. Stone and marble masons, &c. Nominal capital, £500.

BIGGIN & CO., LTD. (209,864). Registered November 23. Slaters, tilers, plasterers and builders. Nominal capital, £6,000.

J. A. WHITEHEAD, LTD. (209,858). Registered November 21. Builder and contractor. Nominal capital, £100.

EVANS, JONES & EVANS, LTD. (209,805). Registered November 20. Builders and contractors. Nominal capital, £500.

J. W. MOORE & SON (ILFORD), LTD. (209,812). Registered November 20. 34, Water-lane, Ilford, Essex. Builder and decorator. Nominal capital, £2,000.

THOMAS CLEMENTS & SONS, LTD. (209,794). Registered November 19. Dene Joinery Works, Selborne-gardens, Newcastle-upon-Tyne. Builder and contractor. Nominal capital, £2,500.

LANCASHIRE CONSTRUCTION CO., LTD. (209,886). Registered November 23. Field-street Saw Mills, Field-street, off Henry-street, Blackpool. Builders, contractors, &c. Nominal capital, £7,000.

DRAIN REPAIR DISPUTE

In the Mayor's and City of London Court, on December 4, before the Recorder, Sir Ernest Wild, K.C., a claim was made by Messrs. Sinfield & Harmer, builders, decorators and sanitary engineers, Camomile-street, E.C., against Messrs. Berrick Bros., Ltd., of Camomile-street, E.C., for £111 3s. 6d., balance of account for work done in relaying drains at the defendants' premises in the early part of this year. Mr. Morgan, counsel for the plaintiffs, outlining the case, said that the work, which was of a difficult nature, had occupied plaintiffs for 10½ weeks. It was found that the drains in the defendant's premises had got into a very bad condition, necessitating work inside the premises, and in the roadway, the latter being done by the Corporation. Accounts had been rendered as the work proceeded, and defendants had paid a total sum of £260 on account, leaving the balance sued for due. Apparently they disputed the length of time taken by the plaintiffs, the amount of material supplied by them, and the number of men employed, as well as the commission charged in respect of profit. The first witness called by Mr. Morgan was Mr. Ralph, sanitary inspector of the City Corporation, who superintended the work done by the plaintiffs. He said that the work was of an unusual character as the drains beneath the asphalt floor of the defendants' premises had been leaking, and the ground in the vicinity had become saturated. Asked whether 10½ weeks was necessary to do the job, the witness expressed the view that instead of the six men employed by the plaintiffs, four men working for seven weeks should have

been sufficient. With regard to the plumbing, he thought three days would have been sufficient time in which to do everything necessary. Cross-examined, witness said he understood that one of the items disputed by the defendants was the charge for 404 hours made for the time spent on the job by Mr. Harmer, a partner in the plaintiffs' firm.

Mr. A. T. Harmer denied that he employed more men than necessary, or for a longer time than was required. He himself superintended the job for 10½ weeks. Of the 404 hours which he had charged as representing his services, he spent a quarter of that time in plumbing. That meant he was plumbing for eight hours a day for two and a-half weeks on the rain-water pipes, and in the dismantling of and re-fixing lavatories and lavatory basins. Questioned about the material supplied, witness said that in reference to four drainpipes, 200 bricks, and 10 bags of cement, no bills had been produced, because they were taken out of his firm's stock. The charge in the bill for 10 per cent. for cutting and breakages was a customary one in the trade.

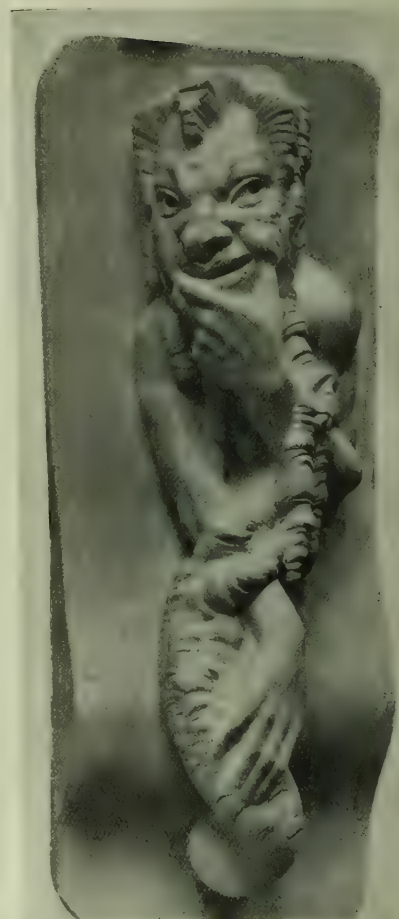
His charge of 33 1-3 per cent. on the cost of labour and materials was also customary.

Mr. Frederick Allen, of the firm of Gray & Allen, gave evidence to the effect that 33 1-3 per cent. on material and time was the customary trade charge. The size of the job would be taken into consideration.

Mr. W. S. Crosher, chartered surveyor, gave evidence on behalf of the defendants. He said he had inspected the work after completion, and, in company with Mr. Ralph, had found that the



Garden Statue of Pan in Cast Concrete.



Model for a Bronze Door Knocker.

charges made by the plaintiffs worked out at £4 10s. per foot for the drains. His view was that the work, even assuming it was more than usually difficult, should have been done for 30s. per foot. He thought that one man superintending, and two labourers could have done the job in seven weeks. His experience was that the charge for profit should be 15 per cent., or in exceptional cases 20 per cent.

The Recorder said that, taking everything into account, he came to the conclusion that for the time and labour, charged by the plaintiffs at £194 17s. 8d., he would allow £100. As to the four drain pipes, 200 bricks, and 10 bags of cement, he disallowed that, remarking that it was intolerable that no accounts should be kept of such transactions which would enable the customer to check the charge. The charge for cutting and breakages he thought was a fair one. As to the percentage of profit, he came to the conclusion that the proper profit chargeable would be 25 per cent. The net result was that the plaintiffs were entitled to receive upon the whole bill £222 15s., and as the defendants had paid £260, they would have judgment on the claim, with costs, and judgment on the counterclaim for £37 5s.

CAST-CONCRETE STATUARY

The illustrations which appear on this page show two rather amusing examples of modern grotesquerie. The garden statue of Pan is interesting not only for the deft handling of a quaint subject, but for the fact that the figure, which is life-size, is cast in white concrete. The delicacy of the casting proper and the smooth surface texture which has been obtained reveal rather strikingly the possibilities of white cast-concrete in relation to figure sculpture. The smaller illustration is of a model for a bronze door-knocker. Both examples were designed and modelled by Messrs. Gilbert Seale & Son.

THE L.C.C. HOUSING ESTATES

LAST week Colonel C. B. Levita, Chairman of the Housing Committee, of the L.C.C., conducted a Press tour of the various housing estates under his supervision. The main divisions of the work are: (1) the improvement or reconstruction of unhealthy areas, including the provision of dwellings for rehousing persons of the working classes displaced, and (2) the provision of new dwellings to meet the need for additional accommodation.

Up to the end of 1914 the Council and its predecessor, the Metropolitan Board of Works, had carried out 35 schemes for the clearance of some 97 acres of slum property, with a consequent displacement of 45,699 persons. In addition, the execution of the scheme for the clearance of the Tabard-street, Grotto-place and Crosby-row areas (17 acres), involving the displacement of 4,552 persons, had been commenced when the war broke out. The Council itself undertook the rehousing operations in connection with slum clearance schemes, and also provided a large number of dwellings in lieu of accommodation destroyed in connection with public improvements. In addition the Council subsequent to 1900 supplemented these compulsory rehousing operations by the voluntary provision of additional housing accommodation in block dwellings in the central districts and cottages in suburban districts. Altogether up to March 31, 1919, accommodation had thus been provided for 58,873 persons in 6,543 tenements and 3,442 cottages, besides three lodging houses containing 1,880 cubicles. Since the war the Council has completed over 11,100 houses and flats, with accommodation for about 84,000 persons. Altogether, therefore, accommodation for nearly 143,000 persons, calculated on the basis of two persons a room, has been provided by the Council up to the present time in 21,042 tenements and cottages and three lodging houses with 1,880 cubicles. There are also at various estates 141 shops, 101 workshops, 284 sheds, &c., and 1,304 allotments. Up to March 31, 1925, the capital expenditure on all dwellings and estates, including clearance of unhealthy areas, amounted to nearly £17,100,000. Since that date over £1,500,000 has been spent in addition. The rent roll from the dwellings at the present time exceeds £800,000. Since the war the Council has undertaken the clearance of 19 separate areas; the cost of these schemes, including acquisition of property, clearance and roadwork, but not including the cost of providing accommodation for rehousing the persons displaced, is estimated at £1,145,200.

The first area to be visited was the Brady-street district, whose tumble-down dwellings and narrow courts constituted one of the worst and most notorious slums in London. Six blocks of tenements are being erected on this site of 7½ acres, and 1,875 persons are to be comfortably housed. In most cases a space is retained in between the houses for a park or recreation ground, and is laid out to include trees. The transformation from the really indescribable squalor of the slums to the big blocks of airy and pleasant tenements is an appreciable and praiseworthy step towards a better London. The rents, inclusive of rates and water charges, are from 11s. 11d. to 12s. 6d. for two-room tenements; from 14s. 9d. to 16s. 3d. for three-room tenements; from 18s. 5d. to 20s. 5d. for four-room tenements; and 21s. 1d. for five-room tenements. These are certainly a little higher than those of the dispossessed dwellings, and this partially accounts for the reluctance of the tenants to leave. Our representative was informed by Colonel Levita, however, that these people were not poor and could afford the difference.

The largest of the Council's estates is at Becontree, and covers an area of 2,700 acres. The original plan for the development of the estate provides for the erection of upwards of 20,000 houses, of which about 550 are occupied at the present time. Provision has been made for a central park, recreation grounds and open spaces, allotments, churches, schools, shops and other public buildings, the more important of which will be grouped in the centre. A con-

siderable area of land has been reserved for business premises and municipal requirements. Provision has also been made for a green belt round the estate on its London side. The development of the estate, which was commenced in 1920, is being carried out under a cost contract with Messrs. C. J. Wills & Sons, Ltd. Many of the buildings are of the usual brick construction, but concrete construction has also been adopted. The rents, inclusive of rates and water charges, range from 10s. 1d. to 14s. 2d. for the flats, and from 12s. 8d. to 22s. 7d. for the houses of three, four and five rooms. The rents of the six-roomed houses vary from 23s. 10d. to 26s.

The White Hart-lane estate, of 177 acres, is situated between Lordship-lane and White Hart-lane, Tottenham, 1 mile from Wood Green Station and ½ mile from Bruce Grove Station, both on the London North Eastern Railway. Before the war 40 acres were developed by the erection of 963 houses. Three acres have been laid out as an estate garden. Under the State-assisted scheme of 1919 about 720 houses have been erected apart from 72 flats in three-story dwellings provided as rehousing accommodation under the Ware-street clearance scheme. Seven acres have been allocated to allotments, and nearly 4 acres to open spaces. An arterial road, 100 ft. wide, known as the New Cambridge-road, traverses the estate. The Lordship-lane frontage is being developed by the erection of three-story buildings comprising 138 dwellings and two shops, the ground floors being constructed as flats capable of conversion into shops should occasion require. A further section is now about to be developed by the erection of about 350 dwellings.

The Council in 1920 made a scheme for the clearance of the Ware-street area of 9½ acres. The clearance of the area is now proceeding, and it is estimated that 2,648 persons will be displaced, of whom 2,160 are to be rehoused on the area. The first block of dwellings to be erected on the estate provides accommodation for 228 persons. The estate will ultimately comprise nine blocks of dwellings.

As part of the rehousing accommodation to be provided under the scheme 72 flats in three-story dwellings to accommodate 378 persons have been provided on the White Hart-lane estate, Tottenham. Again the same open airy appearance characterised the tenements, and is now appreciated by the tenants. Each front door opens on to a long, railed, concrete platform, which thus takes the place of the ordinary street. In some cases a lift conveys people to and from the ground and their particular floor.

The party next visited the Tabard estate, Southwark, comprising some 13½ acres, and standing upon the site of the old Tabard-street area condemned before the war as an unhealthy area, immoral and verminous. Accommodation for about 2,400 persons has been provided in seven blocks of tenement dwellings grouped round an area of about 5 acres which, when cleared, will be laid out as a public open space. The old courts and alleys have been swept away, new 40 ft. roads have been constructed, and Tabard-street itself is being widened to 40 ft. The gross weekly rents, inclusive of rates, are from 9s. 11d. to 15s. 6d. for a tenement of two rooms; 13s. 5d. to 18. 9d. for three rooms; 15s. 7d. to 21s. 4d. for four rooms; and 21s. 11d. to 23s. 10d. for five rooms.

The Downham estate, near Lewisham, was next visited. Of this 516½ acres, 133 acres have been reserved for open spaces, &c., 34½ acres for the erection of shops, schools, churches, &c., and the remaining 349 acres will be devoted to dwellings. The first section, that portion contiguous to the main Bromley-road, is now in course of development, and will consist of about 2,170 houses and flats.

The Bellingham estate of 176 acres comprises 2,089 dwellings, consisting of 132 two-roomed flats, 156 three-roomed flats, 411 houses of three rooms, 986 of four rooms, and 404 of five rooms. The density of houses over the whole

estate is about 12 to the acre. There are about 10,000 persons resident on the estate, and provision is made for allotments, schools, places of worship and shops. This estate has been in existence for two years and, in addition to proving entirely satisfactory in use, presents an extremely attractive and pleasant appearance.

The final visit was to the East Hill estate, Wandsworth, which has been provided by the Council for the purpose of rehousing persons displaced by the clearance of unhealthy areas in London. It is proposed to provide accommodation for 3,280 persons in 537 tenements, comprised in five-story buildings. Each tenement will be self-contained and will comprise, in addition to the living, etc., rooms, a kitchenette (in which a bath will be placed) and other domestic offices. It is proposed to erect a few shops on the East Hill frontage of the estate, and to preserve a pleasant open green square in the main front.

NEW BUILDINGS IN LONDON.

Bermondsey.—Messrs. J. Moir Kennard & Son, architects, 13, Railway-approach, London Bridge, S.E. 1, have prepared plans for a two-story building in Rothsay-yard, Rothsay-street, S.E., for Mr. H. Lee, 242, Bermondsey-street, S.E.

Braintree.—Plans have been prepared by Mr. E. O. Wheeler, 71, Rayne-road, Braintree, for the erection of twelve houses at Bocking.

Chorley Wood.—A group of twenty houses is to be erected in Chapel Hamlet by Mr. W. E. Ellis, Croxley Green, Watford, at a cost of £10,000. Mr. C. W. Richardson, architect.

Carshalton.—Plans have been prepared by Mr. Andrew Mather, F.R.I.B.A., architect, 38, John-street, Bedford-row, W.C. 1, for a new church.

Didcot.—Mr. F. H. Floyd, architect, Market-place, Newbury, has prepared plans and layout for a local housing scheme.

Eastcote.—Mr. A. S. Soutar, 8, King William-street, Strand, W.C. 2, is the architect for a group of sixteen cottages to be built in Wiltshire-lane.

Edgware.—An estate at the corner of Broad-fields-avenue has been sold to Mr. C. B. Heygate, Shirehall Estate Office, Hendon, N.W. 11, who proposes to erect a number of residences.

Feltham.—Additions are to be made to Feltham Barracks and new officers' quarters are to be erected. Mr. R. Mansell, builder, 5, Catherine-street, Croydon.

Finchley.—A domestic science subjects centre is to be built at the elementary school, Albert-street, W. 3. Mr. Percival T. Harrison, 9, The Hawthorns, Regent's Park-road, N. 3, architect to the Finchley Education Committee.

Hampstead.—Plans have been prepared by Sir Edwin Lutens, R.A., 17, Queen Anne's-gate, Westminster, S.W. 1, for art and preparatory schools at the Hampstead Garden Suburb Institute, in Central-square, N.W. 11. The Middlesex C.C. are contributing £14,000 towards the cost.

Hayes.—Plans have been prepared by Mr. Eizaguirre, architect, Golosa, Spain, for a church for the Order of the Immaculate Heart of Mary. The cost is estimated at £20,000.

Hillingdon.—Fifty-four houses are to be carried out under the supervision of Mr. F. Hall-Jones, architect, 11, Haven-grove, Ealing, W. 5.

Hornsey.—A contract has been placed for the erection of a school in Rokesley-street, with Messrs. Patman & Fotheringham, Ltd., Islington, at £53,219. Plans by Mr. H. Carter Pegg, F.R.I.B.A., 35, Parliament-street, Westminster, S.W. 1.

Hoxton.—Messrs. R. Woollaston & Co., 40, Turner's-road, E. 3, are to build a block of tenements, to be called Arrow House, and Westend Asher House (tenements also), on the Whitmore Estate, at a cost of £15,700.

Lewisham.—Twenty houses are to be erected in Southend-lane, S.E. 6, under the supervision of Mr. A. J. Glock, structural engineer, 34,

RATES OF WAGES IN THE BUILDING TRADE

Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.

Victoria-street, S.W.1. Twenty-six houses are also to be erected in Brightling-road.

Leyton.—Mr. F. J. Coxhead, builders, 45, Bulwer-road, E.11, has commenced the erection of a new school in Sybourn-street, E., for the Leyton E.C. Messrs. Newman & Jacques, architects, 61, West Ham-lane, Stratford, E.15. The building will seat 300, and will cost £10,000.

Limhouse.—Work is to be put in hand upon alterations to the Eastern Hotel, E.1, a contract having been placed with Messrs. T. G. Waterman, builders, 34A, Three Colts-street, E.14, at £13,600. Mr. A. E. Sewell, Lic.R.I.B.A., architect to owners. Messrs. Truman, Hanbury, Buxton & Co., Ltd., 91, Brick-lane, E.1. Mr. Wm. Gilbert, Lic.R.I.B.A., quantity surveyor, 74, Broad-street-avenue, E.C.2.

Lombard-street.—Reinforced concrete foundations are now being put in for the large office and banking building at the corner of Lombard-street and Gracechurch-street, E.C.3, intended for Messrs. Barclay's Bank, Ltd. Messrs. Ashby & Horner, Ltd., builders, 8, Aldgate, E.1. Messrs. J. Campbell Jones, Son & Smithers, architects, 8, Dowgate-hill, Cannon-street, E.C.4.

Muswell Hill.—A housing scheme, involving £65,000 and the building of 108 residences, is to be carried out by Messrs. Rowley Bros., Ltd., builders, Tower Works, Dunloe-avenue, N.15.

Oxford-street.—Messrs. A. D. Dawney & Sons, Ltd., Steelworks-road, Battersea, S.W.8, are supplying the steel for the new building at 100, Oxford-street, W.1, for Messrs. F. & C. Osler, Ltd., electric light fittings manufacturers. Messrs. Bovis, Ltd., builders, 43, Upper Berkeley-street, W.1. Messrs. Diespeker & Co., Ltd., 69, Holborn Viaduct, E.C.1, fireproof floors. Messrs. Duncan Watson & Co., electrical installation, 62, Berners-street, W.1. Messrs. Empire Stone Co., Ltd., patent stone-work, 231, Strand, W.C. Messrs. Constantine & Vernon, architects, 82, Mortimer-street, W.1.

Paddington.—Alterations are to be made by the Great Western Railway at Paddington Station, W.2, to provide stores for the Hotel Department. Plans by company's architect Paddington Station, W.2.

Romford.—A site adjoining Waterloo-road is proposed for new factory buildings for Messrs. Cowan Hulbert, engineers and manufacturers, Abbey House, Victoria-street, Westminster, S.W.1.

St. Martin's-le-Grand.—Excavation operations are in progress upon the site in St. Martin's-le-Grand, Foster-lane and Gresham-street, E.C.2, where an office and shop building is to be erected for the St. Martin's-le-Grand Property Co. Messrs. Rice & Sons, builders, Stockwell-road, S.W.9. Messrs. Redpath, Brown & Co., Ltd., steelwork, Laurence Pountney-hill, E.C.4. Messrs. S. H. White & Son, consulting engineers, 9, Victoria-street, S.W.1. Messrs. Gunton & Gunton F.F.R.I.B.A., architects, Blomfield-street, E.C.2.

Soho.—Alterations are being made to Kettner's Restaurant in Church-street, W.1. Messrs. Maple & Co., Ltd., builders, Tottenham Court-road, W.1. Messrs. Express Lift Co., Ltd., lifts, Greycoat-street Works, S.W.1.

Tooting.—New shops and showrooms are being built in Upper Tooting-lane, S.W., for Messrs. E. Mortimer (London), Ltd., clothiers, 9, New Bridge-street, E.C.4. Messrs. Burdwood & Mitchell, architects, 80, George-street, Portman-square, W.1.

Walthamstow.—A timber-framed school is to be erected in Low Hall-lane, Markhouse-road, E.17. Mr. H. Prosser, architect to the Walthamstow E.C.

Westminster.—An ambulance station is to be erected in Regency-street, S.W.1, for the L.C.C., at a cost of £1,890. Messrs. C. P. Roberts & Co., Ltd., 36, Tyssen-street, Dalston, E.8, contractors.

Wood Green.—Twenty-four houses are to be erected to plans by the Artisans' Labourers' & General Dwellings Co., Ltd., 1, Cromwell-road, South Kennington, S.W., on the Noel Park Estate.

Woolwich.—Plans have been prepared by Messrs. Whincrop & Channer, architects, 47, Thomas-street, Woolwich, for a bacteriological laboratory at the Woolwich Infirmary in Plumstead High-street, S.E.18.

	Masons.	Brick-layers.	C'p'ters. Joiners.	Plas- terers.	Slaters.	Plum- bers.	Painters.	Lab'ers.
Aberdare	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Accrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Altrincham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ashton-under-Lyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barnsley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barrow-in-Furness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Barry	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bath	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bedford	1/9	1/9	1/8½	1/9	1/9	1/9	1/9	1/4
Birkenhead	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Birmingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bishop Auckland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackburn	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Blackpool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Boiton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Bournemouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bradford	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Brentwood	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Bridgwater	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/1½
Brighton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Bristol	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burnley	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Burton-on-Trent	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Bury	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Cambridge	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Cardiff	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chatham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Chelmsford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Cheltenham	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Chester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Chesterfield	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Colchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Coventry	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Crewe	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Darlington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Derby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Doncaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dudley	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Durham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
E. Glam. (Mon. Vall.)	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Eastbourne	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Exeter	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Folkestone	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/1½
Gloucester	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Grantham	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Grays	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/8½	1/3½
Grimby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Great Yarmouth	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Guildford	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Halifax	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Harrogate	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hartlepool	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hastings	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/4½	1/1½
Hereford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Huddersfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Hull	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Ipswich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Lancaster	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leamington Spa	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Leeds	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Leicester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Lichfield	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Lincoln	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Liverpool	1/9	1/9	1/8½	1/9	1/9	1/9	1/9	1/4
Llanelli	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
London 12 m. radius	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/9½	1/4½
London 12-15 m. radius	1/9	1/9	1/9	1/9	1/9	1/9	1/9	1/4
Loughborough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Luton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Maidstone	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Manchester	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Mansfield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Merthyr Tydfil	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Middlesbrough	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newcastle-on-Tyne	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Newport, Mon.	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Northampton	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Norwich	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Nottingham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oakham	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Oldham	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Oxford	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Plymouth	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Pontypridd	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Portsmouth	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Preston	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Reading	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Rochdale	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Rochester	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Rugby	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
St. Albans	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
St. Helens	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Scarborough	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/7½	1/2½
Sheffield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Shrewsbury	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Southampton	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Southend-on-Sea	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Southport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
South Shields	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockport	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stockton-on-Tees	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stoke-on-Trent	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stroud	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Sunderland	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swansea	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Swindon	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Taunton	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Torquay	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Tunbridge Wells	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/5½	1/1½
Wakefield	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Walsall	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Warrington	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
West Bromwich	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Wigan	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Windsor	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/1½
Wolverhampton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Worcester	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
York	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/3½

(For rates of wages in the Building Trade in Scotland, see page 917.)

CONTRACTS, COMPETITIONS, &c.

For some contracts still open, but not included in this List, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender; that a fair wages clause shall be observed; that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender unless stated to the contrary.

The date given at the commencement of each paragraph is the latest date when the tender, or the names of those willing to submit tenders, may be sent in; the name and address at the end is the person from whom or place where quantities, forms of tender, &c., may be obtained.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

DECEMBER 27. — **Folkstone.**—PAVILION.—Erection of a cricket pavilion at the Sports Ground, Cheriton-road, for the Corporation. A. E. Nichols, M.Inst.C.E., Borough Engineer, 11, Church-street, Folkstone. Deposit £5 5s.

DECEMBER 28. — **Cardiganshire.**—ADDITIONS.—Adaptation and additions to the house and farm buildings at Abertrinant Farm, Llanfihangel-y-Creuddyn, for the Small Holdings Committee of the C.C. J. Lewis-Evans, architect and surveyor, 21, Great Darkgate-street, Aberystwyth.

DECEMBER 28. — **Coventry.**—HEATING.—Hot-water heating, hot-water supply, steam, and condensed water services in the new kitchen block at the London-road institution, for the B.G. Edwards & Shaw, consulting engineers, 105, Colmore-row, Birmingham. Deposit, £1 1s.

DECEMBER 28. — **Dartford.**—HOUSES.—For (1) 100 houses, and (2) 18 houses, on the Lowfield-street housing site, for the U.D.C. Surveyor. Deposit £2 2s.

DECEMBER 28. — **Doncaster.**—HOSPITAL BUILDINGS.—Erection and completion of the superstructure of the first section of the new hospital buildings on a site adjoining Thorne-road, for the Committee of the Royal Infirmary. William A. Pite, Son & Fairweather, architects, 12, Carteret-street, Westminster, S.W.1. Deposit £5 5s.

DECEMBER 28. — **East Preston.**—COTTAGES.—Angmering (12), Durrington (12), East Preston (12), Poling (4), and Warningcamp (4), for the R.D.C. R. E. Booker, surveyor, Red Roof, Mill-lane, Rustington, Littlehampton.

DECEMBER 28. — **Harrogate.**—HOUSES.—Thirty houses, and the construction of roads, sewers, &c., in connection with the housing scheme at Crab-lane, for the Corporation. C. E. Rivers, Borough Engineer.

DECEMBER 28. — **Sowerby Bridge.**—HOUSES.—Four blocks of houses in Nelson-street, on the Willow-street housing site, for the U.D.C. J. Eastwood, surveyor.

DECEMBER 28. — **Wimbledon.**—CEMETERY EXTENSIONS.—Laying out of the extensions for 1926, including drainage, walling, fencing and gates, for the B.C. Borough Engineer and Surveyor's Office, Town Hall, Wimbledon.

DECEMBER 29. — **Abingdon.**—HOUSES.—Houses at Rayworth, Sunningwell, for the R.D.C. W. W. Earwaker, surveyor, 9, Bath-street. Deposit £2 2s.

DECEMBER 29. — **Bridlington.**—HALL.—Construction of concert hall, foundations, piling, retaining wall, and drainage works, &c., for the T.C. Blackmore, Sykes & Co., architects, Ruskin-chambers, Scale-lane, Hull. Deposit £2 2s.

DECEMBER 29. — **Brixham.**—CONVENIENCE.—Public convenience, for the U.D.C. Surveyor.

DECEMBER 29. — **Carlisle.**—PAINTING.—Complete cleaning and paint work in connection with the steel-work structure forming the coal storage bunkers at the new generating station, Willow Holme, for the T.C. C. W. Salt, City Electrical Engineer, Electricity Offices, Victoria Viaduct.

DECEMBER 29. — **Colchester.**—EMPLOYMENT EXCHANGE.—Erection and completion for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

DECEMBER 29. — **Dublin.**—ELECTRIC LIGHT.—Installation of electric light at the Irish Land Commission Offices, Upper Merrion-street, for the Commissioners of Public Works. J. J. Healy, Secretary, Oifig Oibreach Poblí (Office of Public Works), Baile Atha Cliath. Deposit £1.

DECEMBER 29. — **London, W.C.**—EXTENSION.—To the National Gallery, for the Commissioners H.M.O.W. Contracts Branch, H.M.O.W., King Charles-street, S.W.1. Deposit £1 1s.

DECEMBER 29. — **Paulton.**—HOSPITAL.—Isolation hospital at Paulton, near Bristol, for the Bath, Clutton, Midsummer Norton and Radstock Joint Hospital Committee. A. J. Pictor, F.R.I.B.A., 14, Queen-square, Bath. Deposit £2 2s.

DECEMBER 29. — **Pontefract.**—ALTERATIONS.—Alterations and additions to the Love-lane Council School, for the T.C. W. H. Newton, Borough Engineer and Surveyor. Deposit, £2 2s.

DECEMBER 29. — **Tavistock.**—HOUSES.—Four houses on a site adjoining Callington-road, for the U.D.C. F. Cambie, surveyor.

DECEMBER 30. — **Glasgow.**—HOUSES.—234 houses at Summertown-road, for the T.C. J. Lindsay, Town Clerk.

DECEMBER 30. — **Hendon, N.W.9.**—ALTERATIONS, &c.—(1) Alterations to Isolation Block A into Operating Block, Western Fever Hospital, Seagrave-road, Fulham, S.W.6; (2) new Gate Office, Colindale Hospital, Hendon, N.W.9, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

DECEMBER 30. — **Hendon, N.W.9.**—NEW ENTRANCE ROADWAY.—At Colindale Hospital, Hendon, N.W.6, for the M.A.B. Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

DECEMBER 30. — **Horne Bay.**—ISOLATION ACCOMMODATION.—To be formed for the Metropolitan Asylums Board, at St. Anne's Home, Kent. G. A. Powell, Office of the Board, Victoria Embankment, E.C.4. Deposit £1.

DECEMBER 30. — **Kiveton Park.**—CONVERSION.—Of pail closets into water closets, for the R.D.C. A. L. Lewis, Clerk, near Sheffield.

DECEMBER 31. — **Belfast.**—LIBRARY.—Library in Shankill-road, for the C.B. T. W. Henry, F.R.I.B.A., 16, Donegal-square South. Deposit £2 2s.

DECEMBER 31. — **Buxton.**—HOUSES.—Twenty parlour-type houses and twenty non-parlour houses on Heath Grove estate, for the T.C. F. Langley, Borough Engineer and Architect. Deposit £4 4s.

DECEMBER 31. — **Dublin.**—RESTORATION.—Of Ballybunon ex-R.I.C. barracks, co. Kerry; Ballyduff, co. Kerry; Macroom, co. Cork; Ballymacarberry, co. Waterford; Clonmel, co. Tipperary; Callan, co. Kilkenny; New Inn, co. Tipperary; Ballymoe, co. Galway; Leenane, co. Galway; Ardagh Garda Stochana Station, co. Limerick, for the Commissioners of Public Works. J. J. Healy, Secretary, Oifig Oibreach Poblí (Office of Public Works), Baile Atha Cliath. Deposit £1 each.

DECEMBER 31. — **Dublin.**—WINDOWS.—Supply, delivery and fixing of timber windows at the east and west pavilions and the central hall of the Four Courts, for the Commissioners of Public Works. J. J. Healy, Secretary, Oifig Oibreach Poblí (Office of Public Works), Baile Atha Cliath. Deposit £1.

DECEMBER 31. — **Glossop.**—ALTERATIONS.—Additions and alterations to infirmary, for the B.G. Hadfield & Cawkwell, architects, 19, St. James-street, Sheffield. Deposit, £2 2s.

DECEMBER 31. — **Ipswich.**—HOUSES.—Designs for the erection of houses suitable for the working classes in Samford, for the R.D.C. A. J. Haward, Clerk to the Council, 5, Queen-street.

DECEMBER 31. — **Rochford.**—HOUSES.—Two additional houses at Great Stambridge, for the R.D.C. A. C. Madge, surveyor. Deposit £1 1s.

DECEMBER 31. — **St. Asaph.**—HOUSES.—Rhuddlan, Vicarage-lane, eight houses; St. Asaph, Denbigh-road, six houses, for the R.D.C. E. O. Evans, Hafod Elwy, St. Asaph. Deposit £3 3s.

DECEMBER 31. — **Shanklin.**—PAVILION.—New pavilion on the original site on the Pier, for the Extension Pier (Shanklin), Ltd. E. C. Cooper, Post Office Chambers, Shanklin.

DECEMBER 31. — **Stockton-on-Tees.**—HOUSES.—106 semi-detached houses on the Grangefield estate, Oxbridge-avenue, for the T.C. Hays & Gray, architects, Wingate, Co. Durham.

JANUARY 1, 1926. — **Clapham Common.**—FENCING.—For the supply and erection of wrought-iron unclimbable fencing at Parliament Hill and Clapham Common, for the Administrative County of London. Chief Officer, Parks Department, County Hall, Westminster, S.W.1.

JANUARY 2. — **Bolton-upon-Dearne.**—PAVILION.—Sports pavilion at the welfare ground, for the Miners' Welfare Scheme. Garside & Pennington, architects, Ropergate, Pontefract.

JANUARY 2. — **Humberstone.**—ENLARGEMENT.—Of the Council school, for the Leicestershire C.C. Architect, County Education Office, Grey Friars, Leicester. Deposit £2 2s.

JANUARY 3. — **Newmarket.**—HOUSES.—Erection of five pairs at Burwell; one pair at Longmead, Lode, for the R.D.C. A. E. Austin, 4, Hill's-view, Great Shelford, Cambs.

JANUARY 4. — **Bebington and Bromborough.**—HOUSES.—Seventy-two houses at Bebington and 28 houses at Bromborough, for the U.D.C. Surveyor, Council Offices, Bebington. Deposit £2 2s.

JANUARY 4. — **Cannock.**—HOUSES.—Twelve pairs of non-parlour type houses on a site adjoining the main Wolverhampton-Stafford road at Fordhouses, for the R.D.C. H. M. Whitehead, Engineer's Office, Penkridge, Stafford.

JANUARY 4. — **Clutton.**—HOUSES.—Eight houses at Publow, for the R.D.C. Mr. Hawker, architect, Council House, Temple Cloud. Deposit £2 2s.

JANUARY 4. — **Ham.**—HOUSES.—Erection of 16 terrace houses and eight semi-detached, for the Ham U.D.C. The Surveyor, Council Offices, Lock-road, Ham, Richmond, Surrey.

* JANUARY 4. — **Hammersmith, W.6.**—REPAIRS.—To the properties included under its housing schemes for the periods from the signing of the contract to March 31, 1927, 1928 and 1929 respectively. R. Hampton Clucas, M.Inst.C.E., Borough Engineer and Surveyor, Town Hall.

JANUARY 4. — **Hexham.**—HOUSES.—Fourteen houses on the Chareway-lane site, for the U.D.C. Messrs. Knowles, Oliver & Leeson, architects, Collingwood-street, Newcastle-on-Tyne.

JANUARY 4. — **Holbeach.**—COTTAGES.—Dog-drove, Holbeach-drive (A. E. Farrow's site), one pair; Ravensgate, Holbeach Fen (Alex. West's site), one pair; Washway-road, Holbeach (Spalding Town Husbands' site), five pairs; Holbeach St. Mark's (A. E. Farrow's site), one pair; Holbeach St. Mark's (H. P. Carter's site), one pair; Leadenhall, Holbeach Marsh (H. C. C. Tinsley's site), one pair, for the U.D.C. S. S. Mossop, Jun., Clerk, Holbeach.

JANUARY 4. — **Newburn.**—PAVILION.—On the Lemington recreation ground, for the U.D.C. H. F. J. Modlin, clerk.

JANUARY 4. — **Todmorden.**—EXTENSIONS.—At Cornholme Council school, for the E.C. J. E. Scott, Lic. R.I.B.A., Bridge-street.

JANUARY 4. — **Winterton.**—REPAIRS.—To the Winterton and District Social Club. The Steward, 43, Front-street.

JANUARY 5. — **Alfreton.**—HOUSES.—Sixteen houses at Victoria-street, Somercotes, for the U.D.C. Surveyor. Deposit £5 5s.

* JANUARY 5. — **Armley, Leeds.**—TELEPHONE EXCHANGE.—Erection of a telephone exchange for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, Westminster, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

JANUARY 5. — **Belfast.**—LAVATORIES.—Ladies' lavatories at Hazlewood, Antrim-road, Whitwell, for the C.B. General Manager, Tramways Office, Sandy Row.

JANUARY 5. — **Burton-upon-Trent.**—HOUSES.—Erection of 94 and incidental works on the High Bank-road site, Winhill, for the Corporation. Geo. T. Lynam, Borough Engineer and Surveyor, Town Hall.

JANUARY 5. — **Dublin.**—WAREHOUSE.—Warehouse at the Custom House Docks, for the Port and Docks Board. E. H. Bailey, Secretary, Port and Docks Office, Westmoreland-street. Deposit £5.

JANUARY 5. — **Easington.**—WALL.—Concrete retaining wall reinforced with indented steel bars, at the rear of Bede-street, Easington Colliery, for the R.D.C. R. Urwin Harper, Highway Surveyor, Castle Eden.

JANUARY 5. — **Horwich.**—BAKERY.—In Longworth-road, for the Industrial Co-operative Society, Ltd. H. J. Close, General Secretary, 86, Lee-lane, Horwich, near Bolton, Lancs. Deposit £2 2s.

JANUARY 6. — **Darlington.**—HOUSES.—Fifty houses in pairs and blocks of four houses, in Geneva-road, least, for the C.B. Borough Surveyor. Deposit, £1 1s.

JANUARY 6. — **Edinburgh.**—HOUSES.—For (1) Abercorn, 144 houses, extendable to 184 houses; (2) Easter-corn, 36 houses, extendable to 60 houses; (3) Lechend-road, 102 houses; (4) Saughtonhall, 100 houses; (5) Wardie, 100 houses, for the T.C. Director of Housing, 329, High-street. Deposit £2 2s.

* JANUARY 6. — **Keighley.**—TELEPHONE EXCHANGE.—Erection and completion of, for the Commissioners H.M.O.W. Contracts Branch, H.M.O.W., King Charles street, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

JANUARY 6. — **Lincoln.**—HOUSES.—Twenty-eight non-parlour type houses on the St. Giles estate, for the T.C. S. C. Baggott, City Engineer and Surveyor. Deposit 10s. 6d.

* JANUARY 7. — **Kensington, W.8.**—SANITARY ACCOMMODATION.—At St. Mary Abbots Hospital, Marles-street, Kensington, for the B.G. W. R. Stephens, Clerk, Guardians' Offices, Marles-road.

JANUARY 7. — **Kingston-upon-Thames.**—SCHOOL.—Erecting additions to the Kingston Grammar School, for the Education Committee of the Corporation. Alan Paul, chartered surveyor, 12, New-court, Carey-street, Lincoln's Inn, W.C.2. Deposit £2 2s.

* JANUARY 7. — **Snodland, Kent.**—TELEPHONE EXCHANGE, AUTOMATIC.—Erection of, for the Commissioners H.M.O.W. Contracts Branch, King Charles-street, Westminster, S.W.1. Deposit £1 1s. (Cheques payable to the Commissioners.)

JANUARY 7. — **Tynemouth.**—BUILDING.—Two receiving wards at the Union Institution Hospital, 50, Preston-road, North Shields, for the B.G. Wm. Stockdale, A.R.I.B.A., 81, Howard-street, North Shields.

JANUARY 8. — **Cudworth.**—REPAIRS.—Repairs to property, 2, 4, 6, 8, Guest's-yard, and 53, 55, 57, 59, 61, 63, 65 & 67, Sidecup-road, for the U.D.C. F. S. Burrow, sanitary inspector.

* JANUARY 8. — **Rowley Regis.**—HOUSES.—Erecting 16 and four (total 20) parlour type houses (10 pairs, each semi-detached) and incidental works, including sewerage, draining and filling up land in Hill-road, Tivdale, for the U.D.C. Daniel Wright, Clerk.

JANUARY 9. — **Kiveton Park.**—COTTAGES.—Twenty-four pairs of cottages of "A" type, in Lidget-lane, Dinington, for the R.D.C. H. L. Paterson, F.R.I.B.A., 19, St. James-street, Sheffield. Deposit £3 3s.

JANUARY 9. — **Lyme Regis.**—RECONSTRUCTION.—Of a portion of the Marine Parade and the extension of the outer wall of the Harbour, for the T.C. Gower B. R. Pimm, Chartered Civil Engineer, 72, Queen-square, Bristol. Deposit £2 2s.

JANUARY 9. — **Southend-on-Sea.**—HOUSES.—Block of two houses, non-parlour type, for the C.B. R. H. Dyer, Borough Engineer. Deposit £2.

* JANUARY 10. — **Pennfields.**—EXTENSIONS.—Erection and completion of (comprising six additional classrooms, cloakrooms, out offices, &c.), to Woodfield-avenue Council School, Pennfields, near Wolverhampton, for Staffordshire E.C. Graham Balfour, County Education Offices, Stafford. Deposit £3 3s.

JANUARY 11. — **Hemel Hempstead.**—HOUSES.—Erection of 12 in pairs, at their Handpost Farm site, for the Corporation. A. Murray-Smith, A.M.Inst.C.E., Borough Surveyor, Market-square.

JANUARY 12. — **Bushey.**—SEWERAGE.—Sewage pumping station and certain works at the sewage purification Works, for the U.D.C. Martin & Roberts, 108, St. George's-square, Westminster, S.W. Deposit £3 3s.

JANUARY 12. — **Leeds.**—INSTITUTE.—Proposed Institute for the blind, Roundhay-road, for the T.C. Education Offices (Architect's Section), Calverley-street. Deposit £2 2s.

JANUARY 12. — **London.**—ADDITIONS.—Additions and alterations to the Refuse Destructor, consisting of new cells, high-pressure water-tube boilers and auxiliary plant, for the Fulham B.C. A. F. Holden, Borough Engineer, Town Hall, Fulham, S.W.6. Deposit £5.

JANUARY 12. — **Skelmanthorpe.**—ALTERATIONS.—To Skelmanthorpe Council school, for the West Riding C.C. The Education Department, County Hall, Wakefield.

JANUARY 12. — **Skipton.**—HOUSES.—Forty houses (twelve of the parlour type and twenty-eight of the scullery type), on the Carleton-road site, for the U.D.C. A. E. W. Aldridge, engineer and surveyor.

JANUARY 12.—Southall, Middlesex.—STORES.—Various, for annual contracts, April 1, 1926, to March 31, 1927, for the U.D.C. J. B. Thomson, Assoc. M.Inst.C.E., &c., Engineer and Surveyor, Town Hall.

JANUARY 13.—Brantwood (Essex).—COW HOUSES, &c.—Alterations to the existing houses and the building of a new one and dairy buildings with lavatories, &c., in connection therewith, at the Branch Institution at Brantwood, for the Guardians. Frank R. Coles, Clerk, Hackney Union, 2, Sidney-road, E. 9. Deposit £3 3s.

NO DATE.—Birmingham.—REPAIRS.—To lanterns, slating, ventilators, gutters, walls, &c., including interior and exterior painting, renovations to basement, and general work in connection with the older portion of Woodcock-street swimming and private baths, for the T.C. Rd. Hoggins, Superintendent Engineer, Kent-street. Deposit, 10s.

MATERIALS, etc.

DECEMBER 28.—Berkshire.—MATERIALS.—Broken road material, gravel and sand, for the C.C. Lt.-Col. J. F. Hawkins, County Surveyor, Shire Hall, Reading.

DECEMBER 28.—Rhonda.—MATERIALS.—Bricks, stoneware pipes, iron castings, pavings, kerbs, channels, and pitchings, artificial paving, Portland cement and hydraulic lime, paints, oils, &c., and granite and limestone road macadam, for the U.D.C. E. Taylor, engineer and surveyor.

DECEMBER 30.—Caterham.—CORRUGATED STEEL PALING.—Supply and delivery to Caterham Mental Hospital, for the Metropolitan Asylums Board. Office on the Board, Victoria Embankment, E.C.4. Deposit £1.

DECEMBER 30.—Chorley.—GRANITE.—1,500 tons of 4 in. x 5 in. granite sets, for the T.C. Borough Surveyor.

DECEMBER 31.—West Riding.—MATERIALS.—Granite and whinstone, tarred and untarred slag, do. limestone, sand and gravel, refined tar, tar and bituminous compounds, bituminous compounds, stoneware pipes, cast-iron gully grates and frames, stone and concrete kerbing, edging, flags and sets, for the C.C. West Riding Surveyor, County Hall, Wakefield.

JANUARY 1, 1926.—Cardiff.—MATERIALS.—Building materials, &c., for the B.G. R. Stephenson, clerk, Union Offices, 11, Park-place.

JANUARY 1.—Gloucestershire.—MATERIALS.—Clean and tarred road stone and sea gravel, for use on main roads, for the C.C. County Surveyor.

JANUARY 2.—Bexley.—MATERIALS.—Tar and other road surfacing proprietary articles, highway materials, best glazed stoneware socketed pipes and best Portland cement, for the U.D.C. W. T. Howse, Surveyor.

JANUARY 2.—East Suffolk.—MATERIALS.—Tarmacadam, granite, slag, flint, &c., local materials—i.e., gravel, fine shingle and sand suitable for tarring operations—bitumen and/or surfacing compound, refined tar or other compound for surface treatment of roads, for the C.C. W. Jervis, County Surveyor, County Hall, Ipswich.

JANUARY 2.—Londonderry.—PIPES.—For (a) cast-iron pipes, 12 in., 15 in., and 20 in. diameter; (b) centrifugally spun cast-iron pipes, lined inside with cement, 15 in. and 18 in. diameter; (c) centrifugally spun reinforced concrete pipes, 18 in., 24 in., and 30 in. diameter, for the C.B. M. A. Robinson, City Engineer. Deposit £5.

JANUARY 2.—Spilshy.—MATERIALS.—Broken granite, broken slag and slag chippings, for the R.D.C. Wm. Cooke Brakenridge, District Surveyor of Highways.

JANUARY 5.—Coalville.—MAINS.—170 yds. 6 in., 1,500 yds. 4 in., and 540 yds. 3 in. cast iron gas and water mains, with necessary valves, hydrants and fittings, for the U.D.C. L. L. Baldwin, Waterworks Engineer.

JANUARY 8.—Middleton.—MATERIALS.—Granite sets, broken granite, granite chippings, limestone chippings, crushed slag, stone kerbs, flags, ballast and sets, concrete flags, Portland cement, stoneware pipes, castings, crosote oil and pitch, tarred slag, dehydrated tar, engineering bricks and common bricks, for the T.C. Borough Engineer.

JANUARY 9.—Worthing.—ROADSTONE.—500 tons of 1 in. clean granite chippings, 150 tons of 1 in. clean granite chippings, 150 tons of granite dust, and 700 tons of 1 1/2 in. broken slag, or 700 tons of 1 1/2 in. tarred slag, for the C.B. Borough Surveyor.

JANUARY 9.—Worthing.—TAR.—60,000 gallons of refined tar, for the T.C. Borough Surveyor.

JANUARY 11.—London.—MATERIALS.—Various materials, including builder's materials, for the Camberwell B.C. W. Bell, Borough Engineer and Surveyor, Town Hall, Camberwell, S.E.5.

JANUARY 12.—Birkenhead.—PIPES.—760 tons of cast-iron pipes and 58 tons of special castings, principally 20 in. internal diameter, for the T.C. R. F. Baker, Water Engineer, 82, Balls-road. Deposit £2 2s.

JANUARY 19.—Dorset.—MATERIALS.—Tarmacadam granite, basalt, limestone, refined tar, other surface dressing material, for the C.C. W. T. Fletcher, County Surveyor, County Offices, Dorchester.

JANUARY 23.—Essex.—MATERIALS.—Stoneware pipes, distilled tar, broken granite, and tarred slag, for the C.C. Wm. H. Morgan, chartered civil engineer, County Surveyor, Old Court, Chelmsford.

ENGINEERING. IRON AND STEEL.

DECEMBER 28.—Garforth.—TANK.—For (a) receiving tank, pump well, and engine house; (b) 9 in. and 7 in. sewers (702 yds. in length or thereabouts), and other appurtenant work; and (c) 1,098 lin. yds. of cast-iron rising main in length or thereabouts, for the U.D.C. F. Massie, chartered civil engineer, Tetley House, Wakefield. Deposit, £2 2s.

DECEMBER 29.—Alderden.—RESERVOIR.—Covered concrete reservoir, 54 ft. sq., and ancillary works, at Rosehill, for the Corporation. G. Mitchell, Water Engineer, Water Engineer's Office. Deposit £2.

JANUARY 5, 1926.—Westport.—SHED.—Extension of 100 ft. to the transit shed at Westport quay, for the Harbour Commissioners. T. P. Flanagan, B.E., Castlebar.

JANUARY 13.—Leeds.—TANKS.—Detritus pits, sewage and humus tanks, sludge pump house, workshop and store; laying and jointing 21 in. diameter cast iron pipe sewer, and 6 in. diameter sludge main effluent channels, manholes, &c., for the T.C. Geo. A. Hart, Sewerage Engineer, 8, Park-square. Deposit £5.

JANUARY 13.—Middleton.—CULVERT.—Construction of a proposed culvert, 234 ft. in length, over the Wince Brook, at Kirkway, for the T.C. Borough Engineer.

ROAD, SEWERAGE, AND WATER WORKS.

DECEMBER 28.—Caerphilly.—PAVING.—Forming, ballasting, malling, sewerage, paving, kerbing, &c., of Princes-avenue, Corbett-crescent, for the U.D.C. T. H. Richards, surveyor. Deposit £1 1s.

DECEMBER 28.—Harpenden.—SEWERING.—Of Mandall-avenue, for the U.D.C. Surveyor. Deposit, £2 2s.

DECEMBER 28.—Near Malley.—PIPES.—Laying and jointing about 1,100 yds. of 6 in. cast-iron pipes from Harlaw Reservoir to Malley, and constructing a concrete tank near Malley, with relative works, for the Midlothian C.C. J. & A. Leslie & Reid. C.E., 72a, George-street, Edinburgh. Deposit £1.

DECEMBER 28.—Pontefract.—MAINS.—Cast-iron gas mains, for the T.C. Gas Engineer, Gas Works.

DECEMBER 28.—Wimbledon.—EXTENSIONS.—Laying out extensions of Wimbledon Cemetery, including drainage, walling, fencing and gates, for the B.C. Borough Engineer and Surveyor.

DECEMBER 29.—Sittingbourne.—RECONSTRUCTION.—For reconstruction of a section of footway in the High-street, between 73 and 121. The works consist approximately of 220 yds. run of granite kerbing, 540 yds. super of granolithic paving, 188 yds. run of surface water sewer, and other miscellaneous works connected therewith, and for laying about 270 yds. run of 9 in. diameter soil sewer and other miscellaneous works in the Avenue of Remembrance, for the U.D.C. M. W. Lashmar, surveyor.

DECEMBER 30.—Merton and Morden.—SEWER.—Construction of approximately 512 yds. run of 9 in. and 6 in. stoneware pipe sewer, at Grand-drive, Merton, for the U.D.C. G. Jerram, Surveyor, Council Offices, Merton, S.W.19.

DECEMBER 30.—Surbiton.—SEWERS.—For (1) Regent-road and Surbiton Hill Park, approximately 387 yds. of 9 in. stoneware pipe sewer and 183 yds. of 12 in., with the necessary brick manholes and contingent works; (2) Egmont estate sewer, construction of about 742 yds. of 12 in. stoneware pipe sewer and 321 yds. of 12 in. iron pipe sewer, with brick manholes and other contingent works; (3) Housing estate, Tolworth, construction of 212 yds. of 9 in. foul water sewer and 260 yds. of 9 in. surface water sewer; (4) drainage works at Surbiton Cemetery, Lower Marsh-lane, for the U.D.C. C. Edgar Shelly, clerk.

DECEMBER 31.—Belfast.—PAVING.—Supplying, laying, and polishing terrazzo paving, &c., at the Mental Hospital, for the C.B. N. Fitzsimons, F.R.I.B.A., architect, 21, Castle-place.

DECEMBER 31.—Buxton.—SEWERS.—18 in., 12 in., and 9 in. sewers, in all approximately 350 yds., with manholes and other incidental works, in Burlington-road, for the T.C. F. Langley, Borough Engineer, Town Hall, Buxton.

DECEMBER 31.—Whitby.—SEWER.—950 yards of stoneware pipe sewers, varying in size from 9 in. to 12 in. diameter, with manholes and all appurtenant works, for the U.D.C. W. H. Radford & Son, Chartered Civil Engineers, Albion Chambers, King-street, Nottingham. Deposit £3 3s.

JANUARY 1, 1926.—Cuslodon and Purley.—FENCING.—135 yds. of wrought iron fencing at Marpit-lane, Cuslodon, for the U.D.C. R. Chart, surveyor, 69, Brighton-road, Purley.

JANUARY 1.—Thornton.—MAKING-UP.—For (1) Alexandra-avenue (from Rossall-road to Cleveleys-avenue), (2) Rough Lea-road (from Rossall-road to Nutter-road), (3) Beach-road (from Rossall-road to Queen's-road, adjoining Council Schools), (4) Thornton-gate (from Rossall-road to Queen's-walk), (5) Hastings-road, for the U.D.C. H. Fenton, Surveyor.

JANUARY 4.—Totnes.—SEWER.—Construction of about 1,061 yds. of 9 in. and 6 in. stoneware and cast-iron pipe sewer, together with manholes, &c., for the T.C. J. L. Davies, engineer and surveyor, 10, High-street. Deposit £3 3s.

JANUARY 2.—Warwickshire.—WIDENING.—The widening, excluding surfacing, of Humber-road from the Humber Motor Works, Coventry, to the London-road, a distance of about 1 mile, and widening in concrete and steel of the L.M. & S. Railway bridge, for the C.C. D. H. Brown, County Surveyor, 8, Northgate-street, Warwick. Deposit £2 2s. each.

JANUARY 4.—Beckenham.—SEWER.—Widening of Southend-road, Beckenham, and construction of a sewer, 800 cub. yds. excavation, 350 cub. yds. brick and clinker hardcore, 23 cub. yds. concrete, 500 sq. yds. red brick paving, 350 sq. yds. tar paving, 1,500 sq. yds. tar macadam, 250 lin. yds. 9 in. stoneware pipes, 300 lin. yds. 6 in. by 12 in. Norwegian granite kerb, and other incidental works, for the U.D.C. J. A. Angell, surveyor. Deposit £2.

JANUARY 4.—Birmingham.—SEWERS.—874 yds. of stoneware pipe sewers at King's Heath, for the T.C. H. H. Humphries, M.Inst.C.E., City Engineer and Surveyor. Deposit £2.

JANUARY 4.—Chelmsford.—MAKING-UP.—Formation and foundation work of road, footpaths, and other works in connection with the extension of King's road (340 yds.), to Broomfield-road on the Boarded Barns housing estate, for the T.C. E. J. Miles, A.M.I.C.E., Borough Engineer. Deposit £1 1s.

JANUARY 4.—Hastings.—MAINS.—Provision, laying and jointing of two lines of 9 in. diameter cast-iron mains of a total length of about 8,500 yds., together with sluice valves and air valves, for the T.C. John Taylor & Sons, Caxton House, S.W.1. Deposit £5.

JANUARY 4.—Rugby.—MAIN.—Laying of approximately 450 yds. of 4 in. cast iron water main and incidental works in Fisher-avenue, Hillmorton, for the R.D.C. J. E. Weeks, surveyor. Deposit £1 1s.

JANUARY 4.—Watford.—ROADS.—Construction of about 760 lin. yds. of new roads, 1,400 lin. yds. of new sewers and the widening of 200 lin. yds. of existing roads, on the housing estate, Gammons-lane, for the T.C. W. W. Newman, Borough Engineer. Deposit £2 2s.

JANUARY 5.—Harrow-on-the-Hill.—SEWERS.—Construction of sewerage and sewage disposal works in connection with the South Harrow drainage, comprising the laying of about 6,000 yards of stoneware pipe sewers, 5,500 yards of cast-iron air and rising mains, the construction of manholes, ejector chambers, concrete tanks and outfall works, for the U.D.C. J. P. Bennetts, engineer and surveyor. Deposit £3 3s.

JANUARY 7.—Wanstead.—MAKING-UP.—Of Seagrave-road (section 2), for the U.D.C. Engineer and Surveyor.

JANUARY 8.—London, N.W.—SWEEPING AND REFUSE COLLECTION.—From houses on the Regent's Park estate, for twelve months from March, 1926, for the Crown Estate Paving Commissioners. J. W. S. Appleton, Clerk, 1, Whitehall, S.W.1.

JANUARY 8.—Sheffield.—FENCING.—Wrought iron hurdle fencing at Shiregreen Cemetery, for the T.C. E. Partington, Improvement Surveyor. Deposit £1.

JANUARY 9.—Chesham.—SEWERS.—Road and laying of sewer at Chesham, on the Chiltern Hills building estate. F. E. Howard & Sons, architects and surveyors. Deposit, £1 1s.

JANUARY 9.—Ross and Gromarty.—RECONSTRUCTION.—Widening, strengthening, re-surfacing, drainage, fencing, retaining walls, and bridges, in sections between Tomich, Beaulie, and Alesand, and between Edderton Mains and Bonar Bridge, approximate 20.3 miles, for the C.C. Surveyor to the Mid Ross District Committee, Dingwall. Deposit, £3 3s.

JANUARY 9.—Wolstanton.—SEWERS.—Storm sewers foundation and surfacing to carriageway, kerbing and channelling, and other incidental works, in Crackley-road, Chesterton, for the U.D.C. A. Cotton, engineer and surveyor. Deposit, £3.

JANUARY 12.—Heptonstall.—WALL.—Re-building of boundary wall and drainage to school house at Heptonstall Council School, for the West Riding E.C. Education Department, County Hall, Wakefield.

JANUARY 12.—Northfleet.—DRAINAGE.—Carrying out the storm water drainage of the Perry-street area, for the U.D.C. J. A. Mitchell, District Surveyor. Deposit £1 1s.

JANUARY 15.—Stratford-upon-Avon.—SEWERS.—Approximately 1,120 lin. yds. of 9 in., approximately 1,000 lin. yds. of 12 in., approximately 1,030 lin. yds. of 15 in., approximately 1,126 lin. yds. of 18 in., and approximately 550 yds. of 24 in. outfall sewer, for the T.C. F. W. Jones, Borough Engineer. Deposit £3 3s.

JANUARY 30.—Gosforth.—SEWERS.—For laying new sewers and formation of roadways to complete the layout of the Coxlodge housing site, for the U.D.C. G. Nelson, engineer and surveyor.

FEBRUARY 2.—Tregaron.—EMBANKMENT.—Construction of embankment, mains, distribution, and other works in connection with the proposed water supply for the R.D.C. B. Idris Evans, Clerk.

Competitions.

(See Competition News page 910.)

Public Appointments.

DECEMBER 23.—Cape Town.—Senior Lecturer and Organiser in the Building Trades Department at the Cape Technical College. Chambers, Guthrie & Co., Ltd., 9, Idol-lane, London, E.C.3.

*** DECEMBER 30.—Bethnal Green, E.2.**—Architectural Draughtsman (temporary) required in the Borough Engineer and Surveyor's Department, on weekly staff, by the Metropolitan Borough Council. A. E. Danby, A.M.Inst.C.E., Borough Engineer and Surveyor, Town Hall, Bethnal Green, E.2., endorsed "Temporary Draughtsman."

*** NEW YEAR.—Parkgate.**—Clerk of Works required by the Rawmarsh U.D.C. in connection with the erection of public baths and concert hall in reinforced concrete. Jeffrey A. Tonge, L.R.I.B.A., Council Offices, Parkgate, Yorkshire, West Riding.

*** JANUARY 9.—Yorkshire.**—Architectural Assistant in the Department of the Borough Engineer and Surveyor required by the Corporation. H. H. Brown, Town Clerk, Town Hall, Gravesend.

*** JANUARY 9.—Stepney.**—Architectural Assistant required, on the weekly staff, by the Metropolitan Borough of Stepney. Age not less than 25 years. Borough Engineer and Surveyor, Raines-street, E.1.

*** JANUARY 9.—Stepney.**—Clerk of Works required by the Metropolitan Borough of Stepney, in connection with the construction of two underground conveniences. Age not less than 30 years. Borough Engineer and Surveyor, Raines-street, E.1.

*** JANUARY 9.—Stepney.**—Engineering Assistant required by the Metropolitan Borough of Stepney, on the weekly staff. Age not less than 25. Borough Engineer and Surveyor, Raines-street, E.1.

*** FEBRUARY 1.—Yeovil.**—Clerk of Works to superintend the erection of new municipal offices, public library, and museum, at Yeovil, required by the B.C. Town Clerk.

*** NO DATE.—Ceylon.**—Civil Engineers (3) required by the Government of Ceylon for three years' service, as District Engineers, in the Public Works Department. Apply at once Crown Agents for the Colonies, 4, Millbank, Westminster, S.W.1, quoting at head of application M 14200.

*** NO DATE.—Gold Coast.**—Building Foremen (two) required by the Government for the Public Works Department, for two tours of not less than 12 nor more than 18 months' service, with possible extension. Crown Agents for the Colonies, 4, Millbank, London, S.W.1., quoting M/14184.

PROPOSED NEW BUILDINGS & OTHER WORKS*

In these lists care is taken to ensure the accuracy of the information given, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced. Abbreviations: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.G. for Board of Guardians; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B.E. for Board of Education; M.A.B. for Metropolitan Asylums Board; and M.W.B. for Metropolitan Water Board.

BARNSELY.—In connection with the proposed alterations at the Corn Exchange, the Markets Committee now recommend the provision of shops and offices.

BATH.—The T.C. have considered and approved the providing of a permanent roof over the south, east and west sides of the outer terrace of the Roman Promenade. Detailed plans have been submitted by Mr. A. J. Taylor, the cost of the scheme being estimated at £3,750. The Council recommended the Baths Committee to obtain tenders, and the Town Clerk to apply to the M.H. for sanction to borrow a sum of £3,750.—The Council has recommended the Engineer to remove the Bath pavilion from Wembley Exhibition and re-erect it in the Royal Victoria Park, Botanic Gardens, at a cost of about £715.—The City Engineer reported that the estimated cost of providing necessary fencing, gates, approach and drainage of surface water at Larkhall playground at £700, and the T.C. resolved that the engineer be authorised to put the work in hand.

BEVERLEY.—The T.C. has decided to erect new public lavatories on the site in a narrow street off the Market-place known as Dyer-lane.

BEXHILL.—The T.C. has approved a scheme for the erection of a bridge over the railway opposite Manor-road, and recommended application be made to the M.H. for sanction to borrow £8,051.

BAYTH.—The T.C. decided to proceed with the proposed bathing pool. Sanction is to be sought from the Ministry for a loan of £10,000.

BRADFORD.—The E.C. has adopted plans prepared by the City Architect for the establishment of a boys' department at the Margaret Macmillan School at Thackley. The estimated cost of the complete scheme is £13,118.

BRISTOL.—The E.C. recommend the borrowing of £785 13s. for the purpose of erecting a handicraft centre at Wick-road Council school.

BROMLEY.—The M.H. has held an inquiry into the application of the R.D.C. for sanction to a loan to meet the cost of building offices and of providing a depot at Orpington, on a site acquired on the west side of the railway station.

BURY.—The Corporation Baths Committee recommended the extension of bathing facilities and the provision of washhouses at the old Militia Barracks in Bolton-road, Elton, and suggest that the borough engineer should prepare sketch plans, including provision for the accommodation of spectators at galas.

CARSHALTON.—The U.D.C. passed plans: Thirty-eight houses in Milton-avenue and eight houses in Westmead-road, for Edser & Brown.

CESTER.—The T.C. recommend that application be made to the M.H. for sanction to borrow £2,841, for the erection of houses on the Bottoms-lane site.—The City Surveyor has been instructed to prepare a design and estimate for the cost of providing suitable shelters.—The T.C. has received the sanction of the M.H. to the borrowing of £637 for purchase of Cherry-grove site. The City Surveyor has interviewed the M.H. on the proposal for the erection of 16 houses on this site.—The Council has referred to the Slaughter-house Sub-Committee to consider and report upon the question of providing additional lairage accommodation at the Public Abattoir.

DEPWADE.—The R.D.C. recommended that the following houses be erected: Bunwell 4, Earsham 4, Fundenhall 2, Hapton 2, Harleston 8, Scole 4, Stratton St. Mary 4, Stratton St. Michael 4, Tibenham Long Row 4, Dickleburgh 4, and Hempsall 4.

DONCASTER.—The Corporation Housing Committee has decided to erect a further 136 houses on the Woodfield-lane housing site—36 parlour type and 100 non-parlour type.

DUBLIN.—The Engineering Inspector of the Ministry of Local Government will conduct an inquiry regarding the City Commissioners' proposal to borrow £120,000 for the purpose of improving the water supply to the North side of the city and providing additional filtration at Roundwood.—Authority has been given to the City Commissioners to borrow £84,000 for carrying out main drainage works.—The Government has approved of the City Commissioners' proposal to utilise the site of the Linenhall Barracks for a housing scheme.

EPSOM.—The R.D.C. has given directions for tenders for the erection of 20 houses at Tadworth.

GLASGOW.—Funds are being raised for the new Central Synagogue.

GODSTONE.—The R.D.C. has received permission from the M.H. for the erection of 100 additional houses.

HINCKLEY.—The R.D.C. has decided to erect the first 50 houses under the Council's new scheme in the following districts: Barwell 10, Earl Shilton 10, Burbage 6, Stoney Stanton 6, Sharnford 6, Higham-on-the Hill 4, Sapcote 4, and Stoke Golding 4.

LARNE.—The U.D.C. are seeking sanction to a scheme for making a new street, clearing old cottages, and erecting twenty new houses at a cost of £350 each.

LEEDS.—A £70,000 scheme for the construction of new settlement tanks at the sewage works at Thorpe Stapleton has been approved by the Corporation General Purposes Committee. Application is to be made to the M.H.—The Improvements Committee of the Corporation has approved a proposal for the widening of a portion of Smithy Mills-lane, Weetwood, and the construction thereof of a new bridge.

LONDON (BOW).—The L.C.C. recommend the erection of a school for 640 children at a cost of £29,661, in Wellington-road.

LONDON (BRIXTON).—The L.C.C. recommend that the preliminary plans for the erection of a central school on the Holland-road site be approved, and that the approval of the B.E. be sought thereto, and that the architect be instructed to proceed with the preparation of working drawings, specifications and quantities. The school is estimated to cost £25,022.

LONDON (HACKNEY).—The L.C.C. Education Committee recommend the provision of a store-room, at the Institute, at a cost of £228.

LONDON (HAMMERSMITH).—The L.C.C. recommend that the preliminary plans for the erection of an elementary school on the Lena Gardens site be approved; that the approval of the B.E. be sought, and the architect be instructed to proceed with the preparation of working drawings, specifications, quantities. The expenditure will be £24,369.

LONDON (ISLINGTON).—The L.C.C. recommend that the preliminary plans for the provision of a secondary school for 450 girls at Highbury Hill be approved, and that the approval of the B.E. be sought, and the architect be instructed to proceed with the preparation of working drawings, specifications and quantities. The estimated cost is £46,704.

LONDON (KENNINGTON).—The L.C.C. recommend that the preliminary plans for rebuilding the Springfield school be approved, and that the approval of the B.E. be sought. The school will cost £37,431.

LONDON (LEWISHAM).—The L.C.C. recommend that the preliminary plans for the enlargement of the Elfrida school and the provision of handicraft and domestic economy accommodation be approved, and that the approval of the B.E. be sought thereto. The school will cost £7,453.

LONDON (NORWOOD).—The L.C.C. recommend that the preliminary plans for the erection of a central school on the Carnac-street site (Norwood) be approved, and that the approval of the B.E. be sought. The estimated cost is £24,644.

LONDON (ST. PANCRAS).—The B.C. has appointed a special Sub-Committee to review certain housing schemes for any suitable sites in the Borough upon which working-class dwellings can be erected.—The B.C. recommend that application be made to the Electricity Commissioners for sanction to the borrowing of the sum of £27,615 for electricity purposes.

LONDON (STEPNEY).—The L.C.C. recommend the borrowing by the B.C. of an amount not exceeding £6,300 for housing purposes.

LONDON (STOKE NEWINGTON).—The L.C.C. recommend that the preliminary plans for the erection of a central school on the Albion-road site be approved, and that the approval of the B.E. be sought. The cost of the school will be £24,038.

LONDON (WANDSWORTH).—The L.C.C. recommend that, subject to the approval of the M.H., Whitby House, with accommodation for 348 persons, on the East Hill estate, be appropriated as part of the re-

housing accommodation required to be provided under the Hickman's Folly scheme.

LONDON (WESTMINSTER).—The City Council recommended undertaking the necessary diversion of gullies and sewers in connection with the construction of the new underground railway station in Piccadilly Circus.

LONDON (WOOLWICH).—The B.C. are inviting tenders for a new small bacteriological laboratory at their infirmary.

LURGAN.—The R.D.C. has received approval of the proposal to borrow £2,500 for completing labourers' cottages.

MANCHESTER.—The 1927 National Eisteddfod Pavilion Committee has selected as a site for the pavilion the playground of the Holyhead County School.

MANSFIELD.—The T.C. passed plans: H. Bagdaley, ten houses, Berry Hill-lane; H. Ashley, eight houses, Perlethorpe-avenue.

NAVAN.—The Meath C.C. are to seek a loan of £2,000 for completion of reconstruction of County Hospital.

NEWCASTLE.—The B.G. are to construct a subway underneath Westgate-road connecting the new nurses' home now in erection with the Wingrove Hospital. Plans are in preparation for the L.N.E.R. bridge, which is to be constructed by the railway company.

NEWCASTLE (CO. DOW).—The U.D.C. is considering a scheme for the provision of hot water baths, &c., at Blackrock, at a cost of £4,731.

NORTH TIPPERARY.—The Board of Health proposes to borrow £1,500 for the construction of five labourers' cottages in Thurles.

NORTHAMPTON.—The M.H. has sanctioned the borrowing of £3,470, being the cost of the revised scheme for the development of the western end of the Racecourse, including the erection of an attendant's house, conveniences, and tool shed.

NOTTINGHAM.—About another £7,000 is wanted for the erection of the new hospital for women in Peel-street, Nottingham, which is to take the place of the existing institutions in Raleigh-street and Castle-gate.

OMAGH.—The U.D.C. is to erect four blocks of semi-detached houses on the Dublin road at a cost of £680 each.

OXFORD.—The T.C. are to alter the municipal offices, at a cost of £1,000.—The Deputy City Engineer submitted amended lay-outs for the Weirs-lane South site and the Abingdon-road Glebe site, and the T.C. recommended that the lay-outs of both sites be approved and submitted to the M.H. for approval.—Application is to be made to the M.H. for sanction to loans of £6,935 10s. for the lay-out of the Weirs-lane South site, and £32,414 10s. for the erection of seventy-six houses; also to loans of £4,460 for the lay-out of the Abingdon-road Glebe site, and £28,120 for the erection of sixty houses.

PEMBROKE.—The U.D.C. has decided to build 300 more houses on sites about to be acquired.

ROMSEY.—The R.D.C. has approved the scheme of the reconstruction of the bridge spanning the Test at Mottisfont.

SHEFFIELD.—The Carver-street Chapel Trustees have asked permission to erect new buildings on the site at the corner of West-street and Rockingham street.—The plans prepared by W. J. Hale, F.R.I.B.A., include six shops with basements with a large room, and smaller ones on the first floor for girls' work, and similar rooms above for work amongst men; also a new chapel-keeper's house. The whole scheme is to cost about £12,000.

SOUTHEND-ON-SEA.—The C.B. recommend that application be made to the M.H. for sanction to the raising of a loan of £3,500 for the construction of men's and women's conveniences in the plantation on the Chalkwell Esplanade immediately west of Chalkwell-avenue.

—The C.B. passed plans: Twenty-four houses, new road off Sutton-road, for the Southend-on-Sea Master Builders' Association; ten shops and warehouse, Holly-gardens, Southchurch-road, for D. E. Kerridge; four houses, two shops, twelve flats, and fifteen garages, Hildaville-drive and Fairfax-drive, for T. J. Dennis; eight houses and garages, Tyrone-road, for W. L. Allen.

SWANSEA.—The C.B. resolved that the Borough Architect proceed with the preparation of the bills of quantities for the proposed first block of new buildings at the Technical College. Plans have been provisionally approved by the B.E.—The Director of the municipal schools has received sanction from the M.H. to borrow the sum required for the cost of improving the Boys' School and erecting a new school for girls.—The Borough Architect is to prepare plans for erecting a house for the caretaker in the school grounds at a cost of £600 to £650, on the site of a stable and yard at the Intermediate Girls' School.—The C.B. resolved that the Housing Committee be requested to apply to the Ministry for a further grant in connection with 200 houses.—The Council resolved that the scheme for widening Mayals-road be approved, and that the Town Clerk be instructed to make application to the M.H. for sanction to the borrowing of £35,540 for the work.—The Council resolved that (a) public convenience be made in next year's estimates for (a) public convenience for men and women near the "Star Inn"; (b) a four-stall urinal in Bethel-road; (c) a four-stall urinal at Peniel Green.—The Committee has considered the question of additional accommodation for maternity beds, and resolved that the Borough Estate Agent be authorised to continue negotiations for alternative accommodation.—The C.B. resolved that the Borough Architect proceed with the wiring of Manselton and Terrace-road schools, at the approximate cost of £420.—Plans passed: Mission hall, Wychtree-street, for J. R. Davies; church and hall, Clarence-terrace, for the Swansea Parochial Church Council; 26 houses (9 in Tynmawr-street, 7 in Gelli-street, and 10 in Grafog-street, Danygraig), for J. Pye.

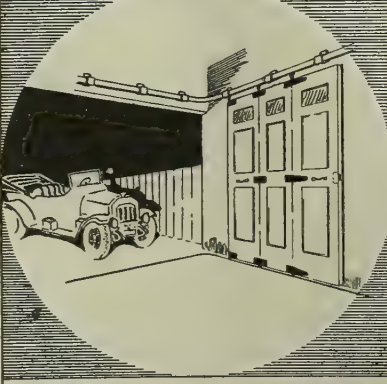
WEYBRIDGE.—The Housing Committee of the U.D.C. resolved that Mr. L. De Soissons, architect, be invited to attend the committee with a view to submitting a scheme for the erection of additional houses by the Council at Old Palace Gardens.

YORK.—Messrs. H. Colman & Sons have prepared a scheme for the lay-out and erection of houses at Water End, Clifton, York.

THE "HENDERSON" SYSTEM

SLIDING DOOR GEAR

FOR FACTORIES, GARAGES, SCHOOLS, ETC..



"TANGENT JUNIOR" FOR LIGHT DOORS.
"TANGENT SENIOR" FOR HEAVY DOORS.

WRITE FOR BOUND CATALOGUE B.24 TO—
P.C. HENDERSON, LIMITED.
BARKING, ESSEX. PHONE, EAST HAM 247.

PRICES CURRENT OF MATERIALS

[Owing to the exceptional circumstances which prevail at the present time, prices of materials should be confirmed by Inquiry.—Ed.]

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to London Bridge.	£ s. d.
Best Stocks	4 3 6
Second, Hard Stocks	3 18 6
Per 1,000, Delivered at London Goods Stations.	£ s. d.
Flettons, at	£ s. d.
King's Cross	2 13 3
Do. grooved for	2 15 3
Plaster	2 15 3
Do. Bullnose	3 8 3
Best Stourbridge Fire Brick	3 11 0
2½ in.	10 3 0
GLAZED BRICKS—	
Best White	D'ble Str'ch'rs 30 0 0
Ivory and	D'ble Headers 27 0 0
Salt Glazed	One Side and
Stretchers	two ends 31 0 0
Headers	Two Sides and
Quoins, Bull-	one End 32 0 0
nose and 4 in.	Splays and
Flats	Squints 29 10 0
Second Quality, 1 per 1,000 less than best.	
and 12 extra over white. Other colours, Hard	
Glaze, 15 10s. extra over white.	

BREEZE CONCRETE SLABS.

Delivered London.

2 in. per yd. super	1 11	3 in. per yd. super	2 9
2½ in. " "	2 4	4 in. " "	3 6
Thames Ballast	10 6 peryd.		
Pit Sand	13 9		
Thames Sand	14 6		
Best Washed Sand	14 6		
2 in. Shingle for Ferro-	12 9		
Concrete	14 0		
2 in. Broken Brick	11 6		
Van Breeze	7 6		
Per ton delivered in London area in full van loads.			
Best Portland Cement, British			
Standard Specification, Test £2 18 0 to £3 3 6			
51s. alongside at Vauxhall in 80-ton lots.			
Ferrocrete per ton extra on above	0 10 0		
Super Cement (Waterproof)	4 8 0		
Roman Cement	8 15 0		
Parian Cement	5 15 0		
Keene's Cement, White	5 15 0		
" Pink	5 10 0		
Plaster, Coarse, Pink	3 0 0		
" White	3 12 6		
" Fine	3 12 0		
Sirapite, Coarse	3 9 0		
Finish	3 17 0		
Grey Stucco Lime	2 11 9		
Chalk Lime	2 11 9		
Best Ground Blue Lias Lime	2 4 6		
Hair	32 0 0		
Granite Chippings	1 12 0		
Norw.—1d. per ft. cube extra for every foot over			
1s. 6d. if returned in good condition within three			
months carr. pd.			
Stourbridge Fireclay in s'cks 35s. 0d. per ton at rly. dp.			

STONE.

BATH STONE—delivered in railway trucks at	s. d.
West Lambeth Park, Paddington, G.W.R., or	
South Lambeth, G.W.R., per ft. cube.	2 9½
Do. do. delivered in railway trucks at Nine	
Elms, L. & S.W.R., per ft. cube.	2 11½
PORTLAND STONE—	
Brown Whitbed, in random blocks of 20 ft.	
average, delivered in railway trucks at	
Nine Elms, L. & S.W.R., South Lambeth	
Station, G.W.R., and Westbourne Park,	
Paddington, G.W.R., per ft. cube.	4 4
Do. do. delivered on road wagons at above	
stations, per ft. cube.	4 5
White Basebed, 3d. per ft. cube extra.	
Norw.—1d. per ft. cube extra for every foot over	
20 ft. average, and 1d. beyond 30 ft.	

HOPKINS-WOOD STONE—	
Delivered at any Goods Station, London.	s. d.
Small random blocks, up to 10 ft. cube. P. ft. cb.	7 0
Random blocks from 10 ft. and over	17 0
Sawn two sides	27 0
Sawn three or four sides	32 0
YORK STONE, BLUE—Robin Hood Quality.	
Delivered at any Goods Station, London.	s. d.
6 in. sawn two sides landings to sizes (under	
30 ft. super.)	Per ft. super 5 6
6 in. rubbed two sides, ditto	6 0
3 in. sawn two sides slabs (random sizes)	2 3½
2 in. to 2½ in. sawn one side slabs	
(random sizes)	1 6½
1½ in. to 2 in. ditto, ditto	1 4
HARD YORK—	
Delivered at any Goods Station, London.	
Scrapped random blocks	Per ft. cube 6 3
6 in. sawn two sides landing to sizes (under	
40 ft. super.)	Per ft. super 5 11
6 in. rubbed two sides, ditto	6 1½
4 in. sawn two sides slabs (random sizes)	2 10
3 in. ditto ditto	2 1½
2 in. self-faced random flags	Per yd. super 9 0

ARTIFICIAL STONE.

Delivered in London Area in full van loads, per ft. cube—Plain, 8s. 6d.; Moulded, 9s. 6d. Cills, 10s. 0d.

WOOD.

OD BUILDING DEAL.

Inches.	per stan.	Inches.	per stan.
4 × 11	£28 0	3 × 6	£21 0
4 × 9	25 0	3 × 11	25 0
4 × 8	24 0	2 × 11	25 0
4 × 7	23 0	3 × 9	24 0
3 × 8	21 0	2 × 9	23 0
3 × 7	20 0	3 × 4½	22 0
2½ × 7	20 0	3 × 4	22 0

PLANED BOARDS.

1 × 11	£26 0	1 × 9	£26 0
--------	-------	-------	-------

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
1	20/-	1½	31/-
1	22/-	1½	34/-
1	25/-		

Inches.	per sq.	Inches.	per sq.
1	25/-	1½	16/6
1	31/-	1½	19/-
1	34/-	1	24/-

SAWN LATHS.

Per bundle	0 2 4
Dry Austrian Wainscoat, per ft.	£ s. d.
Dry American and/or Japanese	0 15 0 to —
Figured Oak, ft. cube	0 11 0 to 0 13 0
Dry American and/or Japanese	0 11 0 to 0 13 0
Plain Oak, ft. cube	0 16 0 to 0 13 0
Dry sq. edged Honduras Mahog-	0 18 0 to 1 1 0
any, ft. cube	1 4 0 to 1 10 0
Dry Cuba Mahogany, ft. cube	0 13 0 to 0 15 0
Dry Teak, ft. cube	0 11 0 to 0 14 0
Dry American Whitewood, ft.	4 10 0 to —
cube	4 7 0 to 5 10 0
Best Scotch glue, per cwt.	
Liquid Glue, per cwt.	

SLATES.

First quality slates from Bangor or Portmadoc	
carriage paid in full truck loads to London Rate Station.	
Per 1,000 of 1,200.	£ s. d.
24 by 12	37 12 6
24 by 12	34 0 0
22 by 11	31 5 0
20 by 12	29 15 0
20 by 10	25 12 6
18 by 10	21 2 6
18 by 9	18 12 6
16 by 10	17 12 6
16 by 8	13 15 0

TILES.

Best machine-made tiles from Broseley or	£ s. d.
Staffordshire district	5 12 6
Ditto hand-made ditto	5 17 6
Ornamental ditto	6 2 0
Hip and valley tiles	0 9 6
(per dozen)	Machine-made 0 9 0

METALS.

JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—	£ s. d.
R.S. Joists, cut and fitted	12 10 0
Plain Compound Girders	14 10 0
Stanchions	16 10 0
In Roof Work	19 10 0

MILD STEEL ROUNDS.

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	12 0 0	½ in. to 1½ in.	10 15 0
1 in.	11 0 0	1 in. to 2½ in.	10 10 0
1½ in.	11 0 0		

WROUGHT-IRON TUBES AND FITTINGS—	
(Discount off list for lot of not less than £7 net value	
delivered direct from Works, 2½ per cent. less above	
gross discounts, carriage forward if sent from	
London Stocks.)	
Black Gas	60 % .. 50 % .. 60 %
Galvanised Gas	45 % .. 40 % .. 50 %
Blue Water	55 % .. 45 % .. 55 %
Galvanised Water	38½ % .. 35 % .. 45 %
Red Steam	50 % .. 40 % .. 50 %
Galvanised Steam	32½ % .. 30 % .. 40 %

C.I. HALF-ROUND GUTTERS—London Prices, ex Works.	
Per yd. in 6 ft.	Angles and Stop
lengths.	Gutters. Nozzles. Ends.
3 in.	1/2½ 11½d. 3½d.
3½ in.	1/4 1/0½ 3½d.
4 in.	1/5 1/2½ 3½d.
4½ in.	1/6½ 1/4 4½d.
5 in.	1/9½ 1/5½ 5½d.

O.G. GUTTERS.	
3 in.	1/7 1/3½ 3½d.
3½ in.	1/7 1/3½ 3½d.
4 in.	1/8½ 1/4 3½d.
4½ in.	1/10½ 1/6½ 4½d.
5 in.	2/3 1/9½ 5½d.

RAIN-WATER PIPES, &c.	
Bends, stock Branches.	angles, stock angles.
2 in. plain	1/9½ 1/2½ 1/8½
2½ in.	1/11½ 1/4 2/0½
3 in.	2/4½ 1/8 2/6
3½ in.	2/10 2/- 2/10½
4 in.	3/3 2/4½ 3/6

L.C.C. COATED SOIL PIPES—London Prices, ex Works.	
Bends, stock Branches.	Pipe. angles, stock angles.
2 in. per yd. in 6 ft. plain	s. d. s. d. s. d.
2½ in.	2 11 .. 2 3 .. 2 9
3 in.	3 5 .. 2 6 .. 3 5
3½ in.	4 1 .. 2 9 .. 4 0½
4 in.	4 5½ .. 3 5 .. 4 8½
4½ in.	4 11½ .. 3 9½ .. 5 5½

L.C.C. COATED DRAIN PIPES—London Prices ex Works.	
Bends, stock Branches.	Pipe. angles, stock angles.
3 in. per yd. in 9 ft. lengths	s. d. s. d. s. d.
4 in.	4 3 .. 5 9 .. 7 8
5 in.	6 3 .. 6 11 .. 9 6
6 in.	7 10 .. 12 0 .. 16 3
Gasken for jointing, 38/6 per cwt.	9 6 .. 15 0 .. 20 9

IRON—	
Common Bars	£ s. d.
Staffordshire Crown Bars—	13 0 0 to 14 10 0
good merchant quality	14 5 0 .. 15 5 0

Staffordshire "Marked	£ s. d.	£ s. d.
Bars	16 5 0 .. 17 5 0	
Mild Steel Bars	10 0 0 .. 11 0 0	
Steel Bars, Ferro-Concrete	12 0 0 .. 13 0 0	
quality, basis price	27 0 0 .. 28 0 0	
Hoop iron, basis price		
Galvanised		
Soft Steel Sheets, Black—		
Ordinary sizes to 20 g.	13 5 0 .. 14 5 0	
" " 24 g.	14 5 0 .. 15 5 0	
" " 26 g.	16 5 0 .. 17 5 0	
Sheets Flat Best Soft Steel, C.R. & C.A. quality—		
Ordinary sizes, 6 ft. by	15 10 0 .. 16 10 0	
2 ft. to 3 ft. to 20 g.		
Ordinary sizes, 6 ft. by	16 10 0 .. 17 10 0	
2 ft. to 3 ft. to 22 g.		
and 24 g.	18 10 0 .. 20 10 0	
Ordinary sizes, 6 ft. by		
2 ft. to 3 ft. to 26 g.	18 10 0 .. 20 10 0	
No. 1 quality 24 per ton extra.		
Flat and Galvanised Corrugated Sheets—		
Ordinary sizes, 6 ft. to	18 10 0 .. 19 10 0	
9 ft. to 20 g.		
Ordinary sizes, 6 ft. to	19 0 0 .. 20 0 0	
9 ft. to 22 g. and 24 g.		
Ordinary sizes, 6 ft. to	22 0 0 .. 23 0 0	
9 ft. to 26 g.		
Sheets Galvanised Flat, Best quality—		
Best Soft Steel Sheets,	22 0 0 .. 23 0 0	
6 ft. by 2 ft. to 3 ft. to		
20 g. and thicker	24 0 0 .. 26 0 0	
Best Soft Steel Sheets,		
22 g. and 24 g.	25 10 0 .. 26 10 0	
Best Soft Steel Sheets,	19 0 0 .. 20 0 0	
26 g.		
Cut Nails, 3 in. to 6 in.		
(Under 3 in. usual trade extras.)		

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	46 10 0
Pipe in coils	43 0 0
Soil Pipe	50 0 0
Compo Pipe	51 0 0
NOTE—Country delivery, 30s. per ton extra: lots under	
3 cwt., 3s. per cwt. extra, and over 3 cwt. and under 5	
cwt., 1s. 6d. per cwt. extra. Cut to sizes, 2s. cwt. extra.	
Old lead, ex London area, 1	31 10 0
at Mills	
Do., ex country, carriage	33 10 0
forward	

COPPER.

Seamless Copper tubes (basis)	per lb. 1 1
Strong sheet	2 3
Thin	2 4
Copper nails	2 3
Copper wire	2 4

PLUMBERS' BRASS WORK.

Delivered in London.	
NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR	
IRON.	
½ in. ½ in. 1 in. 1½ in. 2 in.	
29/- 45/- 76/- 153/- 246/- 510/- per doz.	
NEW RIVER PATTERN SCREW DOWN STOP COCKS AND	
UNIONS.	
½ in. ½ in. 1 in. 1½ in. 2 in.	
41/6 62/- 92/- 130/- 300/- 588/- per doz.	
NEW RIVER PATTERN SCREW DOWN MAIN FERRULES.	
½ in. ½ in. 1 in.	
39/6 60/- 116/6 per doz.	
CAPS AND SCREWS.	
1½ in. 1½ in. 2 in. 3 in. 3½ in. 4 in.	
7/6 10/- 14/- 23/- 30/- 42/- per doz.	
DOUBLE NUT BOILER SCREWS.	
½ in. ½ in. 1 in. 1½ in. 2 in.	
7/6 11/- 17/- 29/- 36/- 63/- per doz.	
BRASS SLEEVES.	
1½ in. 2 in. 3 in. 3½ in. 4 in.	
10/- 12/- 20/- 24/- 31/- per doz.	
NEW RIVER PATTERN CROYDON BALL VALVES, S.F.	
½ in. ½ in. 1 in. 1½ in. 2 in.	
35/- 56/- 98/- 162/- 228/- per doz.	
DRAWN LEAD P. & S. TRAPS WITH BRASS CLEANING	
SCREWS.	
1½ in. 1½ in. 2 in. 3 in.	
8 lbs. P. traps .. 33/- 41/- 56/- 101/- per doz.	
8 lbs. S. traps .. 35/- 45/- 66/- 126/-	
TRY—English Ingots, 2/9 per lb. SOLDIER—Plumbers'	
1/2, Timmen's 1/5, Blowpipe 1/6 per lb.	

PAINTS, &c.

Raw Linseed Oil, in pipes	per gallon 0 3 6
" " in barrels	0 3 8
" " in drums	0 3 11
Boiled	0 3 11
" " in barrels	0 4 2
" " in drums	0 5 10
Turpentine in barrels	0 6 0
Genuine Ground English White Lead, per ton	56 15 0
(In not less than 5 cwt. casks.)	
Genuine WHITE LEAD PAINT—	
" Father Thames," " Nine Elms,"	
" Park," " Supremus," " St. Paul's,"	
" Spedol," " Polacco," and other best	
brands (in 14 lb. tins) not less than	
5 cwt. lots	per ton delivered 77 15 0
Red Lead, Dry (packages extra)	per ton 53 10 0
Best Linseed Oil Putty	per cwt. 0 15 0
Flitcol	0 15 6
Size. XD Quality	0 3 6

Continued on next page.

*The information given on this page has been specially compiled for THE BUILDER and is copyright. Our aim in this list is to give, as far as possible, the average prices of materials, not necessarily the highest or lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.

PRICES CURRENT OF MATERIALS (contd.)**GLASS.****ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.**

	Per Ft.		Per Ft.
15 oz. fourths	3d.	32 oz. fourths	8d.
15 " thirds	4d.	32 " thirds	9d.
21 " fourths	4d.	Obscured Sheet, 15 oz.	4d.
21 " thirds	5d.	21 " 5d.	
26 " fourths	5d.	Fluted 15oz. 6d.	21oz. 9d.
26 " thirds	7d.	En'led 15oz. 5d.	21oz. 7d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED PLATE IN CRATES OF STOCK SIZES.

	Per Ft.
Roller plate	4d.
Rough rolled	5d.
Figured Rolled, Baltic, Oceanic, Arctic, Ship-polyte, and small and large Flemish White.	6d.
ditto, tinted	9d.
Roller Sheet	6d.
White Rolled Cathedral	5d.
ditto, do.	7d.

Cast Plate is same price as rough rolled.

VARNISHES, &c.

	Per Gallon.
Oak Varnish	Outside 0 14 0
Fine ditto	ditto 0 16 0
Fine Copal	ditto 0 18 0
Pale Copal	ditto 1 0 0
Pale Copal Carriage	ditto 1 4 0
Best ditto	ditto 1 12 0
Floor Varnish	Inside 0 18 0
Fine Pale Paper	ditto 0 18 0
Fine Copal Cabinet	ditto 1 2 6
Fine Copal Flatting	ditto 1 0 6
Hard Drying Oak	ditto 0 18 0
Fine Hard Drying Oak	ditto 0 19 0
Fine Copal Varnish	ditto 1 0 0
Pale ditto	ditto 1 2 0
Best ditto	ditto 1 12 0
Best Japan Gold Size	0 12 6
Best Black Japan	0 10 6
Oak and Mahogany Stain (water)	0 12 0
Brumswick Black	0 7 6
Berlin Black	0 14 6
Knotting (patent)	1 5 0
French and Brush Polish	0 17 0
Liquid Dryers in Terebine	0 9 0
Cuirass Black Enamel	0 7 0

NEW BUILDINGS IN SCOTLAND

Arbroath.—BUILDINGS.—The Forfarshire E.C. are considering the question of accommodation in the Arbroath High School, and plans have been prepared of new buildings proposed to be used for the accommodation of the elementary department.

Falkirk.—EXTENSION.—Funds are being

raised for the extension to the Falkirk and District Infirmary.

Perthshire.—HOUSES.—Seventy-four houses are being erected in Perthshire by the D.C. The houses to be erected are as follows:—Central District, Comrie, 10 houses of bungalow type, estimated cost £4,648; Muthill, eight houses of bungalow type; Highland District, Blair Atholl, six houses of Atholl steel type, estimated cost £3,228; Pitlochry, 12 houses of Atholl steel type, estimated cost £6,900.

Tranent.—SCHOOL.—The Master of Works for the E.C. has been instructed to complete plans and secure estimates for the erection of a new infants' school at Tranent.

Housing Progress in Scotland.

The following figures show the progress that has been made in State-aided housing schemes in Scotland to November 30, 1925:—

	Completed.	Under Construction
1919 Act	25,251 ..	289
Private Subsidy Schemes	2,324 ..	—
Slum Clearance Schemes	2,103 ..	3,088
1923 Act	5,291 ..	5,738
1924 Act (Local Authority Scheme)	409 ..	4,093
	35,378 ..	13,208

Of the total number of houses completed and under construction under the 1923 Act, 3,472 are by the Local Authorities and 7,557 by private enterprise.

In Edinburgh houses are being built with the steel roof of the design devised by Colonel Peter Nissen, D.S.O., the inventor of the Nissen hut. These houses have an attractive frontage, and the demonstration pair which are not yet completed have already been sold at £570 each complete. Those responsible for deciding to proceed with these houses are finding that there is no shortage of skilled labour, contrary to what is experienced in many parts of England. It is said that there is ample supply of bricklayers, builders, joiners, and plumbers, and also a fair supply of plasterers. Skilled tradesmen who have not been unemployed for years are now asking for work, and it is thought that next year there will be an even more ample supply of skilled building labour in the south-east of Scotland.

BUILDING TRADE WAGES IN SCOTLAND.*

The following are the present rates of wages in the building trade in the principal towns of Scotland. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur:—

	Masons.	Brick-layers.	Car-penters, Joiners.	Plas-terers.	Slaters.	Plum-bers.	Painters.	Labourers—Masons', Bricklayers', Plasterers'.
Aberdeen	1/8	1/8½	1/8	1/8	1/8	1/8	1/7	10d. to 1/1
Airdrie	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Alexandria	1/8	1/8	1/8	1/8	1/8	1/8	1/2½	1/3½
Arbroath	1/7	1/7	1/7	1/7½	1/7	1/7	1/5½	1/1½
Ayr	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Bathgate	1/8	1/8	1/8	1/8½	1/8	1/8	1/6½	1/2 to 1/3
Blairstown	1/7	1/7	1/7	1/7½	1/7	1/7	1/4	10d. to 1/1
Bo'ness	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Coatbridge	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3 to 1/3½
Dumbarton	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Dumfries	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/6½	1/2
Dundee	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3
Dunfermline	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Edinburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Falkirk	1/7½	1/7½	1/7	1/7	1/7	1/7	1/6½	1/2½
Fort William	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/2
Galashiels	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Glasgow	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Greenock	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3½ to 1/3
Hamilton	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½
Hawick	1/7	1/7	1/7	1/7	1/7	1/7	1/7	1/2½
Helensburgh	1/8	1/8	1/8	1/8	1/8	1/8	1/7	1/3½
Inverness	1/5	—	1/5	1/4	1/5	1/5	1/4	1/1 to 1/2
Kilmarnock	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Kirkcaldy	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Kirkwall	1/5	1/5	1/4	1/5	1/5	1/4	1/4	1/1
Lanark	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/0 to 1/3
Leith	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Motherwell	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3½
Perth	1/8	1/8	1/8	1/8	1/8	1/8	1/6½	1/3
Stirling	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/3½
Stirlingshire (Eastern District)	1/8-1/10	1/8 1 10	1/8	1/9	1/7	1/8	1/6½	1/3½
Wishaw	1/8	1/8	1/8	1/9	1/8	1/8	1/7	1/3½

* The information given in this table is copyright. The rates of wages in the various towns in England and Wales are given on page 932.

PATENTS.

APPLICATIONS PUBLISHED.*

213,572.—I. Tcherniakofsky and H. R. J. Sawyer: Hot water heating installations.

240,208.—F. J. Commin and A. Wilson.

Hughes: Roofing materials and lining-boards.

240,250.—H. B. Haycock: Picture-hanging rails.

240,257.—U. Fiorenzi: Methods of making building-blocks.

240,261.—W. Buck and E. Buck: Construc-tion of walls and blocks for building the same.

240,276.—L. Parsons and H. M. Parsons: Trivets for domestic firegrates of a barless type.

240,277.—R. H. Youngman: Neutral cement.

240,295.—J. P. Petty: Production of hollow bodies of concrete.

240,317.—Moir Buchanan Centrifugal Processes, Ltd., and R. A. Whitson: Pipe joint for concrete pipes.

240,333.—W. E. Farrer: Device for sup-porting flat objects vertically against walls.

240,352.—G. E. Wight: Apparatus for applying mortar in brick laying.

240,366.—A. G. Helbig: Furnace walls.

240,376.—J. H. Doble and W. T. Appleton: Shuttering arrangements for casting concrete walls in situ.

240,386.—C. H. Carey: Processes and com-positions for the treatment of cement and con-crete.

240,552.—F. Griffiths and B. Cromwell: Building constructions.

240,561.—C. D. Burney: Manufacture of reinforced building or constructional materials or elements.

240,633.—A. Gibb: Method of and means for dividing blocks of stone.

240,648.—H. L. Sleigh, A. S. Cheston, and E. C. Edmonds: Door latches.

240,657.—E. H. H. Vertigan: Floors for buildings.

240,676.—G. Martin: Building construction.

226,553.—V. A. Perlat: Door and like clos-ing and fastening devices.

240,705.—C. Bott: Walls and roofs.

240,719.—A. R. Prior and R. I. Hargreaves: Concrete cavity-blocks and apparatus for their manufacture.

240,742.—H. Nadge (Firm of): Manufac-ture of building blocks.

240,761.—C. Hutchins and J. R. Morriss: Collapsible cores for concrete wall construc-tion.

216,855.—G. B. Williams: Means for moulding T-shaped slabs.

216,856.—G. B. Williams: Hollow-wall con-struction.

238,948.—C. D. Burney: Construction of buildings, dwelling houses, and similar struc-tures.

238,949.—F. Mulligan: Manufacture of hydraulic cement or plaster from gypsum.

238,953.—F. Pichler: Construction of con-tainer walls subject to external pressure.

238,982.—F. Mulligan: Paints and washes.

238,996.—F. W. Gough: Damp-proof course for buildings.

239,092.—D. G. Underdown: Construction of reinforced concrete slab walls.

239,262.—T. Long and S. Elgar: Door and furniture handles.

216,892.—L. Rott: Fire and burglar-proof doors and door-jambs of reinforced concrete.

239,276.—E. Pilkington: Composition for staining and filling mahogany.

239,282.—H. D. Cook and G. H. Lundgren. Pipe joints and connections.

239,288.—Crittall Manufacturing Co., Ltd., and R. W. Prior: Mechanism for opening and closing casement windows.

217,605.—S. Seailles (née Calogeropoulos): Process for producing polished surface in cement.

239,337.—J. Pickersgill: Concrete kerb-stones.

* All these applications are now in the stage in which opposition to the grant of Patents upon them may be made.

CURRENT PRICES FOR BUILDING WORK IN LONDON

EXCAVATOR.

Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep....	per yard cube	s. d.
Add if in clay.....	" "	1 0
Add for every additional depth of 6 ft.....	" "	0 6
Planking and strutting to trenches.....	per foot super	0 5
Do. to sides of excavation, including shoring	" "	1 0

CONCRETOR.

Portland cement concrete in foundation 1 to 6..	per yard cube	32 6
Add if in underpinning in short lengths.....	" "	7 0
Add if in floors 6 in. thick.....	" "	3 3
Add if in beams.....	" "	3 9
Add if aggregate 1:2:4	" "	10 0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.....	" "	2 6

BRICKLAYER.

Reduced brickwork in lime mortar and Fletton bricks	per rod	£ s. d.
Add if in stocks.....	" "	7 10 0
Add if in Staffordshire blues.....	" "	22 0 0
Add if in Portland cement and sand.....	" "	1 10 0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks.....	per ft. super	0 0 1½
---	---------------	--------

POINTING.

Neat flat struck or weathered joint.....	" "	0 0 3
--	-----	-------

ARCHES.

Extra only to the price of ordinary brickwork:—		
Fair external in half brick rings.....	" "	0 0 10
Axed in stocks.....	" "	0 1 9
Rubbed and gauged jointed in putty camber or segmental	" "	0 6 0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement.....	" "	0 1 0
Setting ordinary register grates and stoves....	each	1 0 0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	" "	4 15 0

ASPHALTER.

Half-inch horizontal damp course	per yard sup.	4 3
Three-quarter-inch vertical damp course	" "	8 6
¾ inch on flats in two thicknesses.....	" "	6 3
Angel fillet	per foot run	0 3
Skirting and fillet 6 in. high.....	" "	1 2

MASON.

York stone templates fixed	per foot cube	13 0
York stone sills fixed	" "	22 0
Bath stone and all labour fixed	" "	10 6
Portland stone fixed.....	" "	20 0

SLATER.

Welsh 16 in. × 8 in. 3 in. lap, including nails	per square	72 9
Do. 20 in. × 10 in. Do. Do.	" "	80 9
Do. 24 in. × 12 in. Do. Do.	" "	90 0

CARPENTER AND JOINER.

Fir framed in plates.....	per foot cube	5 0
Do. joists.....	" "	5 6
Do. roofs, floors, and partitions	" "	6 0
Do. trusses	" "	8 6

Deal rough close boarding	per sq.	35/6	40/-	45/-	72/-
Flat centering for concrete floor, including struts or hangers	" "	50 0			
Do. to beams	per ft. sup.	1 0			
Centres for arches.....	" "	1 6			
Gutter boards and bearers	" "	1 0			

FLOORING.

FLOORING.		2	1	1 1/2	1 3/4
Deal-edges shot	per sq.	44/6	53/-	60/6	
Do. tongued and grooved	"	49/-	57/6	65/-	
Do. matchings	"	45/-	51/-		
Moulded skirting, including backings and grounds	per ft. sup.	1/6	1/9	2/0	2/6

SASHES AND FRAMES.

One-and-a-half moulded sashes or casements	per foot super.	1 10
Two Do. Do. Do.	" "	2 1
Add for fitting and fixing	" "	0 3
Deal-cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights; average size	" "	3 9

DOORS.

Two-panel square framed	per ft. sup.	13/	13/	2/
Four-panel Do.	" "	2/5	2/8	2/11
Two-panel moulded both sides	" "	2/8	2/11	3/2
Four-panel Do. Do.	" "	2/11	3/2	

CARPENTER AND JOINER—continued.**FRAMES.**

Deal wrot moulded and rebated.....	per foot cube	14	0	
Plain deal jamb linings framed	per ft. sup.	1/7	1 1/2	1 1/11
Deal shelves and bearers.....	"	1/4	1/6	1/9
Add if cross-tongued	"	2d.	2d.	2d.

STAIRCASES.

Deal treads and risers in and including rough brackets.....	1"	1½"	1½"	2"	2½"
Deal strings wrot on both sides and framed.....	2/1	2/4	2/9	—	—
	1/8	2/-	2/2	2/8	—

Housings for steps and risers.....	each	0 11
Deal balusters, 1 in. × 1½ in.....	per ft. run	0 9
Mahogany handrail: average 3 in. × 3 in.....	" "	6 0
Add if ramped.....	" "	11 10
Add if wreathed	" "	23 9

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts.....	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks.....	4/6
Casement fasteners	1/5	Patent spring hinges and Casement stays	letting into floor and making good
Cupboard locks.....	1/5		19/-

FOUNDER AND SMITH.

Rolled steel joists	per cwt.	16 3
Plain compound girders	" "	19 0
Do. stanchions	" "	21 9
In roof work.....	" "	27 6

RAIN-WATER GOODS.

Half-round plain rebated joints.. ft. run	3"	4"	5"	6"
Ogee Do. Do. ..	1/6	1/9	2/-	2/6
Rain-water pipes with ears ..	1/9	2/-	2/6	3/3
Extra for shoes and bends.....	each	4/4	5/11	—
Do. stopped ends	" "	1/11	2/4½	3/7
Do. nozzles for inlets	" "	2/2	2/7	3/10

PLUMBER.

Milled lead and laying in flashings and gutters....	per cwt.	61 6
Do. Do. in flats	" "	60 0
Extra labour and solder in coated cesspools.....	each	6 9
Welf joint	per ft. run	0 6
Soldered seam	" "	1 6
Copper nailing	" "	0 6

Drawn lead waste per ft. run	½"	¾"	1"	1½"	2"	4"
Do. service ..	1/2	1/9	2/-	3/4	4/-	—
Do. soil ..	1/8	2/2	2/7	3/10	—	6/9
Bends in lead pipe ..	—	—	—	—	3/3	8/2
Soldered stop ends ..	1/2	1/8	2/1	2/10	3/6	—
Red lead joints ..	11d.	1/-	1/3	1/11	2/4	4/10
Wiped soldered joints ..	2/10	3/6	4/-	4/11	6/6	9/9
Lead traps and cleaning screws ..	—	—	—	14/7	19/6	—
Bib cocks and joints ..	6/4	9/7	15/4	41/-	—	—
Stop cocks and joints ..	15/4	17/2	25/8	64/-	—	—

PLASTERER.

Render, float and set in lime and hair	per yard sup.	2 4
Do. Do. Sirapite	" "	2 7
Do. Do. Keen's	" "	3 7
Add sawn lathing	" "	1 7
Add metal lathing	" "	2 6
Portland cement screed	" "	2 2
Do. plain face	" "	3 3
Mouldings in plaster.....	per 1 girth	0 1½
One-and-a-half granolithic pavings	per yard sup.	5 9

GLAZIER.

21 oz. sheet plain	per foot sup.	0 8½
26 oz. Do.	" "	1 0
Obscured sheet	" "	1 1
½ in. rolled plate	" "	0 9
½ in. rough rolled or cast plate.....	" "	0 10½
½ in. wired cast plate	" "	1 4

PAINTER.

Preparing and distempering, 2 coats	per yard sup.	0 9
Knotting and priming	" "	0 7
Plain painting, 1 coat	" "	0 9
Do. 2 coats	" "	1 2
Do. 3 coats	" "	1 9
Do. 4 coats	" "	2 4
Graining	" "	2 3
Varnishing twice	" "	1 9
Sizing	" "	0 3
Flatting	" "	0 7
Enamel	" "	1 1
Wax polishing	per foot sup.	0 6
French polishing	" "	1 2
Preparing for and hanging paper	per piece, 2/- to 4/-	

* These prices apply to new buildings only. They cover superintendence by foreman and carry a profit of 10 % on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Acts and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes accepted. † Denotes provisionally accepted.
‡ Denotes recommended for acceptance.
§ Denotes accepted subject to modification.

BEDFORD.—Twenty houses at Kathie-road, for the T.C.:

*C. A. White £430 per house

BELFAST.—New school at Ormeau Park, for the E.C.:

James Henry & Sons	£31,049	0	0
McRoberts & Armstrong	30,254	2	8
J. & W. Stewart	29,920	0	0
Patrick Ritchie	29,280	0	0
Courtney & Co.	28,220	0	0
Wm. J. Campbell & Son	27,850	0	0
Thornbury Bros., Ltd.	27,696	0	0
F. B. McKee & Co., Ltd.	27,500	0	0
J. & R. Thompson, Ltd.	27,495	0	0
Thos. McKee & Sons, Ltd.	27,211	0	0
Isaac Copeland & Sons	26,250	0	0

(All of Belfast.)

BELFAST.—Electric wiring and fittings for new schools in (a) Euston-street; and (b) Templemore-avenue, for the C.B. Education Architect, College-square:

*J. J. Milliken & Son, Belfast—(a) £620, (b) £630

BIRMINGHAM.—Houses at (a) Richmond-road; and (b) Flavells-lane, Yardley, for the T.C. Mr. H. H. Humphries, City Engineer:

(a) Morris & Jacobs, Birmingham.

(b) G. Stubbings, Birmingham.

BRIGHTON.—Reconstruction of the Shoreham pumping station dam, for the T.C.:

*Wm. Tarr & Co., Ltd. £133 3 4

BROMSGROVE.—Sixteen houses in the Stourbridge-road, for the U.D.C.:

*J. & A. Brazier £7,712

BURLEIGH.—Reconstruction of Station-road railway bridge, for the Stoke T.C.:

*Thos. Godwin, Hanley £14,573 8 1

BURTON-ON-TRENT.—Construction of streets on the High Bank estate, for T.C.:

*G. F. Tomlinson, Derby £4,170

CARLISLE.—Transformer station at Harraby, for T.C.:

*J. & D. Bell, Carlisle £201 13 8

CARLISLE.—Twenty-four houses in Millholme-avenue, for the T.C.:

*J. & D. Bell.

CHESTER.—Six houses, on the Bottoms-lane site, for the T.C.:

*Universal Housing Co., Ltd. £2,580
(Subject to M.H. approval.)

CHESTERFIELD.—Nineteen A3 type houses at Stand-road, for T.C.:

*Swift Bros. & Haslam, Ltd. £9,034 10

CHIPPING SODBURY.—Six houses at Shortwood, for the T.C.:

*W. J. Hembrough & Sons, Warmley.. £2,388

FAVERSHAM.—Eight houses, for the Corporation. Mr. S. P. Adams, Borough Surveyor, 20, West-street:

Mansell, Croydon	£6,992
G. P. Judges, Faversham	6,670
Ratcliff Bros., Faversham	6,610
Fuller & Sons, Faversham	6,549
G. Johnson & Son, Faversham	5,800
Whiting Bros., Faversham	5,304

FOLESHILL.—Sixteen houses in Wheelwright-lane, for the R.D.C.:

†A. Ward £415 each

FOLESHILL.—Twenty-two houses on the Alderman's Geen site, for the R.D.C.:

†Pearson & Burden £415 each

LONDON.—Interior cleaning of schools, for the L.C.C.:

Arthur-street (Camberwell, N.)—

*D. C. Bowyer, Belvedere £596 0 0

Architect's comparable estimate 597 0 0

Balham Central and Hearnville-road (Balham and Tooting)—

*J. Garrett & Son, Balham Hill.. 660 0 0

Architect's comparable estimate 635 0 0

Barnsbury Park (Islington, S.)—

*F. Cousins, Islington 260 12 6

Architect's comparable estimate 296 0 0

Blakesley-street (Whitechapel and St. George's)—

*G. Barker, Whitechapel 679 0 0

Architect's comparable estimate 696 0 0

Canal-road (Shoreditch)—

*Stevens & Sons, Crouch Hill... 696 0 0

Architect's comparable estimate 684 0 0

Commercial-street (Whitechapel and St. George's)—

*Turnbull & Son, City 856 0 0

Architect's comparable estimate 806 0 0

Derby-road (Hackney, S.)—

*F. Cottrell, Ltd., Crouch Hill... 325 0 0

Architect's comparable estimate 362 0 0

Earl-street (Woolwich, E.)—

*J. H. Sutch & Sons, Plumstead.. 446 0 0

Architect's comparable estimate 502 0 0

Ellerslie-road (Hammersmith, N.)—

*A. & F. Polden, Ltd., Hammer-

smith

Architect's comparable estimate 478 0 0

Grove-street (Greenwich)—

*Cole, Loasby & Co., Ltd., Blooms-

bury

Architect's comparable estimate 671 15 0

Architect's comparable estimate 637 0 0

Harper-street (Southwark, C.)—

*W. J. Dixon & Son, Bermondsey 561 0 0

Architect's comparable estimate 603 0 0

Larkhall-lane (Clapham)—

*Triggs & Co., Clapham 584 0 0

Architect's comparable estimate 594 0 0

Leo-street (Peckham)—

*T. Brown & Son, Herne Hill... 731 0 0

Architect's comparable estimate 746 0 0

Magdalen-road (Temp.) (Wandsworth, C.)—

*J. Thompson & Sons, Battersea.. 228 12 6

Architect's comparable estimate 262 0 0

Magdalen-street (Rotherhithe)—

*T. Cair, Broad-court 285 0 0

Architect's comparable estimate 306 0 0

Marner-street (Bow and Bromley)—

*L. H. & R. Roberts 620 0 0

Architect's comparable estimate 562 0 0

Morpeth-street Central (Bethnal Green, N.E.)—

*W. J. Clemens, Stratford 443 0 0

Architect's comparable estimate 453 0 0

Netley-street (St. Pancras, S.W.)—

*Stevens & Sons, Crouch Hill... 484 0 0

Architect's comparable estimate 542 0 0

Nynehead-street (Deptford)—

*W. Bailey & Sons (Builders), Ltd., East Greenwich 449 0 0

Architect's comparable estimate 430 0 0

Oxford-gardens (Kensington, N.)—

*Payne Bros., Watford 620 0 0

Architect's comparable estimate 656 0 0

Redman's-road (Mile End)—

*R. Wollaston & Co., Limehouse 478 14 0

Architect's comparable estimate 541 0 0

Surrey-lane (B) and Battersea Central (Battersea, N.)—

*Curd Bros., Barnes 781 0 0

Architect's comparable estimate 798 0 0

Timbercroft (Woolwich, E.)—

*D. C. Bowyer, Belvedere 473 17 0

Architect's comparable estimate 432 0 0

Upper North-street (Poplar, S.)—

*R. Wollaston & Co., Limehouse 385 0 0

Architect's comparable estimate 381 0 0

Victoria (Hammersmith, N.)—

*A. & F. Polden, Ltd., Hammer-

smith

Architect's comparable estimate 693 0 0

Wenlock-road (Shoreditch)—

*Stevens & Sons, Crouch Hill... 676 0 0

Architect's comparable estimate 652 0 0

Wood-close (Bethnal Green, S.W.)—

*C. P. Roberts & Co., Ltd., Dalston 790 0 0

Architect's comparable estimate 744 0 0

Wood-street (Woolwich, W.)—

*J. H. Sutch & Sons, Plumstead.. 572 0 0

Architect's comparable estimate 640 0 0

LONDON.—Practical workroom in the boys' department, and practical workrooms in the senior girls' department, and the formation of a staff room in the senior boys' department of the Burghley School, St. Pancras, for the L.C.C.:

Whitbys, Ltd. £344 0 0

Hooper & Hooper 315 0 0

Pitcher Construction Co., Ltd... 298 0 0

F. Cottrell, Ltd. 298 0 0

Stevens & Sons 286 0 0

Lole & Co. 279 0 0

W. T. Lawrence 274 18 6

C. H. Boyd & Sons, Ltd. 272 0 0

S. Shaw 267 0 0

†J. C. Mather 233 0 0

(All of London.)

LONDON.—Two rooms for the head teachers at Pope-street school, Woolwich, for the L.C.C.:

A. Logan £266

H. Groves & Son 247

W. J. Dixon & Son 235

Cole, Loasby & Co., Ltd. 231

W. Bickerton 226

W. Mills & Sons, Ltd. 217

T. Brown & Son 215

Castle Bros., Ltd. 210

†A. V. Goad 195

(All of London.)

LONDON.—Provision of head teachers' rooms, at Trundley's-road, Deptford, for the L.C.C.:

Cole, Loasby & Co., Bloomsbury .. £183 0

J. Marsland & Sons, Mayfair... 168 0

J. Ford & Sons, Lambeth 163 0

T. D. Leng, Deptford 159 0

H. King & Son, Peckham 158 10

W. J. Dixon & Son, Bermondsey .. 142 0

*The Economic Building Co., Clapham 126 0

Architect's comparable estimate... 153 0

LONDON.—Elementary school on the Crondall-street site, Shoreditch, for the L.C.C.:

Cheesums, Ltd. £43,872

Griggs & Son 43,342

W. Lawrence & Sons, Ltd. 42,854

A. Monk 42,700

G. Gordon & Sons, Ltd. 41,732

F. & H. F. Higgs, Ltd. 41,171

G. Parker & Sons, Ltd. 40,847

Prestige & Co., Ltd. 40,570

E. A. Roope & Co., Ltd. 40,108

J. & C. Bowyer, Ltd. 39,946

†Bovis, Ltd. 38,667

(All of London.)

LONDON.—Schoolkeeper's house, at Haverstock-hill, for the L.C.C.:

Whitbys, Ltd., Holborn £1,494

W. M. Brand, Stamford Hill... 1,185

F. Cottrell, Ltd., Crouch Hill... 1,150

A. Logan, Victoria 1,088

W. Silk & Son, Ltd., Homerton .. 1,084

Y. J. Lovell & Son, Paddington .. 1,060

A. Monk, Lower Edmonton 1,055

Stevens & Sons, Crouch Hill... 1,041

Butler & Wiles, Kilburn 949

S. Shaw, Barnsbury 901

†J. C. Mather, St. Pancras 875

Architect's estimate 874

LONDON.—Rebuilding the girls' and infants' departments and remodelling and enlarging the boys' department of the Frankham-street school, Deptford, for the L.C.C.:

Griggs & Sons £32,542

E. A. Roope & Co., Ltd. 30,681

Prestige & Co., Ltd. 30,656

W. Akers & Co., Ltd. 30,547

G. E. Wallis & Sons, Ltd. 30,477

H. Kent 30,120

T. D. Leng 30,085

J. & C. Bowyer, Ltd. 29,783

†F. & T. Thorne 29,654

Architect's comparable estimate 30,013

(All of London.)

LONDON.—Improved accommodation Linden Lodge residential school for elder blind boys, Battersea, for the L.C.C.:

Sims & Russell £1,987

T. Brown & Son 1,980

J. Garrett & Son 1,943

W. Harbrow, Ltd. 1,892

W. Hammond 1,880

Holliday & Greenwood, Ltd. 1,868

†Triggs & Co. 1,784

Architect's comparable estimate .. 1,792

(All of London.)

LONDON.—Handicraft and science room at the Huntingfield-road school, Putney, for the L.C.C.:

W. Hammond, Battersea £1,607

Leslie & Co., Ltd., Kensington... 1,570

Akers & Co., Ltd., S. Norwood... 1,435

R. A. Jewell, Ltd., Wandsworth... 1,200

J. Carmichael (Contractors), Ltd., Wandsworth 1,194

Sooles & Son, Ltd., Richmond... 1,180

Triggs & Co., Clapham 1,173

H. S. Lee, Ltd., St. John's Hill... 1,169

J. Garrett & Son, Balham 1,139

†T. Brown & Son, Herne Hill 984

W. H. Gaze & Sons, Ltd., Kingston.. 966

LONDON.—Alterations and additions at the Grammar School, Kilburn, for the Middlesex C.C. Mr. H. G. Crothall, F.R.I.B.A., County Architect:

Leslie & Co., Ltd. £26,449

Geo. Bollow & Sons, Ltd. 25,417

ROCHDALE.—Convenience on the Springfield estate, for the C.B. Borough Surveyor:—
*D. Mitchell, Rochdale.

ROCHDALE.—Reconstruction of Town Mill Bridge in reinforced concrete, for the C.B. Borough Engineer:—

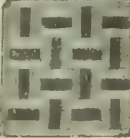
*J. E. Rangleley, Rochdale.

ROCHDALE.—Fifty-four houses on the Clarke's estate, for the C.B. Borough Surveyor:—

*R. & T. Howarth, Rochdale.

ROCHDALE.—Convenience at Wet Rake Gardens, for the C.B.:—

*Brierley & Castree, Rochdale.



PORTABLE PARQUET
In Oak or Oak and Walnut, also
Spring Foundation Dance Floors
Post or Phone (Park 1885)
enquiries to
TURPIN'S PARQUET
FLOORING CO.,
25, NOTTING HILL GATE,
LONDON, W.11.
Phone:
PARK 1885

School & Hospital Stoves

MAKERS OF
WRIGHT'S IMPROVED and also SHORLAND PATENT
WARM AIR VENTILATING PATTERNS.

GEO. WRIGHT (LONDON) LIMITED
19, Newman St., Oxford St., London, W.1
Barton Weir Works, Rotherham.

J. GLIKSTEN & SON

LIMITED

Specialities in

**SEASONED
HARDWOODS**

MAHOGANY. WALNUT
JAPANESE, AMERICAN and
WAINSCOT OAK, TEAK,
WHITEWOOD, &c.

REGISTERED OFFICE AND WHARF

**CARPENTERS RD.
STRATFORD
LONDON E.15**

Telephone:
EAST 3771
(5 lines)

Telegrams
GLIKSTEN PHONE
LONDON

ROTHERHAM.—Twenty-six houses on the Don-caster-road, East Dene, housing estate, for the C.B. Mr. C. A. Broadhead, architect, Devonshire House Moorgate:—

Baldwin & Co.	£18,200	0	0
Coe & Lorrainan	15,991	18	9
W. & F. Blair	15,080	0	0
Saul & Sons, Ltd.	14,872	0	0
F. Moody & Co.	14,638	0	0
A. Thompson	14,274	0	0
*G. Ramsden	13,780	0	0

(All of Rotherham.)

SHEFFIELD.—Reconstruction and widening bridge over the Canal at Shirland-lane, for the T.C.:—

*Waddington & Sons, Sheffield.

STAMFORD.—Reconstruction of the Corn Exchange, for the Stamford Corn Exchange Co. Messrs. Traylen & Lenton, architects, 16, Broad-street. Quantities by the architects:—

R. S. Jellings, Peterborough	£4,899
W. H. Freeman, Oundle	4,888
Roberts Bros., Stamford	4,835
A. Peasgood, Stamford	4,775
*Bowman & Sons, Stamford	4,648

STAMFORD.—Twenty-four houses on the New Cross-road housing site, for the T.C. Borough Engineer:—

Stamford Builders' Federation	£14,160
E. S. Ireson, Stamford	13,428
Simms, Sons & Cooke, Ltd., Nottingham	12,480
J. H. Thompson & Sons, Ltd., Grimsby	11,599
The Foundation Co., Ltd., London	11,400

STOKE-ON-TRENT.—Buildings at Cookshill small holdings, for the T.C.:—

*W. & R. Jewell £975 | 4 | 11 |

STOURPORT.—Four police cottages for Worcester T.C.:—

*H. Millner & Sons £1,992 |

SWANSEA.—Repairs to houses in Llangyfeach-street, for the C.B.:—

*T. Williams & Sons £305 |

TETNEY (LINCS.)—New wireless station at Tetney, for B.B. Co.:—

Main contractors—*Holloway Bros., Ltd., London.
Asphalting—*Tunstalls Rock Asphalte Co., Ltd., Leeds.

THORNE.—232 houses at the Thorne Colliery Housing Scheme, for the Thorne Housing Association, Ltd. Mr. H. E. Jarvis, A.R.I.B.A., architect, Darlington:—

*The Housing Corporation of Great Britain, Ltd. London.

TRURO.—Demolishing property and erecting two cottages at St. Clement's-street, for the T.C.:—

*J. Bassett, Truro £1,053 | 10 |

TYLDESLEY - WITH - SHAKERLEY.—Thirty houses on the Sale-lane site, for the U.D.C. Mr. F. E. Jones, Engineer and Surveyor:—

*J. Cocker, Ltd., Walkden £13,665 |

J. J. ETRIDGE, J^r.
SLATING AND TILING
SLATE MERCHANTS
CONTRACTORS.

Inspections and Reports made on
OLD OR FAULTY ROOFS
in any part of the country.

Telephone; Bishopsgate 1944/5 or write,
Bethnal Green Slate Works,
BETHNAL GREEN, LONDON, E.

BEST SEASONED

OAK FLOORING

AUSTRIAN
RUSSIAN
JAPANESE

PREPARATION TO ANY SECTION
CAN BE UNDERTAKEN AT ONCE

SYDNEY PRIDAY & SONS

WAINSCOT OAK MERCHANTS (EST. 1880)

Phone
CLISSOLD
6254
(2 lines)

OAK WHARF
RAVENSDALE ROAD
LONDON, N.16.

FITZPATRICK & SON

MASONS & PAVERS

Secondhand and Re-dressed (equal to new)
Granite Setts and Kerb.

York Paving, Crazy Paving, Rockery Stone,
Granite Spur Stones made to order.

Granite Chippings and Tarmacadam,
Granolithic and Sett Paving.

WRITE, PHONE or CALL:—

**455, OLD FORD RD.,
BOW, LONDON, E.3.**

Phone: EAST 4808.

HIGH-CLASS

FLOORINGS

of every description in
WOOD BLOCKS. PARQUETRY
SEASONED T. & G. WAINSCOT OAK
TEAK AND MAPLE
FACTORY AND ROADWAY PAVING

STEVENS & ADAMS

LIMITED

VICTORIA MILL, POINT PLEASANT
WANDSWORTH, S.W.18.
(Phones: Putney 1700 & 2457)

BRABY'S

CALVANIZED

WORKS:
LONDON
DEPTFORD
LIVERPOOL
BRISTOL
GLASGOW
FALKIRK



Chief Offices:
352 to 364
EUSTON RD.
LONDON,
N.W.1

SATISFACTION GUARANTEED

